FHWA FY 2009 BUDGET

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Section IV: Performance Budget

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FEDERAL HIGHWAY ADMINISTRATION
FISCAL YEAR 2009 PERFORMANCE BUDGET

ADMINISTRATOR'S OVERVIEW

The FY 2009 budget request for the Federal Highway Administration (FHWA) reflects the final year of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) authorization. Since the enactment of SAFETEA-LU in 2005, the FHWA has implemented new programs to improve highway safety, promoted innovative solutions to reduce traffic congestion, worked with other Federal agencies and States to streamline the project approval process, enhanced program oversight and stewardship, and responded to unforeseen events such as Hurricane Katrina and the collapse of the I-35W Bridge in Minneapolis, Minnesota. As we request funding for FY 2009, the FHWA continues to strive to achieve progress in realizing the improvements to the Nation's highway system while looking ahead to the next highway program authorization and challenges that still lie ahead.

In addition to safety, tackling congestion on our Nation's highways remains a top priority. As demand for highway travel by Americans continues to grow, construction of new highway capacity to accommodate this growth in travel has not kept pace. Increasing highway system congestion has become a threat to our nation's economic prosperity and quality of life. To address this problem, the FHWA is coordinating closely with the Department of Transportation to implement the *National Strategy to Reduce Congestion on America's Transportation Network* (the "Congestion Initiative"). The objective of this initiative is to actually reduce congestion, not simply to slow its increase. Congestion is not an insurmountable problem, but solutions will require a smarter approach to capacity expansion and improved productivity of existing transportation assets.

FHWA has built upon the programs and authorities provided by SAFETEA-LU and is focusing on a number of high-priority efforts to help reduce congestion on the nation's highways in support of the Congestion Initiative. These efforts include tolling and pricing, public private partnerships, real-time traveler information, traffic incident management, work zone mobility, Highways for LIFE technology, and traffic signal timing. Together, these efforts provide information that allows more informed decisions, better coordination, and quick action that help avoid and reduce traffic congestion.

Through the programs described above, SAFETEA-LU encourages the safe and efficient management and operations of integrated surface transportation systems to mitigate the impacts of traffic congestion and improve system reliability. To further build on these programs, the budget proposes $175 million to reduce congestion in metropolitan areas and along major Interstate Corridors. In addition, the budget proposes that 75% of the funds for discretionary programs will be made available for support of critical congestion relief projects. Projects that combine various road pricing, transit and technology solutions would receive priority consideration and be selected by the Department according to transparent, competitive, and merit-based criteria. These programs will help to address congestion in the short-term and will provide valuable insights for the next reauthorization.

A significant challenge as we look toward the next reauthorization of our programs is the mechanism used to finance our highway and transit programs. Action must be taken to ensure that

cash balances in the Highway Account of the Highway Trust Fund remain sufficient to support highway programs. For FY 2009, the budget proposes to address a projected shortfall in the Highway Account of the Trust Fund with repayable advances from the Mass Transit Account in the event that the Highway Account cash balance is exhausted. Additional actions will be required in the longer term and will need to be considered during the next reauthorization debate.

The FHWA FY 2009 budget request supports the programs authorized in SAFETEA-LU and the Congestion Initiative in concert with other departmental initiatives as well the Agency's top priority to make transportation safer and more secure.

Summary of FY 2009 Budget Request

The FHWA FY 2009 budget totals $40.1 billion in new budgetary resources. This level includes a Federal-aid highway obligation limitation of $39.4 billion and $739 million in exempt contract authority. The obligation limitation reflects a negative adjustment of $1 billion from the base level in SAFETEA-LU in accordance with the revenue aligned budget authority (RABA) calculation, and provides the final installment to the $286.4 billion total agreement for SAFETEA-LU. This level reflects overall funding for highway, highway safety, and transit programs from FY 2004 to FY 2009 and was the level agreed to for the reauthorization of these programs when SAFETEA-LU was enacted in 2005. The request fulfills the President's multi-year commitment without raising taxes or subsidizing transportation spending with other tax dollars. The budget also provides new flexibility to manage funds in the Highway Trust Fund so the existing tax structure can continue to support authorized funding for surface transportation programs.

Within the $40.1 billion request, the budget includes $429.8 million for research programs and a Limitation on Administrative Expenses of $394.9 million.

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 2009, 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.

<u>Performance Budget</u>

Funding levels requested for the Federal-aid Highway Program (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 the 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 $22.4 billion for activities contributing to the goals to reduce congestion and improve infrastructure in all modes. Highway funds apportioned to the States in FY 2009 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. In addition, the budget proposes to redirect $175 million in unobligated balances for inactive projects authorized in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. The funds will be used to carry out the Department's *National Strategy to Reduce Congestion on America's Transportation Network* (the "Congestion Initiative") and will support metropolitan area congestion reduction demonstration initiatives and the Corridors of the Future Program.

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 2009, the 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 $6.2 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. Within this amount, $1.8 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 $365.8 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 $496.3 million for 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 $394.9 million is requested for FY 2009 for the necessary salaries and benefits of 2,313 full-time equivalents (FTE) and on-going administrative expenses in support of the above Federal programs.

The FHWA's FY 2009 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 that follows illustrates the allocation of FY 2009 FHWA funds by strategic goal.

FHWA Funding Distribution by Goal

($ in thousands)

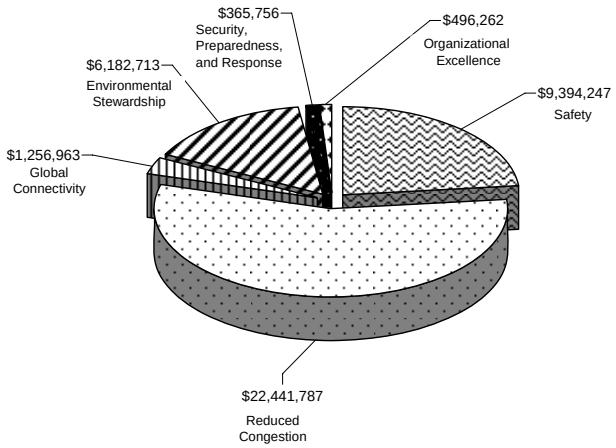
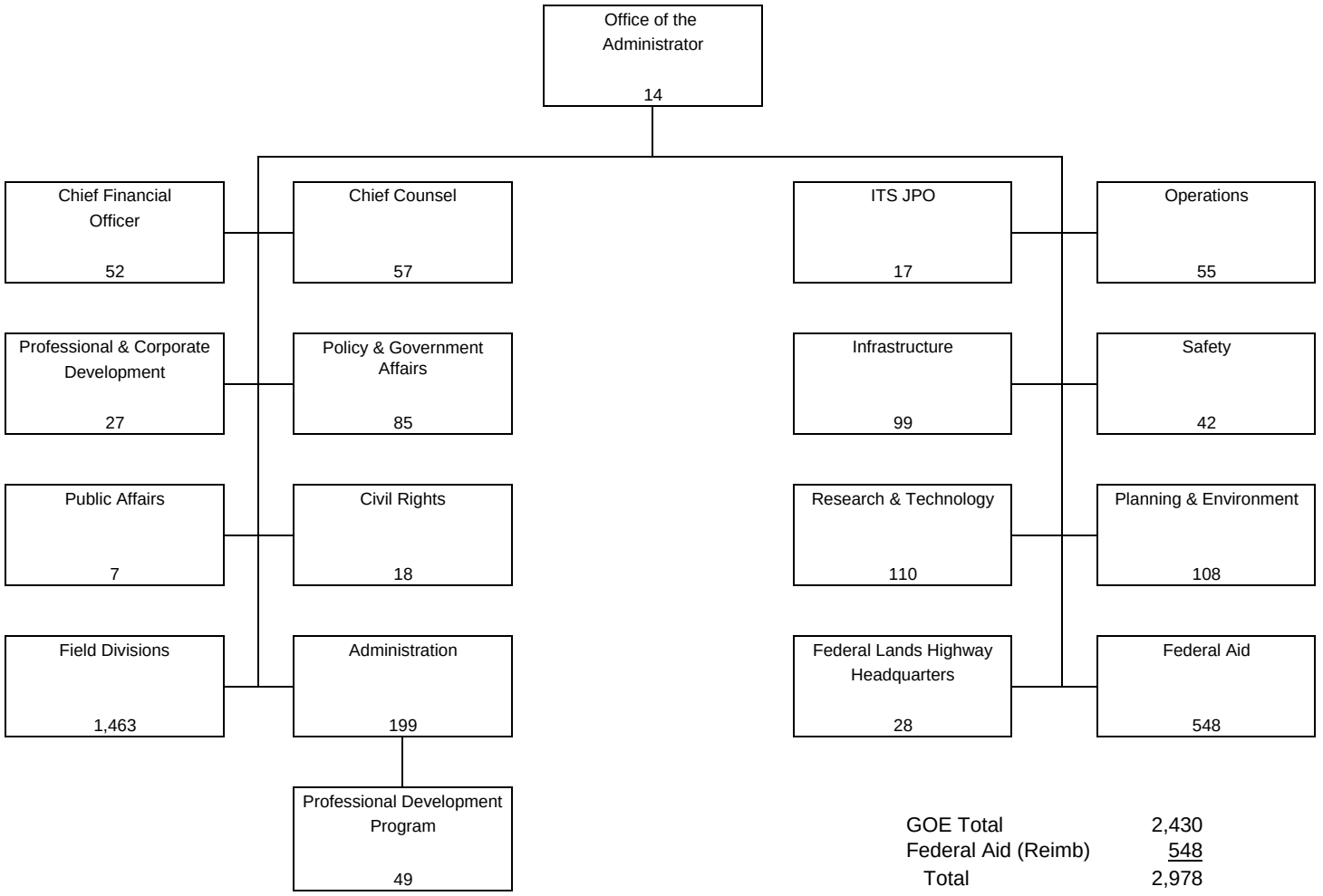


EXHIBIT-I

FEDERAL HIGHWAY ADMINISTRATION
ORGANIZATION CHART
with AUTHORIZED FTP POSITIONS
FY 2009



GOE Total	2,430
Federal Aid (Reimb)	548
Total	2,978

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EXHIBIT II-1

COMPARATIVE STATEMENT OF NEW BUDGET AUTHORITY
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Programs
($000)

ACCOUNT	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
[Limitation on administrative expenses]	[360,992]	[377,566]	[394,880]
Federal-aid Highways (Highway Trust Fund)			
(Liquidation of contract authorization)	(36,032,344)	(38,000,000)	(39,500,000)
(Limitation on obligations)	(37,147,706) 1/	(40,585,075)	(40,399,970) 2/
(Revenue Aligned Budget Authority - RABA)	(842,254)	(630,976) 3/	-(1,001,242)
Subtotal (Limitation on obligations)	(37,989,960)	(41,216,051)	(39,398,728)
Exempt contract authority	740,737 4/	739,000	739,000
Subtotal, Obligation Limitation & Exempt Contract Authority	38,730,697	41,955,051	40,137,728
Budget authority for pay raise (sec. 111 of P.L. 110-5)	2,794	-----	-----
Rescission of new contract authority	-----	-478,637	-----
Rescission/cancellation of unobligated balances of contract authority	-4,342,604	-3,697,246	-3,885,000
SAFETEA-LU rescission of unobligated balances of contract authority	-----	-----	[-8,593,000]
[Congestion Initiative]	-----	-----	[175,000]
Miscellaneous Highway Trust Funds (HTF)	-----	-734	-----
Emergency Relief Program - Supplementals (GF)	871,022	195,000	-----
Appalachian Development Highway System (GF)	19,800	15,680	-----
Miscellaneous Appropriations/Delta Region Program (GF)	-----	14,014	-----
Misc. Approps rescission of unobligated balances (GF)	-----	-4,020	-----
Highway Related Safety Grants rescission of unobligated balances (HTF)	-----	-11	-----
Total, Federal Highway Administration			
(Limitation on obligations)	(37,989,960)	(41,216,051)	(39,398,728)
Exempt contract authority	740,737	739,000	739,000
Other programs	893,616	224,694	-----
Rescission of new contract authority	-----	-478,637	-----
Rescission/cancellation of unobligated balances of contract/budget authority	-4,342,604	-3,702,011	-3,885,000
Total Budgetary Resources, FHWA	**35,281,709**	**37,999,097**	**36,252,728**
Discretionary	34,540,972	37,260,097	35,513,728
Mandatory	740,737	739,000	739,000

[ ] Non-add
1/ Reflects $121 million transfer to NHTSA per P.L. 110-5.
2/ Reflects SAFETEA-LU authorized obligation limitation of $41.2 billion less $800 million reduction.
3/ The FY 2008 RABA calculation was $631 million in the President's Budget. It was revised at mid-session to $703 million in contract authority.
4/ $1.7 million of RABA to ER Exempt.

EXHIBIT II-2

FY 2009 BUDGET REQUEST BY APPROPRIATION ACCOUNT
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Programs
($000)

ACCOUNT	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
[Limitation on administrative expenses]	[360,992]	[377,566]	[394,880]
Federal-aid Highways (Highway Trust Fund)			
(Liquidation of contract authorization)	(36,032,344)	(38,000,000)	(39,500,000)
(Limitation on obligations)	(37,147,706) 1/	(40,585,075)	(40,399,970) 2/
(Revenue Aligned Budget Authority - RABA)	(842,254)	(630,976) 3/	-(1,001,242)
Subtotal (Limitation on obligations)	(37,989,960)	(41,216,051)	(39,398,728)
Exempt contract authority	740,737 4/	739,000	739,000
Subtotal, Obligation Limitation & Exempt Contract Authority	38,730,697	41,955,051	40,137,728
Budget authority for pay raise (sec. 111 of P.L. 110-5)	2,794	-----	-----
Rescission of new contract authority	-----	-478,637	-----
Rescission/cancellation of unobligated balances of contract authority	-4,342,604	-3,697,246	-3,885,000
SAFETEA-LU rescission of unobligated balances of contract authority	-----	-----	[-8,593,000]
[Congestion Initiative]	-----	-----	[175,000]
Miscellaneous Highway Trust Funds (HTF)	-----	-734	-----
Emergency Relief Program - Supplementals (GF)	871,022	195,000	-----
Appalachian Development Highway System (GF)	19,800	15,680	-----
Miscellaneous Appropriations/Delta Region Program (GF)	-----	14,014	-----
Misc. Approps rescission of unobligated balances (GF)	-----	-4,020	-----
Highway Related Safety Grants rescission of unobligated balances (HTF)	-----	-11	-----
Total, Federal Highway Administration			
(Limitation on obligations)	(37,989,960)	(41,216,051)	(39,398,728)
Exempt contract authority	740,737	739,000	739,000
Other programs	893,616	224,694	-----
Rescission of new contract authority	-----	-478,637	-----
Rescission/cancellation of unobligated balances of contract/budget authority	-4,342,604	-3,702,011	-3,885,000
Total Budgetary Resources, FHWA	**35,281,709**	**37,999,097**	**36,252,728**
Discretionary	34,540,972	37,260,097	35,513,728
Mandatory	740,737	739,000	739,000

[ ] Non-add
1/ Reflects $121 million transfer to NHTSA per P.L. 110-5.
2/ Reflects SAFETEA-LU authorized obligation limitation of $41.2 billion less $800 million reduction.
3/ The FY 2008 RABA calculation was $631 million in the President's Budget. It was revised at mid-session to $703 million in contract authority.
4/ $1.7 million of RABA to ER Exempt.

EXHIBIT II-3

FY 2009 BUDGET REQUEST BY APPROPRIATION ACCOUNT AND STRATEGIC OBJECTIVE
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

APPROPRIATION/PROGRAM/ACTIVITY PERFORMANCE GOAL	SAFETY	REDUCED CONGESTION	GLOBAL CONNECT.	ENVIRON. STEWARD.	SECURITY	ORG. EXCELL.	TOTAL
Federal-aid Highways (Excludes LAE)	$9,301,825	$22,221,001	$1,244,597	$6,121,887	$362,158	$491,380	$39,742,848
Transp. Infrastructure Finance and Innov. Act (Credit Program)	24,400	76,860	6,100	12,200	1,220	1,220	122,000
Surface Transportation Program	1,753,435	3,888,053	228,709	1,524,726	76,236	152,473	7,623,632
National Highway System	1,519,829	4,559,487	289,491	723,728	72,373	72,373	7,237,281
Interstate Maintenance	1,303,637	4,147,935	118,512	296,281	59,256	0	5,925,621
Bridge Program	1,164,444	3,037,680	253,140	506,280	50,628	50,628	5,062,800
Congestion Mitigation & Air Quality Improvement	0	0	0	2,046,055	0	20,667	2,066,722
Highway Safety Improvement Program	1,249,114	0	0	0	0	12,617	1,261,731
Equity Bonus	555,034	1,472,047	72,396	241,319	24,132	48,264	2,413,192
Equity Bonus (Exempt)	146,970	389,789	19,170	63,901	6,390	12,780	639,000
Federal Lands Highways	226,636	591,224	29,561	108,391	9,854	19,707	985,373
Appalachian Development Highway System	76,400	297,110	8,488	38,200	4,244	0	424,442
High Priority Projects	509,104	1,603,677	127,276	254,552	25,455	25,455	2,545,519
Projects of National and Regional Significance	52,903	166,266	5,038	25,192	2,519	0	251,918
ITS Research	62,919	47,986	3,078	0	0	0	113,983
Transportation Research, Training and Education	15,775	233,248	0	11,268	1,972	19,437	281,700
Miscellaneous Programs	618,225	1,639,639	80,638	268,794	26,879	53,759	2,687,934
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:							
SUBTOTAL PROGRAM FUND	$9,301,825	$22,221,001	$1,244,597	$6,121,887	$362,158	$491,380	$39,742,848
LIMITATION ON ADMINISTRATIVE EXPENSES	92,422	220,786	12,366	60,826	3,598	4,882	394,880
TOTAL REQUEST	**$9,394,247**	**$22,441,787**	**$1,256,963**	**$6,182,713**	**$365,756**	**$496,262**	**$40,137,728**
FTE (GOE & Federal-aid Direct)	541	1,293	72	357	21	29	2,313

EXHIBIT II-4

FY 2009 BUDGET REQUEST RECAP BY ACCOUNT
FEDERAL HIGHWAY ADMINISTRATION
Budget Authority
($000)

ACCOUNT	FY 2007 ACTUAL		FY 2008 ENACTED	FY 2009 REQUEST
Federal-aid Highways				
Contract Authority (subject to limitation)	39,590,807	1/	41,652,252	41,749,457
Revenue Aligned Budget Authority (RABA)	840,518		703,467	- 1,001,242
Exempt contract authority	740,737	2/	739,000	739,000
Budget authority for pay raise (sec. 111 of P.L. 110-5)	2,794		-----	-----
TIFIA Upward Reestimate	7,099		-----	-----
Rescission of new contract authority	-----		- 478,637	-----
Rescission/cancellation of unobligated balances of contract authority	- 4,342,604		- 3,697,246	- 3,885,000
SAFETEA-LU rescission of unobligated balances of contract authority	-----		-----	[-8,543,000]
[Congestion Initiative]	-----		-----	[175,000]
Subtotal Federal-aid Highways	36,839,350		38,918,836	37,602,215
Miscellaneous Highway Trust Funds - Unobligated balance rescission	-----		- 734	-----
Miscellaneous Trust Funds	33,689		74,864	74,864
Emergency Relief Program - P.L. 110-28 (GF)	871,022		195,000	-----
Appalachian Development Highway Systems (GF)	19,800		15,680	-----
Miscellaneous Appropriations (GF) (TIFIA Re-Estimate)	1,328		15,147	-----
Miscellaneous Appropriations (GF) - Unobligated balance rescission	-----		- 4,020	-----
TOTALS	**37,765,189**		**39,214,773**	**37,677,079**
[Discretionary]	- 3,451,782		- 3,969,957	- 3,885,000
[Mandatory]	41,216,971		43,184,730	41,562,079
PROPRIETARY AND OTHER GOVERNMENTAL RECEIPTS				
Advances from State Cooperating, Other Fed. Agencies, and Foreign Gov.	-----		-----	-----
Contributions for Highway Research Programs	-----		-----	-----
Miscellaneous Trust Funds	33,689		74,864	74,864
Advances from Other Federal Agencies	-----		-----	-----
TOTAL	**33,689**		**74,864**	**74,864**

[ ] Non-add

1/ Reflects $121 million transfer to NHTSA per P.L. 110-5. Also includes net transfer to FTA of $975 million.
2/ $1.7 million of RABA (above RABA subject to limitation) to ER Exempt.

EXHIBIT II-5

FY 2009 BUDGET REQUEST RECAP BY ACCOUNT
FEDERAL HIGHWAY ADMINISTRATION
Outlays
($000)

ACCOUNTS	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
Federal-aid Highways (HTF)	33,707,775	37,243,905	39,264,429
Subject to Obligation Limitation	32,500,424	35,984,908	37,945,297
Exempt	926,424	877,278	938,728
Pay Raise Provision	2,794	-----	-----
TIFIA Reestimate	7,099	10,810	-----
Emergency Relief Supplementals	271,034	370,910	380,403
Emergency Relief Program (GF)	840,799	1,111,635	979,076
Appalachian Development Highway System (HTF)	1,978	6,130	2,360
Appalachian Development Highway System (GF)	71,971	98,222	83,681
Miscellaneous Appropriations (GF)	158,463	90,792	69,176
Miscellaneous Highway Trust Funds (HTF)	157,996	167,307	132,894
Miscellaneous Trust Funds (TF)	45,449	213,512	105,054
Highway Related Safety Grants (HTF)	-----	193	139
State Infrastructure Banks (GF)	103	956	687
Right-of-Way Revolving Fund (HTF)	21	-----	-----
TOTALS	**34,984,556**	**38,932,654**	**40,637,498**
[Mandatory]	978,972	1,101,600	1,043,782
[Discretionary]	34,005,584	37,831,054	39,593,716

[ ] Non-add

EXHIBIT II-6

SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

LIMITATION ON ADMINISTRATIVE EXPENSES

	FY 2008 Enacted	Annualization of 2008 Pay Raise	2009 Pay Raise	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2008 Adjusted Base	Program Increases/ Decreases	FY 2009 Request
PERSONNEL RESOURCES (FTE)	2,272								
Direct FTE	2,272					41	2,313		2,313
FINANCIAL RESOURCES									
Salaries and Benefits	$262,936	$2,301	$5,719			$4,568	$275,524		$275,524
Travel	$9,582						$9,582		$9,582
Transportation	$1,719						$1,719		$1,719
GSA Rent	$26,418			$2,588			$29,006		$29,006
Rent, Communications & Utilities	$4,533						$4,533		$4,533
Printing	$2,067						$2,067		$2,067
Other Services:	$0								
-WCF	$14,554				$1,162		$15,716		$15,716
-Other	$48,324					$986	$49,310		$49,310
Supplies	$3,403						$3,403		$3,403
Equipment	$4,020						$4,020		$4,020
Total, Limitation of Administrative Expenses	**$377,556**	**$2,301**	**$5,719**	**$2,588**	**$1,162**	**$5,554**	**$394,880**	**$0**	**$394,880**
ARC	$3,000						$3,000		$3,000
OIG	$3,524						$3,524		$3,524
GRAND TOTAL, CONTRACT AUTHORITY	**$384,080**						**$401,404**		**$401,404**

EXHIBIT II-6A

WORKING CAPITAL FUND
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, Exempt and Reimbursable Obligations
($000)

	FY 2008 ENACTED	FY 2009 REQUEST	CHANGE
DIRECT:			
Federal-aid Highways (Highway Trust Fund)			
Limitation on administrative expenses	14,554	15,716	1,162
SUBTOTAL	14,554	15,716	1,162
REIMBURSABLE:			
Federal-aid Highways (Highway Trust Fund)			
Limitation on administrative expenses	-----	-----	-----
SUBTOTAL	-----	-----	-----
TOTAL	**14,554**	**15,716**	**1,162**

EXHIBIT II-7

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

DIRECT FUND, BY APPROPRIATION	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
Limitation, General Operating Expenses	2,241	2,272	2,313
SUBTOTAL, DIRECT FUNDED	2,241	2,272	2,313
REIMBURSEMENT/ ALLOCATIONS/OTHERS			
Direct Construction (FLH '000') Reimbursements	332	333	333
Federal-aid Highways (FLH '000') from Reimbursable Authority	184	185	185
Misc. Trust Fund	27	30	30
Allocations From Other Agencies, Subtotals	-----	-----	-----
SUBTOTAL, REIMBURSEMENTS/ALLOCATIONS/OTHER	543	548	548
TOTAL FTEs	2,784 *	2,820	2,861

*Matches OPM SF-113G staffing report for FHWA.

EXHIBIT II-8

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

DIRECT FUND, BY APPROPRIATION	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
Limitation, General Operating Expenses	2,244	2,430	2,430
SUBTOTAL, DIRECT FUNDED	2,244	2,430	2,430
REIMBURSEMENT/ ALLOCATIONS/OTHERS			
Direct Construction (FLH '000') Reimbursements	524	548	548
Federal-aid Highways (FLH '000') from Reimbursable Authority	-----	-----	-----
Misc. Trust Fund	-----	-----	-----
Allocations From Other Agencies, Subtotals	-----	-----	-----
SUBTOTAL, REIMBURSEMENT/ALLOCATION/OTHERS	524	548	548
TOTAL POSITIONS	2,768	2,978	2,978

FEDERAL HIGHWAY ADMINISTRATION
HISTORICAL FUNDING LEVELS (1998-2007)
($ in Thousands)

	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003 2/	FY 2004 3/	FY 2005 4/	FY 2006 5/	FY 2007
Federal-Aid Highways										
Obligation Limitation 1/	$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	$39,086,465
Liquidation of Contract Authority (C.A.)	$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	$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	$101,737
Supplemental Emergency Relief Funds	$259,000	$0	$0	$718,416	$242,000	$0	$0	$1,943,000	$3,452,363	$871,022
State Infrastructure Banks	$0	-$6,500	$0	$0	-$5,750	$0	$0	$0	$0	$0
Appalachian Development Highway System (GF)	$300,000	$132,000	$0	$0	$200,000	$188,000	$125,000	$80,000	$20,000	$19,800
Appalachian Development Highway System (TF)	$0	$0	$0	$254,402	$0	$0	$0	$0	$0	$0
LGOE/LAE - (Non Add within Federal-Aid)	$551,656	$324,767	$304,355	$294,470	$310,159	$316,126	$337,604	$346,500	$364,638	$360,992
Admin Expenses - LGOE	258,948	271,392	304,355	294,470	310,159	316,126	337,604	346,500	364,638	360,992
Admin Expenses - Motor Carrier Safety	51,000	53,375	0	0	0	0	0	0	0	0
GOE Contract Programs	241,708	0	0	0	0	0	0	0	0	0
Motor Carrier Safety Grants										
Obligation Limitation	$84,825	$100,000	$0	$0	$0	$0	$0	$0	$0	$0
Liquidation of Contract Authorization	$85,000	$100,000	$0	$0	$0	$0	$0	$0	$0	$0
Miscellaneous Appropriations	$0	$200,000	$0	$604,667	$148,300	$90,600	$4,000	$0	$0	$0
Miscellaneous Highway Trust Fund	$0	$0	$1,500	$1,182,493	$100,000	$285,000	$50,000	$34,000	$0	$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, $975 million in FY 2007.

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.

EXHIBIT III-1

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

ACCOUNTS	FY 2007 ACTUAL	FY 2008 ENACTED	FY 2009 REQUEST
[Limitation on administrative expenses]	[360,992]	[377,566]	[394,880]
Federal-aid Highways Obligation Limitation	(37,147,706) 1/	(40,585,075)	(40,399,970) 2/
Revenue Aligned Budget Authority - RABA	(842,254)	(630,976) 3/	-(1,001,242)
Subtotal, Obligation Limitation	(37,989,960)	(41,216,051)	(39,398,728)
Exempt Programs	740,737 4/	739,000	739,000
Subtotal, Obligation Limitation & Exempt Contract Authority	38,730,697	41,955,051	40,137,728
Budget Authority for pay raise (sec. 111 of P.L. 110-5)	2,794	-----	-----
Rescission of new contract authority	-----	-478,637	-----
Rescission/cancellation of unobligated balances of contract authority	-4,342,604	-3,697,246	-3,885,000
SAFETEA-LU rescission of unobligated balances of contract authority	-----	-----	[-8,593,000]
[Congestion Initiative]	-----	-----	[175,000]
TOTALS	**34,390,887**	**37,779,168**	**36,252,728**
FTEs			
Limitation on Adminstrative Expenses	2,241	2,272	2,313
Federal Aid Reimbursable	543	548	548

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. 110-5.
2/ Reflects SAFETEA-LU authorized obligation limitation of $41.2 billion less $800 million reduction.
3/ The FY 2008 RABA calculation was $631 million in the President's Budget. It was revised at mid-session to $703 million in contract authority.
4/ $1.7 million of RABA to ER Exempt.

EXHIBIT III-2

FEDERAL-AID HIGHWAYS
Summary Analysis of Change From FY 2008 to FY 2009
Appropriations, Obligation Limitations, and Exempt Obligations

($000)

Item	Change from FY 2008 Pres. Bud. to FY 2009	FY 2009 PC&B by Program	FY 2009 FTEs by Program	FY 2009 Contract Expenses	Total
FY 2008 Base		**Note: Columns are Non-Add**			
Federal-aid Highways					**$41,955,051**
Adjustment to Base					
Federal-aid Hwys					
New or Expanded Programs					
Federal-aid Hwys	**-$1,817,323**			**-1,817,323**	
Total Adjustment to Base					**-1,817,323**
FY 2009 Request [Ob. Lim. + Exempt]					**$40,137,728**

FEDERAL-AID HIGHWAYS

HIGHWAY TRUST FUND

Whenever in this fiscal year the Secretary of the Treasury (after consultation with the Secretary of Transportation) determines that the amount in the Highway Trust Fund (other than the Mass Transit Account) or the Mass Transit Account is insufficient to timely meet the anticipated payments from the account, and the amount in the other account exceeds the amount necessary to timely meet the anticipated payments from that account, the Secretary shall transfer to the insufficient account from such other account referred to in this paragraph an amount up to the insufficiency or the excess in such other account, whichever is less: Provided, That any amount transferred to the insufficient account shall be treated as a non-interest bearing repayable advance: Provided further, That whenever in this fiscal year or any fiscal year hereafter the Secretary of the Treasury (after consultation with the Secretary of Transportation) determines that the amount in the account to which an advance is made exceeds the amount necessary to timely meet the anticipated payments from the account, the Secretary shall transfer from that account, to the account from which the advance was made, an amount equal to the amount so advanced or such excess, whichever is less.

FEDERAL-AID HIGHWAYS

(**[**RESCISSION**]** *CANCELLATION*)

(HIGHWAY TRUST FUND)

Of the unobligated balances of funds apportioned to each State under chapter 1 of title 23, United States Code, $3,150,000,000 are **[**rescinded**]** *hereby cancelled*: *Provided,* That such **[**rescission**]** *cancellation* shall not apply to the funds distributed in accordance with sections 130(f) and 104(b)(5) of title 23, United States Code; sections 133(d)(1) and 163 of such title, as in effect on the day before the date of enactment of Public Law 109-59; and the first sentence of section 133(d)(3)(A) of such title.

(a) Notwithstanding any other provision of law, 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, consisting of $100,000,000 for metropolitan area congestion reduction demonstration initiatives and $75,000,000 to support the Corridors of the Future program: Provided further, That funds available pursuant to this section shall remain available for obligation until September 30, 2011, and shall not be subject to any limitation on obligations for Federal-aid 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) Notwithstanding any other provision of law, after funds are made available in accordance with subsection (a), of the remaining unobligated balances of funds 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), $109,000,000 are hereby cancelled.

(c) Notwithstanding any other provision of law, of the unobligated balances made available under section 1602 of Public Law 105-178, funds for each project for which less than 10 percent of the funds made available under that section have been obligated are hereby cancelled.

(LIMITATION ON OBLIGATIONS)

(HIGHWAY TRUST FUND)

(INCLUDING TRANSFER OF FUNDS)

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 **[**$40,216,051,359**]** *$39,398,728,226* for Federal-aid highways and highway safety construction programs for fiscal year 2008: *Provided*, That within the **[**$40,216,051,359**]** *$39,398,728,226* 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**]** *2009*: *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.

[(ADDITIONAL OBLIGATION LIMITATION)**]**

[(HIGHWAY TRUST FUND)**]**

[For an additional amount of obligation limitation to be distributed for the purpose of section 144(e) of title 23, United States Code, $1,000,000,000: *Provided*, That such obligation limitation shall be used only for a purpose eligible for obligation with funds apportioned under such section and shall be distributed in accordance with the formula in such section: *Provided further*, That such obligation limitation shall remain available for

a period of three fiscal years and shall be in addition to the amount of any limitation imposed on obligations for Federal-aid highway and highway safety construction programs for future fiscal years: *Provided further*, That in distributing obligation authority under this paragraph, the Secretary shall ensure that such obligation limitation shall supplement and not supplant each State's planned obligations for such purposes.**]**

(LIQUIDATION OF CONTRACT AUTHORIZATION)

(HIGHWAY TRUST FUND)

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, **[**$41,955,051,359**]** *$39,500,000,000* 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*: Provided, That notwithstanding any other provision of law, from such amount, sufficient funds shall first be allocated to ensure timely liquidation of obligations for salaries and administrative expenses authorized to be paid from this account for the fiscal year. (Department of Transportation Appropriations Act, 2008.)*

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

Federal-aid Highways (Ob. Lim. and Exempt Contract Authority)	**FY 2009 Request:**	**$40,137,728**
	FY 2008 Enacted:	**$41,955,051**

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 funding 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 2009 totals $40.1 billion in new budgetary resources and will be used to deliver the programs and projects envisioned in the authorizing legislation.

FY 2008 Base:

The 2008 Base reflects the FY 2008 enacted level for the Federal-aid highway program, totaling $42.0 billion in budgetary resources. This level includes an obligation limitation of $41.2 billion for FAHP programs and $739 million in exempt contract authority ($639 million for Equity Bonus and $100 million for Emergency Relief). The FY 2008 obligation limitation includes $1 billion specifically for the bridge program authorized under section 144(e) of Title 23.

In FY 2008, the 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 2008 Accomplishments:

FY 2008 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 FHWA will direct existing resources and authorities to undertake an action plan to support the Secretarial priorities of safety, system performance and reliability, and 21st century solutions. The following summarizes anticipated accomplishments to achieve the Agency's performance goals (please refer to Section 4 – Performance Budget section of the request – for additional performance information and anticipated accomplishments). Specific program funding levels for FY 2008 are detailed in the FY 2009 request section.

Safety

The FHWA will continue to deliver technical assistance, training, and public awareness programs to advance priorities in the delivery of national safety programs. FY 2008 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 2008, 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 creation 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.

The 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, the 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 2008, 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

The 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 2008, the FHWA will fund transportation improvement projects in States to help reduce mobile source emissions and adverse environmental effects. Funding, including $1.8 billion for the Congestion Mitigation and Air Quality (CMAQ) Improvement program, will 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.

The FHWA will implement environmental streamlining activities that encourage State and Federal 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.

Security, Response, and Preparedness

The FHWA will work with the State departments of transportation to implement essential 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 to achieve strategic management of human capital, competitive sourcing goals, financial performance goals, budget and performance integration goals, and electronic government (E-Gov) goals. The FY 2008 enacted level will fund a Limitation on Administrative Expenses of $377.6 million to assist with accomplishment of the FHWA's Organizational Excellence performance goals.

FY 2009 Budget Request:

The FY 2009 budget request totals $40.1 billion for the Federal-aid Highway Program (FAHP). This level includes a Federal-aid highway obligation limitation of $39.4 billion and $739 million in exempt contract authority. The obligation limitation includes a negative adjustment of $1 billion from the base level in SAFETEA-LU in accordance with the revenue aligned budget authority (RABA) calculation, and an additional reduction of $800 million. The request fulfills the President's multi-year commitment to invest in surface transportation without raising taxes or subsidizing transportation spending with other tax dollars. It is the final installment of the $286.4 billion in highway, transit, and safety program funding agreed upon in the last surface transportation reauthorization act.

The budget provides new flexibility to manage funds in the Highway Trust Fund so the existing tax structure can continue to support authorized spending for all surface transportation programs. The budget authorizes borrowing between the Highway Account and the Mass Transit Account within the Highway Trust Fund in fiscal year 2009 in the form of non-interest bearing repayable advances. The borrowing would occur if the Secretary of the Treasury, in consultation with the Secretary of Transportation, determines that during 2009, the amount in the borrowing account is not sufficient to make anticipated payments in a timely manner and the amount in the lending account exceeds the amount necessary to make anticipated payments in a timely manner.

The FY 2009 request includes $429.8 million for research programs, consistent with the level authorized in SAFETEA-LU, and a Limitation on Administrative Expenses (LAE) of $394.9 million for the necessary salaries and expenses for 2,313 full-time equivalent positions and ongoing administrative expanses.

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 2009, 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.

The budget proposes to redirect $175 million in unobligated balances for inactive projects authorized in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. The funds will be used to carry out the Department's *National Strategy to Reduce Congestion on America's Transportation Network* (the "Congestion Initiative") and will support metropolitan area congestion reduction demonstration initiatives and the Corridors of the Future Program.

In addition, the budget proposes that 75% of the funds for discretionary programs will be made available for support of critical congestion relief projects. Projects that combine various road pricing, transit and technology solutions would receive priority consideration and be selected by the Department according to transparent, competitive, and merit-based criteria.

The budget proposes $3.15 billion in cancellations of unobligated balances of apportioned contract authority in FY 2009. In addition, the budget proposes cancellations of $735 million from unobligated balances of inactive High Priority Projects authorized under TEA-21 ($626 million) and demo projects authorized under the Intermodal Surface Transportation Efficiency Act (ISTEA) ($109 million). The proposal for cancellation of funding for High Priority Projects reflects projects for which obligations to date equal less than 10% of the total authorized for the projects.

Authorized contract authority and estimated obligation limitation amounts for FAHP programs in FY 2008 and 2009 are detailed as follows. FY 2008 reflects estimated amounts enacted in P.L. 110-161. [Note: FY 2008 contract authority includes enacted rescissions of new authority; FY 2009 contract authority amounts do not include RABA adjustment; FY 2009 obligation limitation amount reflect RABA and other adjustments].

	(in thousands of dollars)	
Surface Transportation Program	**FY 2008**	**FY 2009**
Contract Authority	$6,371,818	$6,576,630
Obligation Limitation (Est.)	$6,365,057	$6,254,533

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	**FY 2008**	**FY 2009**
Contract Authority	$6,050,338	$6,306,611
Obligation Limitation (Est.)	$6,043,920	$5,940,416

The National Highway System (NHS) is a roughly 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	**FY 2008**	**FY 2009**
Contract Authority	$4,954,606	$5,199,399
Obligation Limitation (Est.)	$4,949,350	$4,865,408

Under SAFETEA-LU, the 46,726 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	**FY 2008**	**FY 2009**
Contract Authority	$4,233,515	$4,457,422
Obligation Limitation (Est.)	$4,229,024	$4,157,643

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	**FY 2008**	**FY 2009**
Contract Authority	$1,727,235	$1,777,263
Obligation Limitation (Est.)	$1,725,402	$1,695,314

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 2008**	**FY 2009**
Contract Authority	$1,055,929	$1,296,474
Obligation Limitation (Est.)	$1,054,808	$1,039,521

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 2008**	**FY 2009**
Contract Authority	$9,235,351	$9,093,266
Obligation Limitation (Est.)	$9,225,554	$8,781,104

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 2008**	**FY 2009**
Contract Authority	$932,736	$1,019,000
Obligation Limitation (Est.)	$861,848	$961,979

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 2008**	**FY 2009**
Contract Authority	$2,966,400	$2,966,400
Obligation Limitation (Est.)	$2,740,954	$2,800,408

The High Priority Projects Program provides designated funding for specific projects identified in SAFETEA-LU. A total of 5,091 projects are identified, each with a specified amount of funding over the 5 years of SAFETEA-LU.

Projects of National and Regional Significance	**FY 2008**	**FY 2009**
Contract Authority	$444,750	$355,800
Obligation Limitation (Est.)	$410,949	$335,890

The Projects of National and Regional Significance program provides funding for designated high cost projects of national or regional importance. Benefits could include improving economic productivity, facilitating international trade, relieving congestion, and improving safety.

National Corridor Infrastructure Improvement Program	**FY 2008**	**FY 2009**
Contract Authority	$487,000	$389,600
Obligation Limitation (Est.)	$449,988	$367,799

The National Corridor Infrastructure Program is a discretionary program that provides funding for construction of highway projects in corridors of national significance to promote economic growth and international or interregional trade. This program replaces TEA-21 section 1118, the National Corridor Planning and Development program.

Transportation Improvements	**FY 2008**	**FY 2009**
Contract Authority	$638,809	$511,047
Obligation Limitation (Est.)	$590,260	$482,450

The Transportation Improvements program provides designated funding for specific projects identified in SAFETEA-LU. A total of 466 projects are identified, each with a specified amount of funding over the 5 years of SAFETEA-LU.

Appalachian Development Highway System	**FY 2008**	**FY 2009**
Contract Authority	$470,000	$470,000
Obligation Limitation (Est.)	$434,280	$443,700

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	**FY 2008**	**FY 2009**
Contract Authority	$53,466	$61,250
Obligation Limitation (Est.)	$49,403	$57,823

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 Act (TIFIA)	**FY 2008**	**FY 2009**
Contract Authority	$122,000	$122,000
Obligation Limitation (Est.)	$112,728	$115,173

The TIFIA program provides Federal credit assistance; such as secured loans, loan guarantees, and lines of credit 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. 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	**FY 2008**	**FY 2009**
Contract Authority	$387,083	$429,800
Obligation Limitation (Est.)	$387,083	$407,260

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.

Surface Transportation Research, Development and Deployment	FY 2008	FY 2009
Contract Authority	$183,300	$196,400
Obligation Limitation (Est.)	$169,369	$185,410

Training and Education	FY 2008	FY 2009
Contract Authority	$24,671	$26,700
Obligation Limitation (Est.)	$24,671	$25,206

University Transportation Research	FY 2008	FY 2009
Contract Authority	$64,403	$69,700
Obligation Limitation (Est.)	$64,403	$65,800

ITS Standards, Research and Development	FY 2008	FY 2009
Contract Authority	$101,640	$110,000
Obligation Limitation (Est.)	$101,640	$103,845

Bureau of Transportation Statistics	FY 2008	FY 2009
Contract Authority	$27,000	$27,000
Obligation Limitation (Est.)	$27,000	$27,000

Other Programs	**FY 2008**	**FY 2009**
Contract Authority	$1,748,099	$717,495
Obligation Limitation (Est.)	$1,587,495	$693,818

This category includes the following programs: Recreational Trails, National Scenic Byways, Coordinated Border Infrastructure, Ferry Boats, Highways For LIFE, 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 important programs. An additional amount of obligation limitation for FY 2008 is set aside for allocated carryover.

Equity Bonus (exempt)	**FY 2008**	**FY 2009**
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)	**FY 2008**	**FY 2009**
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 2009 budget.

Congestion Initiative (non-add)	**FY 2008**	**FY 2009**
Contract Authority	--	[$175,000]

The budget proposes to redirect $175 million in unobligated balances for inactive projects authorized in ISTEA to fund activities in support of the Department-wide Congestion Initiative. Within this amount, the Department requests $100 million to fund qualified projects in 2009 that would implement congestion pricing along with complementary transportation solutions, including transit service and innovative operational technologies.

The Department requests $75 million in the FY 2009 budget to support the Department's Corridors of the Future Program (CFP), which is part of the Department's Congestion Initiative. In September 2007, the Department identified Interstates 5, 15, 10, 69, 70 and 95 as nationally significant Corridors of the Future; whose improvement will alleviate congestion and provide national and regional long-term transportation benefits.

The Department will be entering into Development Agreements with the States along the Corridors during FY 2008. The $75 million requested will support projects negotiated and included within the Development Agreements that demonstrate an aggressive approach to congestion management. Selected projects are expected to include technology purchases to support electronic tolling and other intelligent transportation system technologies, financing analysis and targeted infrastructure investments.

In addition, the budget proposes that 75% of the funds for discretionary programs will be made available for support of critical congestion relief projects. Projects that combine various

road pricing, transit and technology solutions would receive priority consideration and be selected by the Department according to transparent, competitive, and merit-based criteria.

Funding authorized for the following discretionary programs will be used to support congestion relief projects to the extent consistent with each program's statutory requirements:

- Ferry Boat Discretionary Program
- Highways for Life Pilot Program
- Innovative Bridge Research and Deployment Program
- Interstate Maintenance Discretionary Program
- Public Lands Highway Discretionary Program
- Transportation, Community, and System Preservation Program
- Truck Parking Facilities Pilot Program

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL-AID HIGHWAYS

PROGRAM AND FINANCING SCHEDULE
in millions of dollars

Identification code: 69-8083-0-7-401		FY 2007 Actual	FY 2008 Estimate	FY2009 Request
Obligations by Program Activity				
	Direct program:			
	Programs subject to obligation limitation:			
00.01	Direct loan subsidy [TIFIA]	30	232	100
00.02	Guarantee loan subsidy [TIFIA]	-----	20	20
00.09	Administrative expenses [TIFIA]	2	2	2
00.10	Surface transportation program	8,466	7,712	7,624
00.11	National highway system	6,954	7,323	7,237
00.12	Interstate maintenance	5,104	5,996	5,926
00.13	Bridge program	4,789	5,624	5,063
00.14	Congestion mitigation and air quality improvement	1,049	2,090	2,067
00.15	Highway Safety Improvement Programs	753	1,278	1,262
00.16	Equity Programs	1,925	2,421	2,413
00.17	Federal lands highways	940	1,059	985
00.18	Appalachian development highway system	300	417	424
00.19	High Priority Projects	1,607	1,860	2,546
00.20	Projects of national and regional significance	158	205	252
00.21	Research, development, and technology	458	391	396
00.22	Administration [Federal-aid highways]	361	378	395
00.23	Other programs	2,903	3,942	2,630
00.91	Programs subject to obligation limitation	35,799	40,950	39,342
	Programs exempt from obligation limitation:			
02.11	Emergency relief program	110	172	118
02.13	Equity Programs	606	771	692
02.14	Demonstration projects	7	22	-----
02.15	Direct loan program upward reestimate [TIFIA]	7	1	-----
02.16	Congestion initiative	-----	-----	175
02.91	Programs exempt from obligation limitation	730	976	985
03.01	Other discretionary appropriations	1	567	-----
06.00	Total direct program	36,530	42,493	40,327
09.01	Reimbursable program	229	200	200
10.00	Total obligations	36,759	42,693	40,527
Financing:				
Budgetary resources available for obligation				
21.40	Unobligated balance carried forward, start of year	35,319	35,726	32,163
22.00	New budget authority (gross)	37,164	39,130	29,209
22.22	Unobligated balance transferred from other accounts [69-8350]	2	-----	-----
23.90	Total budgetary resource available for obligation	72,485	74,856	61,372
23.95	Total new obligations	-36,759	-42,693	-40,527
24.40	Unobligated balance carried forward, end of year.	35,726	32,163	20,845

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL-AID HIGHWAYS

PROGRAM AND FINANCING SCHEDULE
in millions of dollars

Identification code: 69-8083-0-7-401		FY 2007 Actual	FY 2008 Estimate	FY2009 Request
New budget authority (gross) detail:				
	Discretionary:			
40.26	Appropriation (trust fund) [20-8102-0-401-N-0500-01]	36,035	41,955	39,500
40.49	Portion applied to liquidate contract authority	-35,675	-41,955	-39,500
41.00	Transferred to other account (69-8350)	-247	-----	-----
41.00	Transferred to other account (69-8016)	-121	-----	-----
42.00	Transferred from other account (69-8350)	11	-----	-----
43.00	Appropriation (total discretionary)	3	-----	-----
49.36	Unobligated balances permanently reduced	-----	-----	-3,885
	Spending authority from offsetting collections			
58.00	Offsetting collections, (cash)	54	200	200
58.10	Change in uncollected cust payments from Federal Sources (unexpired)	272	-----	-----
58.90	Spending authority from offsetting collections	326	200	200
	Mandatory:			
60.26	Appropriation (trust fund, indefinite) [20-8102-0-401-N-0500-01]	7	11	-----
66.10	Contract authority	42,269	43,095	42,488
66.35	Contract authority permanently reduced	-----	-479	-1,001
66.36	Unobligated balances permanently reduced	-4,343	-3,697	-8,593
66.61	Transfer to other accounts [69-8350]	-988	-----	-----
66.61	Transfer to other accounts [69-8016]	-121	-----	-----
66.62	Transfer from other accounts [69-8350]	11	-----	-----
66.90	Contract authority (total mandatory)	36,835	38,930	32,894
70.00	Total new budget authority (gross)	37,164	39,130	29,209
Change in obligated balances				
72.40	Obligated balance, start of year	43,267	45,992	51,242
73.10	Total new obligations	36,759	42,693	40,527
73.20	Total outlays (gross)	-33,762	-37,443	-39,464
74.00	Chg in Uncollected cust orders fm Fed Sources (unexpired)	-272	-----	-----
74.40	Obligated balance, end of year	45,992	51,242	52,305
Outlays (gross), detail (unexpired and expired)				
86.90	Outlays from new discretionary authority	10,586	11,328	10,838
86.93	Outlays from discretionary balances	22,243	25,227	27,687
86.97	Outlays from new mandatory authority	208	211	200
86.98	Outlays from mandatory balances	725	677	739
87.00	Total outlays (gross)	33,762	37,443	39,464
Offsets:				
Against gross budget authority and outlays				
	Offsetting collections (cash) from:			
88.00	Offsetting collections (cash) from: Federal sources	54	200	200
Against gross budget authority only				
88.95	Change in uncollected customer payments from Federal sources (unexpire	272	-----	-----
Net budget authority and outlays				
89.00	Budget authority	36,838	38,930	29,009
90.00	Outlays	33,708	37,243	39,264

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL-AID HIGHWAYS

OBJECT CLASSIFICATION
in millions of dollars

Identification code: 69-8083-0-7-401		2007 Actual	2008 Estimate	2009 Estimate
Direct obligations:				
	Personnel compensation:			
11.11	Full-time permanent	30	31	32
11.13	Other than full-time permanent	1	1	1
11.15	Other personnel compensation	1	1	1
11.19	Total personnel compensation	32	33	34
11.21	Civilian personnel benefits	5	5	5
12.10	Travel and transportation of persons	10	10	10
12.40	Printing and reproduction	1	1	1
12.51	Advisory and Assistance Services	18	18	19
12.52	Other services	396	404	412
12.53	Other purchases of goods and services from Government accounts	454	463	472
12.54	Operation and maintenance of facilities	2	2	2
12.60	Supplies and materials	4	4	4
13.20	Land and structures	152	155	158
14.10	Grants, subsidies, and contributions	34,154	40,068	37,849
19.30	Limitation on general operating expenses (see separate schedule)	-----	-----	-----
19.90	Subtotal, direct obligations	35,228	41,163	38,966

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL-AID HIGHWAYS

OBJECT CLASSIFICATION
in millions of dollars

Identification code: 69-8083-0-7-401	2007 Actual	2008 Estimate	2009 Estimate
Reimbursable obligations:			
Personnel compensation:			
21.11 Full-time permanent	17	18	19
21.13 Other than full-time permanent	1	1	1
21.19 Total personnel compensation	18	19	20
21.21 Civillian personnel benefits	5	5	5
22.10 Travel and transportation of persons	1	1	1
22.51 Advisory and Assistance Services	7	7	7
22.52 Other services	2	2	2
22.53 Other purchases of goods and services from Government accounts	7	7	7
22.57 Operation and maintenance of equipment	1	1	1
22.60 Supplies and materials	1	1	1
23.10 Equipment	2	2	2
24.10 Grants, subsidies, and contributions	185	155	154
29.90 Subtotal, reimbursable obligations	229	200	200

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL-AID HIGHWAYS

OBJECT CLASSIFICATION
in millions of dollars

Identification code: 69-8083-0-7-401		2007 Actual	2008 Estimate	2009 Estimate
Allocation accounts - direct:				
	Personnel compensation:			
31.11	Full-time permanent	46	48	49
31.13	Other than full-time permanent	5	5	5
11.15	Other personnel compensation	3	3	3
31.19	Total personnel compensation	54	56	57
31.21	Civilian personnel benefits	14	14	15
32.10	Travel and transportation of persons	4	4	4
32.20	Transportation of things	1	1	1
32.31	Rental payments to GSA	9	9	9
32.33	Communications, utilities, and misc. charges	1	1	1
32.51	Advisory and assistance services	3	3	3
32.52	Other services	458	467	477
32.53	Other purchases of goods and services from Government accounts	21	21	22
32.54	Research and development contracts	4	4	4
32.60	Supplies and materials	4	4	4
33.10	Equipment	5	5	5
33.20	Land and structures	18	18	19
34.10	Grants, subsidies, and contributions	345	345	345
39.90	Subtotal, obligations from allocation accounts	941	952	966

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL-AID HIGHWAYS

OBJECT CLASSIFICATION
in millions of dollars

Identification code: 69-8083-0-7-401		2007 Actual	2008 Estimate	2009 Estimate
Limitation account - Direct Obligations:				
	Personnel compensation:			
61.11	Full-time permanent	188	196	206
61.13	Other than full-time permanent	3	3	3
61.15	Other personnel compensation	3	3	3
61.19	Total personnel compensation	194	202	212
61.21	Civilian personnel benefits	57	61	63
62.10	Travel and transportation of persons	10	10	10
62.20	Transportation of things	2	2	2
62.31	Rental payments to GSA	24	26	29
62.32	Rental payments to others	1	1	1
62.33	Communications, utilities, and misc. charges	4	4	4
62.40	Printing and reproduction	2	2	2
62.51	Advisory and assistance services	13	12	12
62.52	Other services	3	3	3
62.53	Purchases of goods and services from government accounts	11	15	16
62.57	Operation and maintenance of equipment	33	33	34
62.60	Supplies and materials	3	3	3
63.10	Equipment	4	4	4
69.90	Subtotal, obligations from limitation account	361	378	395

FEDERAL AID HIGHWAY

EMPLOYMENT SUMMARY

Identification code: 69-8083-0-7-401		FY 2007 Actual	FY 2008 Estimate	FY 2009 Estimate
	Direct:			
10.01	Civilian full-time equivalent employment……..	332	333	333
	Reimbursable:			
20.01	Civilian full-time equivalent employment……..	184	185	185
	Limitation Account - direct:			
60.01	Civilian full-time equivalent employment……..	2,241	2,272	2,313

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LIMITATION ON ADMINISTRATIVE EXPENSES

Not to exceed **[**$377,556,000**]** *$394,880,000,* 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. *(Department of Transportation Appropriations Act, 2008.)*

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

Operating Expenses (Ob. Lim.)
FY 2009 Request: $394,880
FY 2008 Enacted: $377,556

Overview:
This account provides for resources to 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 2008 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 2008 enacted level totals $377.6 million. This level includes $262.9 million for the salaries and benefits for 2,272 full time equivalents (FTE), which is 158 FTE below the authorized staffing level. The FY 2008 base level also includes $26.4 million for rent, $14.6 million for the Working Capital/IT Franchise Fund, $9.6 million for travel, and $64.1 million for other activities critical to maintaining the agency's administrative operations.

Anticipated FY 2008 Accomplishments:

Strategic Management of Human Capital

Human Capital Plan, Succession Planning, Closing Gaps. The FHWA's Human Capital Plan will be revised to implement a new model for 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 an aggressive recruitment program will be needed to replace the retiring workforce and strengthen our core functions, including congestion management and mitigation, structures and materials research and analysis, budget development and execution, transportation management and operations, and safety. 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, information technology, and human resources).

Initiatives to Achieve a Multidisciplinary Workforce While Continuing our Succession Planning Efforts. The Professional Development Program will be used to recruit, hire, and develop entry-level individuals in mission-critical disciplines (e.g., financial management). In addition, there will be an increase of new mid-career hires, and recruitment initiatives and incentives will be critical to attracting diverse candidates with the needed multidisciplinary skills. Also, the Agency will implement new initiatives to reduce the under-representation of Hispanic employees and individuals with disabilities.

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. Recommendations from the FHWA Disability Task Force will be implemented. Mediation will be used to address organizational issues when appropriate.

The Agency's Learning and Development Program will train increasing numbers of employees to ensure continued improvements in stewardship, program oversight, and financial management. A multidisciplinary approach and an emphasis on accountability will be incorporated at all levels of training. Many learning activities will be offered using video and web conferencing technologies. Using a blended approach to learning enables the FHWA to respond more quickly to the learning needs of our employees. In addition, the Agency plans to fund rotational assignments for mid-career hires to ensure that they have the skills needed to successfully administer the various FHWA programs.

The Agency's other accomplishments will include the implementation of the new Federal-aid Academy which is designed to foster improved stewardship and oversight of Federal-aid programs in accordance with requirements of SAFETEA-LU, the new Leadership Academy for new mid-career managers, and acquisition training. Implementation of changes to acquisition training requirements will call for additional FHWA resources. The number of individuals affected by this change has increased; at the same time, the number of training hours has increased as well. Without additional funding, the impact of this change may require a reprioritization of learning and development activities.

The Agency will launch improved learning activities with an emphasis on just-in-time delivery and reinforce learning at regular intervals during the initial two years of supervisory tenure, to ensure that supervisors can effectively manage performance while operating in a continually changing environment. The Agency will continue to enhance current supervisor skills and focus greater attention on the skills needed to effectively manage performance when supervising staff that telecommute, are employed in shared positions, or work in alternative duty locations.

The FHWA plans to implement recommendations for pilot field organizational alignments that lead to increased organizational flexibility to respond to changes in Agency mission and funds will be used for telework sites and related training for employees and managers in remote worksites.

Improving performance management skills will also be a high priority item. The FHWA and OPM employee survey results indicate there is a strong need to provide training for supervisors and employees. Both supervisors and employees will receive additional training on how to improve metrics in performance standards, how to hold employees accountable for achieving organizational goals, and how to deal with performance problems.

Also, feedback from OPM on the FHWA's Performance Appraisal Assessment Tool will be addressed. The FHWA will ensure that awards are used to recognize achievements that advance our goals and objectives. The FHWA will carefully monitor that these goals and objectives, as stated in the Agency's 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 GOE funds for its employee recognition and awards budget to support the strengthening of the performance culture in the FHWA.

The FHWA will continue to implement its Employee Survey Action Plan (which also includes actions to address Human Capital Survey (HCS) and Diversity Management Council recommendations) and create an organizational climate that enables its workforce to achieve the strategic goals of the Agency. New approaches will be used to address low-scoring and/or downward trending items. The Agency will implement new initiatives to improve employee satisfaction. In addition, action items by the FHWA Human Resources Management Committee (HRMC) will be implemented.

Implementing OPM's Hiring Model. Under the OPM 45-day hiring model, the measurement of success has changed to "percentage selected within 45 days." The goal for FY 2008 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 has developed a guideline to assist selecting officials in making selections and clearing the ERRC within 75 days.

Accountability Reviews. The FHWA is participating in Department-wide accountability reviews. In 2008, the 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. Further accountability review activity will be coordinated with the DOT Accountability Review Program Plan.

Background Investigations. Homeland Security Presidential Directive-12 (HSPD-12) requires that all Federal employees have at a minimum a basic background investigation on file, and many employees need to have their clearances updated

Electronic Government (E-Gov)

The FHWA will begin the implementation of best practices arising from the information technology (IT) field study, support E-Gov initiatives through contributions and participation, and 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.

The FHWA will continue to lead a departmental E-Gov subcommittee working on crosscutting IT initiatives. The Director of the Office of Information and Management Services co-chairs the DOT E-Gov Subcommittee. The subcommittee meets regularly throughout the year to discuss the E-Gov scorecard and strategies for "getting to green."

The FHWA will continue to expand its Enterprise Architecture (EA) by identifying and developing a target architecture for one or more business areas, implement governance processes, and build-out and utilize the transition strategy and sequencing plan. We will continue to work with our EA extended core team, comprised of Headquarters and field office representatives, to identify new business improvement opportunities and to collect and validate

information for the EA information repository. We will continue to educate Headquarters and field offices on the uses and benefits of EA, such as enhanced decision-making and long-range planning. In addition, the recently implemented Business Need Request process will integrate EA and capital planning, ensuring that investments are driven by a specific business need. Also, a board will ensure that enterprise-wide solutions are considered to achieve better return-on-investment and review investments annually, as part of the capital planning process, to ensure continuity and consistency with the target architecture.

Competitive Sourcing

As in our 2005 and 2006 Federal Activities Inventory Reform (FAIR) Act submissions, our recent 2007 inventory was based on identification of the "functions and activities" for which the FHWA is responsible. Our approach in 2005 to examine all of our work at the activity level resulted in a solid baseline that continues to require only minor adjustments from year-to-year. We believe that development of the annual FAIR Act inventory provides a resource to support the Department's human capital/workforce planning processes, while also helping our Agency to achieve its organizational goals. In this regard, we are prepared to be active participants in Departmental planning initiatives that may offer a potential for added cross-modal efficiency.

The use of contractor support is a well-established business practice of our Agency that continues to serve us well. The FHWA's reliance upon a contractor workforce to contribute to accomplishment of critical work signifies a continuing commitment to the efficient integration of public and private sector talent to assure the best use of taxpayer dollars. Competitive sourcing is a tool that we will continue to consider and apply in our effort to reduce operational costs and incorporate the best and most effective business practices.

Planned accomplishments include: (1) continuing to align our human capital management strategies with competitive sourcing; (2) participating in OST cross-cutting reviews of Departmental operations where the FHWA has an FTE presence; and (3) continuing to train Agency employees who may be involved in the competitive sourcing process, to ensure they have the necessary skills and qualification to fulfill their roles and assignments.

We are also benefiting from an improved process for developing our annual FAIR Act commercial and inherently governmental inventories, as well as the strengthened relationship between our workforce planning and competitive sourcing programs.

Financial Performance

By the end of 2008, the FHWA will have completed three full years 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 achieving them. As this review and oversight program continues with the Federal-aid program, we will incorporate best practices from both Federal-aid and Federal Lands Highway organizations into an expanded agency-wide program. It will include reviews of financial processes, financial transactions, and funds management activities,

along with external audit coordination, and evaluations of the key internal administrative processes.

A "National Lessons Learned Program" will be developed and cost estimating training will be continued. In addition, staff plans to complete the risk roll-up report on the second round of agency-wide risk management initiative; and develop guidance for improving program management practices in the agency. Both of these activities are follow-up actions from the recent Highway Infrastructure PART.

Budget and Performance Integration

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. The 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, the 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 is in the process of refining the methodology developed for attributing costs to DOT strategic objectives, and to more than one performance goal. These refinements will provide the basis for a Managerial Cost Accounting (MCA) model. In FY 2008, 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 2009 Budget Request:

The FHWA requests $394.9 million for the Limitation on Administrative Expenses (LAE). In addition, Title 23, U.S.C. authorizes $3 million in contract authority for administrative expenses of the Appalachian Regional Commission (ARC) and $3.5 million in contract authority for audits conducted by the DOT Office of Inspector General.

The FY 2009 request reflects increases to the FY 2008 base for cost of living adjustments (COLA), rent costs, Working Capital Fund costs, travel costs and inflation in other activities critical to maintaining the agency's administrative operations. The adjusted base totals $394.9 million, which is an increase of $17.3 million.

The FHWA is refocusing its workforce to use resources differently and accomplish needed changes to FHWA operations. Through this effort, an FTE level of 2,313 FTE in FY 2009 is estimated to be sufficient to successfully carry out agency operations. This level is 117 FTE below the authorized FTE ceiling of 2,430.

Strategic Management of Human Capital

Human Capital Plan, Succession Planning, Closing Gaps. 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 an aggressive recruitment program will be needed to replace the retiring workforce and strengthen our core functions, including congestion management and mitigation, structures and materials research and analysis, budget development and execution, transportation management and operations, and safety. 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 information technology and human resources).

The Professional Development Program will be used to recruit, hire, and develop the increasing number of entry-level individuals in mission-critical disciplines (e.g., financial management). The funding will support individuals needed to fill FTE positions in Headquarters, and the increasing number of individuals needed to fill FTE positions in Division Offices.

Recruitment incentives will be critical to attracting new mid-career hires with the requisite multidisciplinary skills. With the increasing number of retirements and vacancies agency-wide, continuous efforts need to be made to attract a diverse workforce through various recruitment sources such as advertisements, print media, web sites, etc.

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 stewardship, program oversight, and financial management including the implementation of the new Federal-aid Academy which is designed to foster improved stewardship and oversight of Federal-aid programs in accordance with requirement under SAFETEA-LU, the new Leadership Academy for new mid-career managers, and acquisition training. A multidisciplinary approach and an emphasis on accountability will be incorporated at all levels of training. 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.

The Agency will continue our efforts to support a learning environment that supports new supervisors with the information and skills they will need immediately in their new supervisory role and then by providing additional training in regular installments through the first two years of their supervisory tenure. Managing employee performance will continue to be a high priority item in 2009. The Agency will continue to enhance current supervisor skills and focus on managing performance under flexible work arrangements such as teleworking, shared positions, and alternative duty locations. The Agency will also 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 using video and web-conferencing, or other e-learning technologies. Additional funding is necessary to develop and/or convert instructor-led courses to an e-learning environment.

Over the last four years, the FHWA has sustained reductions to the training budget as a result of Agency-wide funding constraints. Employee survey results indicate employees do not have sufficient training to meet their immediate work and career needs. The Agency plans to build the training program so that critical multidisciplinary training needs are addressed. Continued implementation of changes to acquisition training requirements will require additional FHWA resources. The number of individuals affected by this change has increased; at the same time, the number of training hours has increased as the well. Without additional funding resources, the impact of this change may require a reprioritization of learning and development activities.

The FHWA will evaluate the pilot field realignments to identify issues and make changes to increase organizational effectiveness for teleworking sites and related training for employees and managers in flexible work arrangements such as shared positions are alternative duty locations.

The FHWA will carefully monitor to ensure the Agency's goals and objectives, as stated in the Agency's 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. Follow-up 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 used to recognize achievements that advance the Agency's goals and objectives. The Agency request includes funding for employee recognition and awards funding to support this strengthening of the performance culture in the FHWA.

The FHWA will continue to implement its Employee Survey Action Plan (which also includes actions to address Human Capital Survey (HCS) and Diversity Management Council recommendations) and create an organizational climate that enables its workforce to achieve the strategic goals of the Agency. New approaches will be used to address low-scoring and/or downward trending items. The Agency will implement new initiatives to improve employee satisfaction. In addition, action items by the FHWA Human Resources Management Committee (HRMC) will be implemented.

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. Mediation will be used to address organizational issues when appropriate.

Under the OPM 45-day hiring model, the measurement of success has changed to percentage selected within 45 days. The goal for FY 2008 is for selecting officials to sign the certificate within 45 days of the announcement closing in 65 percent of the cases. If the measurement for success changes for FY 2009, the FHWA will make any changes necessary to work toward

achieving the new goal. For the SES, the FHWA has developed a guideline to assist selecting officials in making selections and clearing the ERRC within 75 days.

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. This includes greater integration and enhancement of current systems, to provide for greater customer service response and focus, greater system integration between the training system (eLMS) and other personnel systems such as Hiring Management and the Federal Personnel and Payroll System (FPPS), and enhanced management-automated tools to improve overall processes.

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.

Under the implementation of HSPD-12, there are new and more rigorous background investigations required on all new Federal employees and contractors working for the FHWA. As a result, individuals need security clearances and many employees need to have their clearances updated. The Agency requests that funds be allocated for personnel security area. These funds will assist with finalizing the appropriate clearances for employees that are selected for positions that have higher-level clearance requirements.

Electronic Government (E-Gov)

The FHWA will continue to co-chair a departmental E-Gov subcommittee working on crosscutting IT initiatives.

The FHWA will continue to refine and use its Enterprise Architecture (EA) to guide IT investments in support of the DOT and the FHWA strategic goals and expand the target architecture by adding one or more business areas. 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. In addition, the FHWA will continue to ensure the integration of EA and capital planning.

The FHWA will 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.

To enhance IT security, we will implement the provisions of Homeland Security Presidential Directive - 12 (HSPD-12) applicable to FY 2009. We will also continue the consolidation of IT infrastructure in FHWA field offices

The FHWA will support 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.

The FHWA Exhibit 300 is posted at the following web site:
http://www.dot.gov/exhibit300.

Financial Performance

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

The FHWA will deliver a National Lessons Learned Program to field offices for major project stewardship and oversight. Also, training on cost estimation for major projects has been developed and will be provided to select States. The training presents 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. The 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.

The FHWA will continue to implement the next iteration of an agency-wide risk management initiative. A training course on risk management practices has been developed and will be provided to FHWA employees and its state and local partners. The FHWA will continue to develop strategies for improving program management practices in the agency.

Budget and Performance Integration

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 Managerial Cost Accounting (MCA) model will be developed to fully map budget accounts and program activities to strategic objectives and performance goals. The FHWA will continue to improve the MCA and unit performance reports.

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 2008	**$377,556**
Adjustments to Base:	
<u>Salaries and Benefits</u> The requested increase is needed to fund the COLA, Locality Pay, and other pay increases.	**$12,588**
<u>GSA Rent and Utilities</u> The requested increase for GSA rent is due to increased rent costs for FHWA field office facilities.	**$2,588**
<u>Working Capital Fund</u> The requested increase for the Working Capital Fund is assigned by the Department due to an increase in the services provided.	**$1,162**
<u>Other Activities</u> The requested increase for other services contracts accommodates inflation and is necessary to support departmental initiatives and activities central to carrying out the agency's mission.	**$986**
Total Adjustments to Base:	**$17,324**
LAE, FY 2009 President's Budget	**$394,880**

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EMERGENCY RELIEF PROGRAM **[**I-35W BRIDGE REPAIR AND RECONSTRUCTION**]**

[For necessary expenses to carry out the project for repair and reconstruction of the Interstate 35W bridge located in Minneapolis, Minnesota, that collapsed on August 1, 2007, as authorized under section 1(c) of Public Law 110-56, up to $195,000,000, as documented by the Minnesota Department of Transportation to remain available until expended: *Provided*, That the amount provided under this heading is designated as described in section 5 (in the matter preceding division A of this consolidated Act): *Provided further*, That the Federal share of the costs of any project funded using amounts made available under this section shall be 100 percent in accordance with section 1(b) of Public Law 110-56.**]** *(Department of Transportation Appropriations Act, 2008.)*

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 were 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). In FY 2007, $871 million was appropriated for this program (P.L. 110-28). In 2008, $195 million was appropriated in P.L. 110-161 for the repair and reconstruction of the Interstate 35W bridge located in Minneapolis, MN, that collapsed on August 1, 2007, as authorized under Public Law 110-56.

BUDGETARY RESOURCES

No new budget authority is requested for FY 2009.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
EMERGENCY RELIEF

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-0500-0		2007 Actual	2008 Estimate	2009 Estimate
	Obligations by program by activity:			
00.01	Emergency relief program	939	1,567	……
10.00	Total new obligation (object class 41.0).....	939	1,567	……
	Budgetary resources available for obligation			
21.40	Unobligated balance available, start of year…….	1,330	1,372	……
22.00	New budget authority (gross)……..…….	871	195	……
22.10	Recoveries of prior year obligations……	-110	……	……
23.90	Total budgetary resources available for obligations……	2,311	1,567	……
23.95	Total new obligations.....	-939	-1,567	……
24.40	Unobligated balance available, end of year……	1,372	……	……
	New budget authority (gross), Detail: Discreationary:			
40.00	Appropriation…….……	871	195	……
	Change in obligated balances			
72.40	Obligated balance, start of year.....…	1,274	1,262	1,717
73.10	New obligations.....….	939	1,567	……
73.20	Total outlays (gross).....….	-841	-1,112	-979
73.45	Recoveries of prior year obligations……	-110	……	……
74.40	Obligated balance, end of year.....….	1,262	1,717	738
	Outlays (gross), detail			
86.90	Outlays from new discretionary authority……..…	235	53	……
86.93	Outlays from discreationary balances.....	606	1,059	979
87.00	Total outlays (gross)……	841	1,112	979
	Net budget authority and outlays:			
89.00	Budget authority.....	871	195	……
90.00	Outlays.....……	841	1,112	979

EMERGENCY RELIEF

OBJECT CLASSIFICATION

In millions of dollars

Identification code: 69-0500-0		2007 Actual	2008 Estimate	2009 Estimate
	Direct obligations:			
14.10	Direct obligations:Grants,susbsides, and contributions.	939	1,567	……

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[APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM**]**

[For necessary expenses for West Virginia corridor H of the Appalachian Development Highway System as authorized under section 1069(y) of Public Law 102-240, as amended, $15,680,000, to remain available until expended.**]** *(Department of Transportation Appropriations Act, 2008.)*

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. In FY 2007 and 2008, this program received appropriations of $19.8 million and $15.7 million, respectively. Obligations and outlays for the Highway Trust Fund account result in part from prior year appropriations.

BUDGETARY RESOURCES

No new budget authority is requested for FY 2009.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-0640-0-1-401		2007 Actual	2008 Estimate	2009 Estimate
	Obligations by program by activity:			
00.06	Appalachian Hwy. Dev. Sys. 2005	54	122	.....
10.00	Total obligations	54	122	.....
	Budgetary resources available for obligation			
21.40	Unobligated balance available, start of year	133	106	.....
22.00	New budget authority (gross)	20	16	.....
22.10	Resources available from recoveries of prior year obligations	7		
23.90	Total budgetary resources available for obligation	160	122	.....
23.95	New obligations	-54	-122	.....
24.40	Unobligated balance available, end of year	106	.....	.....
	New budget authority (gross), detail			
	Discretionary			
40.00	Appropriation	20	16	.....
	Change in obligated balance			
72.40	Obligated balance, start of year	176	151	175
73.10	New obligations	54	122	.....
73.20	Total outlays (gross)	-72	-98	-84
73.45	Recoveries of prior year obligations	-7	.....	.....
74.40	Obligated balance, end of year	151	175	91
	Outlays (gross), detail			
86.90	Outlays from new discretionary authority	5	4	.....
86.93	Outlays from discretionary balances	67	94	84
87.00	Total outlays (gross)	72	98	84
	Net budget authority and outlays			
89.00	Budget authority	20	16	.....
90.00	Outlays	72	98	84

APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

OBJECT CLASSIFICATION

In millions of dollars

Identification code: 69-0640-0-1-401		2007 Actual	2008 Estimate	2009 Estimate
	Direct obligations:			
12.52	Other Services	54	122	.....

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-8072-0-1-401	2007 Actual	2008 Estimate	2009 Estimate
Obligations by program by activity:			
00.02 Sec. 378 of P.L. 106-346	1	2	.....
10.00 Total obligations	1	2	.....
Budgetary resources available for obligation			
21.40 Unobligated balance available, start of year	3	2	.....
23.95 New obligations	-1	-2	.....
24.40 Unobligated balance available, end of year	2	.....	.....
Change in obligated balances			
72.40 Obligated balance, start of year	8	7	3
73.10 New obligations	1	2	.....
73.20 Total outlays (gross)	-2	-6	-2
74.40 Obligated balance, end of year	7	3	1
Outlays (gross), detail			
86.93 Outlays from discretionary balances	2	6	2
Net Budget authority and outlays:			
89.00 Budget authority	.....	.....	.....
90.00 Outlays	2	6	2

APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM

OBJECT CLASSIFICATION

In millions of dollars

Identification code: 69-8072-0-1-401	2007 Actual	2008 Estimate	2009 Estimate
Direct obligations:			
12.52 Other Services	1	2	.....

MISCELLANEOUS APPROPRIATIONS

[DELTA REGIONAL TRANSPORTATION DEVELOPMENT PROGRAM]

[For necessary expenses for the Delta Regional Transportation Development Program as authorized under section 1308 of Public Law 109-59, $14,014,000, to remain available until expended.] *(Department of Transportation Appropriations Act, 2008.)*

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
MISCELLANEOUS APPROPRIATIONS

BACKGROUND

This account contains miscellaneous appropriations from the General Fund. In FY 2008 $14 million was provided for the Delta Regional Transportation Development Program, which is being reported under this account. Also in FY 2008, $4 million was rescinded from unobligated balances. Obligations and outlays result in part from prior year appropriations.

BUDGETARY RESOURCES

No new budget authority is requested for FY 2009.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
MISCELLANEOUS APPROPRIATIONS

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-9911-01-401		2007 Actual	2008 Estimate	2009 Estimate
	Obligations by program by activity:			
00.01	Interest on TIFIA Upward Reestimate…….	1	1	……
00.83	Miscellaneous highway projects/Muscle Shoals	67	43	29
10.00	Total new obligation (object class 41.0).....	68	44	29
	Budgetary resources available for obligation			
21.40	Unobligated balance available, start of year…….	151	130	97
22.00	New budget authority (gross)…….	1	11	……
22.10	Resources available from recoveries of prior year obligations	46	……	……
23.90	Total budgetary resources available for obligations……	198	141	97
23.95	Total new obligations.....	-68	-44	-29
24.40	Unobligated balance available, end of year…….	130	97	68
	New budget authority (gross), Detail: Discreationary:			
40.00	Appropriation	……	14	……
40.36	Unobligated balance permanetly reduced…….	……	-4	……
43.00	Appropriation (total discretionary)	……	10	……
	New budget authority (gross), Detail Mandatory:			
60.00	Appropriations (trust fund)	1	1	……
70.00	Total new budget authority (gross)…….	1	11	……
	Change in obligated balances			
72.40	Obligated balance, start of year.....	310	174	127
73.10	New obligations.....	68	44	29
73.20	Total outlays (gross).....	-158	-91	-69
73.45	Recoveries of prior year obligations……..	-46	……	……
74.40	Obligated balance, end of year.....	174	127	87
	Outlays (gross), detail			
86.90	Outlays from new discretionary authority……..	……	3	……
86.93	Outlays from discreationary balances.....	157	87	69
86.97	Outlays from new mandatory authority.....	1	1	……
87.00	Total outlays (gross)	158	91	69
	Net budget authority and outlays:			
89.00	Budget authority.....	1	11	……
90.00	Outlays.....	158	91	69

MISCELLANEOUS APPROPRIATIONS

OBJECT CLASSIFICATION

In millions of dollars

Identification code: 69-9911-01-401		2007 Actual	2008 Estimate	2009 Estimate
	Direct obligations:			
14.10	Direct obligations:Grants,subsidies, and contributions	68	44	29

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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. In FY 2008, $0.734 million was rescinded from unobligated balances in this account.

BUDGETARY RESOURCES

No new budget authority is requested for FY 2009.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
MISCELLANEOUS HIGHWAY TRUST FUNDS

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-9972-0-7-401		2007 Actual	2008 Estimate	2009 Estimate
	Obligations by program by activity:			
00.27	Miscellaneous highway projects	111	164	……
10.00	Total new obligation (object class 41.0).....	111	164	……
	Budgetary resources available for obligation			
21.40	Unobligated balance available, start of year……	260	165	……
22.00	New budget authority (gross)……	……	-1	……
22.10	Resources available from recoveries of prior year obligations	16	……	……
23.90	Total budgetary resources available for obligations……	276	164	……
23.95	Total new obligations.....	-111	-164	……
24.40	Unobligated balance available, end of year……	165	……	……
	New budget authority (gross), Detail: Discreationary:			
40.36	Unobligated balance permanetly reduced…….	……..	-1	……
	Change in obligated balances			
72.40	Obligated balance, start of year.....	388	275	272
73.10	New obligations.....…	111	164	……
73.20	Total outlays (gross).....…	-158	-167	-133
73.45	Recoveries of prior year obligations……..	-16	……	……
74.40	Obligated balance, end of year.....…	275	272	139
	Outlays (gross), detail			
86.93	Outlays from discreationary balances.....	158	167	133
	Net budget authority and outlays:			
89.00	Budget authority.....	……	-1	……
90.00	Outlays.....…	158	167	133

MISCELLANEOUS HIGHWAY TRUST FUNDS

OBJECT CLASSIFICATION

In millions of dollars

Identification code: 69-9972-0-7-401		2007 Actual	2008 Estimate	2009 Estimate
	Direct obligations:			
14.10	Direct obligations:Grants,susbsides, and contribution	111	164	……

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 $75 million will be available from non-Federal sources in FY 2009.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
MISCELLANEOUS TRUST FUNDS

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-9971-0-7-999		2007 Actual	2008 Estimate	2009 Estimate
	Obligations by program by activity:			
00.01	Cooperative work, forest highways	8	29	29
00.03	Contributions for highway research	1	3	3
00.04	Advances from State cooperating Agencies	20	70	70
00.05	Advances from other Federal Agencies	1	3	3
10.00	Total obligations	30	105	105
	Budgetary resources available for obligation			
21.40	Unobligated balance available, start of year	43	67	37
22.00	New budget authority (gross)	34	75	75
22.10	Resources available from recoveries of prior year obligations	20	.....	.....
23.90	Total budgetary resources available for obligations	97	142	112
23.95	Total new obligations	-30	-105	-105
24.40	Unobligated balance available, end of year	67	37	7
	New budget authority (gross), Detail: Mandatory:			
60.26	Appropriations (trust fund) [69-9971-0-999-N-0500-01]	34	75	75
	Change in obligated balances			
72.40	Obligated balance, start of year	165	130	21
73.10	New obligations	30	105	105
73.20	Total outlays (gross)	-45	-214	-105
73.45	Recoveries of prior year obligations	-20	.....	.....
74.40	Obligated balance, end of year	130	21	21
	Outlays (gross), detail			
86.97	Outlays from new mandatory authority	12	61	61
86.98	Outlays from mandatory balances	33	153	44
87.00	Total outlays (gross)	45	214	105
	Net budget authority and outlays:			
89.00	Budget authority	34	75	75
90.00	Outlays	45	214	105

MISCELLANEOUS TRUST FUNDS

OBJECT CLASSIFICATION

In millions of dollars

Identification code: 69-9971-0-7-999		2007 Actual	2008 Estimate	2009 Estimate
	Direct obligations: Personnel compensation:			
11.11	Personnel Compensation: Full-time permanent	3	3	3
12.52	Other Services	27	102	102
99.99	Total new obligations	30	105	105

MISCELLANEOUS TRUST FUNDS

EMPLOYMENT SUMMARY

Identification code: 69-9971-0-7-999		2007 Actual	2008 Estimate	2009 Estimate
	Direct:			
10.01	Civilian full-time equivalent employment	27	30	30

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 2007, USDOT provided TIFIA commitments to three projects for a total of $766 million in credit assistance, including the first instance of a loan refinancing (using new authority provided in SAFETEA-LU) to facilitate the delivery of new infrastructure. In early FY 2008, USDOT executed a $589 million TIFIA loan for Virginia's Capital Beltway HOT Lanes, which will utilize congestion pricing to ensure reliable traffic flow on one of the nation's most congested highways. Both transactions involved private borrowers in partnership with the state of Virginia.

Such public-private partnerships (P3s), which replicate development models common in Europe, Australia and South America, comprise a growing segment of the US project finance market and are especially well-suited to utilize TIFIA credit assistance. In FY 2008, the USDOT expects to review five more applications seeking approximately $1.6 billion in total credit assistance for P3 toll facilities. In addition, three public entities have notified USDOT of their intent to seek approximately $1.4 billion in total credit assistance in FY 2008.

In response to this strong demand the USDOT is proposing, via a rulemaking open to public comment, refinements to its project selection criteria to help ensure that TIFIA resources are targeted toward projects that provide the most effective solutions to the problem of congestion.

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

PROGRAM AND FINANCING SCHEDULE
In millions of dollars

Identification code: 69-4123-0-3-401	2007 Actual	2008 Estimate	2009 Estimate
Program by Activities:			
00.01 Loan obligations	766	2,120	798
00.02 Interest paid to Treasury	16	51	113
01.00 Direct program by Activities - Subtotal	782	2,171	911
10.00 Total new obligations	782	2,171	911
Budgetary resources available for obligation:			
21.40 Unobligated balance brought forward	31	1	……
22.00 New financing authority (gross)	780	2,225	911
22.10 Resources available from recoveries of prior year Obligations	163	……	……
22.60 Portion applied to repay debt	(8)	(55)	……
22.70 Balance of authority to be withdrawn	(183)	……	……
23.90 Total budgetary resources available for obligation	783	2,171	911
23.95 Total new obligations	(782)	(2,171)	(911)
24.40 Unobligated balance carried forward, end of year	1	……	……
New financing authority (gross), detail:			
Appropriations			
Mandatory:			
67.10 Authority to borrow (indefinite)	757	2,001	831
Mandatory			
69.00 Offsetting collections (cash)	43	131	82
69.10 Change in uncollected customer payments from Federal Sources (unexpired)	(20)	93	(2)
69.90 Spending authority from offsetting collections	23	224	80
70.00 Total new financing authority (gross)	780	2,225	911
Change in obligated balances			
72.40 Obligated balance, start of year	1,300	1,672	2,330
73.10 Total new obligations	782	2,171	911
73.20 Total financing disbursements (gross)	(267)	(1,420)	(1,259)
73.45 Recoveries of prior year obligations	(163)	……	……
74.00 Change in uncollected customer payments from Federal sources, (unexpired)	20	(93)	2
Unpaid obligations, end of year:			
74.40 Obligated balance, end of year	1,672	2,330	1,984
Outlays (gross) detail:			
87.00 Total financing disbursements (gross)	267	1,420	1,259
Offsets against gross financing authority and Financing disbursements:			
Offsetting collections (cash) from:			
88.00.01 Federal sources: Subsidy from program account	29	119	82
88.00.02 Federal sources: Payment from program account -- upward restimate	8	12	.....
88.25 01 Interest on uninvested funds	6	.....	.....
88.90 Total offsetting collections (cash)	43	131	82
Against gross financing authority only			
88.95 Change in receivables from program account	(20)	93	(2)
Net financing authority and financing disbursements:			
89.00 Financing authority	757	2,001	831
90.00 Financing disbursements	224	1,289	1,177

STATUS OF DIRECT LOANS
In millions of dollars

Identification code: 69-4123-0-3-401	2007 Actual	2008 Estimate	2009 Estimate
Portions with respect to appropriations act limitation on obligations:			
11.31 Direct loan obligations exempt from limitation	766	2,120	798
11.50 Total direct loan obligations	766	2,120	798
Cumulative balance of direct loans outstanding:			
12.10 Outstanding, start of year	109	376	1,745
12.31 Disbursement: Direct loan disbursements	267	1,369	1,146
12.51 Repayments: Repayments and Prepayments	……	……	……
12.90 Outstanding, end of year	376	1,745	2,891
62.00 Net financing disbursements	224	1,289	1,177

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: 69-4145-0-3-401	2007 Actual	2008 Estimate	2009 Estimate
Program by Activities:			
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year	.....	.....	20
22.00 New financing authority (gross)	.....	20	20
23.90 Total budgetary resources available for obligation	.....	20	40
24.40 Unobligated balance carried forward, end of year:	.....	20	40
New financing authority (gross), detail:			
Mandatory			
69.00 Offsetting collections (cash)	.....	4	8
69.10 Change in uncollected customer payments from Federal Sources (unexpired)	.....	16	12
69.90 Spending authority from ofsetting collections (total mandatory)	……	20	20
72.40 Obligated balance, start of year	……	……	(16)
74.00 Change in uncollected customer payments from Federal Sources (unexpired)	……	(16)	(12)
74.40 Obligated balance, end of year	……	(16)	(28)
Offsets			
Against gross financing authority and financing disbursements:			
88.00 Offseting collections (cash) from:			
Federal sources: loan guarantee subsidy	.....	4	8
Against gross financing authority only:			
88.95 Change in receivables from program accounts	.....	16	12
Net financing authority and financing disbursements			
89.00 Financing Authority	.....	.....	.....
90.00 Financing disbursements	.....	(4)	(8)

STATUS OF GUARNTEED LOANS
In millions of dollars

Identification code: 69-4145-0-3-401	2007 Actual	2008 Estimate	2009 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
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: 69-4173-0-3-401	2007 Actual	2008 Estimate	2009 Estimate
Program by Activities:			
Obligations by program activity			
00.01 Lines of credit	……	200	200
00.02 Interest Paid to Treasury	……	……	1
10.00 Total new obligations	.....	200	201
Budgetary resources available for obligation:			
22.00 New financing authority (gross)	(2)	200	201
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	.....	200	201
23.95 Total new obligations	.....	(200)	(201)
New financing authority (gross), detail:			
Mandatory:			
67.10 Authority to borrow	.....	180	181
Mandatory:			
69.00 Offsetting collections (cash)	.....	20	20
69.10 Change in uncollected customer payments from Federal sources (unexpired)	(2)	……	……
69.90 Spending authority from offsetting collections (total mandatory)	(2)	20	20
70.00 Total new financing authority (gross)	(2)	200	201
Change in obligated balances			
72.40 Obligated balance, start of year	18	……	180
73.10 Total new obligations	.....	200	201
73.20 Total financing disbursements (gross)	.....	(20)	(41)
73.45 Recoveries of prior year obligations	(20)	……	……
74.00 Change in uncollected customer payments from Federal sources (unexpired)	2	……	……
74.40 Obligated balance, end of year	.....	180	340
87.00 Total financing disbursements (gross)	.....	20	41
Offsets			
Against gross financing authority and financing disbursements:			
88.00 Offsetting collections (cash) from Federal sources	.....	20	20
Against gross financing authority only			
88.95 Change in receivables from program account	(2)	……	……
Net financing authority and financing disbursements:			
89.00 Financing authority	.....	180	181
90.00 Financing disbursements	.....	.....	21

STATUS OF LINE-OF-CREDIT
In millions of dollars

Identification code: 69-4173-0-3-401	2007 Actual	2008 Estimate	2009 Estimate
Portions with respect to appropriations act limitation on obligations			
11.31 Limitation on direct loans	.....	200	200
11.50 Total direct loan obligations	.....	200	200
Cumulative balance of direct loans outstanding:			
12.10 Outstanding, start of year	.....	……	20
12.31 Disbursements: Direct loan disbursements	.....	20	40
12.90 Outstanding, end of year	.....	20	60
62.00 Net financing disbursements	.....	21	42

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-of-credit 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 2009.

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

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code:		2007	2008	2009
69-0543-0-1-401		Actual	Estimate	Estimate
	Change in unpaid obligations			
72.40	Unpaid Obligations, start of year	5	3	1
73.45	Uncollected customer payments from prg. acct.	-2	-2	.....
74.40	Obligated balance, end of year	3	1	1
89.00	Financing authority	.....	.....	.....
90.00	Financing disbursements	.....	.....	.....

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

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-4264-0-3-401		2007 Actual	2008 Estimate	2009 Estimate
	Budgetary resources available for obligation			
22.00	New financing authority (gross)	-2	-2	.....
22.10	Resources available from recoveries of prior year obligations	24	24	.....
22.70	Balance of authority to borrow withdrawn	-22	-22	.....
23.90	Total budgetary resources available for obligations	.....	.....	.....
69.10	Change in uncollected customer payments from Federal sources (unexpired)	-2	-2	.....
	Change in obligated balance			
72.40	Obligated Balance, start of year	67	45	23
73.45	Recoveries of prior year obligations	-24	-24	.....
74.00	Change in uncollected customer payments from Federal sources (unexpired)	2	2	.....
74.40	Obligated balance, end of year	45	23	23
	Against gross financing authority only			
88.95	Change in receivables from program accounts	-2	-2	.....
89.00	Financing authority	.....	.....	.....
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, 2008, or 2009.

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 2009.

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

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-8402-0-8-401	2007 Actual	2008 Estimate	2009 Estimate
Budgetary resources available for obligation:			
21.40 Unobligated balance carried forward, start of year	15	8	……
22.40 Portion returned to trust fund from liquidating account	-7	……	.....
23.90 Total budgetary resources available for obligation	8	8	……
23.98 Unobligated balance expiring or withdrawn	……	-8	
24.40 Unobligated balance carried forward, end of year	8	……	……
24.41 Special and trust fund receipts returned to Schedule N	……	8	
New Budget Authority (gross), detail			
Mandatory:			
Change in obligated balances:			
72.40 Obligated balance, start of year	6	6	6
74.40 Obligated balance, end of year	6	6	6
Net financing authority and financing disbursements:			
89.00 Financing authority	.....	……	……
90.00 Financing disbursements	……	……	……
Cumulative balance of direct loans outstanding:			
12.10 Outstanding, start of year	67	67	67
12.64 Write-offs for default: Loan forgiveness (P.L. 109-59)	……	……	……
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.

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BUDGETARY RESOURCES

No new budgetary resources are requested in FY 2009.

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

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-0549-0-1-401	2007 Actual	2008 Estimate	2009 Estimate
Change in obligated balance			
72.40 Obligated Balance, start of year	3	3	1
73.20 Total Outlays (gross)	……	-2	-1
74.40 Obligated balance, end of year	3	1	……
Outlays (gross), detail:			
86.93 Outlays from discretionary balances	……	2	1
89.00 Financing authority	……	……	……
90.00 Financing disbursements	……	2	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. No obligations or outlays are anticipated in this account during FY 2008 or 2009.

BUDGETARY RECOURCES

No new budgetary resources are requested in FY 2009.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
HIGHWAY RELATED SAFETY GRANTS

PROGRAM AND FINANCING SCHEDULE

In millions of dollars

Identification code: 69-8019-0-1-401	2007 Actual	2008 Estimate	2009 Estimate
Change in obligated balances:			
72.40 Obligated balance, start of year..... .	1	1	1
74.40 Obligated balance, end of year.....	1	1	1
89.00 Budget authority.....	……	……	.....
90.00 Outlays……	……	……	.....

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

Passenger vehicle occupant highway fatalities per 100 million VMT. *Shared measure with NHTSA*	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Target			1.15	1.12	1.10	1.06	1.02
Actual	1.21	1.17	1.15	1.10	+		

+ To be released by NHTSA 12/08.

Non-occupant highway fatalities per 100 million VMT. *Shared measure with NHTSA*	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Target				0.16	0.15	0.19	0.19
Actual	0.19	0.19	0.20	0.19	+		

+ To be released by NHTSA 12/08.

Motorcycle rider highway fatalities per 100,000 motorcycle registrations. *Shared measure with NHTSA.*	**2005**	**2006**	**2007**	**2008**	**2009**
Target		75	76	76	77
Actual	73.5	71.9	+		

+ To be released by NHTSA 12/08.

Large truck and bus fatalities per 100 million VMT. *Shared measure with FMCSA*	**2005**	**2006**	**2007**	**2008**	**2009**
Target		0.179	0.175	0.171	0.167
Actual	0.184	0.176	+		

+ To be released by FMCSA in 2008.

Strategic Objective: Reduced Congestion

Percent of total annual urban-area travel time occurring in congested conditions	2002	2003	2004	2005	2006	2007	2008	2009
Target	30.9	31.6	32.3	33.0	33.7	32.5	32.3	31.9
Actual	30.7 (r)	31.0 (r)	31.6 (r)	31.8 (r)	31.6	31.8 #		

(r) Revised; # Projection

Percent of U.S. population with access to 511 travel telephone service.	2003	2004	2005	2006	2007	2008	2009
Target	30	35	40	50	65	65	85
Actual	14	17	25	28	48		

Percent of top 40 metropolitan areas with full service patrols.	2007	2008	2009
Target	N/T	100	100
Actual	70		

Percent of top 40 metropolitan areas with quick clearance policies.	2007	2008	2009
Target	N/T	90	90
Actual	80		

Percent of top 40 metropolitan areas with quick clearance laws.	2007	2008	2009
Target	N/T	90	90.2
Actual	75		

Percent of travel on the National Highway System (NHS) meeting pavement performance standards for good ride.	2002	2003	2004	2005	2006	2007	2008	2009
Target	N/A	N/A	N/A	53	54	56	56	57
Actual	49(r)	50(r)	52(r)	52	54	57		

(r) Revised

Percent of deck area on NHS bridges rated deficient, adjusted for average daily traffic.	2002	2003	2004	2005	2006	2007	2008	2009
Target	28.6	27.5	26.4	25.3	24.2	23.1	22.0	20.9
Actual	29.9	29.8	29.8	29.9	29.2	29.7		

Number of States enacting Public/Private Partnership (PPP) laws where PPP authority is lacking, cumulative.	2006	2007	2008	2009
Target	N/T	2	5	10
Actual	N/R	2		

Strategic Objective: Global Connectivity

Number of freight corridors with an annual decrease in the average buffer index rating greater than the national average.	**2006**	**2007**	**2008**	**2009**
Target	N/T	5	25	25
Actual	3	5		

Number of NHS Border Crossings with an Increase in reliability (Inbound).	**2007**	**2008**	**2009**
Target	5	TBD	TBD
Actual	1		

Number of NHS Border Crossings with an Increase in reliability (Outbound).	**2007**	**2008**	**2009**
Target	**5**	**TBD**	**TBD**
Actual	**4**		

Number of technology/information agreements that promote the U.S. highway transportation industry (Baselines and targets were determined in FY 2007).	**2007**	**2008**	**2009**
Target	1	3	3
Actual	4		

Strategic Objective: Environmental Stewardship

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

Number of exemplary human environment initiatives.	2007	2008	2009
Target	5	10	15
Actual	8		

Number of areas in conformity lapse.	2002	2003	2004	2005	2006	2007	2008	2009
Target	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Actual	6.0	6.0 (r)	6.3 (r)	5.8(r)	1.3	0.0		

(r) Revised

Median time in months required for all Federal-aid Highway projects to have a completed Environmental Impact Statement (EIS). – *Supplemental to DOT-wide Measure.*	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Target	N/A	N/A	51	48	45	40	36	36	36
Actual	54	80	68	54	60(r)	61(r)	68		

(r) Revised;

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**	**2009**
Target	N/A	17	16	15	14	12	12	12
Actual	N/A	26	25	25 (r)	34	20		

(r) Revised;

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.***	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Target	N/T	N/T	N/T	N/T	90	90
Actual	50	83	86	85		

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.***	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Target	N/T	N/T	N/T	N/T	90	90
Actual	75	83	86	85		

Detailed performance budget information can be found in the following section of this budget submission.

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:

Program	PART Cycle	OMB Assessed Score
Highway Infrastructure Program	FY 2004	82
	FY 2005	70
	FY 2007	59
Federal Lands Highway Program	FY 2005	82
Research and Development	FY 2006	83
Emergency Relief	FY 2007	70
TIFIA (Credit Programs)	FY 2008	69

HIGHWAY INFRASTUCTURE PROGRAM ANALYSIS:
During 2007, OMB reviewed the program again and provided an updated rating of "adequate", compared to "moderately effective" in prior years. OMB identified several areas where further improvements could be made in the administration of the Federal-aid Highway program (see Recommendations #5 through #7 below).

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

Action Taken: Completed

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

Action Taken: Completed

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

Action Taken: Completed

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

Action Taken: Completed

OMB Recommendation #5 (NEW): Consider and propose modifications and performance-based improvements to the program design during the formulation of a reauthorization proposal in FY 2009.

Action Taken: (1) A small group has been convened to begin discussion on strategies for improving program management practices in the agency. We expect the guidance memorandum to be developed by mid-2008.

Action Taken: (2) We are collecting the results of the second round of program risk management in Divisions and Headquarters. The results will be analyzed and incorporated into a roll-up report. The report will be completed by February 2008.

OMB Recommendation #6 (NEW): Continue to improve program and project oversight of States.

- Develop internal guidance by mid-2008 to direct more attention and focus to improving program management practices in the agency.
- Complete second round of program risk assessments in Division and Headquarters offices by the end of 2007.

Action Taken: The Financial Integrity Review and Evaluation program will incorporate the FMFIA within the FHWA into a single agency-wide program that covers Federal-aid, Federal Lands, and the other remaining program offices. The Federal-aid Divisions are updating their risk management plans and are incorporating risk response strategies into their unit plans.

OMB Recommendation #7 (NEW): Continue pursuing financial management improvements in order to eliminate all material weaknesses in the FY 2009 financial audit.

Action Taken: The FHWA continues to improve financial management by strengthening internal controls to reduce the number of adjustments needed to correct errors. More transactions are being completed through the Budget Execution Model, which allow better control and greatly reduces the number of journal entries. Financial management has improved considerably during the past year that OMB has waived the requirement to prepare Highway Trust Fund consolidated statements beginning in FY 2008.

FEDERAL LANDS HIGHWAY PROGRAM ANALYSIS:
OMB rated the Federal Lands Highway (FLH) Program as a "moderately effective" program and made recommendations for improvements in external program reviews, which led to the following recommendations.

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

> Action Taken: Completed: 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, working with the National Park Service (NPS), agreed upon performance measures to implement program delivery plan and more clearly link goals and performance. The final draft is at NPS for their review and signature. We anticipate an endorsement by the NPS in January 2008.

RESEARCH AND DEVELOPMENT (INCLUDES ITS) PROGRAM ANALYSIS:
OMB completed a PART assessment of the FHWA's Research and Intelligent Transportation System (ITS) programs, which led to the following recommendations:

OMB Recommendation #1: Recommend that the FHWA Research and Technology (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: Completed. Annual event.

OMB Recommendation #2: Recommend that the FHWA R&T Program include a numeric chart showing projects completed by goal in the FHWA RD&T annual performance report. Implementing this recommendation would strengthen the linkage between the research roadmaps, the individual research projects and both the 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: Completed. Annual event.

OMB Recommendation #3: Recommend that the 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 the FHWA is doing everything possible to influence the appropriate use of Research funds.

Action Taken: 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: Action taken but not completed. Functional area research & technology multi-year plans were developed. The multi-year plans identify the research projects selected to be undertaken and funded by the agency. The multi-year plans and projects are mission driven and directly tied to FHWA's Strategic Implementation Plan and the USDOT Strategic Plan. The agency continues to reach out to our stakeholders to ensure that the programs and projects undertaken are coordinated and future collaborative research and technology opportunities are identified. In addition, the agency supports and contributes to the Research and Innovative Technology Administration RD&T Planning Team and Council, which coordinate the Departments RD&T programs and projects.

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

Action Taken: Completed. Over the past four years, laboratory assessments were completed for each lab at the Turner-Fairbank Highway Research Center. The recommendations for each lab assessment were addressed for a majority of the labs and the remaining recommendations should be implemented by the end of the FY 2008. A few of the recommendations that are more structural in nature were incorporated in the recently developed Capital Improvement Plan for the facility.

EMERGENCY RELIEF PROGRAM ANALYSIS:
OMB completed its PART assessment of the FHWA's Emergency Relief program during 2005. OMB has made the following recommendations concerning program improvements.

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

Action Taken: Completed.

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

Action Taken: Completed. October 2006. Continuous Event. PART measures are included in the Unit Plans of the Division Offices.

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

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

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

Action Taken: An internal employee team was created earlier this year to conduct a program review, which is expected to be completed early next year. The report will include lessons learned from previous disasters and a set of review recommendations that will result in additional updates to the ER manual to improve standardization of project management in each Division office. Scheduled: Spring 2008.

TIFIA PROGRAM ANALYSIS:

OMB rated the Transportation Infrastructure Finance and Innovation Act (TIFIA) credit program as "adequate" in meeting its goals. 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.

Action Taken: Action taken but not completed. Plans are to address this recommendation in the proposed TIFIA rulemaking, now in draft form to be reviewed by OMB and released later this year.
Completion Date: September 30, 2008

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

Action Taken: Action taken, but not completed. A TIFIA Credit Program is now required to document why a specific type of credit assistance is requested. If a direct loan or line of credit is requested, the applicant is asked to further specify the reasons for the proposed financial structure of the project where the credit assistance is in the form of a direct loan or line of credit instead of a loan

guarantee. This new requirement was implemented in January 2007 with the issuance of the updated TIFIA Program Guide. In addition, the TIFIA Joint Program Office (JPO) plans to engage an outside consultant to evaluate the efficiency and cost-effectiveness of each TIFIA credit instrument in meeting market gaps for large transportation projects. As part of this study, the consultant will research what incentives, consistent with capital market practices, can be implemented to encourage borrowers to seek and private lenders to offer loans guaranteed by the TIFIA program. This consultant study will include an outreach effort to investment banks and other lenders to assess the market potential for TIFIA loan guarantees.

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: Plans are to address this recommendation in the proposed TIFIA rulemaking, now in draft form to be reviewed by OMB and released later this year. Completion Date: September 30, 2008

[(INCLUDING RESCISSIONS)**]**

[SEC. 120. (a) For fiscal year 2008, the Secretary of Transportation shall—

(1) not distribute from the obligation limitation for Federal-aid highways amounts authorized for administrative expenses and programs by section 104(a) of title 23, United States Code; programs funded from the administrative takedown authorized by section 104(a)(1) of title 23, United States Code (as in effect on the date before the date of enactment of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users); the highway use tax evasion program; the programs, projects and activities funded by the set aside authorized by section 129 of this Act; the Bureau of Transportation Statistics; and additional obligation limitation provided in this Act for the purpose of section 144(e) of title 23, United States Code;

(2) not distribute an amount from the obligation limitation for Federal-aid highways that is equal to the unobligated balance of amounts made available from the Highway Trust Fund (other than the Mass Transit Account) for Federal-aid highways and highway safety programs for previous fiscal years the funds for which are allocated by the Secretary;

(3) determine the ratio that—

(A) the obligation limitation for Federal-aid highways, less the aggregate of amounts not distributed under paragraphs (1) and (2), bears to

(B) the total of the sums authorized to be appropriated for Federal-aid highways and highway safety construction programs (other than sums authorized to be appropriated for provisions of law described in paragraphs (1) through (9) of subsection (b) and sums authorized to be appropriated for section 105 of title 23, United States Code, equal to the amount referred to in subsection (b)(10) for such fiscal year), less the aggregate of the amounts not distributed under paragraphs (1) and (2) of this subsection;

(4)(A) distribute the obligation limitation for Federal-aid highways, less the aggregate amounts not distributed under paragraphs (1) and (2), for sections 1301, 1302, and 1934 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users; sections 117 (but individually for each project numbered 1 through 3676 listed in the table contained in section 1702 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) and 144(g) of title 23, United States Code; and section 14501 of title 40, United States Code, so that the amount of obligation authority available for each of such sections is equal to the amount determined by multiplying the ratio determined under paragraph (3) by the sums authorized to be appropriated for that section for the fiscal year; and

(B) distribute $2,000,000,000 for section 105 of title 23, United States Code;

(5) distribute the obligation limitation provided for Federal-aid highways, less the aggregate amounts not distributed under paragraphs (1) and (2) and amounts distributed under paragraph (4), for each of the programs that are allocated by the Secretary under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users and title 23, United States Code (other than to programs to

which paragraphs (1) and (4) apply), by multiplying the ratio determined under paragraph (3) by the amounts authorized to be appropriated for each such program for such fiscal year; and

(6) distribute the obligation limitation provided for Federal-aid highways, less the aggregate amounts not distributed under paragraphs (1) and (2) and amounts distributed under paragraphs (4) and (5), for Federal-aid highways and highway safety construction programs (other than the amounts apportioned for the equity bonus program, but only to the extent that the amounts apportioned for the equity bonus program for the fiscal year are greater than $2,639,000,000, and the Appalachian development highway system program) that are apportioned by the Secretary under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users and title 23, United States Code, in the ratio that—

(A) amounts authorized to be appropriated for such programs that are apportioned to each State for such fiscal year, bear to

(B) the total of the amounts authorized to be appropriated for such programs that are apportioned to all States for such fiscal year.

(b) EXCEPTIONS FROM OBLIGATION LIMITATION.—The obligation limitation for Federal-aid highways shall not apply to obligations: (1) under section 125 of title 23, United States Code; (2) under section 147 of the Surface Transportation Assistance Act of 1978; (3) under section 9 of the Federal-Aid Highway Act of 1981; (4) under subsections (b) and (j) of section 131 of the Surface Transportation Assistance Act of 1982; (5) under subsections (b) and (c) of section 149 of the Surface Transportation and Uniform Relocation Assistance Act of 1987; (6) under sections 1103 through 1108 of the Intermodal Surface Transportation Efficiency Act of 1991; (7) under section 157 of title 23, United States Code, as in effect on the day before the date of the enactment of the Transportation Equity Act for the 21st Century; (8) under section 105 of title 23, United States Code, as in effect for fiscal years 1998 through 2004, but only in an amount equal to $639,000,000 for each of those fiscal years; (9) for Federal-aid highway programs for which obligation authority was made available under the Transportation Equity Act for the 21st Century or subsequent public laws for multiple years or to remain available until used, but only to the extent that the obligation authority has not lapsed or been used; (10) under section 105 of title 23, United States Code, but only in an amount equal to $639,000,000 for each of fiscal years 2005 through 2008; and (11) under section 1603 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, to the extent that funds obligated in accordance with that section were not subject to a limitation on obligations at the time at which the funds were initially made available for obligation.

(c) REDISTRIBUTION OF UNUSED OBLIGATION AUTHORITY.—Notwithstanding subsection (a), the Secretary shall, after August 1 of such fiscal year, revise a distribution of the obligation limitation made available under subsection (a) if the amount distributed cannot be obligated during that fiscal year and redistribute sufficient amounts to those States able to obligate amounts in addition to those previously distributed during that fiscal year, giving priority to those States having large unobligated balances of funds apportioned under sections 104 and 144 of title 23, United States Code.

(d) APPLICABILITY OF OBLIGATION LIMITATIONS TO TRANSPORTATION RESEARCH PROGRAMS.—The obligation limitation shall apply to transportation research programs carried out under chapter 5 of title 23, United States Code, and title V (research title) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, except that obligation authority made available for such programs under such limitation shall remain available for a period of 3 fiscal years and shall be in addition to the amount of any limitation imposed on obligations for Federal-aid highway and highway safety construction programs for future fiscal years.

(e) REDISTRIBUTION OF CERTAIN AUTHORIZED FUNDS.—

(1) IN GENERAL.—Not later than 30 days after the date of the distribution of obligation limitation under subsection (a), the Secretary shall distribute to the States any funds that—

(A) are authorized to be appropriated for such fiscal year for Federal-aid highways programs; and

(B) the Secretary determines will not be allocated to the States, and will not be available for obligation, in such fiscal year due to the imposition of any obligation limitation for such fiscal year.

(2) RATIO.—Funds shall be distributed under paragraph (1) in the same ratio as the distribution of obligation authority under subsection (a)(6).

(3) AVAILABILITY.—Funds distributed under paragraph (1) shall be available for any purposes described in section 133(b) of title 23, United States Code.

(f) SPECIAL LIMITATION CHARACTERISTICS.—Obligation limitation distributed for a fiscal year under subsection (a)(4) for the provision specified in subsection (a)(4) shall—

(1) remain available until used for obligation of funds for that provision; and

(2) be in addition to the amount of any limitation imposed on obligations for Federal-aid highway and highway safety construction programs for future fiscal years.

(g) HIGH PRIORITY PROJECT FLEXIBILITY.—

(1) IN GENERAL.—Subject to paragraph (2), obligation authority distributed for such fiscal year under subsection (a)(4) for each project numbered 1 through 3676 listed in the table contained in section 1702 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users may be obligated for any other project in such section in the same State.

(2) RESTORATION.—Obligation authority used as described in paragraph (1) shall be restored to the original purpose on the date on which obligation authority is distributed under this section for the next fiscal year following obligation under paragraph (1).

(h) LIMITATION ON STATUTORY CONSTRUCTION.—Nothing in this section shall be construed to limit the distribution of obligation authority under subsection (a)(4)(A) for each of the individual projects numbered greater than 3676 listed in the table contained in section 1702 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users.**]**

SEC. **[**121**]** *120*. 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.

[SEC. 122. Of the unobligated balances made available under sections 1103, 1104, 1105, 1106(a), 1106(b), 1107, and 1108 of Public Law 102-240, $1,292,287.73 are rescinded.**]**

[SEC. 123. Of the unobligated balances made available under section 1602 of Public Law 105-178, $5,987,345.70 are rescinded.**]**

[SEC. 124. Of the unobligated balances made available under section 188(a)(1) of title 23, United States Code, as in effect on the day before the date of enactment of Public Law 109-59, and under section 608(a)(1) of such title, $256,806,000 are rescinded.**]**

[SEC. 125. Of the amounts made available under section 104(a) of title 23, United States Code, $43,358,601 are rescinded.**]**

[SEC. 126. Of the unobligated balances of funds made available in fiscal year 2005 and prior fiscal years for the implementation or execution of programs for transportation research, training and education, and technology deployment including intelligent transportation systems, $239,801,603 are rescinded.**]**

[SEC. 127. Of the amounts made available for ``Highway Related Safety Grants'' by section 402 of title 23, United States Code, and administered by the Federal Highway Administration, $11,314 in unobligated balances are rescinded.**]**

[SEC. 128. Of the unobligated balances made available under Public Law 101-516, Public Law 102-143, Public Law 103-331, Public Law 106-346, Public Law 107-87, and Public Law 108-7, $4,753,687.26 are rescinded.**]**

[SEC. 129. Notwithstanding any other provision of law, the Secretary of Transportation shall set aside from revenue aligned budget authority authorized for fiscal year 2008 under section 110 of title 23, United States Code, such sums as may be necessary for the programs, projects and activities at the level of 98 percent of the corresponding amounts identified under this section in the explanatory statement accompanying this Act: *Provided*, That funds set aside by this section, at the request of a State, shall be transferred by the Secretary to another Federal agency: *Provided further*, That the Federal share payable on account of any program, project, or activity carried out with funds set aside by this section shall be 100 percent: *Provided further*, That the sums set aside by this section shall remain available until expended: *Provided further*, That all funds set aside by this section shall be subject to any limitation on obligations for Federal-aid highways and highway safety construction programs set forth in this Act or any other Act: *Provided further*, That the obligation limitation made available for the programs, projects, and activities for which funds are set aside by this section shall remain available until used and shall be in addition to the amount of any limitation imposed on obligations for Federal-aid highway and highway safety construction programs for future fiscal years: *Provided further*, That amounts authorized for fiscal year 2008 for revenue aligned budget authority under such section in excess of the amount set aside by the first clause of this section are rescinded.**]**

[SEC. 130. Not less than 15 days prior to waiving, under her statutory authority, any Buy America requirement for Federal-aid highway projects, the Secretary of Transportation shall make an informal public notice and comment opportunity on the intent to issue such waiver and the reasons therefor: *Provided*, That the Secretary shall provide an annual report to the Appropriations Committees of the Congress on any waivers granted under the Buy America requirements.**]**

[SEC. 131. Notwithstanding any other provision of law, amounts authorized for fiscal year 2008 for programs under sections 1305 and 1502 of Public Law 109-59 and section 503(b) of title 23, United States Code, are rescinded.**]** *(Department of Transportation Appropriations Act, 2008.)*

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Exhibit IV-1

FY 2009 BUDGET REQUEST BY STRATEGIC GOAL AND PERFORMANCE GOAL
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, & Exempt Obligations
$(000)

STRATEGIC & PERFORMANCE GOALS by Performance Measure	**FY 2007 ENACTED**	**FY 2008 ENACTED**	**FY 2009 REQUEST**
1. SAFETY STRATEGIC GOAL			
A. Highway Safety			
a. Passenger vehicle occupant fatality rate per 100 million passenger vehicle-miles traveled.	6,120,933	6,926,055	6,575,973
b. Motorcycle rider fatality rate per 100,000 motorcycle registrations.	874,419	989,436	939,425
c. Non-occupant highway fatalities per 100 million vehicle-miles traveled.	874,419	989,436	939,425
d. Large truck and bus fatalities per 100 million total vehicle-miles traveled.	874,419	989,436	939,425
Subtotal, Performance Outcome	8,744,190	9,894,364	9,394,247
Total – Safety Strategic Goal	8,744,190	9,894,364	9,394,247
2. REDUCED CONGESTION STRATEGIC GOAL			
A. High Performance Transp. Infrastructure			
a. Percent of travel on the National Highway System meeting pavement performance standards for "good"-rated ride.	5,730,919	5,784,050	5,486,124
b. Percent of deck area on NHS bridges rated deficient, adjusted for average daily traffic.	5,730,919	5,784,050	5,486,124
Subtotal, Performance Outcome	11,461,838	11,568,099	10,972,248
B. Increase Transportation Capacity			
a. Number of states enacting public/private partnership (PPP) laws where PPP authority is lacking.	1,671,481	1,689,286	1,605,734
Subtotal, Performance Outcome	1,671,481	1,689,286	1,605,734
C. Operations Performance			
a. Percent of top 40 metropolitan areas with full service patrols, quick clearance policies, and quick clearance laws.	1,731,178	1,749,617	1,663,083
b. Percent of population with access to 511.	1,731,178	1,749,617	1,663,083
Subtotal, Performance Outcome	3,462,356	3,499,234	3,326,166
D. Reduction in Urban Congestion			
a. Percent of annual urban-area travel time occurring in congested conditions.	6,805,321	6,877,809	6,537,639
Subtotal, Performance Outcome	6,805,321	6,877,809	6,537,639
Total – Reduced Congestion Strategic Goal	23,400,996	23,634,428	22,441,787

Exhibit IV-1

FY 2009 BUDGET REQUEST BY STRATEGIC GOAL AND PERFORMANCE GOAL
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, & Exempt Obligations
$(000)

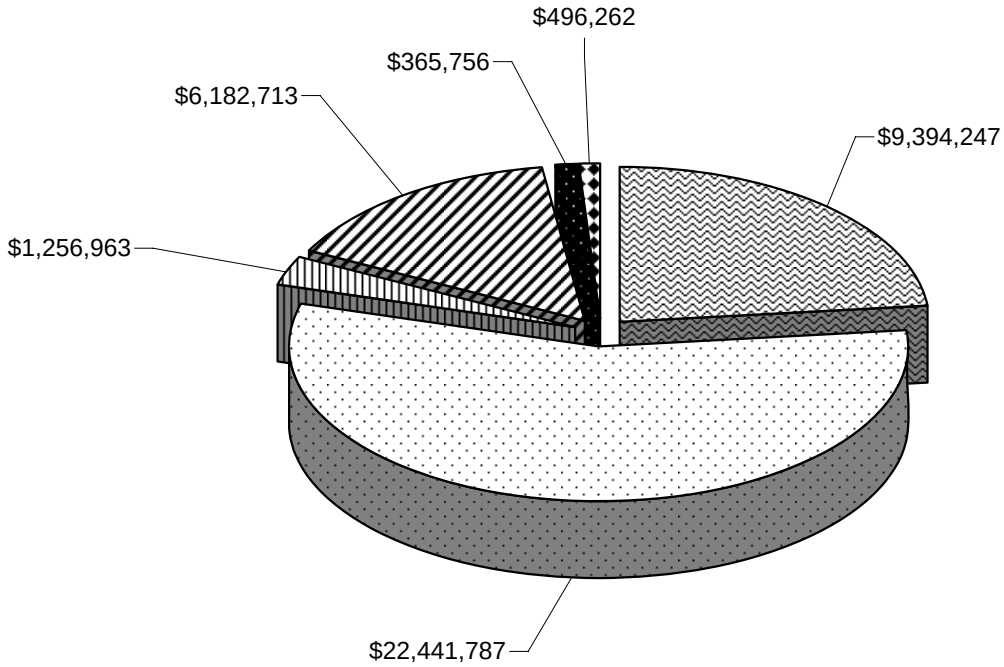
STRATEGIC & PERFORMANCE GOALS by Performance Measure	**FY 2007 ENACTED**	**FY 2008 ENACTED**	**FY 2009 REQUEST**
3. GLOBAL CONNECTIVITY			
STRATEGIC GOAL			
A. Expand Business Opportunities		UNDER DEVELOPMENT	
a. Percent of total dollar value of DOT direct contracts awarded to women owned businesses.	-----	-----	-----
b. Percent of total dollar value of DOT direct contracts awarded to small disadvantaged businesses.	-----	-----	-----
Subtotal, Performance Outcome	-----	-----	-----
B. Increase the Efficiency of Passenger and Cargo Movement			
a. Number of freight corridors with an annual decrease in the average buffer index rating.	441,495	469,209	446,599
b. Number of NHS border crossings with an increase in reliability (both in- and out-bound).	441,495	469,209	446,599
Subtotal, Performance Outcome	882,990	938,418	893,198
C. Enhanced Competitiveness			
a. Number of technology/information exchange agreements that promote the U.S. highway transportation industry.	367,652	383,865	363,765
Subtotal, Performance Outcome	367,652	383,865	363,765
Total-Global Connectivity Strategic Goal	1,250,642	1,322,283	1,256,963
4. ENVIROMENTAL STEWARDSHIP			
STRATEGIC GOAL			
A. Reduction in Pollution			
a. Number of exemplary ecosystem initiatives.	1,745,654	2,103,073	2,028,851
b. Number of exemplary human environment initiatives.	1,745,654	2,103,073	2,028,851
c. Number of areas in conformity lapse.	1,745,654	2,103,073	2,028,851
Subtotal, Performance Outcome	5,236,961	6,309,220	6,086,553
B. Streamline Environmental Review			
a. Median completion time for all Environmental Impact Statements.	47,282	50,620	48,080
b. Median completion time for all Environmental Assessments.	47,282	50,620	48,080
Subtotal, Performance Outcome	94,563	101,240	96,160
Total – Environmental Stewardship Strategic Goal	5,331,524	6,410,460	6,182,713

Exhibit IV-1

FY 2009 BUDGET REQUEST BY STRATEGIC GOAL AND PERFORMANCE GOAL
FEDERAL HIGHWAY ADMINISTRATION
Appropriations, Obligation Limitations, & Exempt Obligations
$(000)

STRATEGIC & PERFORMANCE GOALS by Performance Measure	**FY 2007 ENACTED**	**FY 2008 ENACTED**	**FY 2009 REQUEST**
5. SECURITY, PREPAREDNESS AND RESPONSE			
A. Hazmat Emergency Response			
a. Other	369,905	385,720	365,756
Subtotal, Performance Outcome	369,905	385,720	365,756
Total – Security, Preparedness and Response Strategic Goal	369,905	385,720	365,756
6. ORGANIZATIONAL EXCELLENCE STRATEGIC GOAL			
A. Fulfill the President's Management Agenda			
a. Other	437,766	443,742	413,552
Subtotal, Performance Outcome	437,766	443,742	413,552
B. Financial Stewardship			
a. Percent of major Federally funded transportation infrastructure projects with less than 2 percent annual growth in the project completion milestones as reported in the financial plan.	43,777	44,374	41,355
b. Percent of finance plan cost estimates for major Federally funded transportation infrastructure projects with less than 2 percent annual growth.	43,777	44,374	41,355
Subtotal, Performance Outcome	87,553	88,748	82,710
Total – Organizational Excellence Strategic Goal	525,319	532,490	496,262
GRAND TOTAL	**39,622,576**	**42,179,745**	**40,137,728**

FHWA FY 2009 Funding Distribution by Goal



FEDERAL HIGHWAY ADMINISTRATION
FISCAL YEAR 2009 PERFORMANCE BUDGET

NARRATIVE JUSTIFICATION

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SAFETY

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

Transportation safety is the Department's highest priority. The 2006 fatality rate of 1.41 per 100 million vehicle miles of travel (VMT) equates to 42,642 lives lost from motor vehicle crashes. This is unacceptable, and even one fatality is one too many. While firmly committed to meeting the 1.0 fatality rate goal, the Department realizes it will not reach this goal by 2008 as originally planned.

The 2008 1.0 fatality goal, which was originally set in 1998, would reduce the number of transportation deaths to approximately 33,500 by 2008. The number was changed to an equivalent rate in 2002. The original goal was based on overly optimistic behavioral assumptions—a 90 percent seat belt usage rate and alcohol-related fatalities falling to 11,000 annually. Current figures indicate that the national seat belt use rate is 81 percent, and there are over 17,000 alcohol-related highway fatalities annually. Additionally, an unprecedented, unpredictable, and sustained spike in motorcycle rider fatalities began when the original goals were set—from a historic low of 2,116 in 1997 to 4,810 in 2006 (a 127 percent increase).

The funding requests for the National Highway Traffic Safety Administration (NHTSA), the Federal Highway Administration (FHWA), and the Federal Motor Carrier Safety Administration (FMCSA) contribute to the DOT Safety strategic objective and its new target, as stated in the *DOT 2006-2011 Strategic Plan*, which is to reduce highway fatalities to 1.0 per 100 million vehicle-miles of travel (VMT) by 2011. The DOT overall fatality rate target for 2009 is 1.34 fatalities per 100 million VMT.

In the FY 2008 budget, the Department included four fatality sub-measures— passenger vehicle occupants, motorcycle riders, large trucks and buses, and non-occupants (pedestrians, bicyclists, etc.)—which represent the breadth of all highway users. The purpose of this approach is to closely look at the fatality rates of the different segments of highway users, devote greater energy and resources, and develop new strategies to combat sub-measure trends that are impeding progress to the overall 1.0 goal. NHTSA, FHWA, and FMCSA programs directly support these sub-metrics. Included later in this chapter is a discussion of FHWA-specific initiatives towards each measure. The FHWA will continue to maintain agency-specific intermediate outcome measures, many of which serve as a subset to the Department's accountability measures.

DOT Accountability Measures in Support of 1.0 Fatality Rate

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

	2003	2004	2005	2006	2007	2008	2009
Target	N/A	N/A	1.15	1.12	1.10	1.06	1.02
Actual	1.21	1.17	1.15	1.10	+		

+ Data to be released by NHTSA 12/08.

Reduce the expected rate of increase in motorcycle rider highway fatalities per 100,000 motorcycle registrations.

	2003	2004	2005	2006	2007	2008	2009
Target	N/A	N/A	N/A	75	76	76	77
Actual	69.16	69.83	73.48	71.94	+		

+ Data to be released by NHTSA 12/08.

Reduce the rate of large truck and bus fatalities per 100 million VMT.

	2005	2006	2007	2008	2009
Target	N/A	0.179	0.175	0.171	0.167
Actual	0.184	0.176	+		

+ Data to be released by FMCSA 12/08.

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

	2003	2004	2005	2006	2007	2008	2009
Target	N/A	N/A	0.16	0.16	0.15	0.19	0.19
Actual	0.19	0.19	0.20	0.19	+		

+ Data to be released by NHTSA 12/08.

Performance Issue (DOT-wide)

Motor vehicle crashes are the leading cause of death and disability for Americans age 2 through 34. Traffic crashes cost our economy approximately $230.6 billion (in 2000 dollars) 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. DOT seeks to attenuate this major public health problem and avoid the pain, suffering, and economic loss to our Nation by preventing highway crashes and alleviating the effects when crashes do occur.

A preview of results from the 2006 Annual Assessment of Motor Vehicle Traffic Crash Fatalities and Injuries indicates a reduction in both fatalities and injuries for people involved in motor vehicle crashes. In 2006, 42,642 people died in traffic crashes, a drop of 868 deaths compared to 2005 (43,510). This equates to a 2 percent decline in traffic deaths and a historically low fatality rate of 1.41 per 100 million vehicle miles of travel (VMT), compared to 1.46 in 2005. This is the lowest highway fatality rate ever recorded and the largest drop in total deaths in 15 years.

Most significantly, fatalities of occupants of passenger vehicles—cars, SUVs, vans and pickup trucks—continued a steady decline to 30,521, the lowest annual total since 1993. However, the successes in the 3.3 percent reduction in passenger vehicle occupant fatalities (to 30,521) and the 1 percent reduction among non-occupant (pedestrians, cyclists, etc.) fatalities (to 5,740) were minimized by a rise in the number of motorcycle fatalities for the ninth consecutive year. Motorcycles continue to be of particular concern, playing a large role in offsetting other fatality decreases with a 5.1 percent increase in motorcycle fatalities in 2006 (to a total of 4,810), an increase of 127 percent since 1997. Although motorcycle fatalities increased in 2006, the rate of increase in motorcycle fatalities decreased from the 13 percent increase in 2005 to a 5.1 percent increase in 2006. The number of pedestrian fatalities decreased from 4,892 in 2005 to 4,784 in 2006, a 2.2 percent decrease, whereas the number of cyclists killed decreased by 1.7 percent from 786 in 2005 to 773 in 2006. Fatalities among large-truck occupants were essentially the same, with an increase of one fatality to 805 in 2006, a 0.1 percent increase. Another troubling trend is in alcohol-related fatalities, which were also essentially flat, with an increase of 0.1 percent for fatalities involving a blood alcohol content of .08+.

Fatalities often receive more public attention than injuries from traffic crashes. However, the societal toll in hospitalization, medical costs, lost productivity, and 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 2006, injuries also declined to just under 2.6 million people being injured in motor vehicle crashes compared to nearly 2.7 million in 2005. The data shows that the number of people injured declined in all categories except motorcycle riders and that the decline was highest for large-truck occupants (15 percent) and passenger car occupants (6.2 percent).

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

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 1.15. In 2006, the number of passenger vehicle occupant fatalities (includes passenger cars and light trucks) decreased to 30,521 from 31,549 in 2005, a reduction of 3.3 percent. The drop in passenger car occupant fatalities was for the fourth year in a row, while the drop in light-truck occupant fatalities was the first since 1992. The FY 2009 target for passenger vehicles is 1.02. The 2009 passenger vehicle occupant fatality rate is projected at 1.04. If DOT can maintain the same level of progress in behavioral programs and roadway infrastructure improvements as it has achieved in the past and the VMT remains essentially unchanged through 2009, a 1.02 per 100 million passenger VMT fatality rate in 2009 will potentially save an additional 550-584 lives compared to the projected 1.04 rate.

Reduce the rate of motorcycle rider highway fatalities per 100,000 motorcycle registrations.

Motorcycle rider fatalities have increased each year since reaching a historic low of 2,116 fatalities in 1997. In 2006, motorcycle rider fatalities increased for the ninth year in a row to 4,810 from 4,576 in 2005. This is a 5.1 percent increase in just one year and accounts for 11 percent of the 42,642 total fatalities in motor vehicle crashes in 2006.

Data from 2005 (latest data available) 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 (younger 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.

As of November 2006, 20 States, the District of Columbia, and Puerto Rico require helmet use for all motorcycle operators and passengers. In another 27 States, only those under a certain age, usually 18, are required to wear helmets. Three States do not have 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.

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.

For FY 2008, the Department re-baselined this measure to reflect a change of focus from fatalities per 100 million VMT to fatalities per 100,000 registrations. 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 the Fatality And Reporting System (FARS). This data represents a complete census of all fatal crashes in the U.S. registration data collected by the States, and it is provided to the FHWA, 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 the FHWA was optional before 2007. 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. The FHWA estimates VMT for States that do not report based on data from states that do report. The accuracy of these counts is thus somewhat speculative. Additionally, motorcycle ridership (i.e. State registration) is itself dependent on high oil prices and successful marketing.

DOT has set its motorcycle rider fatality rate for FY 2009 at 77 per 100,000 motorcycle registrations. If fatalities and registrations continue to grow indefinitely at their recent pace, the projected rate in FY 2009 is 78. Maintaining a motorcycle fatality rate of 77 fatalities per 100,000 registrations in 2009 would prevent an additional 77 fatalities compared to those anticipated by current trends.

A key FHWA effort to decrease motorcycle fatalities was the establishment of a Motorcycle Advisory Council (MAC) in 2006. The MAC has made several recommendations that the FHWA will consider for implementation including: developing a brochure urging government agencies to consider motorcyclists' concerns during road design, construction and maintenance activities; encouraging State DOTs to create websites for motorcyclists to report roadway hazards; examining the skid resistance of intersection markings; continuing initiatives to improve retro-reflectivity of signs and roadway markings; reducing hazards associated with milled surfaces, parallel paving lane joints, drop offs at shoulders and bridge surfaces, parallel grids on bridges, steel plates, potholes and other uneven roadway surfaces; conducting a review of barrier designs used internationally and identifying those that are most forgiving when impacted by motorcyclists; considering signage targeted to warn motorcyclists of especially hazardous conditions; and examining the use of various sealants on road surfaces.

In FY 2008, data collection will begin on the NHTSA-sponsored pilot *Motorcycle Crash Causes and Outcomes Study*. The pilot study will acquire the necessary data to allow determination of an effective method for performing the full scale study that will determine the main factors contributing to crash causation in motorcycles. This study is a precursor to, and closely coordinated with, the larger FHWA study on *Motorcycle Crash Causes and Outcomes*. This research will allow specification of factors related to crash occurrence and calculation of the relative risk of crash involvement based on factors like age, gender, impairment, motorcycle type, riding experience, and speed. The NHTSA

pilot study will collect a small sample of crashes in order to refine the data collection process, procedure and variables to be collected in the larger study. It is anticipated that the study will occur over a five-year period.

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

Fatalities among large-truck occupants were essentially the same in 2006, with an increase of one fatality to 805, a 0.1 percent increase in fatalities. In FY 2008, DOT changed the large-truck metric to include fatalities involving both occupants and non-occupants in crashes involving a truck with a gross vehicle weight rating of 10,000 pounds or more and/or a motor coach. The new measurement uses 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 FY 2009 target for large-truck and bus fatalities is 0.167. The estimate for potential lives saved if DOT reaches its FY 2009 large truck and bus goal is 541 lives, with some overlap for passenger vehicles.
The FHWA has no programs that are specifically focused on reducing large truck and bus fatalities. Rather, FHWA program activities are focused on improving highway safety for all users. The success of these program activities should positively impact large-truck and bus safety.

*Red**uce the rate of non-occupant highway fatalities per 100 million VMT.***

According to 2006 data, the number of non-occupants of all types (pedestrians, pedalcyclists and occupants of motor vehicles not in transport and of non-motor vehicle transport devices) killed in motor vehicle crashes decreased by 1 percent, from 5,864 fatalities in 2005 to 5,740 in 2006. The number of pedestrian fatalities decreased from 4,892 in 2005 to 4,784 in 2006, a 2.2 percent decrease, whereas the number of cyclists decreased by 1.7 percent from 786 in 2005 to 773 in 2006. The DOT FY 2009 target for non-occupant fatalities is 0.19. The non-occupant fatality rate uses overall VMT data to calculate the rate since pedestrian, cyclist, and other non-occupant miles traveled are not available – meaning the numerator is much smaller in comparison to the denominator and changes in the rate are minuscule. When we take the projected 2006 rate out three decimal places it equates to .192. If DOT can reduce the non-occupant fatality rate to its 2009 target of .190, 59 lives would potentially be saved.

The FHWA has been working with the pedestrian safety focus states and cities (providing technical assistance and training) and encouraging them to develop pedestrian specific action plans to reduce pedestrian deaths by the end of FY 2008. By focusing on the states (Arizona, California, District of Columbia, Florida, Georgia, Hawaii, Illinois, Nevada, New Jersey, New Mexico, New York, North Carolina, Pennsylvania, Texas) with pedestrian fatalities above 150 or a fatality rate above 2.5 and cities (Los Angeles, Phoenix, Chicago, New York City) with the highest pedestrian fatalities, the FHWA hopes to have the greatest impact on those numbers. To date, New York City, New Jersey, Arizona, Phoenix, Chicago and Georgia have developed or are developing pedestrian specific plans, while others have at least incorporated pedestrians into their Strategic Highway Safety Plans (SHSPs). Many have modified dangerous

roadways/intersections or made policy changes that will have an impact on pedestrian safety as result of the technical assistance that has been provided.

The FHWA promotes the use of different infrastructure countermeasures to improve pedestrian safety. For example, the Safety Office developed *the Pedestrian Safety Guide and Countermeasure Selection System*, which is an "expert system" intended to provide practitioners with the latest information available for improving the safety and mobility of those who walk. The online tool allows users to input basic roadway and crash information about a specific location and then provides the user with a list of possible engineering, education, or enforcement treatments to improve pedestrian safety and/or mobility. In FY 2008, the FHWA will release the *Pedestrian Safety Guide for Communities*, a user-friendly packet of information for communities to help educate them about pedestrian and bicycle safety matters and help them solve their safety issues, working within the guidelines/framework provided by documents such as the Manual on Uniform Traffic Control Devices (MUTCD), the American Association of State Highway Transportation Officials (AASHTO) *Guide for the Planning Design and Operation of Pedestrian Facilities*, and other current design manuals and best practices guides that may be applicable.

The FHWA will also complete a Congressionally-mandated report on pedestrian safety that will build on the current level of knowledge of pedestrian safety countermeasures. This report will identify the most effective advanced technologies and Intelligent Transportation System (ITS) countermeasures related to automated pedestrian detection and warning systems, road design, and vehicle structural design that could potentially mitigate the crash forces on pedestrians in the event of a crash.

The FHWA will continue to promote the application of Pedestrian Safety Audits, which consists of guidelines and a checklist. Road Safety Audits (RSA) are independent reviews of a roadway section or proposed project design by a multi-disciplinary team to identify potential safety problems or solutions. Pedestrian guidelines and a checklist will be incorporated into the existing RSA software. The pedestrian component will also be field tested and evaluated in several pedestrian Focus States and/or Cities. A comprehensive report will be available, which will discuss the results of field tests and identify any revisions to the checklist and guidelines.

FHWA funding for this performance goal:

$(000)

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
1. SAFETY STRATEGIC GOAL			
A. Highway Safety			
a. Passenger vehicle occupant fatality rate per 100 million passenger vehicle-miles traveled.	6,120,933	6,926,055	6,575,973
b. Motorcycle rider fatality rate per 100,000 motorcycle registrations.	874,419	989,436	939,425
c. Non-occupant highway fatalities per 100 million vehicle-miles traveled.	874,419	989,436	939,425
d. Large truck and bus fatalities per 100 million total vehicle-miles traveled.	874,419	989,436	939,425
e. Other	-----	-----	-----
Subtotal Performance Outcome	8,744,190	9,894,364	9,394,247
Total – Safety Strategic Goal	8,744,190	9,894,364	9,394,247

This request allows the FHWA to conduct critically needed research and 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.

SAFETEA-LU significantly increased funding dedicated towards Safety goal-related programs by establishing several new or expanded safety programs, including the Highway Safety Improvement Program (HSIP) and Safe Routes to School (SRTS) Program. This increase in resources will strengthen the ability of the 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 required by SAFETEA-LU, all States had developed a statewide Strategic Highway Safety Plans by the end of FY 2007. The FHWA will continue to provide technical assistance and support to the States. These additional resources will allow the FHWA to maintain a high level of consistency in support of the States' SHSP implementation activities and efforts to advance safety. Further, the FHWA will be able to provide direct technical assistance to local transportation agencies so they can assist local officials to make better decisions related to safety on their systems. There are more than 30,000 local road owners in the United States, and these resources will allow a more aggressive approach to be directly aligned with safety improvement on the local system.

Marginal Cost of Performance - Safety

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, pedestrian, and speeding-related crashes. To project the number of lives saved, the fatality rate for each of these four crash types in 2003 is the baseline for comparison of actual lives saved in 2004 and subsequent years. Estimates of lives saved in 2007 to 2009 are based on a target fatality rate for each crash type and estimated growth in vehicle miles of travel (VMT) or population for each of these years. When estimates for each of these four crash types are combined, a projected 4,303 additional lives would be saved in 2009, compared with a baseline of 53,211 lives lost due to these four types of crashes (this figure is greater than the total number of fatalities due to the fact that many fatalities are 'double-counted' due to multiple contributing factors). The incremental improvement from 2008 to 2009 is 655.

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

Performance Measure: Number of lives saved in roadway departure crashes. Baseline is 0.88 fatalities per 100 million vehicle miles of travel (VMT) or 25,576 fatalities in 2003. Target rate for 2009 is 0.82 fatalities per 100 million VMT.

	2004	**2005**	**2006**	**2007**	**2008**	**2009**
Target	N/T	N/T	1,296(r)	1,535(r)	1,797(r)	2,073
Actual	523	1,054	1,860	N/A	N/A	N/A

N/T – No Target, N/A – Not Available, (r) – Revised

Performance Measure: Number of lives saved in intersection-related crashes. Baseline is 3.23 fatalities per 100 thousand population or 9,362 fatalities in 2003. Target rate for 2009 is 3.05 fatalities per 100 thousand population.

	2004	**2005**	**2006**	**2007**	**2008**	**2009**
Target	N/T	N/T	396 (r)	445(r)	494(r)	544
Actual	337	348	826	N/A	N/A	N/A

N/T – No Target, N/A – Not Available, (r) – Revised

Performance Measure: Number of lives saved in pedestrian-related crashes. Baseline is 1.65 fatalities per 100 thousand population or 4,774 fatalities in 2003. Target rate for 2009 is 1.54 fatalities per 100 thousand population.

	2004	2005	2006	2007	2008	2009
Target	N/T	N/T	139 (r)	185 (r)	247 (r)	310 (r)
Actual	180	(18)	123	N/A	N/A	N/A

N/T – No Target, N/A – Not Available, (r) – Revised

Performance Measure: Number of lives saved in speeding crashes. Baseline is 0.47 fatalities per 100 million vehicle miles of travel (VMT) or 13,499 fatalities in 2003. Target rate for 2009 is 0.41 fatalities per 100 million VMT.

	2004	2005	2006	2007	2008	2009
Target	N/T	N/T	1,089	858 (r)	1,111 (r)	1,376 (r)
Actual	553	378 (r)	531	N/A	N/A	N/A
Incremental Performance Target (With Program Changes)					627	655
(Total) Performance Target (With Program Changes)					3,648	4,303

N/T – No Target, N/A – Not Available

Revised figures above reflect updated 'actual' data from finalized Fatality Analysis Reporting System (FARS) for 2005, or 2006, as available at the time calculations were performed.

Note: Actual VMT was 2,965 million miles in 2004, 2,989 in 2005, and 3,014 in 2006. For this study, VMT is projected at 3,015 million miles in 2007, 3,049 in 2008, and 3,092 in 2009. Actual Population was 292.801 million in 2004, 295.507 in 2005, and 298.217 in 2006. Population is projected at 300.912 million in 2007, 303.598 in 2008, and 306.272 in 2009.

Performance Issue (FHWA Priority Areas)

The FHWA safety program continues to concentrate efforts to reduce the number of fatalities in four types of crashes: roadway departures, crashes at intersections, collisions involving pedestrians, and speeding-related crashes. Approximately 60 percent of the fatalities occurred in roadway departure crashes in 2004, for example, those involving a single vehicle running-off-road or a head-on or sideswipe collision with another vehicle.

Roadway departures, including run off-the-road and head-on crashes, accounted for 24,806 fatalities in 2006, a 2.7 percent decrease from 2005. Safer highway and intersection designs and smarter operations will remove roadside hazards and help keep vehicles on the roadway. Also, 8,797 fatalities occurred in crashes in 2006 between vehicles in collisions at intersections, a decrease of 4.8 percent from 2005. The FHWA will continue to promote the use of comprehensive intersection design and operational tools and enforcement strategies and will assist States in improving intersection safety problems at specific locations. Pedestrian deaths decreased 2.2 percent from 4,892 in 2005 to 4,784 in 2006. The FHWA will continue to target crash causes in major urban areas and select rural locations and facilitate community-based programs that fully and safely accommodate pedestrians.

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 1, the 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 4 Es) in delivering effective programs and projects.

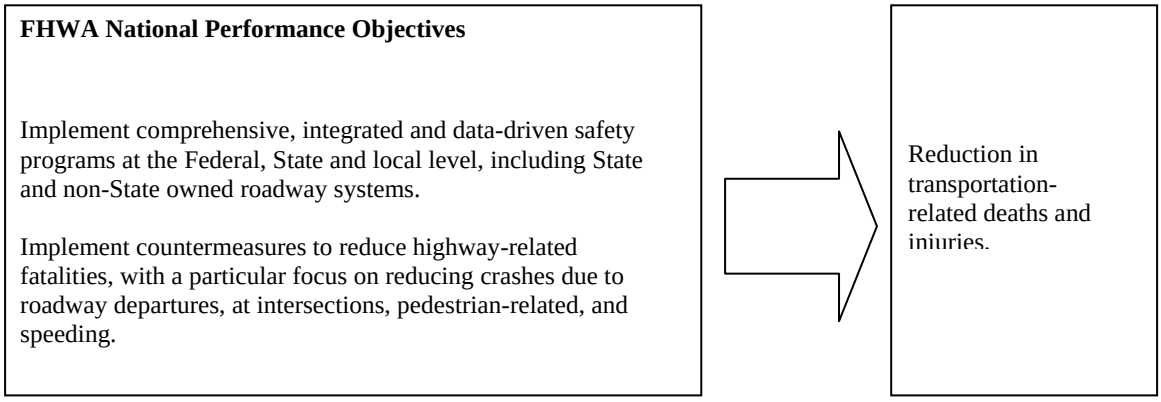


Figure 1. Relationship between Safety-Directed Program Objectives and Outcomes.

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, cable median barriers and rumble strips, retroreflective signage, improved markings, and 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 enforcement cameras, training for local safety professionals, and increased public awareness. The ITS program continues efforts to develop technology-based systems that could significantly reduce intersection crashes. A major component is the recent construction of an intersection safety test facility at the FHWA 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 and avoiding traffic control (stop sign and traffic signal) violations.

To counter the serious issue of pedestrian fatalities, the 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.

To lessen the occurrence of speeding-related fatalities, the FHWA is working cooperatively with NHTSA and FMCSA on an integrated and balanced 4 Es approach to manage speed and crash risk.

Anticipated FY 2008 Accomplishments

The 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 that involve roadway departure, intersections, pedestrians, and speeding and assistance will be provided to reduce fatalities in these areas. Assistance to States in the implementation of SHSPs will continue. All States developed a SHSP by the end of FY 2007.

Safety, System Performance and 21st Century Solutions

The FHWA's planned activities include several specific action initiatives directly related to the Safety Goal. These initiatives are:

- Improving the quality of State DOT HSIPs – In FY 2008, funds will be used to: (1) provide program delivery, national policy leadership, technical assistance, and technology deployment assistance to State DOTs; (2) complete the Safety Analyst software tools and associated reports; (3) incorporate these Safety Analyst software tools in the Highway Safety Manual; and (4) improve the quality, timeliness and comprehensiveness of the crash and roadway data used by the States to make safety funding decisions. The expected outcome is improved highway safety and a reduction in fatalities and serious injuries nationwide and alignment of SHSPs and HSIP funding. This initiative is expected to have reached significant milestones by December 2008.
- Implementing SHSPs in all States – In FY 2008, funds will be used to: (1) have the Office of Safety offer national policy leadership and technical assistance to states in support of all States developing and implementing SHSPs. The expected outcome is coordinated statewide safety programs that bring safety partners together to make data-driven decisions and leverage limited resources for the greatest potential in reducing statewide fatalities. All States had completed and approved SHSPs by October 2007.
- Administer the SRTS program – In FY 2008, funds will be used to: (1) ensure that all State DOTs have a full-time SRTS coordinator, which was achieved in

December 2007; (2) ensure that all States have announced SRTS funding; and (3) report to the Secretary on strategies to advance SRTS nationwide. The expected outcome is the improved safety of children walking and biking to school. These initiatives are expected to have reached significant milestones by December 2008.

- Improve Older Driver Safety – In FY 2008, funds will be used to: (1) publish the Final Rule on sign retroreflectivity, which was achieved in December 2007; (2) develop guidelines for cross-walk lighting; and (3) develop capability to assist State DOTs in sharing best practice information. The expected outcome is the reduction of older driver fatalities and injuries. These initiatives are expected to have reached significant milestones by December 2008.
- Manage Speed – In FY 2008, funds will be used to: (1) employ the 4 Es to more effectively manage speed and reduce speeding-related fatalities and injuries. The expected outcome is the reduction in speeding-related fatalities and injuries, including the completion of several technical guidance products. This initiative is expected to have reached significant milestones by December 2008.
- Promote the use of roundabouts – In FY 2008, funds will be used to: (1) develop products and policies to promote the wide-scale implementation of roundabouts. The expected outcome is an increase in the number of States and local agencies constructing modern roundabouts. This initiative is expected to have reached significant milestones by December 2008.

During FY 2008, the FHWA will continue to strategically 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, pedestrian safety plans, and speed management safety plans to reduce the number of fatal crashes.
- Improvement in the quality of safety data in all States and in the quality of the HSIP.
- Increase the level of technical assistance and training to implement new programs.
- Improve the overall HSIP by rewriting the 23 CFR 924 regulations to reflect state-of-the-art safety practices via the regulatory process.
- 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), through a partnership with the National Park Service, using the Park Roads and Parkways Program, will continue development of a Safety Management System (SMS) by using crash information assembled in a new Safety Summary Report. The system will provide valuable crash safety and fatality data that

will enable the FHWA and its partners to develop targeted strategies to address problem areas.

The Forest Highway Program is unique in that project delivery decisions are addressed through a tri-party agreement between the 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. FLH anticipates completion of a unique SMS for the Forest Highway Program through the combined use of available data and road safety audits.

A draft SMS will be presented to the Bureau of Indian Affairs. Outreach to the tribes will be undertaken to encourage their participation in sharing safety data to support the SMS. FLH will continue to emphasize the importance of road safety audits (RSA) in this system by leading RSAs for various Tribal lands.

FY 2009 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 Safe Routes to School (SRTS) program, 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.

The FHWA will continue to assist States with the implementation of SHSP and safety planning where data show a need to reduce injury and fatality rates. The 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, pavement marking, and signalization.

Rural two-lane two-way 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 2009 to address safety considerations and develop countermeasures to reduce these higher rural road fatalities.

The FHWA will also continue to concentrate its efforts in reducing the severity of crashes through roadway infrastructure and operational improvements. Planned activities include funding safety improvements to the national highway infrastructure including roadsides and intersections, 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 solution pursued in Utah. The Utah Department of Transportation (UDOT) identified a serious and growing problem with median crossover fatalities and serious injuries on I-15 in the Provo/Orem area. A six-lane 15-mile segment with an annual average of 92 crashes that resulted in five fatalities and 22 serious injuries was reaching capacity but was not scheduled for reconstruction for at least two years. While median barriers would mitigate the problem, the investment of limited safety funds for a two-year period was questioned at first.

Using high-tensioned cable barrier as an interim solution seemed viable to UDOT, especially considering that reusing the cables could recapture nearly half of the costs. After the barrier was installed, there was a reduction of 91 percent in the annual average of fatalities and injuries on this segment of I-15. Considering the number of likely crossover crashes prevented, crash reports suggest that more than 40 high-speed crossovers were prevented in less than 2 years. In addition, reuse of the cables and hardware in other projects has recaptured up to 45 percent of the cost, producing a greatly reduced net construction cost at each location.

Pedestrian and intersection safety improvement programs will also be addressed through the HSIP program. As an example, the State of New Jersey annually identifies its top pedestrian crash locations for improvement with HSIP funds. One such project was done in Palisades Park at Route 93 and CR 501. Pedestrian signal heads were added at every corner of the intersection, as were crosswalk markings, and the side streets were re-striped to restrict the left lane for left turns only (many of the pedestrian crashes were caused by left turning vehicles). A lower crash frequency (.7 per year vs. 1.5 per year) has been reported as a result. In addition to pedestrian-oriented projects supported by the HSIP, the 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 making safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school.

In one specific area to address intersection safety, the 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 2009, $220 million is set aside to address grade crossing safety countermeasures.

An example of an intersection safety project involved the intersection of State Highway 13 and County Road 2, both with 55 mph speed limits, with two-way stop control in a rural area of Scott County, Minnesota. There had been two fatal crashes and 50 injury crashes in a five-year period at this intersection. A traffic signal was considered for this location, which would mean added delay for the mainline traffic when stopped for the cross street traffic. The solution was to construct a roundabout, thus allowing free flow traffic from all legs and increasing safety by reducing conflict points and eliminating the high-speed right angle crashes that were occurring. The roundabout was opened to traffic

in September 2005. Operations were observed during a rush hour period with approximately 700 approaching vehicles, with about 90 percent of them not having to yield before entering the roundabout. During the 12 months after installation, there was only one reported crashing involving a single motorcycle traveling too fast in the roundabout and running off the road.

Speeding-related crashes will also be addressed through the HSIP program. A coordinated speed management program in Minnesota is an example of a project that was successfully implemented. The Minnesota Department of Transportation and Department of Public Safety combined the setting of credible speed limits with strict enforcement and education campaigns to increase voluntary compliance, reduce excessive speeds and reduce fatal and injury crashes. This program, in concert with other efforts, resulted in reductions in the number of speeders and reductions in the number of fatal and life-changing crashes.

Federal Lands Highway

Federal Lands Highway (FLH) will continue to advance its safety initiatives through development and implementation of safety management systems. For programs that are enhancing or developing data systems, 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. This will be a major advancement, especially for the Park Roads and Parkways Program, because much more crash data is available now than ever before. Generally, the goal is to continue movement from the tool development stage to the development and deployment of corrective actions based on the safety data. The outcomes should be a safer visitor experience at parks, refuges and forests and safer travel for tribal members who use Indian Reservation Roads facilities daily.

Research and ITS

Five critical areas will continue to be addressed in FY 2009: roadway departure crashes, intersection fatalities, pedestrian fatalities, speeding-related fatalities, and advancement of a strategic approach to improving highway safety.

To address roadway departure crashes, research funds will support activities to enhance understanding of roadway departure crash causation, develop analysis tools and procedures to support better roadside safety design, refine and implement the Interactive Highway Safety Design Model (IHSDM), and develop and evaluate countermeasures to prevent and mitigate the consequences of roadway departure crashes. 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 evaluation of innovative infrastructure and operational configurations at both signalized and non-signalized intersections, assess the safety and operational impacts of access management techniques on surface street networks, improve signal design settings to reduce red-light running at signalized intersections, and enhance tools for safety analysis of freeway interchanges. 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.

To address the problem of pedestrian fatalities, FHWA research will include evaluation of the impacts of traffic calming designs on pedestrian and bicyclist safety and development of expert systems to evaluate pedestrian and bicycle improvement opportunities. The FHWA will 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.

To address speeding-related fatalities, the FHWA will place emphasis on a speed management program that involves: evaluating variable speed limit applications; speed reducing treatments on main roads through rural communities; and implementation of rational speed limits, coupled with strict enforcement, including automated enforcement.

Towards establishment of a strategic approach to improving highway safety, the FHWA will enhance the functions of the Digital Highway Measurement System to collect roadway data; deploy and enhance the Safety Analyst software; evaluate the effectiveness of various safety improvements; and operate and maintain the fifth generation of the Highway Safety Information System. 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.

In addition, the FHWA will conduct safety research projects that contribute to multiple objectives, including advancing visibility technologies and better defining the visual requirements of road users, and working on human-centered systems to incorporate human factors considerations into all aspects of highway design. Furthermore, the FHWA will conduct exploratory advanced research to identify, develop, and evaluate innovative methods and technologies to improve highway safety.

The FHWA Exploratory Advanced Research program will solicit safety research proposals to enhance understanding of the importance of the visibility of the roadway; develop innovative technologies to detect the presence of pedestrians or other vulnerable road users; create the parameters for a long-term ground traffic control system; and enhance understanding of the relationship between the vehicle (all types) and the roadway.

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

For the past several years, the FHWA has advanced a "focused approach" to safety in which specific States were identified as Opportunity and Focus States. These States receive priority assistance and resources to advance their safety activities and initiatives. As part of this effort, the FHWA realigned staff, funding, and program priorities to support a focused approach that concentrates on reducing roadway departure, intersection, pedestrian, and speeding-related fatalities in these States. In addition, the FHWA partnered with States to provide support and technical assistance in the development and implementation of SHSPs as part of their efforts to advance safety within their States. SAFETEA-LU requires each State to develop a SHSP through a collaborative, comprehensive and data-driven approach.

SAFETEA-LU also significantly increased funding for Safety goal-related programs including the HSIP and SRTS programs. This increase in resources strengthens the ability of States and locals to deliver effective safety programs that lower the overall fatality rate and that save lives.

By implementing the focused approach to safety within the FHWA and among the States, and with effective implementation of the HSIP and other Safety programs within SAFETEA-LU, the FHWA believes the national fatality and crash rates will be significantly reduced.

Limitation on Administrative Expenses

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

541 FTE and $92.4 million

Responsible Officials:
Mr. Jeffrey Lindley, Associate Administrator for Safety
Mr. John Baxter, Associate Administrator Office of Federal Lands Highway
Mr. Dennis C. Judycki, Associate Administrator for Research, Development and Technology

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. The DOT and the FHWA have 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 Federal Aid Highway Program (FAHP) Program Assessment Rating Tool (PART) assessment.

Percent of total annual urban-area road travel time that occurs under congested conditions.

	2002	2003	2004	2005	2006	2007	2008	2009
Target	30.9	31.6	32.3	33.0	33.7	32.5	32.3	31.9
Actual	30.7(r)	31.0(r)	31.6(r)	31.8(r)	31.6	31.8#		

(r) Revised; # Projection

Funding for this performance goal:

$(000)

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
2. REDUCED CONGESTION STRATEGIC GOAL			
Reduction in Urban Congestion			
a. Percent of annual urban-area travel time occurring in congested conditions.	6,805,321	6,877,809	6,537,639
b. Other	-----	-----	-----
Subtotal, Performance Outcome	6,805,321	6,877,809	6,537,639
Total – Reduced Congestion Strategic Goal	23,400,996	23,634,428	22,441,787

This request will allow the FHWA to fund transportation-related improvements that address traffic congestion in urban areas and will support the Department's Congestion Initiative.

Funding will be used to implement all of the following congestion reduction strategies:

(1) ensuring that consumption levels accurately reflect individual and commercial requirements and preferences (applying direct charges to users through congestion pricing),
(2) strategically adding capacity,
(3) using the physical capacity currently available more productively by operating the system at peak condition and performance, and
(4) providing travel alternatives by encouraging the adoption of travel demand management strategies such as telecommuting.

Marginal Cost of Performance – Urban Congestion

As noted in the table below, the FHWA will focus its congestion mitigation initiatives on reducing the cost of congestion as measured by travel delay and fuel consumption. The estimate of reduced travel on congested roads in 2007-2009 is based on meeting the targets for the percentage of travel on congested NHS roads and a projected VMT. Using this approach, it is estimated that there will be a reduction of 24 million miles of congested travel on the NHS in 2008 and 50 million miles in 2009, when compared to projections in each year based on current trends. This improvement represents a cost savings to society, in terms of a reduction in travel delay, of $3 billion in 2008 and $5.2 billion in 2009, which is equivalent to approximately 3 percent and 6 percent, respectively, of total Fed-aid program costs based on current trends and anticipated growth in travel. The incremental improvement in percentage of congested travel from 2007 to 2009 is offset by the anticipated growth in travel and delay. Even if the targets are met, the total congested VMT still increases by 6 million, from 980 to 986 million miles.

Agency Output or Outcome Measure Associated with this Program increase(s): Reduction in urban congestion.

Performance Measure: Percent of total annual urban-area road travel time that occurs under congested conditions.

	FY 2007	FY 2008	FY 2009
Target (million VMT)	980	985	986
Projected (million VMT)	983	1,009	1,036
Incremental Performance	-3	-24	-50

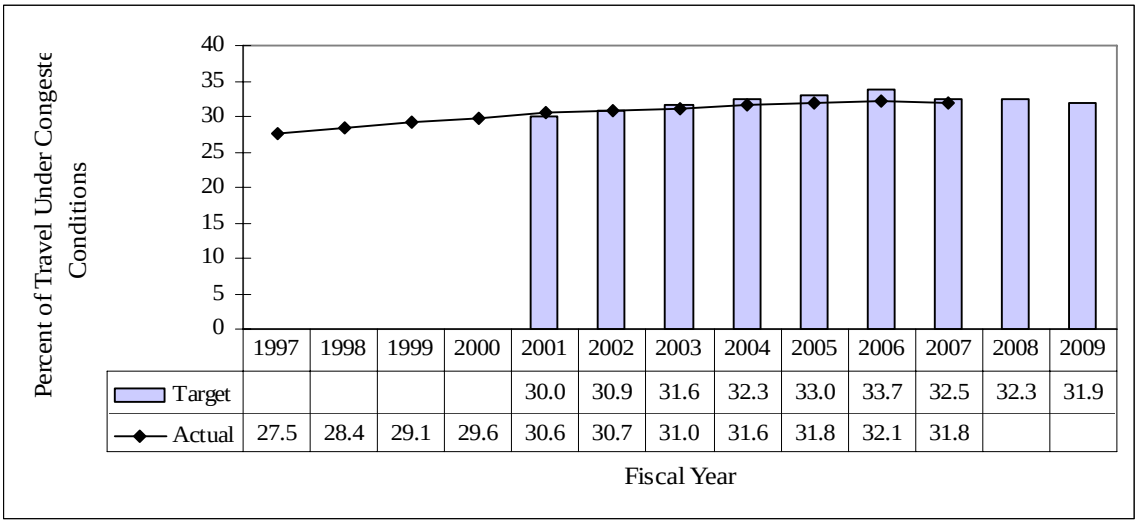
Note: Actual VMT under congested conditions for FY 2007 will be available in the fall of 2008. VMT is projected at 3,015 million miles in 2007, 3,049 in 2008, and 3,092 in 2009.

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.

As noted in figure 2, the percentage 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 percentage points higher than in 2004, a rate slightly below the projected increase of 0.7 percentage points. On the whole, recent results suggest that the overall rate of growth in traffic congestion nationwide has slowed somewhat. The goal in FY 2009 is to reduce the level of congestion by 0.4 percentage points relative to the FY 2008 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 2005-2007 from travel information websites and transportation management centers in selected cities. 2005-2006 data collected from transportation management centers in 19 cities in general showed continued growth in congestion at similar rates as the 2004-2005 data.



	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Target					30.0	30.9	31.6	32.3	33.0	33.7	32.5	32.3	31.9
Actual	27.5	28.4	29.1	29.6	30.6	30.7	31.0	31.6	31.8	32.1	31.8		

Figure 2. Percent of Travel under Congested Conditions, FY 1997 – FY 2009.

Innovative strategies to reduce recurring 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 re-adjusted 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 3, the FHWA will pursue several broad strategies that are aimed at reducing congestion in urban areas. A key element will be supporting the new Urban Partner cities so that they will be successful in implementing their agreements to congestion reduction strategies. These strategies include comprehensive and innovative congestion pricing applications combined with strong transit, travel demand management, and operation and management strategies and technologies. In addition, FHWA will work with the Office of the Secretary of Transportation and other modal administrations throughout the Department to advance the Congestion Reduction Demonstration (CRD) program. As with the Urban Partnership program, the CRD program will result in the award of discretionary funds to cities willing to implement aggressive congestion pricing strategies as well as innovative technologies and expanded transit operations.

While the urban partners and CRD program participants provide an opportunity to showcase real-world applications of congestion reducing opportunities, a robust program of research, development, and technology transfer will be advanced to pursue the widespread implementation of pricing applications to include High Occupancy Toll (HOT) lanes and parking pricing; other travel demand management practices; the institutionalization of comprehensive bottleneck reduction programs in every State Department of Transportation; improved management of freeway and arterial systems particularly through improved traffic signal timing and Active Traffic Management; improved management of non-recurring events such as traffic incidents and work zones; and enhanced decision-making through the use of more robust traffic analysis tools, the integration of system management and operations considerations into the Planning process; and the establishment of partnerships that include all of the key agencies in a region.

The 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 system performance, 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.

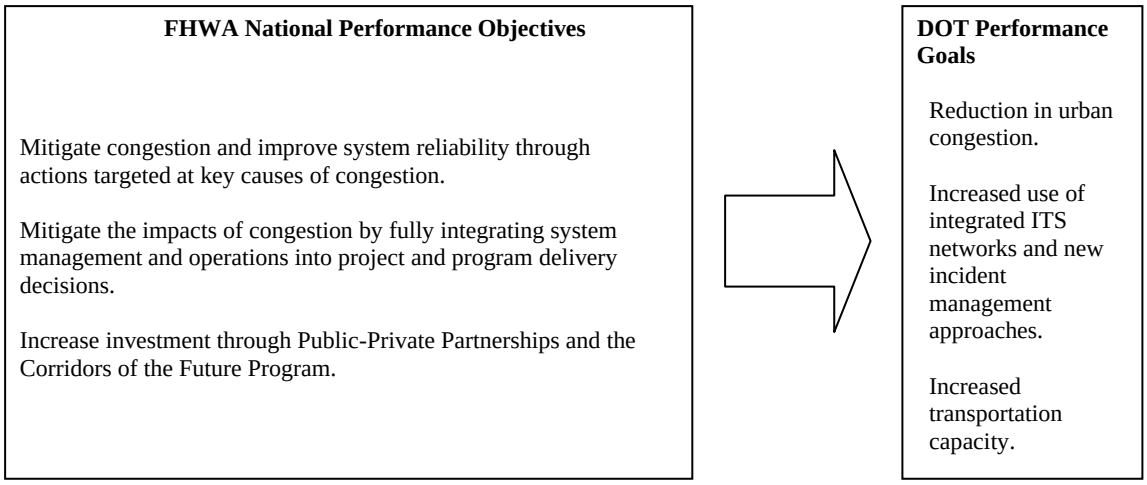


Figure 3. Relationship between Urban Congestion Reduction Program Objectives and Outcomes.

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, the 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.

Anticipated FY 2008 Accomplishments

Congestion reduction should be achieved in areas characterized by higher levels of investment in adding system capacity and removing bottlenecks; more emphasis on effective congestion partnerships that facilitate inter-agency coordination and collaboration; and a commitment to pursing the application of tolling and pricing strategies, the collection and dissemination of real-time information, and other effective operational practices. By focusing efforts on these areas, the 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, the FHWA will work to improve the 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 High Occupancy Vehicle (HOV) lanes to HOT lanes by assisting select States in exploring HOV to

HOT conversion, building the necessary constituency base, and providing technical assistance.

- Implement a comprehensive national strategy to reduce traffic bottlenecks through providing, to transportation agencies, information and technical assistance in identifying operational and low-cost construction options that may be implemented in the near-term to mitigate or eliminate bottleneck traffic congestion and adopting comprehensive bottleneck reducing programs.
- Integration of operations and management considerations into the planning process through the provision of technical assistance in bringing a new outcome-based perspective to the Congestion Management Process and the Long-Range Transportation Plan.
- 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. Continue to advance technologies, such as *Adaptive Control Software-Lite (ACS-Lite),* to enhance traffic signal timing.
- Promote the use of real-time data to better quantify system performance and place better information in the hands of officials making transportation investment and resource allocation choices.
- 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.
- 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 strategies for the FLHP programs. Provide technical assistance to the Bureau of Indian Affairs to develop criteria for determining when congestion management strategies are required.

Safety, System Performance and 21st Century Solutions

Bottleneck Reduction – In alignment with the USDOT Congestion Initiative, assist transportation agencies in identifying and implementing operational or low-cost construction improvements to provide travelers with near-term relief from traffic congestion at bottleneck locations. A Primer outlining such solutions is available and is continuously updated with innovative ideas. The FHWA Division Offices use the Primer as a virtual peer exchange forum to work with their States to determine if their bottleneck locations could benefit from these improvements. In addition, technical assistance on matching low-cost operational improvements with specific bottleneck deficiencies and developing systematic near-term bottleneck reduction programs is provided.

Congestion Pricing - In support of the USDOT Congestion Initiative, activities are underway to introduce road pricing as a superior solution for reducing traffic congestion on heavily traveled facilities throughout the country. The USDOT selected five Urban Partner cities to demonstrate innovative congestion pricing strategies. A Congestion Reduction Program will add additional cities to the list of pricing pioneers. In addition, a task force is focused on providing tailored technical assistance to States that have HOV facilities with excess capacity that could be sold to vehicles not meeting the occupancy requirements. Extensive outreach and training, and technical assistance strategies are underway to provide information on all aspects of congestion pricing, to include developing State legislation allowing tolling, implementing the necessary technology, forming public private partnerships, and explaining the underlying rationale for pricing. Finally, a *Making the Technical Case* effort is on-going and will quantify the benefits and costs of congestion pricing.

Congestion Pricing – Implementation of HOT Lanes – A task force is focused on providing tailored technical assistance to States that have HOV facilities with excess capacity that could be sold to vehicles not meeting the occupancy requirements. In FY 2008, funds will be used to aggressively promote HOT lanes as a strategy to reduce congestion and demonstrate pricing as an appropriate congestion mitigation strategy.

Congestion Pricing - Execution of Discretionary Programs to Support Urban Partnership Agreements – In FY 2008, the FHWA will leverage Discretionary Programs, such as the Ferry Boats and Innovative Bridge Research and Deployment programs, to support the Urban Partners in the implementation of aggressive and innovative pricing strategies.

Congestion Rule Making - In FY 2008, funds will be used to identify and implement changes to the FHWA's regulations to help States better focus on congestion and to incorporate elements of the DOT Congestion Initiative into FHWA programs. The expected outcome is a Final rule and the rulemaking is expected to be completed by the end of FY 2008.

Traffic Signal Timing - Significant congestion reduction impacts are realized when traffic signal timing is updated. The 2005 *National Traffic Signal Report Card* was updated and the findings will be used to encourage jurisdictions to improve their report card score. A broad array of outreach, training, and technical assistance activities encourage and support adoption of improved traffic signal management practices. In addition ACS-Lite was developed to, at relatively low cost, update traffic signal timing in real-time. This new software is being actively promoted via a partnership with interested parties from the private sector.

Congestion Management Process (CMP) – SAFETEA-LU requires transportation agencies to actively consider operational strategies alongside more traditional – often capital intensive – approaches to congestion reduction. Extensive guidance and training will be provided to those engaged in the planning process to ensure that the Congestion Management Process is geared toward outcomes. In this way, expenditures that result in operating the system at peak performance will be well considered.

Evaluation of the CMAQ Program - The FHWA will conduct an evaluation of the Congestion Mitigation and Air Quality (CMAQ) Program as required by SAFETEA-LU. This effort will assess a sample of CMAQ projects for their impacts on system performance. It will examine about 100 projects in detail and develop data on the project impacts on emissions and congestion and also will examine cost-effectiveness. The project will be conducted in cooperation with FTA and EPA in 2 phases. A final report will include data, where practicable, on the emissions, congestion benefits of seven projects and the relative cost-effectiveness.

Conditions and Performance (C&P) Report Enhancements – In FY 2008, funds will be used to improve and refine the analysis of the impact that aggressive congestion mitigation strategies, including congestion pricing and operations strategies, could have on future highway investment requirements and performance. The expected outcome is an improved investment analyses in the 2008 *C&P Report*, which better reflects the potential impacts of such strategies. The 2008 edition of the *C&P Report* will be completed in July 2008.

FY 2009 Performance Budget Request

Federal-aid Highway Program

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, adding traffic lanes, adding additional buses in specific locations where congestion is recurring, or removing bottlenecks. States and local governments will also use these funds to improve traffic flow through more effective systems management and operations, including variable pricing programs.

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

- The I-10/Katy Freeway, Texas 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.
- The I-43/I-94/I-794 Marquette Interchange, Wisconsin 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.

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. The 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

The FHWA Exploratory Advanced Research program will seek to identify, develop and assess promising innovations that could provide significant operational and technological improvements that have the potential to dramatically reduce traffic congestion. Proposals would explore longer-term, higher risk research with potentially dramatic breakthroughs addressing the causes and consequences of traffic congestion.

Effectively addressing traffic congestion will hinge on the ability of the 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, the FHWA will use FY 2009 R&D and ITS funding to:

- Promote the findings gathered from the Urban Partnership /Congestion Reduction Demonstration (CRD) experience by fully engaging field staff in promoting broad-based (e.g., cordon pricing) 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, the FHWA will continue its efforts to increase the number of jurisdictions with effective traffic signal timing practices through aggressive outreach and technical assistance. In addition, FHWA will introduce the States to Active Traffic Management practices and will assist in their adoption.
- 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. Institutionalize the use of performance measures by continued promotion and facilitation of their integration into the Congestion Management Process.
- Continue to work with States to deploy operational and planning countermeasures to address identified bottlenecks and chokepoints through the implementation of

operational and low-cost construction strategies, and continue to promote the adoption of comprehensive bottleneck reduction programs.

Congestion Initiative

The budget proposes to redirect $175 million in unobligated balances for inactive projects authorized in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. The funds will be used to carry out the Department's National Strategy to Reduce Congestion on America's Transportation Network (the "Congestion Initiative") and will support metropolitan area congestion reduction demonstration initiatives and the Corridors of the Future Program.

Congestion Reduction Demonstration Program: $100 million

In November 2007, USDOT solicited applications from metropolitan areas to support congestion relief projects. Through this solicitation, DOT intends to fund proposals that would implement congestion pricing along with complementary transportation solutions, including transit service and innovative operational technologies. In December 2007, DOT received approximately 20 applications from a wide range of jurisdictions. The Department requests $100 million to fund qualified projects.

Corridors of the Future: $75 million

These funds would be utilized at the discretion of the Secretary to facilitate project development in the six Corridors of the Future, I-95, I-10, I-69, I-70, I-5 and I-15. Funds would be eligible for expenditures across the spectrum of project development including preliminary engineering, and purchase 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. The Department requests $75 million to fund qualified projects.

Limitation on Administrative Expenses

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

377 FTE and $64.3 million

Responsible Officials:
Mr. King Gee, Associate Administrator for Infrastructure
Mr. John Baxter, 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. Marc Lemon, Chief Counsel

DOT Performance Goal: 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.

	2003	**2004**	**2005**	**2006**	**2007**	**2008***	**2009**
Target	30%	35%	40%	50%	65%	65%	85%
Actual	17%	25%	28%	41%	48%		

* Change from previous target of 75%

Percent of top 40 metropolitan areas with full service patrols, quick clearance policies, and quick clearance laws.

Full Service Patrols

	2007	**2008**	**2009**
Target	N/T	100%	100%
Actual	70%		

Quick Clearance Policies

	2007	2008	2009
Target	N/T	90%	90%
Actual	80%		

Quick Clearance Laws

	2007	**2008**	**2009**
Target	N/T	90%	90%
Actual	75%		

Funding for this performance goal:

$(000)

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
2. REDUCED CONGESTION STRATEGIC GOAL			
Operations Performance			
a. Percent of top 40 metropolitan areas with full service patrols, quick clearance policies, and quick clearance laws.	1,731,178	1,749,617	1,663,083
b. Percent of population with access to 511.	1,731,178	1,749,617	1,663,083
c. Other	-----	-----	-----
Subtotal, Performance Outcome	3,462,356	3,499,234	3,326,166

This request will allow the 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:

- 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
- Mitigating the negative mobility impacts associated with traffic incidents, work zones, and weather.

With respect to the first track, the requested funds will allow the 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 one-quarter of congestion, a high-priority emphasis area aimed at increasing the deployment of full-service (incident-oriented) patrols, and Quick Clearance policies and laws have been identified. In addition, funds will provide for ITS-based solutions to improving road weather management.

Performance Issue

Non-recurring congestion accounts for half of all congestion. This is the congestion that does not follow a routine pattern. The four main causes of non-recurring congestion are: traffic incidents (ranging from disabled 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 freight carriers are especially

sensitive to the unanticipated disruptions due to tightly scheduled personal activities and freight distribution systems.

Traffic incidents cause approximately 25 percent of traffic congestion. For every minute that an incident blocks a lane, it increases congestion 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 policies and Move It laws. This is because traffic incident management is neither solely a public safety function nor solely a traffic management function. It requires cooperation between multiple 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 critical 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 policies to institutionalize work zone processes and procedures that consider work zone impacts throughout the project delivery process. Compliance with the updated rule was required by October 12, 2007. The rule provides considerable opportunity to improve the management and implementation of work zones 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 critical 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.

The 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 4, the 511 Telephone service was accessible to about 48 percent of the Nation’s population in October 2007. The target is to make the service available to 85 percent by the end of FY 2009.

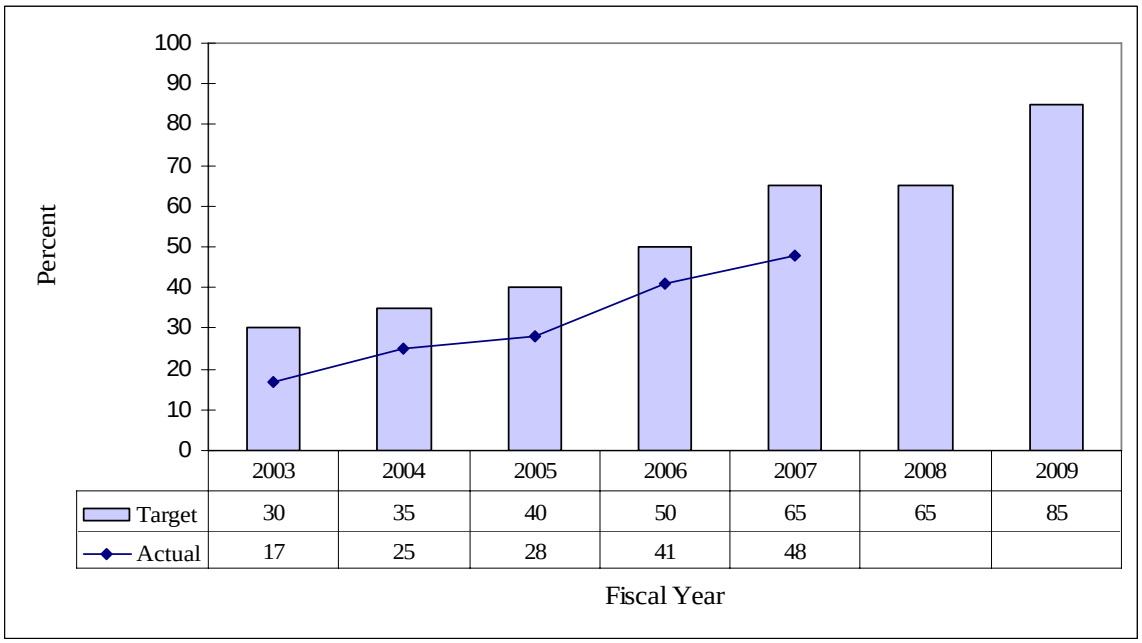


Figure 4. Percent of Population with Access to 511 Telephone Traveler Information Services, FY 2002-FY 2009.

Working through the National Traffic Incident Management Coalition, which is comprised of a number of transportation, public safety and private sector organizations, the FHWA completed an effort in FY 2007 to develop measures and baseline results 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. Additionally, progress was made to develop performance measures for incident duration so we can begin to measure the effect of different strategies on the reducing incident duration.

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 5, the 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.

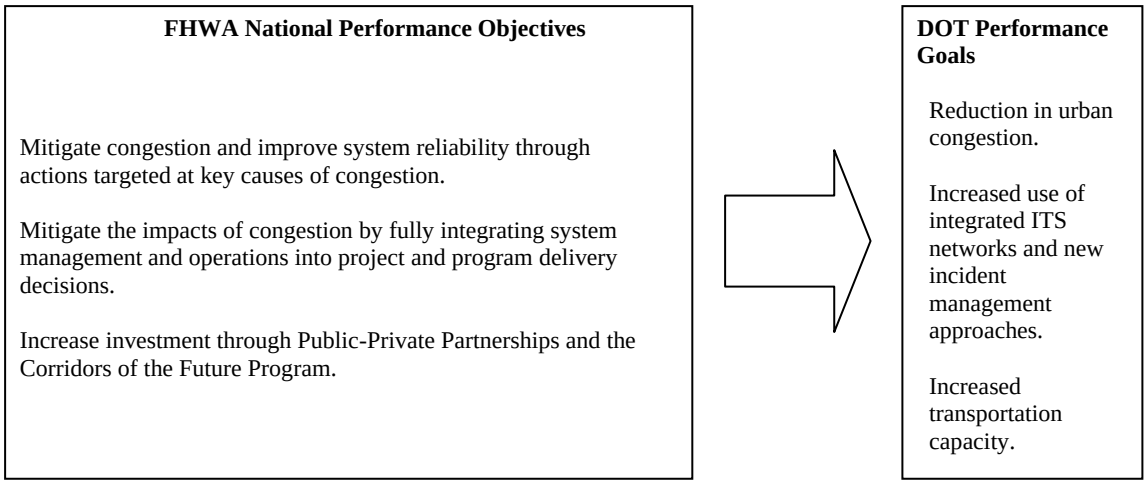


Figure 5. Relationship between Integrated ITS networks and Incident Management Program Objectives and Outcomes.

Anticipated FY 2008 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, the 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 the top 40 metropolitan areas with full function service patrols, quick clearance policies, and Move It laws 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 Joint Program Office (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 DOTs 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 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 2008.
- Advancing the SAFETEA-LU Section 1201 Real Time System Management Information Program. This program will lead to the nationwide availability of quality real-time information on delays associated with incidents, work zones, and weather events.
- Demonstrating regional weather observation networks and establishing a national partnership to deploy and operate a national weather observation network.

Safety, System Performance and 21st Century Solutions

Integrated Corridor Traffic Management (ITS Major Initiative) – USDOT is partnering with eight pioneer sites to develop corridors where travelers can rapidly make alternative transportation choices – even during a trip – in response to changing traffic conditions. An Integrated Corridor is one where travelers and shippers can receive information that encompasses the entire transportation network and infrastructure managers can coordinate their activities to ensure optimal real-time management of the corridor. This initiative will provide the institutional guidance, operational capability, ITS technology and technical methods needed for effective ICM systems.

Electronic Freight Management (EFM) (ITS Major Initiative) - Complete EFM deployment tests and initiate movement into business practice. Complete the independent evaluation of EFM Deployment Test, which ran from May through November of 2007, complete initial phase of EFM Adoption Strategy, under the auspices of the Intermodal Freight Technology Working Group (IFTWG), and begin the transfer of key elements of the business plan to the private sector.

Traffic Incident Management (TIM) –Develop and implement actions that work aggressively on advancing key efforts to improve traffic incident management. These actions include establishing performance measures for traffic incident duration; expanded use of full functioning service patrols; quick clearance policies; move-it/steer-it/clear-it laws; and integrated communications between public safety and transportation disciplines.

Operations Performance Measures – Performance measures provide concrete information that agency decision-makers and stakeholders can use to better understand the trade-offs associated with the allocation of transportation resources. Activities are underway to achieve industry-wide acceptance of basic performance measures and to assist in the formulation of performance measure programs aimed at measuring how the system is operating.

Real Time Traveler Information – Real-time traveler information is information that enables travelers to decide how they will use (or not use) the transportation system.

Agencies use real-time information to better manage and improve the system. Three key activities are being pursued under the real-time information umbrella: (1) Facilitating deployment of 511 communication services, (2) Encouraging the display of travel times on dynamic message signs, and (3) Establishing and supporting a real-time system management information program as called for in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. Supporting these activities are outreach, technical assistance and peer exchange programs.

Work Zones – Develop and implement actions that work aggressively on advancing key efforts to reduce the impact of work zones on congestion and crashes. These actions include establishing performance measures for WZ management; creating a WZ Peer-to-Peer program to enable professional interchange and technology transfer amongst and between the transportation agencies and; providing focused, on-site technical assistance to State DOTs to improve WZ management in targeted areas.

Data Collection- System Performance - Funds will be used to modify and supplement data collected by the States to focus more on system performance and freight mobility. The expected outcome is better, more complete measures of system performance and utilization, and asset management.

FY 2009 Performance Budget Request

Federal-aid Highway Program

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 policies and 'Move It' laws; and developing and implementing improved strategies for work zone implementation and management.

Research and ITS

Effectively addressing traffic congestion will hinge on the ability of the 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.

The FHWA will use FY 2009 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 Pioneer test 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 policies 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 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.

Limitation on Administrative Expenses
FTE and administrative resources associated with this strategic initiative are as follows:
192 FTE and $32.7 million

Responsible Officials:
Mr. King Gee, Associate Administrator for Infrastructure
Mr. John Baxter, 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. Marc Lemon, Chief Counsel

DOT Performance Goal: Increased transportation capacity.

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.

Number of States enacting Public/Private Partnership (PPP) where PPP authority is lacking.

	2007	2008	2009
Target	2	5	10
Actual	2*		

* Preliminary estimate

Funding for this performance goal:

$(000)

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
2. REDUCED CONGESTION STRATEGIC GOAL			
Increased Transportation Capacity			
a. Number of states enacting public/private partnership (PPP) laws where PPP authority is lacking.	1,671,481	1,689,286	1,605,734
b. Other	-----	-----	-----
Subtotal Performance Outcome	1,671,481	1,689,286	1,605,734

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 request also allows the FHWA to continue to 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. The FHWA will consider the use of credit assistance through the Transportation Infrastructure Finance and Innovation Act (TIFIA) credit reform program, if proposed projects meet the established criteria.

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 2008 Accomplishments

- The FHWA will work with the six selected Corridors of the Future to advance their project goals. 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.

- The 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.
- Increase the number of States using non-traditional revenue sources beyond TIFIA and State Infrastructure Banks for project financing.

Safety, System Performance and 21st Century Solutions

Public-Private Partnerships (PPPs) – In FY 2008, funds will be used to:

- analyze two different international PPPs in-depth;
- develop a flexible financial model from the perspectives of both the private sector and the public sector, and;
- develop general guidance for State and local governments.

The expected outcome is a better understanding of PPP financing, performance specifications and standards, risks borne by the parties, actions needed to protect the public interest, and other aspects of PPPs.

Increase the use of non-traditional, i.e., non-motor fuel based revenue sources for system management and expansion. Sources will include TIFIA credit assistance, GARVEE bonds, and private activity bonds.

International Program - Public Private Partnerships. In conjunction with AASHTO and the National Cooperative Highway Research Program (NCHRP), funds will be used in FY 2008 to conduct an international research scan on Public Private Partnerships. Each scan results in the preparation of a written final report with recommended steps for implementing study findings.

FY 2009 Performance Budget

Federal-aid Highway Program

The FHWA will provide technical assistance to all parties involved in Public Private Partnerships (PPP) issues from both a programmatic and project level. The program will engage State representatives, State DOTs, private sector interests, and private financial community representatives to explain and demonstrate how financing tools and methods have worked successfully to build roads and highways faster and more economically. The FHWA will share information with State government and private industry and financial representatives about the advantages of using innovative partnerships by developing and disseminating 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 best practices and highlighting successful examples throughout the country at meetings and conferences during the year. The FHWA will assist in the implementation of the Secretary's Congestion Initiative by encouraging states to enact 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.

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.

Limitation on Administrative Expenses

FTE and administrative resources associated with this strategic initiative are as follows: 93 FTE and $15.8 million

Responsible Officials:
Mr. King Gee, Associate Administrator for Infrastructure
Mr. John Baxter, 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. Marc Lemon, Chief Counsel
Mr. A. Thomas Park, Chief Financial Officer

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).

	2002	2003	2004	2005	2006	2007	2008	2009
Target	N/A	N/A	N/A	53	54	56	56	57
Actual	49(r)	50(r)	52(r)	52	54	57		

(r) Revised

Percent of deck area on NHS bridges rated deficient.

	2002	2003	2004	2005	2006	2007	2008	2009
Target	28.6	27.5	26.4	25.3	24.2	23.1	22.0	20.9
Actual	29.9	29.8	29.8	29.9	29.2	29.7		

Funding for this performance goal:

$(000)

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
2. REDUCED CONGESTION STRATEGIC GOAL			
High Performance Transp. Infrastructure			
a. Percent of travel on the National Highway System meeting pavement performance standards for "good"-rated ride.	5,730,919	5,784,050	5,486,124
b. Percent of deck area on NHS bridges rated deficient, adjusted for average daily traffic.	5,730,919	5,784,050	5,486,124
c. Other	-----	-----	-----
Subtotal Performance Outcome	11,461,838	11,568,099	10,972,248

This request will allow the 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 the FHWA to fund the clean up, repair, restoration and/or reconstruction of highway facilities damaged during natural and man made disasters.

Marginal Cost of Performance – Pavement Condition

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, the 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 table 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 is based on meeting the targets for the percentage of travel with good ride quality on the NHS and an estimated VMT for FY 2007-FY 2009. Using this approach, it is estimated that there will be an increase of 780 million miles of travel on the NHS with good ride quality in FY 2009. The incremental improvement from FY 2008 to FY 2009 is 24 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).

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target	702	721	748	756	780
Actual	689	721	761		
Incremental Performance Target*		18	27	8	24

*in million miles of VMT, with program changes

Note: Actual VMT was 2,965 million miles in FY 2004 and 2,989 in 2005, and 3,014 in 2006. Assume VMT is 3,015 million miles in 2007, 3,049 in 2008, and 3,092 in 2009. Percent of VMT on the NHS is 44.3 percent, based on travel in 2003.

Marginal Cost of Performance –NHS Bridge Condition

Bridge condition is a measure of infrastructure system performance. The FY 2009 target for this measure is to decrease the percent of deck area on deficient NHS bridges to 20.9 percent. The actual percentage of deck area on deficient bridges on the NHS with high ADT is historically higher than on bridges with lower ADT, which might indicate the aging of the thousands of bridges built during the Interstate era. Progress towards decreasing the deck area that is deficient on all ADT bridges in the coming years may depend on proactive implementation of asset management programs and preservation strategies.

As noted in the tables below, the FHWA will focus its bridge program initiatives on decreasing the percent of deck area of NHS bridges that are rated deficient, as either structurally deficient or functionally obsolete. The estimate of the decrease in the deck area on bridges that are deficient in FY 2008 and FY 2009 is based on meeting the targets for FY 2007-FY 2009. Using this approach, it is estimated that there will be 34.573 million square meters of deck on the NHS bridges that are structurally deficient and/or functionally obsolete. The incremental improvement from FY 2008 to FY 2009 is a decrease by 1.615 million square meters of deck area on deficient NHS bridges. This decrease in the amount of deck area on deficient NHS bridges is likely to produce some user benefits such as less travel delays and operational savings to bridge owners in terms of delayed or deferred bridge replacement costs.

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

Performance Measure: Percent of deck area on NHS bridges rated deficient.

	FY 2006	FY 2007	FY 2008	FY 2009
Target	39.360	37.783	36.188	34.573
Actual	47.492	48.333		
Incremental Performance Target*		-1.576	-1.595	-1.615

*in million square meters of deficient deck area, with program changes

Note: Total NHS deck area was 162,642,636 in FY 2006. For the purposes of this study, total NHS deck area is projected to increase annually by 0.057 percent between FY 2007-FY 2009. While the measure pertains only to deck area on NHS bridges rated deficient, FHWA programs seek to reduce deficient deck area on both NHS and non-NHS bridges.

Performance Issue

The condition of the NHS affects wear and tear on vehicles, the comfort of travelers, and fuel consumption. Consequently, maintaining a healthy network of pavements 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 so it is critical to keep the NHS pavement network in good condition to avoid costly construction operations. Efforts need to continue to maintain the current condition level of the NHS pavement network where, currently, 57 percent of vehicles are traveling on pavement mileage exhibiting good ride quality (International Roughness Index (IRI) of 95 inches/mile or less). At the same time, these efforts need to be conducted with a goal to improve the condition of the NHS pavement network beyond FY 2009 to ensure the long term health of the pavement network.

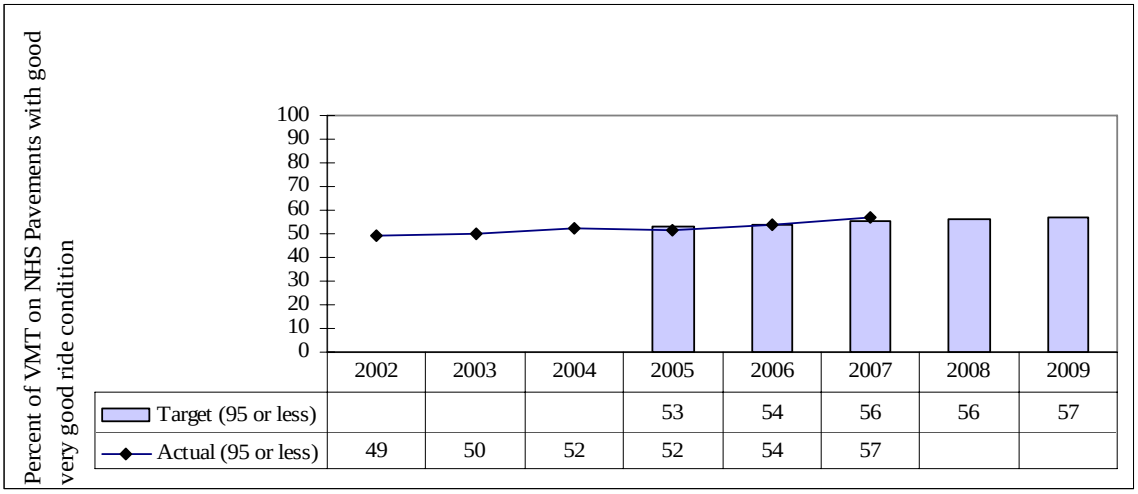


Figure 6. Pavement Condition on the NHS, FY 2002 to FY 2009.

An additional goal for FY 2009 is to decrease the percent of deck area on deficient NHS bridges to 20.9 percent. The nationwide percentage of deck area on deficient bridges on the NHS dropped from 32.6 percent in 1998 to 29.7 percent in 2007. 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 a 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 30.5 percent in 2007. 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 10,000.

As illustrated in Figure 7, the FHWA will pursue broad strategies that are aimed at furthering the use of asset management practices, providing longer lasting highway structures, improving pavement surface characteristics, accelerating the adoption of new technologies, and pursuing non-traditional revenue sources.

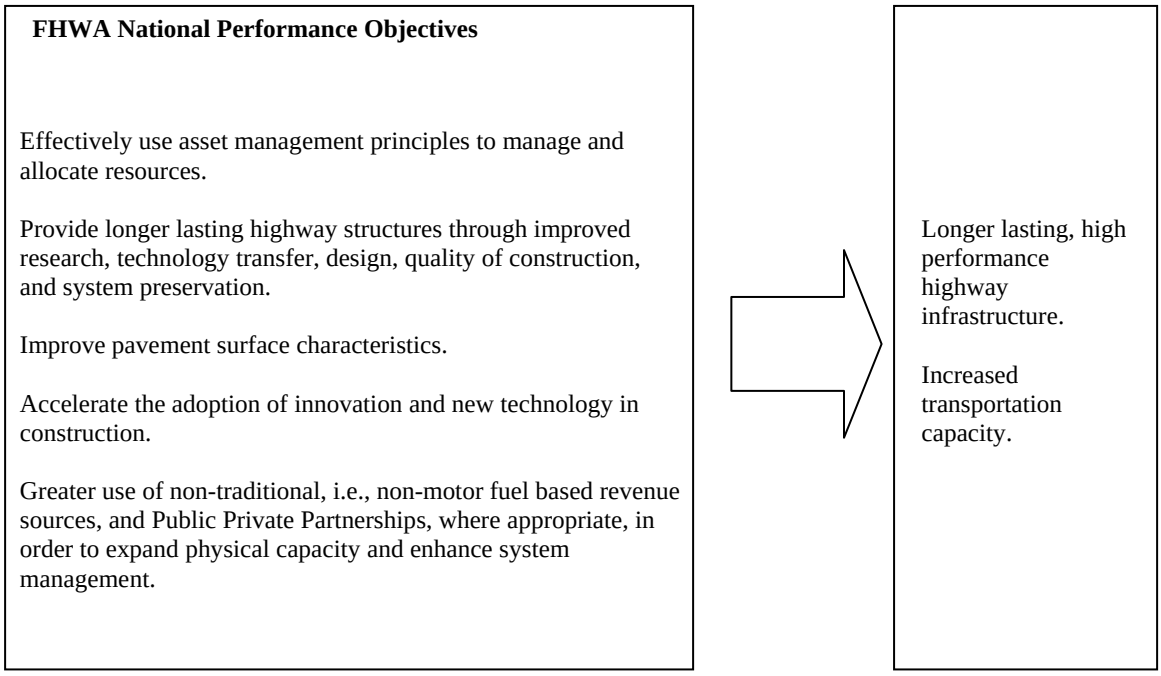


Figure 7. Relationship between Infrastructure Program Objectives and Outcomes.

Anticipated FY 2008 Accomplishments

In FY 2008, funds will be used to help ensure each State and Federal Land Management Agency (FLMA) uses management systems information to measure system performance and support integrated decisions in programming projects. Activities planned include:

- Sponsoring the 7th National Conference on Transportation Asset Management and conducting regional conferences to bring asset management principles to states,

- Supporting and advancing the application of comprehensive pavement management and remaining service life methods by State agencies as a tool to assess the needs of their network to determine the adequacy of their resource allocation, and
- Sharing best practices through process reviews, case studies and other methods.

As a result, the anticipated outcome is that the number of states and Federal Lands Highway Divisions with documented performance based processes that use asset management principles will increase.

In FY 2008, funds will be used to:

- Support the enhancement of the National Bridge Inspection Program to assure safety of highway bridges and structures.
- A program audit by the DOT Office of Inspector General planned for FY 2008 may result in recommended improvements to the Highway Bridge Program and the National Bridge Inspection Program.
- Provide guidance for developing design criteria to be adopted by AASHTO in the design and retrofit of bridges in coastal regions.
- Provide Emergency Relief program funding and assist the Minnesota DOT with the replacement of the I-35W Bridge in Minneapolis. A program audit by the DOT Office of Inspector General may result in additional recommended improvements to the Bridge program.
- Provide guidance for developing design criteria to be adopted by AASHTO in the design and retrofit of bridges in coastal regions.
- Complete evaluation of bridges, over rivers and tidal waterways, vulnerable to scour.
- Assist States with the development and implementation of plans of action to address scour critical bridges.
- Support the installation of countermeasures on scour critical bridges to prevent bridge failures.
- 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.
- Advance the implementation of Load Resistance Factor Design (LRFD) in foundation designs. Support AASHTO in fully implementing the LRFD Bridge Design and Construction Specifications.
- In coordination with AASHTO, promote the use of Load and Resistance Factor Rating in the load rating of new and existing bridges.

The expected result should be an increase in the number of states that employ new design procedures, high performance materials, and advanced construction practices to achieve

longer life and more reliability; a reduction in the number of scour vulnerable bridges; and improvements in the state of the practice in bridge inspection.

In FY 2008, funds will be used to:

- Monitor and review State materials and construction quality assurance programs to identify the most effective areas to deploy quality system tools and practices for improved material control and construction management.
- Conduct quality assurance performance reviews in a number of states
- Co-host with industry to deliver a national workshop on percent within limits specifications and develop training on quality assurance and specification development/validation.
- Conduct programs with the Asphalt and Concrete Mobile Laboratory in select states to advance new technologies and performance related specifications that will improve quality assurance.
- Continue to promote Accelerated Construction Technology (ACT) through regional workshops and projects with an expected outcome to increase the number of states using advanced quality assurance programs.

In FY 2008, funds will be used to:

- Conduct workshops and data reviews in opportunity states that have been identified as key states where gains in pavement smoothness or rideability will most likely affect the national trends.

- Continue efforts to establish national standards for test methods to monitor pavement smoothness, noise, friction and splash and spray and will continue to explore pavement technologies that can be easily implemented to improve pavement surface characteristics.

As part of this effort, the FHWA will revisit existing policies related to pavement surface characteristics to identify any changes necessary to better reflect the current standard of practice to monitor surface characteristics and existing pavement technologies that can be utilized to improve pavement surface characteristics. The expected outcome of these activities is to increase the number of states that employ three or more technology practices to improve pavement smoothness.

In FY 2008, we will continue to work with our partners and stakeholders to accelerate the adoption of innovative practices to improve safety and customer satisfaction and to reduce the congest caused by highway construction. The “Vanguard Technologies”: Road Safety Audits, Prefabricated Bridge Elements and Systems and Making Work Zones Work Better will be promoted and transferred using marketing science to develop the most effective strategies to accelerate their adoption as standard practice. Demonstration workshops will be held at the sixteen 2006 and 2007 funded pilot Demonstration Projects. These projects will be platforms to demonstrate what can be done and to bring practitioners together to learn from each other how to adopt these practices. FHWA has developed and will deliver up to 20 workshops on “Seeking the Best Solutions”. These workshops are aimed at using performance goals to raise the bar and create an environment that fosters the application of innovation. In addition, the FHWA will maintain an active program of information dissemination and stakeholder

participation which will include the bimonthly publication of the *INNOVATOR* newsletter that features innovative practices and opportunities to learn more. FHWA will continue to 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.

Additional technology transfer activities include conducting workshops and showcases to provide peer-to-peer, case studies, and hands-on opportunities for practitioners in the public sector and industry to learn about the benefits of the innovations demonstrated on the projects. The FHWA will also implement a Technology Partnership Program to work with developers of innovative technologies to accelerate the development of working prototypes. The expected outcome of these activities is the acceleration and adoption of new and innovative technologies and practices to improve safety, quality, customer satisfaction and reduction in construction caused by congestion.

In FY 2008, FLH will continue work on approximately 140 active construction projects underway and over 530 projects in the design phase. In addition, the 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.

Safety, System Performance and 21st Century Solutions

Effectively Use Asset Management Principles to Manage and Allocate Resources to Improve Our Nation's Transportation System Performance - In FY 2008, funds will be used to support States and FLMAs usage of management systems information to measure system performance and support integrated decision making in programming projects.

Accelerate the Adoption of Innovation and New Technology in Construction to Significantly Improve Safety, Quality, Customer Satisfaction and Reduce Congestion Due To Construction. In FY 2008, Highways for LIFE will continue to advance the vision to Significantly Improve America's Driving Experience.

Provide Longer Lasting Highway Structures through Improved Research, Design, Quality of Construction, and System Preservation – In FY 2008, funds will be used to design, construct, rehabilitate, preserve, and inspect highway structures with improved standards, materials, and practices such as the AASHTO LRFD Bridge Design and Construction Specifications, High Performance Materials and Accelerated Construction Practices.

Improve Materials And Construction Quality Assurance – In FY 2008, funds will be used to deploy tools and practices for improved construction management, including advanced quality systems.

Improve Pavement Surface Characteristics - In FY 2008, funds will be used to develop, promote, and deploy technologies to improve pavement smoothness and measurement capabilities.

Issue Broad Agency Announcement (BAA) for Exploratory Advanced Research – In FY 2008, funds will be used to issue a second BAA. The expected outcome is the competitive selection of research proposals with the potential for transformational improvements to the durability, efficiency, environmental impact, productivity and safety

aspects of the highway and intermodal transportation system. The initial selection of projects from the second BAA is expected by July 2008.

Create A New Process And Methodology For Developing, Conducting, And Delivering High-Risk, Breakthrough Research Within The Agency's R&T Program – In FY 2008, funds will be used to continue the implementation of the Scanning and Convening Plan developed in FY 2007. The breakthrough innovations and technologies identified in FY 2007 will determine FHWA research proposals to be competed for further investigation and possible application to advance transformational change. The expected completion date for the FHWA competition is December 2008.

FY 2009 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 designated 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, the 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.

Highway 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 inspect and load rate all highway bridges on public roads using advanced practices, tools, and technologies.

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. Following the unfortunate collapse of the I-35W Bridge in Minneapolis, MN, DOT released more than $173 million in ER program funds for clean-up and recovery work, including clearing debris and re-routing traffic, as well as for design work on a new bridge. This amount is in addition to the $5M in ER program funds immediately provided to the Minnesota DOT after the bridge collapse. In P.L. 110-161 for FY 2008, Congress authorized additional expenditures of up to $195 million for the repair and reconstruction of the bridge.

The 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.

Federal Lands Highway

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 2009 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 underway currently, indicates that we can anticipate improving between 700 to 1000 miles of roads and about 35 to 40 bridges in FY 2009. The improvement of these roads and bridges enables the American public to access these national treasures across the country.

FLH will continue to emphasize and encourage Federal Land Management Agencies (FLMA) that we support to perform as well as report their findings during their bridge inspections in the appropriate format and in accordance with National Bridge Inventory Standards.

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, the FHWA will focus resources and grant funding for improving and preserving 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 2009 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.

The 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. The 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, the 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-FY 2009 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 Highway Economic Requirements System-State (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.

The FHWA Exploratory Advanced Research program will explore longer-term, higher risk research with potentially dramatic breakthroughs for the next generation of highway infrastructure, addressing such issues as quality performance data, improved materials and systems, improved fabrication and construction practices, and new decision-making tools and models.

Limitation on Administrative Expenses
FTE and administrative resources associated with this strategic initiative are as follows: 631 FTE and $107.9 million

Responsible Officials:
Mr. King Gee, Associate Administrator for Infrastructure
Mr. John Baxter, 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. Marc Lemon, Chief Counsel

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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 freight corridors with an annual decrease in the average buffer index rating greater than the national average.

	2006	2007	2008	2009
Target	N/T	5	25	25
Actual	3	5		

INBOUND - Number of U.S. border crossings with increase in reliability.

	2007	2008	2009
Target	5	5	5
Actual	1		

OUTBOUND - Number of U.S. border crossings with increase in reliability.

	2007	2008	2009
Target	5	TBD	TBD
Actual	4		

Funding for this performance goal:

$(000)

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
3. GLOBAL CONNECTIVITY STRATEGIC GOAL			
Increase the Efficiency of Passenger and Cargo Movement			
a. Number of freight corridors with an annual decrease in the average buffer index rating.	441,495	469,209	446,599
b. Number of NHS border crossings with an increase in reliability (both in- and out-bound).	441,495	469,209	446,599
c. Other	-----	-----	-----
Subtotal, Performance Outcome	882,990	938,418	893,198

This request will allow the 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, plan for, and accommodate 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.

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 U.S. and Canada and the U.S. 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. Free flowing corridors and land border crossings are 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. Data collection expanded to 25 freight corridors in FY 2006-FY 2007. The buffer index, a measure of travel time reliability, 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.

As illustrated in Table A, travel speed measurements are used to calculate the average travel speed and average buffer index for the five Interstate corridors in which data are collected. For FY 2007, the 2006 data are used. The annual average travel speed for the five corridors measured remained constant when compared to the previous year; no corridor had a decline in average annual speed greater than 1 mph. The annual average buffer index for two of the five corridors declined in a positive direction. Three of the five corridors had an increase in annual average buffer index. The FY 2007 target, which was based on reducing the buffer index in 100 percent of the corridors monitored in 2006, was not met. To improve system performance and reliability, we will continue to work with partner agencies to encourage implementation of operational strategies and to execute the freight projects related infrastructure provisions of SAFETEA-LU. In 2008, data will be available for 25 corridors. With this data for the most freight significant interstate corridors, we will establish a national average with the target to have 50 percent or more of the 25 corridors perform better than the national average.

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

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

Another key indicator of the transportation system performance is the crossing 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 crossing time, the FHWA is working toward benchmarking outbound and inbound crossing times at selected northern and southern borders. Between May 2006 and April 2007, the annual average crossing time and annual average buffer index were measured for five U.S.-Canadian border crossings. Baseline data for these measures are shown in Table B. Inbound and outbound crossing times include commercial trucks moving within two miles of the border crossing area. In FY 2008, performance measures that encompass a larger portion of the transportation network in the border area, i.e., further distances out from the port of entry, will be developed. Ways to reliably measure travel times will also be examined during FY 2008 for several U.S./Mexico border crossings. Concurrent with benchmarking activities, the FHWA continues to collaborate with other public and private agencies to develop strategies that produce positive results using the benchmarks.

Table B. Average Annual Crossing Time and Buffer Index at U.S.-Canadian Border Ports of Entry- FY 2007

Border Crossing	Average Annual Crossing Time (U.S. Inbound), in minutes	Average Annual Buffer Index (U.S. Inbound), as a percentage	Average Annual Crossing Time (U.S. Outbound), in minutes	Average Annual Buffer Index (U.S. Outbound), as a percentage
Ambassador Bridge, Michigan	42.8	225.5	28.2	262.2
Blaine, Washington	36.4	238.6	30.9	255.8
Champlain, New York	73.2	132.0	43.4	174.0
Peace Bridge, New York	32.8	136.2	18.9	250.4
Pembina, North Dakota	179.4	96.6	16.3	164.9

Note: The buffer index represents the extra time freight carriers should add to their average crossing time in order to ensure the their crossing time will be equal to or less than the average, at least 95 percent of the time.

Anticipated FY 2008 Accomplishments

The 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. The FHWA will:

- Continue to engage State and MPO stakeholders in the development freight professional capacity building through the Freight Professional Development (FPD) Program to ensure that this program is responsive to identified needs in the transportation community.
- Continue to advance the usage of the freight data and freight performance measures in local decision-making. We will continue to work with States and MPOs in developing methods for acquiring and integrating local and national data in support of local project analysis.
- Work with State DOTs to advance improved commercial motor vehicle size and weight enforcement opportunities that improve freight throughput. This will include the usage of weigh-in-motion (WIM) technology, virtual weigh stations and electronic permitting of oversize/overweight permits.
- Actively promote the adoption of the Electronic Freight Management's information transfer protocols into select supply chains.
- Implement a prioritized list of Freight Model Improvement Program (FMIP) research projects.
- Continue the work of improving our forecasting ability, which is critical to long term planning at the national, State and local level, by advancing our 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.
- Examine methods to collect data at U.S./Mexico border to help measure crossing travel times.

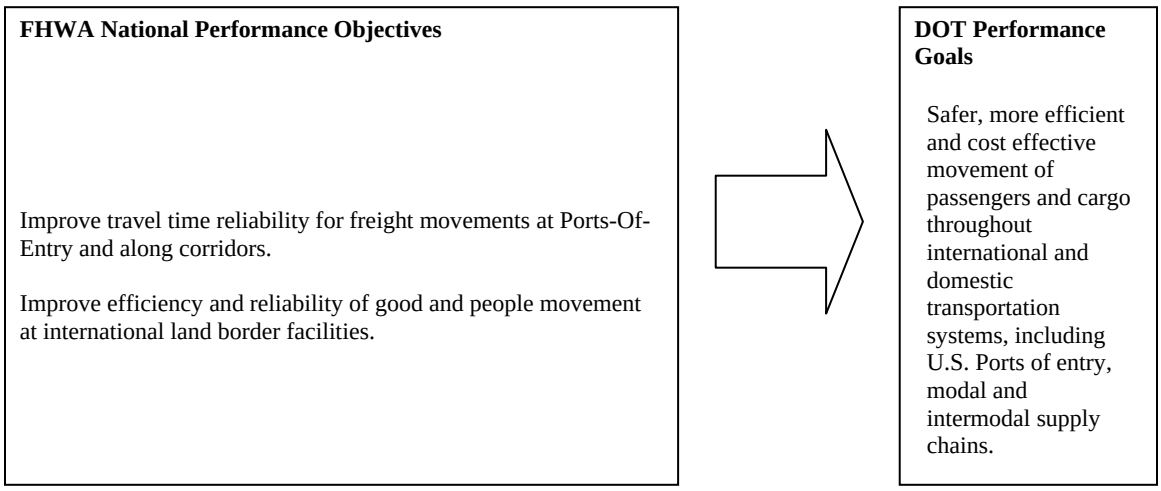


Figure 8. Relationship between Freight and Border Program Objectives and Outcomes.

Safety, System Performance and 21st Century Solutions

Improving International Border Crossings – In FY 2008, funds will be used for a Domestic Border Issues Conference, the completion of a case study of the Caltrans/Baja California Border Master Plan, activities related to the Record of Decision for the Detroit/Windsor International Crossing Initiative, examining data collection tools for the southern border, and support of a variety of regional workshops.

International Scan Program - Freight Mobility and Intermodal Connectivity Innovative Practices – In conjunction with AASHTO and the National Cooperative Highway Research Program (NCHRP), an implementation plan from the Freight Mobility and Intermodal Connectivity Innovative Practices in China scan will be advanced.

Data Collection- Freight Mobility – In FY 2008, funds will be used to modify and supplement data collected by States to focus more on system performance and freight mobility. The expected outcome is better, more complete measures of system performance and utilization, and asset management. New data collection efforts will begin in January 2008.

Issue Broad Agency Announcement (BAA) for Exploratory Advanced Research – In FY 2008, funds will be used to issue a second BAA. The expected outcome is the competitive selection of research proposals with the potential for transformational improvements to the durability, efficiency, environmental impact, productivity and safety aspects of the highway and intermodal transportation system. The initial selection of projects from the second BAA is expected by July 2008.

Create a new process and methodology for developing, conducting, and delivering high-risk, breakthrough research within the agency's R&T program – In FY 2008, funds will

be used to continue the implementation of the Scanning and Convening Plan developed in FY 2007. The breakthrough innovations and technologies identified in FY 2007 will determine FHWA research proposals to be competed for further investigation and possible application to advance transformational change. The expected completion date for the FHWA competition is December 2008.

FY 2009 Performance Budget Request

Federal-aid Highway Program

The 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. The FHWA will continue to refine the Frame Analysis Framework (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 General Services Administration (GSA), the Department of Homeland Scrutiny (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, the 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. The 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.

The 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, transfer 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. 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.

The FHWA Exploratory Advanced Research program will explore longer-term, higher risk research with potentially dramatic breakthroughs for the next generation of intermodal and freight transportation, addressing such issues as improved intermodal connections, innovations to create real-time traffic control and ensure productive global supply-chain freight logistics, and improved Geographic Information System (GIS) applications.

Limitation on Administrative Expenses

FTE and administrative resources associated with this strategic initiative are as follows: 51 FTE and $8.8 million

Responsible Officials:

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

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	2007	2008	2009
Target	N/T	1	3	3
Actual	2	4		

Funding for this performance goal:

$(000)

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
3. GLOBAL CONNECTIVITY STRATEGIC GOAL			
Enhanced Competitiveness			
a. Number of technology/information exchange agreements that promote the U.S. highway transportation industry.	367,652	383,865	363,765
b. Other	-----	-----	-----
Subtotal, Performance Outcome	367,652	383,865	363,765
Total-Global Connectivity Strategic Goal	1,250,642	1,322,283	1,256,963

This request will allow the 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 Departmental and U.S. foreign policy priorities and initiatives including expanded opportunities and access for U.S. transportation industry. This funding will also be used to support international adaptation of U.S. standards and specifications, thereby providing more opportunities for the U.S. private sector.

Performance Issue

Increasingly, the DOT and the 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, Israel, Russia, 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. Additionally, findings from the April 2004 Prefabricated Bridge Elements and Systems Scan led to developments used in rapid responses to hurricane damage in both Florida and the Gulf Coast.

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 2008 Accomplishments

- Continue the International Scanning program. Three Scans took place in FY 2007; Warm Mix Asphalt Technologies, Bridge Inspection Quality Control, Freight Mobility and Intermodal Connectivity – Asia. It is anticipated that implementation activities related to these Scans will occur in FY 2008. The Scans planned for FY 2008 include: Best Practices to Accommodate Older Road Users; Transportation Research Program Management; Public Private Partnerships; and Integrating and Streamlining Right-of-Way and Utility Processes with Planning, Environment and Design.
- Finalize cooperative memorandums of understanding (MOUs) with strategically and economically important countries and continue implementation of existing MOUs. This should produce opportunities for U.S. Highway transportation stakeholders.
- Initiatives may include exchanges with Iraq, Kuwait, Israel, the Netherlands, Russia, Mexico and Latin American partners and other activities in support of the Congestion Initiative and the Departmental goals of Safety and Global Connectivity.

Safety, System Performance and 21st Century Solutions

International Scan Program - In conjunction with AASHTO and the National Cooperative Highway Research Program (NCHRP), funds will be used in FY 2007-FY 2008 to conduct international research scans on Older Driver Safety, Public Private Partnerships, Freight Mobility and Intermodal Connectivity Innovative Practices, and Warm Mix Asphalt Technologies. Safety and congestion topics will also be incorporated into exchange activities and MOU implementation**.**

FY 2009 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.

Depending on availability of funds, the FHWA will work with existing partners to expand the number of technology exchange centers and engage in technical and information exchange activities, as well as priority technical training, in selected countries such as Iraq and Kuwait. The 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. FHWA will work with other federal entities in supporting strategic foreign policy goals, such as those in the Middle East, opening opportunities for the U.S. private sector as well. The FHWA intends to coordinate and State partners, establish partnerships between U.S. States and their foreign counterparts.

The FHWA will continue to facilitate technical exchanges and relationships leading to the use of international technologies and best practices. The 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:

21 FTE and $3.4 million

Responsible Officials:
Ms. Mary Phillips, Associate Administrator for Policy and Governmental Affairs.
Mr. Jeffrey F. Paniati, Associate Administrator for Operations
Ms. Gloria Shepherd, 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.

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Target	N/A	6.0	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	0.0		

(r) Revised

Number of exemplary ecosystem initiatives.

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

Number of exemplary human environment initiatives.

	2007	2008	2009
Target	5	10	15
Actual	8		

Funding for this performance goal:

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
4. ENVIROMENTAL STEWARDSHIP STRATEGIC GOAL			
Reduction in Pollution			
a. Number of exemplary ecosystem initiatives.	1,745,654	2,103,073	2,028,851
b. Number of exemplary human environment initiatives.	1,745,654	2,103,073	2,028,851
c. Number of areas in conformity lapse.	1,745,654	2,103,073	2,028,851
c. Other	-----	-----	-----
Subtotal, Performance Outcome	5,236,961	6,309,220	6,086,553

This request will allow the 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.

The number of Exemplary Ecosystem Initiatives (EEIs) undertaken will be replaced after 2007 with Exemplary Human Environment Initiatives (EHEIs) as the primary measure demonstrating accomplishment in environmental and social stewardship. Examples of EEIs will continue to be solicited and recognized. This request will also allow FHWA and the States to continue to protect and enhance the Nation's wetlands and aquatic resources and help the FHWA achieve its goal of conservation of natural habitats and ecosystems.

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 (PM) and Carbon Monoxide (CO) between 1980 and 2003. The downward trend in on-road emissions from mobile sources 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.

At the end of FY 2007, there were no areas in a conformity lapse. The number of conformity lapses was maintained at zero or a very low number during most of FY 2007.

A number of changes to the conformity provisions were implemented throughout FY 2006 and FY 2007 to address new requirements of new air quality standards and to

streamline and provide more flexibility to the conformity process. In the implementation of the changes, the FHWA and U.S. Environmental Protection Agency (EPA) conducted numerous workshops, trainings, and other outreach activities to raise awareness of and to prepare State DOTs, air agencies, and MPOs to meet the requirements. In addition, guidance documents were issued by both agencies to ensure that the new conformity requirements were transitioned smoothly. State and local agencies took the initiative to coordinate the process well in advance of conformity determinations. Because of the advanced preparations, most nonattainment and maintenance areas were able to meet the *Clean Air Act* goals thus enabling projects to proceed.

The measure of Exemplary Ecosystem Initiatives (EEIs) undertaken was 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. The FHWA recognized 20 new EEIs in 2006, exceeding by thirteen the target of designating seven additional initiatives and bringing the total number that the FHWA has designated to 43. Therefore, the target for FY 2007 was raised to total 50. In 2007, an additional 7 EEIs were recognized, which meets the target of 50 EEIs.

In FY 2008, the FHWA is replacing the EEI goal with a new initiative, Exemplary Human Environment Initiatives (EHEIs) which focuses on community and cultural resources that were not included as part of the EEI criteria. The FHWA is replacing the EEI measure because the EEI targets have been substantially exceeded. This indicates that that the use of the EEI measure has achieved the desired effect of promoting consideration of ecosystems into development of transportation projects and in creating a broad array of model projects on which project sponsors could draw. The FHWA determined, however, that more effort in the area of human environment would be helpful in promoting environmental stewardship, and has developed the EHEI program as a way to improve performance in this area. The measure of the EHEIs is the number of projects or programs chosen for national recognition. An EHEI is a transportation project or program that either creates or improves conditions for human activities. The six categories of eligible activities are: encouraging nonmotorized transportation; enhancing the environment for human activities; process improvements; educational and training programs; product development; and others meeting the eligibility criteria. In 2007, there were 38 submittals to the EHEI program, and eight were selected for recognition. The selected projects were in Arkansas, New York, Georgia, South Carolina, Oregon, Colorado, Kansas, and Mississippi.

Anticipated FY 2008 Accomplishments

- The FHWA expects that the FY 2008 target of six or less areas in conformity lapse will be met. EPA will continue to review and revise the NAAQS to protect human health. Anticipating the implementation of more stringent standards for ozone and fine particulate matter, the FHWA will continue to address the impact

of the regulatory changes and to maintain area transportation conformity lapses at current low levels during FY 2008.

- The FHWA will continue to work closely with States, MPOs, FTA, and EPA to reduce on-road mobile source emissions. 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.
- SAFETEA-LU required EPA to revise the conformity regulation to reflect all transportation conformity changes by August 2007. The FHWA will continue to work with EPA and FTA in the rulemaking process. The final rule is expected to be released in early 2008.
- The FHWA will continue to work with our State and local partners to implement the new provisions under the CMAQ program and evaluate funded projects.
- The FHWA will continue to implement its evaluation of the CMAQ Program as required by SAFETEA-LU to assess a sample of CMAQ projects for their impacts on system performance. The evaluation is being conducted in cooperation with FTA and EPA in 2 phases. A final report will include data where practicable on the emissions, congestion benefits of projects and their relative cost-effectiveness
- The FHWA will continue outreach for the *Eco-logical* handbook, seek to advance pilot projects that implement *Eco-logical* approaches, develop training for new assessment tools, and implement the results of the NAS report through development of a rapid ecosystem assessment methodology.
- The FHWA has completed the Wildlife Vehicle Collision Study mandated in SAFETEA-LU, and has submitted the report to Congress. Work has begun on the design manual and training course that were also required by SAFETEA-LU.
- In 2008 the FHWA will increase the number of EHEIs to at least 10 that will be selected from the projects and programs submitted for consideration. This is an increase of 100 percent from the FY 2007 target of 5 EHEIs.
- FLH will publish and promote a comprehensive report titled, *Roadside Revegetation: An Integrated Approach to Establishing Native Plants*. The report is intended for field level practitioners and designed to help fill current information and technology gaps, share strategies and techniques, facilitate collaborative processes through interagency and interdisciplinary coordination and help readers through the process of successfully establishing native plant communities on roadsides. By successfully establishing native plant communities, the spread of invasive species can be better controlled.

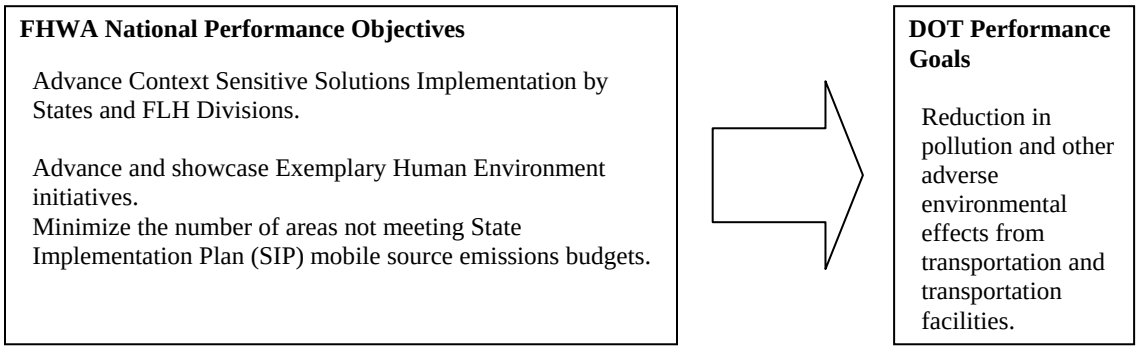


Figure 9. Relationship between Environment Program Objectives and Outcomes.

Safety, System Performance and 21st Century Solutions

Evaluation of the CMAQ program - The FHWA is conducting an evaluation of the CMAQ Program as required by SAFETEA-LU. This effort is to assess a sample of CMAQ projects for their impacts on system performance by examining about 100 projects in detail, developing data on the project's impacts on emissions and congestion and also examining cost-effectiveness. The evaluation will be conducted in cooperation with FTA and EPA in 2 phases. Phase 1 is expected to be finished in FY 2008. A final report will include data where practicable on the emissions, congestion benefits of projects and their relative cost-effectiveness.

Issue Broad Agency Announcement (BAA) for Exploratory Advanced Research – In FY 2008, funds will be used to issue a second BAA. The expected outcome is the competitive selection of research proposals with the potential for transformational improvements to the durability, efficiency, environmental impact, productivity and safety aspects of the highway and intermodal transportation system. The initial selection of projects from the second BAA is expected by July 2008.

Create a new process and methodology for developing, conducting, and delivering high-risk, breakthrough research within the agency's R&T program – In FY 2008, funds will be used to continue the implementation of the Scanning and Convening Plan developed in FY 2007. The breakthrough innovations and technologies identified in FY 2007 will determine FHWA research proposals to be competed for further investigation and possible application to advance transformational change. The expected completion date for the FHWA competition is December 2008.

FY 2009 Performance Budget Request

<u>Federal-aid Highway Program</u>

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 2009, 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 is being undertaken largely in FY 2007-FY 2008 and will conclude in FY 2009 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 2009, the 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.

The FHWA will increase the number of EHEIs to at least 15, which will be selected from the projects and programs submitted for consideration. This is an increase of five EHEIs from the FY 2008 target of 10.

Federal Lands Highway

FLH will continue to develop projects that meet the criteria for Exemplary Human Environment Initiatives and nominate these projects for national recognition.

FLH will continue working with its program partners, resource and regulatory agencies to promote collaboration and a broader landscape approach to program management and project delivery. This includes the development and use of tools such as Wildlife Action Plans and Wildlife Habitat Linkages.

FLH will continue to revegetate roadsides with native plants. Best practices will be documented and promoted through publications and training courses.

FLH will sponsor and conduct a national Dust Management Practices and Future Needs Conference. The conference will address the environmental issues associated with road dust and the tools used to control dust and stabilize road surfaces.

Research and ITS

The 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. The 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, the 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.

The FHWA Exploratory Advanced Research program will explore longer-term, higher risk research with potentially dramatic breakthroughs for the next generation of transportation planning and environmental stewardship, addressing such issues as improve the data collected, systemize the data for easier use, and reduce the cost of the data collection for both the 20+ year planning activity and the 5 year programming: improve both the environmental data collected and reduce the cost of environmental data collection; develop an early prediction system that would indicate the potential for a reversal in the trend of increasing traffic based on technological change.

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:

- Continued outreach and training in concepts from *Eco-Logical: An Ecosystem Approach to Developing Infrastructure Projects* (a collaborative initiative which is supported by FHWA and seven other Federal agencies)*;*

- Implementation, monitoring and reporting results for the pilot projects selected to test the benefits and identify any obstacles to using the concepts and methods in *Eco-logical,* and linking planning and environment;
- Improved Endangered Species Act Section 7 procedures, including the web-based Biological Assessment model;
- Enhanced outreach for research results implementation;
- Continued storm water research.

Limitation on Administrative Expenses
FTE and administrative resources associated with this strategic initiative are as follows:
351 FTE and $59.9 million

Responsible Officials:
Ms. Gloria Shepherd, Associate Administrator for Planning, Environment, and Realty
Mr. King Gee, Associate Administrator for Infrastructure
Mr. John Baxter, Associate Administrator for Federal Lands Highway

DOT Performance Goal: 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.

	2004	2005	2006	2007	2008	2009
Target	35	30	30	30	30	TBD
Actual	N/A	N/A	N/A	N/A		

FY 2009 target under review by OST.

Median time in months required for all Federal-aid Highway projects to have a completed EIS or EA. (Supplemental FHWA Measure)

	2001	2002	2003	2004	2005	2006	2007	2008	2009
EIS Target	N/A	N/A	51	48	45	40	36	36	36
EIS Actual	54	80	68	54	60(r)	61(r)	68		
EA Target	N/A	N/A	17	16	15	14	12	12	12
EA Actual	N/A	N/A	26	25	25(r)	34	20		

(r) Revised

Funding for this performance goal:

$(000)

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
4. ENVIROMENTAL STEWARDSHIP STRATEGIC GOAL			
Streamline Environmental Review			
a. Median completion time for all Environmental Impact Statements.	47,282	50,620	48,080
b. Median completion time for all Environmental Assessments.	47,282	50,620	48,080
c. Other	-----	-----	-----
Subtotal, Performance Outcome	94,563	101,240	96,160
Total – Environmental Stewardship Strategic Goal	5,331,524	6,410,460	6,182,713

This request will enable the 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.

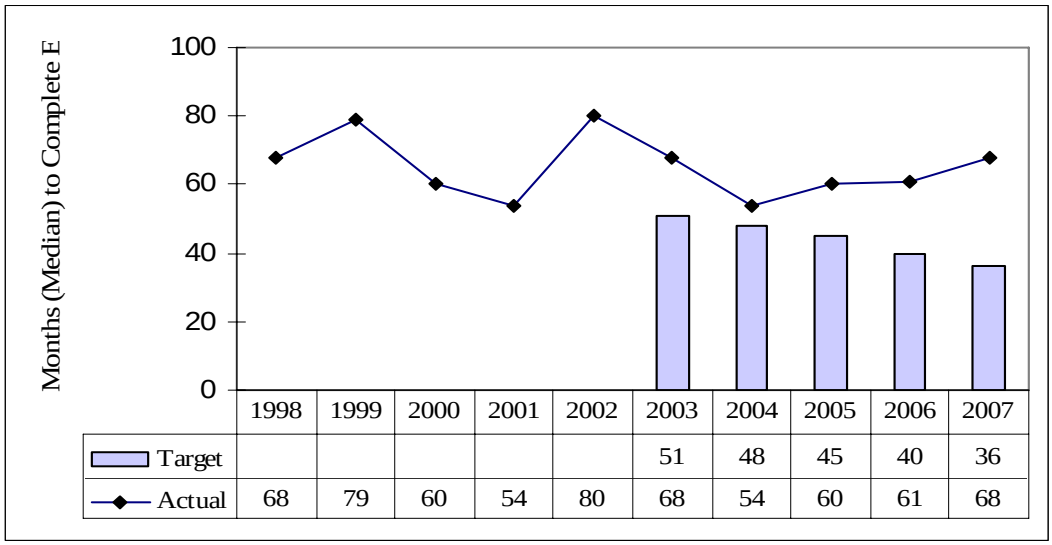
Performance Issue

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, climate change and changes in wetland banking and delineation rules.

As illustrated in Figure 10, 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. 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 54 months in FY 2004, and then increased again over the next three years to 68 in 2007.

Despite this recent reversal in the trend, the FHWA will maintain the targets in FY 2009 to decrease the median completion times for all EIS and EA projects to 36 and 12 months, respectively. Working with State departments of transportation, the 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 and efforts will be made to cull projects with no action from the active EIS database.



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Target						51	48	45	40	36
Actual	68	79	60	54	80	68	54	60	61	68

Figure 10. Median EIS Processing times, FY 1998 - 2009.

Anticipated FY 2008 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.

The FHWA will rely heavily on the use of the SAFETEA-LU Section 6002 Environmental Review Process to reduce delays and achieve a target completion rate of 90 percent for EISs that have a scheduled completion date in FY 2008. The FHWA will produce a report in FY 2008 regarding the use and effectiveness of the SAFETEA-LU Section 6002 Environmental Review Process.

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 *Implementing Performance Measurement in Environmental Streamlining*.

The FHWA will encourage State departments of transportation leadership to reinforce the CSS policy, facilitate saturation training in CSS, and promote visibility for State CSS projects. The FHWA continues to lead national partners in providing CSS resources to support states, building training and education capacity, raising awareness on moving toward mature implementation of CSS principles, and facilitating a CSS national dialog to promote peer exchange.

In 2007, FHWA established a baseline for two new measures aimed at tracking progress in the implementation of CSS. These measures look at sustained progress in CSS

implementation by States or Federal Lands Highway Divisions. The new measures focus on accomplishing sustained progress toward implementing mature or exemplary CSS programs along with increasing the number of exemplary elements of programs and projects (i.e., commitment and/or policy, training, integration into projects and planning studies, stakeholder involvement, interdisciplinary teams). In 2007, 16 programs had achieved mature or exemplary status and 6 had exhibited exemplary elements of CSS in programs or projects. In 2008, the targets are 20 and 12, respectively.

FY 2009 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. AASHTO was awarded a three-year contract to continue the Center for Environmental Excellence, which will increase its role as a clearinghouse for practitioners.

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. For FY 2009, FHWA will continue to measure progress toward implementing mature or exemplary CSS programs and projects.

Federal Lands Highway

FLH will continue to identify and implement environmental streamlining activities. This includes working with our FLMA partners to better link planning activities with the requirements of NEPA. Action plans in development will be implemented and the duration of EA and EIS documents will be tracked in EDTS.

FLH will emphasize sound project management principles to improve and streamline the entire project delivery process. FLH will continue to promote certification of its project managers through the Project Management Institute.

FLH will continue to implement a CSS approach in all aspects of its mission and will document and share its vision and successes.

Research and ITS

The FHWA will place substantial emphasis on identifying and developing time-sensitive 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. The FHWA anticipates placing substantial effort in implementing the environmental streamlining related provisions included in SAFETEA-LU. In addition, the 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 maintain the Environmental Document Tracking System (EDTS) and conduct outreach on findings of the *Implementing Performance Measurement in Environmental Streamlining II*. 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: 6 FTE and $0.9 million

Responsible Officials:
Ms. Gloria Shepherd, Associate Administrator for Planning, Environment, and Realty
Mr. King Gee, Associate Administrator for Infrastructure
Mr. John Baxter, Associate Administrator for Federal Lands Highway

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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:

$(000)

STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
5. SECURITY, PREPAREDNESS AND RESPONSE			
Hazmat Emergency Response			
a. Other	369,905	385,720	365,756
Subtotal, Performance Outcome	369,905	385,720	365,756
Total – Security, Preparedness and Response Strategic Goal	369,905	385,720	365,756

This request will allow the 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.

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 2008 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 the FHWA Engineering Assessment Team to states and other governmental agencies in assessing the security and vulnerability of critical bridges and tunnels.

FY 2009 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, the 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. The FHWA will encourage State and local governments to consider security program options and strategies identified during the regional workshops conducted in FY 2006-FY 2007. The FHWA will continue to provide technical assistance and training in areas ranging from risk assessment and countermeasure implementation to emergency preparedness and operations.

In FY 2009, funds will be used to support follow-up activities directed by Congress and the Secretary in improving nationwide evacuation planning and capacity building. The 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. Expected outcome is to increase the preparedness for emergencies affecting the transportation sector.

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. The 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

The FHWA Exploratory Advanced Research program will seek to identify, develop and assess promising innovations that could provide significant improvements to national security and response our surface transportation systems.

Limitation on Administrative Expenses

FTE and administrative resources associated with this strategic initiative are as follows: 21 FTE and $3.6 million.

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, electronic government (E-Gov), competitive sourcing, improved financial performance, 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:

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STRATEGIC GOALS & OUTCOMES by Performance Measure	FY 2007 ENACTED	FY 2008 ENACTED	FY 2009 REQUEST
6. ORGANIZATIONAL EXCELLENCE STRATEGIC GOAL			
Fulfill the President's Management Agenda			
a. Other	437,766	443,742	413,552
Subtotal, Performance Outcome	437,766	443,742	413,552
Financial Stewardship			
a. Percent of major Federally funded transportation infrastructure projects with less than 2 percent annual growth in the project completion milestones as reported in the financial plan.	43,777	44,374	41,355
b. Percent of finance plan cost estimates for major Federally funded transportation infrastructure projects with less than 2 percent annual growth.	43,777	44,374	41,355
c. Other			
Subtotal, Performance Outcome	87,553	88,748	82,710
Total – Organizational Excellence Strategic Goal	525,319	532,490	496,262

Strategic Management of 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 2008 Accomplishments

The dollar figures in the paragraphs that follow are keyed 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 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 an aggressive recruitment program will be needed to replace the retiring workforce and strengthen our core functions, including congestion management and mitigation, structures and materials research and analysis, budget development and execution, transportation management and operations, and safety. 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, information technology, and human resources).

Initiatives to Achieve a Multidisciplinary Workforce While Continuing our Succession Planning Efforts. The Professional Development Program will be used to recruit, hire, and develop entry-level individuals in mission-critical disciplines (e.g., financial management). In addition, there will be an increase of new mid-career hires, and recruitment initiatives and incentives will be critical to attracting diverse candidates with the needed multidisciplinary skills. Also, the Agency will implement new initiatives to reduce the under-representation of Hispanic employees and individuals with disabilities.

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. Recommendations from the FHWA Disability Task Force will be implemented. Mediation will be used to address organizational issues when appropriate.

The Agency's Learning and Development Program will train increasing numbers of employees to ensure continued improvements in stewardship, program oversight, and financial management. A multidisciplinary approach and an emphasis on accountability will be incorporated at all levels of training. Many learning activities will be offered using video and web conferencing technologies. Using a blended approach to learning enables the FHWA to respond more quickly to the learning needs of our employees. In addition, the Agency plans to fund rotational assignments for mid-career hires to ensure that they have the skills needed to successfully administer the various FHWA programs.

The Agency's other accomplishments will include the implementation of the new Federal-aid Academy which is designed to foster improved stewardship and oversight of Federal-aid programs in accordance with requirements of SAFETEA-LU, the new Leadership Academy for new mid-career managers, and acquisition training. Implementation of changes to acquisition training requirements will call for additional FHWA resources. The number of individuals affected by this change has increased; at the same time, the number of training hours has increased as well. Without additional funding, the impact of this change may require a reprioritization of learning and development activities.

The Agency will launch improved learning activities with an emphasis on just-in-time delivery and reinforce learning at regular intervals during the initial two years of supervisory tenure, to ensure that supervisors can effectively manage performance while operating in a continually changing environment. The Agency will continue to enhance current supervisor skills and focus greater attention on the skills needed to effectively manage performance when supervising staff that telecommute, are employed in shared positions, or work in alternative duty locations.

The FHWA plans to implement recommendations for pilot field organizational alignments that lead to increased organizational flexibility to respond to changes in Agency mission and funds will be used for telework sites and related training for employees and managers in remote worksites.

Improving performance management skills will also be a high priority item. The FHWA and OPM employee survey results indicate there is a strong need to provide training for supervisors and employees. Both supervisors and employees will receive additional training on how to improve metrics in performance standards, how to hold employees accountable for achieving organizational goals, and how to deal with performance problems.

Also, feedback from OPM on the FHWA's Performance Appraisal Assessment Tool will be addressed. The FHWA will ensure that awards are used to recognize achievements that advance our goals and objectives. The FHWA will carefully monitor that these goals and objectives, as stated in the Agency's 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 GOE funds for its employee recognition and awards budget to support the strengthening of the performance culture in the FHWA.

The FHWA will continue to implement its Employee Survey Action Plan (which also includes actions to address Human Capital Survey (HCS) and Diversity Management Council recommendations) and create an organizational climate that enables its workforce to achieve the strategic goals of the Agency. New approaches will be used to address low-scoring and/or downward trending items. The Agency will implement new initiatives to improve employee satisfaction. In addition, action items by the FHWA Human Resources Management Committee (HRMC) will be implemented.

Implementing the OPM Hiring Model. Under the OPM 45-day hiring model, the measurement of success has changed to "percentage selected within 45 days." The goal for FY 2008 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 has developed a guideline to assist selecting officials in making selections and clearing the ERRC within 75 days.

Accountability Reviews. The FHWA is participating in Department-wide accountability reviews. In 2008, the 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. Further

accountability review activity will be coordinated with the DOT Accountability Review Program Plan.

Background Investigations. Homeland Security Presidential Directive-12 (HSPD-12) requires that all Federal employees have at a minimum a basic background investigation on file, and many employees need to have their clearances updated.

FY 2009 Performance Budget Request

Human Capital Plan, Succession Planning, Closing Gaps. 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 an aggressive recruitment program will be needed to replace the retiring workforce and strengthen our core functions, including congestion management and mitigation, structures and materials research and analysis, budget development and execution, transportation management and operations, and safety. 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 information technology and human resources).

The Professional Development Program will be used to recruit, hire, and develop the increasing number of entry-level individuals in mission-critical disciplines, (e.g., financial management). The funding will support individuals needed to fill FTE positions in Headquarters, and the increasing number of individuals needed to fill FTE positions in Division Offices.

Recruitment incentives will be critical to attracting new mid-career hires with the requisite multidisciplinary skills. With the increasing number of retirements and vacancies agency-wide, continuous efforts need to be made to attract a diverse workforce through various recruitment sources such as advertisements, print media, web sites, etc.

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 stewardship, program oversight, and financial management including the implementation of the new Federal-aid Academy which is designed to foster improved stewardship and oversight of Federal-aid programs in accordance with requirement under SAFETEA-LU, the new Leadership Academy for new mid-career managers, and acquisition training. A multidisciplinary approach and an emphasis on accountability will be incorporated at all levels of training. 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.

The Agency will continue our efforts to support a learning environment that supports new supervisors with the information and skills they will need immediately in their new supervisory role and then by providing additional training in regular installments through the first two years of their supervisory tenure. Managing employee performance will continue to be a high priority item in 2009. The Agency will continue to enhance current supervisor skills and focus on managing performance under flexible work arrangements

such as teleworking, shared positions, and alternative duty locations. The Agency will also 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 using video and web-conferencing, or other e-learning technologies. Additional funding is necessary to develop and/or convert instructor-led courses to an e-learning environment.

Employee survey results indicate employees do not have sufficient training to meet their immediate work and career needs. The Agency plans to build the training program so that critical multidisciplinary training needs are addressed. Continued implementation of changes to acquisition training requirements will require additional FHWA resources. The number of individuals affected by this change has increased; at the same time, the number of training hours has increased as the well. Without additional funding resources, the impact of this change may require a reprioritization of learning and development activities.

The FHWA will evaluate the pilot field realignments to identify issues and make changes to increase organizational effectiveness for teleworking sites and related training for employees and managers in flexible work arrangements such as shared positions are alternative duty locations.

The FHWA will carefully monitor to ensure the Agency's goals and objectives, as stated in the Agency's 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. Follow-up 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 used to recognize achievements that advance the Agency's goals and objectives. The Agency request includes funding for employee recognition and awards funding to support this strengthening of the performance culture in the FHWA.

The FHWA will continue to implement its Employee Survey Action Plan (which also includes actions to address Human Capital Survey (HCS) and Diversity Management Council recommendations) and create an organizational climate that enables its workforce to achieve the strategic goals of the Agency. New approaches will be used to address low-scoring and/or downward trending items. The Agency will implement new initiatives to improve employee satisfaction. In addition, action items by the FHWA Human Resources Management Committee (HRMC) will be implemented.

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. Mediation will be used to address organizational issues when appropriate.

Under the OPM 45-day hiring model, the measurement of success has changed to percentage selected within 45 days. The goal for FY 2008 is for selecting officials to sign the certificate within 45 days of the announcement closing in 65 percent of the cases. If the measurement for success changes for FY 2009, the FHWA will make any changes necessary to work toward achieving the new goal. For the SES, the FHWA has developed a guideline to assist selecting officials in making selections and clearing the ERRC within 75 days.

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. This includes greater integration and enhancement of current systems, to provide for greater customer service response and focus, greater system integration between the training system (eLMS) and other personnel systems such as Hiring Management and the Federal Personnel and Payroll System (FPPS), and enhanced management-automated tools to improve overall processes.

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. Further accountability review activity will be coordinated with the DOT Accountability Review Program Plan.

Under the implementation of HSPD-12, there are new and more rigorous background investigations required on all new Federal employees and contractors working for the FHWA. As a result, individuals need security clearances and many employees need to have their clearances updated. The Agency requests that funds be allocated for personnel security area. These funds will assist with finalizing the appropriate clearances for employees that are selected for positions that have higher-level clearance requirements.

Electronic Government (E-Gov)

Anticipated FY 2008 Accomplishments

The FHWA will begin the implementation of best practices arising from the information technology (IT) field study, support E-Gov initiatives through contributions and participation, and 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.

The FHWA will continue to lead a departmental E-Gov subcommittee working on crosscutting IT initiatives. The Director of the Office of Information and Management Services co-chairs the DOT E-Gov Subcommittee. The subcommittee meets regularly throughout the year to discuss the E-Gov scorecard and strategies for "getting to green."

The FHWA will continue to expand its Enterprise Architecture (EA) by identifying and developing a target architecture for one or more business areas, implement governance processes, and build-out and utilize the transition strategy and sequencing plan. We will continue to work with our EA extended core team, comprised of Headquarters and field

office representatives, to identify new business improvement opportunities and to collect and validate information for the EA information repository. We will continue to educate Headquarters and field offices on the uses and benefits of EA, such as enhanced decision-making and long-range planning. In addition, the recently implemented Business Need Request process will integrate EA and capital planning, ensuring that investments are driven by a specific business need. Also, a board will ensure that enterprise-wide solutions are considered to achieve better return-on-investment and review investments annually, as part of the capital planning process, to ensure continuity and consistency with the target architecture.

FY 2009 Performance Budget Request

The FHWA will continue to co-chair a departmental E-Gov subcommittee working on crosscutting IT initiatives.

The FHWA will continue to refine and use its EA to guide IT investments in support of the DOTs and the FHWA's strategic goals and expand the target architecture by adding one or more business areas. 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. In addition, the FHWA will continue to ensure the integration of EA and capital planning.

The FHWA will 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.

To enhance IT security, we will implement the provisions of Homeland Security Presidential Directive - 12 (HSPD-12) applicable to FY 2009. We will also continue the consolidation of IT infrastructure in FHWA field offices

The FHWA will support 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.

The Exhibit 300 for FHWA is posted at the following web site:

http://www.dot.gov/exhibit300/

Competitive Sourcing

The FHWA remains fully committed to implementing competitive sourcing strategies, as appropriate, to achieve objectives of the President's Management Agenda.

Anticipated FY 2008 Accomplishments

As in our 2005 and 2006 Federal Activities Inventory Reform (FAIR) Act submissions, our recent 2007 inventory was based on identification of the "functions and activities" for which the FHWA is responsible. Our approach in 2005 to examine all of our work at the activity level resulted in a solid baseline that continues to require only minor adjustments from year-to-year. We believe that development of the annual FAIR Act inventory

provides a resource to support the Department's human capital/workforce planning processes, while also helping our Agency to achieve its organizational goals. In this regard, we are prepared to be active participants in Departmental planning initiatives that may offer a potential for added cross-modal efficiency.

The use of contractor support is a well-established business practice of our Agency that continues to serve us well. The FHWA's reliance upon a contractor workforce to contribute to accomplishment of critical work signifies a continuing commitment to the efficient integration of public and private sector talent to assure the best use of taxpayer dollars. Competitive sourcing is a tool that we will continue to consider and apply in our effort to reduce operational costs and incorporate the best and most effective business practices.

Planned accomplishments include: (1) continuing to align our human capital management strategies with competitive sourcing; (2) participating in OST cross-cutting reviews of Departmental operations where the FHWA has an FTE presence; and (3) continuing to train Agency employees who may be involved in the competitive sourcing process, to ensure they have the necessary skills and qualification to fulfill their roles and assignments.

We are also benefiting from an improved process for developing our annual FAIR Act commercial and inherently governmental inventories, as well as the strengthened relationship between our workforce planning and competitive sourcing programs.

FY 2009 Performance Budget Request

The FY 2009 plan reflects our continuing commitment to assisting the Department in achieving the objectives established for this important initiative of the President's Management Agenda. We plan to actively participate in planning and decisions that may lead to future reviews of functional areas determined to offer the greatest potential for cross-modal efficiency and attention.

Financial Performance

Performance measures

Percent of major Federally funded transportation infrastructure projects with less than 2 percent annual growth in the project completion milestone as reported in the finance plan (target is 90 percent in 2011).

	2004	2005	2006	2007	2008	2009
Target	N/T	N/T	N/T	N/T	90%	90%
Actual	50%	83%	86%	85%		

Percent of finance plan cost estimates for major Federally funded transportation infrastructure projects with less than 2 percent annual growth (target is 90 percent in 2011).

	2004	2005	2006	2007	2008	2009
Target	N/T	N/T	N/T	N/T	90%	90%
Actual	75%	83%	86%	85%		

The resources included in the budget submission will enable the 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

With the completion of the fiscal year 2007 audit of the Highway Trust Fund (HTF), grants financial management oversight was removed as a material weakness, where it had been reported for the past three audits.

Program oversight and program stewardship are critical and ongoing strategic objectives for the FHWA. In this regard, the 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 Federal-aid transportation infrastructure projects, especially major 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 major 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 major projects. The impact of the lowered monetary threshold immediately increased the number of Major Projects from 21 to 37. At the end of FY 2007, the FHWA was monitoring about 50 active major projects. In addition, more than 150 potential Major Projects were in the planning or environmental review stages.

Anticipated FY 2008 Accomplishments

By the end of 2008, the FHWA will have completed two full years 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 achieving them. As this review and oversight program continues with the Federal-aid program, we will incorporate best practices from both Federal-aid and Federal Lands Highway organizations into an expanded agency-wide program. It will include reviews of financial processes, financial transactions, and funds management activities, along with external audit coordination, and evaluations of the key internal administrative processes.

A National Lessons Learned Program will be developed and cost estimating training will be continued. In addition, staff plans to complete the risk roll-up report on the second

round of agency-wide risk management initiative; and develop guidance for improving program management practices in the agency. Both of these activities are follow-up actions from the recent Highway Infrastructure PART.

FY 2009 Performance Budget Request

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

The FHWA will deliver a "National Lessons Learned" Program to field offices for major project stewardship and oversight. Also, training on cost estimation for major projects has been developed and will be provided to select States. The training presents 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. The 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.

The FHWA will continue to implement the next iteration of an agency-wide risk management initiative. A training course on risk management practices has been developed and will be provided to FHWA employees and its State and local partners. The FHWA will continue to develop strategies for improving program management practices in the agency.

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

1. Actions by the 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 multi-disciplinary 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.

Optimizing the use of internal staffing. 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).

The 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.

Effective recruitment of project managers. Since major projects require more project-focused 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. The FHWA will conduct appropriate cost estimate reviews at critical stages throughout the timeline of the project. These project reviews will ensure that the cost estimates are consistent with the FHWA Cost Estimating Guidance that is part of the FHWA Major Project Guidance.

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. The FHWA will continue its effort to develop a multidisciplinary workforce. The FHWA delivered training to support implementation of a more comprehensive financial management program, cost estimating, risk management, project management and process review. In the areas of financial management, the 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, the FHWA assessed and evaluated positions in the 810 (Engineering) job series to determine whether the function reflects the appropriate classification series and made recommendations for appropriate classification.

Implementing specific stewardship and oversight initiatives. The FHWA's stewardship and oversight role was strengthened in SAFETEA-LU legislation passed in 2005. 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 2007, the FHWA issued final 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 July 2007, the FHWA was monitoring financial plans or their annual updates for 20 major projects. Of these Major projects that have reached the Financial Plan stage, 17 of 20, or 85 percent, were currently on or within allowable budget variances (current cost estimates have not yet been received for 2 new projects). In addition, 16 of 20 projects, or 80 percent, were within the forecasted schedule completion variance. The FHWA is now measuring the performance of major projects in meeting the budget and schedule forecasts by comparing progress on an annual basis. The change on an annual basis gives a more accurate measure of current performance compared to the initial measurement based on a 10 percent variance from the initial cost estimate and scheduled completion date. The current goal is for no more than 2 percent annual growth for budget and schedule measures in 90 percent of all active major projects that have reached the Financial Plan stage.

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

The FHWA and State departments of transportation will continue efforts that led to the elimination of a grants management material weakness from the agency's FY 2006 financial statement audit report. This includes senior leadership involvement at the State and Federal levels in monitoring inactive obligations. The FIRE program has provided a framework for consistently carrying out oversight and stewardship responsibilities, including documenting and reporting the results of these efforts in a standard format.

The performance data shown here demonstrates the results of the sustained focus on inactive funds management:

Continually reduced obligations in inactive projects, as a percent of total Federal-aid apportionments, FY 2006-FY 2007. [Note: For all large projects greater than $500,000 and inactive for 1 year or more.]

Fiscal Year	FY 2006	FY 2007
Target	5.0%	5.0%
Actual	7.7%	7.1%

Continually reduced obligations in inactive projects, as a percent of all active or open Federal-aid projects, FY 2006-FY 2007. [Note: For all large projects greater than $500,000 and inactive for 1 year or more.]

Fiscal Year	FY 2006	FY 2007
Target	1.0%	1.0%
Actual	1.0%	1.0%

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

The FHWA integrated improper payments testing and assessment methodology into its normal grant testing procedures. After two successful years of testing, the agency's improper payment rate has remained constant at 0.2 percent of total program payments, well below the OMB threshold for significant improper payments at 2.5 percent.

Clean up unreliable data and generate reliable financial statements.

In FY 2008 the FHWA will consolidate and incorporate all Federal Managers Financial Integrity Act (FMFIA) programs within the agency under a single, FHWA-wide FIRE program, covering the Federal-aid and Federal Land Divisions and all other FHWA organizations.

The 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. The financial management material weakness reported in the FY 2005 audit was resolved in FY 2006.

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

In its relationships with State and local highway agencies, the 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.

Performance Improvement

Anticipated FY 2008 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. The 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, the 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 is in the process of refining the methodology developed for attributing costs to DOT strategic objectives, and to more than one performance goal. Efforts to this end were delayed substantially due to the FY 2007 continuing resolution and the subsequent lack of funding available to FHWA. These refinements will provide the basis for a Managerial Cost Accounting (MCA) model. In FY 2008, 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 2009 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-FY 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 be developed to fully map budget accounts and program activities to strategic objectives and performance goals. The 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: 29 FTE and $4.9 million

Responsible Officials:
Mr. A. Thomas Park, Office of the Chief Financial Officer
Ms. Patricia Prosperi, Associate Administrator for Administration
Ms. Mary Phillips, Associate Administrator for Policy and Governmental Affairs

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Federal Highway Administration
Research, Development, Technology, & Education, and ITS Overview
Budget Request for FY 2009

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

The Federal Highway Administration is requesting $196.4 million for its program of research, development and deployment in FY 2009. The FHWA is also requesting $26.7 million 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

The FHWA is requesting $66.4 million for infrastructure-related research, focusing on the major areas of pavements and bridges and structures. The pavement and bridges/structures activities 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 assure 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 the Long-Term Pavement Performance Program (LTPP)) includes research, development and deployment activities to advance pavement design and analysis, improve pavement materials and construction technology, enhance pavement management and preservation, improve construction quality assurance and advance environmentally sound pavement materials and practices. Initiatives in FY 2009 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. The FHWA will continue to work with industry, the State highway agencies and other stakeholders to advance the national pavement technology agendas defined in the concrete, hot mix asphalt, and pavement preservation roadmaps. The FHWA will also complete the originally planned 20-year monitoring period for the Long-Term Pavement Performance, and work with the States and other stakeholders to lay the groundwork for post-2009 follow-up to this landmark research program.

The 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 2009 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 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.

The 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 2009 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 Highway Economic Requirements System-State (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

The FHWA is requesting $19.5 million in this area to support five research initiatives authorized in SAFETEA-LU: Surface Transportation Environment and Planning Cooperative Research Program (STEP), Transportation Economic and Land Use System (TELUS), 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 and the environment. 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: developing and deploying a management information tool (TELUS) to assist State Departments of Transportation and Metropolitan Planning Organizations (MPOs) in the development of their transportation improvement programs, particularly public involvement; providing technical assistance, training and forums for information sharing about best practices 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; developing tools, including training and education to demonstrate how the comprehensive development of small metropolitan and rural regional transportation systems can be responsive to the needs of businesses and local communities; and assisting State Departments of Transportation and MPOs in developing methods and providing training and technical assistance for the implementation of TRANSIMS.

OPERATIONS

The FHWA is requesting $7.84 million 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 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.

The 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.

HIGHWAY SAFETY

The FHWA is requesting $13.6 million for safety RT&E activities with emphasis on five core program areas: roadway departure crashes, intersection fatalities, pedestrian fatalities, speeding-related fatalities, and advancement of a strategic approach to improving highway safety.

To address roadway departure crashes, research funds will support activities to enhance understanding of roadway departure crash causation, develop analysis tools and procedures to support better roadside safety design, refine and implement the Interactive Highway Safety Design Model (IHSDM), and develop and evaluate countermeasures to prevent and mitigate the consequences of roadway departure crashes. 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 evaluation of innovative infrastructure and operational configurations at both signalized and non-signalized intersections, assess the safety and operational impacts of access management techniques on surface street networks, improve signal design settings to reduce red-light running at signalized intersections, and enhance tools for safety analysis of freeway interchanges. Road safety audit training and promotion of intersection safety analysis tools will be critical components of this program area.

To address the problem of pedestrian fatalities, FHWA research will include evaluation of the impacts of traffic calming designs on pedestrian and bicyclist safety and development of expert systems to evaluate pedestrian and bicycle improvement opportunities. The FHWA will 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.

To reduce speeding-related fatalities, the FHWA will place emphasis on a speed management program that involves: evaluating variable speed limits, speed-reducing treatments on main roads through rural communities; and creation of rational speed limits.

Towards advancement of a strategic approach to improving highway safety, the FHWA will enhance the functions of the Digital Highway Measurement System to collect roadway data; deploy and enhance the SafetyAnalyst software; evaluate the effectiveness of various safety improvements; and operate and maintain the fifth generation of the Highway Safety Information System. 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.

In addition, the FHWA will conduct safety research projects that contribute to multiple objectives, including advancing visibility technologies and better defining the visual requirements of road users, and working on human-centered systems to incorporate human factors considerations into all aspects of highway design.

POLICY

The FHWA is requesting $0.26 million for the Policy Office's International Highway Transportation Outreach Program. Initiatives will include completion of up to five international Scanning research trips (in collaboration with AASHTO) plus implementation of findings and recommendations from previous Scanning reports. International research activities will also include program and project activities in support of the Department's Congestion Initiative and Safety Goal, technology exchange with and technical assistance to strategically and economically important partners (i.e., Iraq, Israel, Russia, Mexico, Kuwait, the Netherlands, Czech Republic, Korea and Latin American partners), collaboration with State DOTs and Local Technical Assistance Programs (LTAP) centers on international efforts, deployment of U.S. technologies, and collaboration with and representation at other national and international organizations.

EXPLORATORY ADVANCED RESEARCH

The FHWA is requesting $12.2 million for Exploratory Advanced Research to continue the implementation of the authorized program. All advanced research initiatives are intended to have the common objective of addressing mission-oriented technology and knowledge gaps. The FHWA's Turner-Fairbank Highway Research Center manages and administers the Exploratory Advanced Research program, which is intentionally ambitious to address longer-term, higher risk research on a wide-spectrum of topics and objectives. In 2007, Federal Highway Administration issued a Broad Agency Announcement (BAA) seeking research and development

projects that could lead to potentially transformational advances in the durability, efficiency, and environmental impact, productivity, and safety aspects of highway and intermodal transportation systems. In addition to the BAA, the Exploratory Advanced Research Program initiated a scanning and convening program element to identify fundamental research and breakthrough technologies that could be exploited for possible highway application. An advanced research reference librarian will conduct targeted and scanning investigations of published literature to inform researchers and program mangers of opportunities and assist with a dedicated Website. A program manager is being sought who is technically skilled, with the ability to integrate, innovate, and readily assess new ideas.

FUTURE STRATEGIC HIGHWAY RESEARCH PROGRAM—SHRP II

The FHWA is requesting $44.7 million 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. 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. And 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 implementation report to Congress with a proposed plan for addressing this requirement. The report is due February 1, 2009.

U.S. DOT PARTNER ADMINISTRATIONS

The FHWA is also requesting $31.9 million for SAFETEA-LU programs being led by other U.S. DOT modes. This request includes $0.76 million for the Office of the Secretary (OST) to administer the Center for Excellence in Project Finance. The request also includes $28.53 million 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 $0.43 million for the National Highway Traffic Safety Administration (NHTSA) to conduct Automobile Accident Injury Research, $1.09 million for the Federal Motor Carrier Safety Administration (FMCSA) to conduct Motor Carrier Efficiency Study, and $1.09 million for the Pipeline and Hazardous Materials Safety Administration (PHMSA) to conduct Hazardous Materials Research Projects.

EDUCATION AND TRAINING

The 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 (LTPP) ($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 Garrett A. Morgan Technology and Transportation Education Program ($1.21 million) enhances 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 $110.0 million 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 $110 million 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. Additional budget details are contained in the Research and Innovative Technology Administration (RITA) budget submission.

UNIVERSITY TRANSPORTATION RESEARCH

The FHWA is requesting $69.7 million for University Transportation Research. University Transportation Centers programs support 52 university-based centers that conduct state-of-the-art 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)

The Bureau of Transportation Statistics (BTS) is requesting $27.0 million to support statistical activities in FY 2009. BTS is a component 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)

FEDERAL HIGHWAY ADMINISTRATION	FY 2007 Enacted	FY 2008 Enacted	FY 2009 Pres. Bud.
A. Surface Transportation Research, Development, and Deployment Program	**180,829**	**169,369**	**196,400**
1. Safety	7,839	6,880	7,978
2. Safety (T)	6,413	4,861	5,637
3. Pavements	18,891	20,148	23,363
4. Pavements (T)	10,174	7,486	8,681
5. Structures	13,181	14,151	16,409
6. Structures (T)	10,785	7,885	9,144
7. Planning, Environment, and Realty	7,074	14,938	17,322
8. Planning, Environment, and Realty (T)	10,610	1,875	2,174
9. Highway Operations	4,268	5,755	6,674
10. Highway Operations (T)	2,845	1,008	1,169
11. Long-Term Pavement Performance	7,998	7,604	8,818
12. International Outreach	237	147	170
13 International Outreach (T)	0	79	91
14. Exploratory Advanced Research	11,064	10,520	12,199
15. Future Strategic Highway Research Program-SHRP II	40,504	38,511	44,657
16. OST, RITA, FMCSA, NHTSA & PHMSA	15,329	25,273	29,307
17. OST, RITA, FMCSA, NHTSA & PHMSA (T)	13,617	2,248	2,607
B. Training and Education	**24,583**	**24,671**	**26,700**
1. National Highway Institute (T)	8,535	8,566	9,270
2. Local Technical Assistance Program (T)	9,869	9,904	10,719
3. Eisenhower Transportation Fellowship Program (T)	1,956	1,963	2,124
4. Garret Morgan Program (T)	1,111	1,115	1,207
5. Transportation Education Development Pilot (T)	1,667	1,673	1,811
6. Freight Planning Capacity Building (T)	778	781	845
7. Surface Transportation Relief Assistance Program (T)	667	669	724
C. Intelligent Transportation Systems	**101,279**	**101,640**	**110,000**
1. Vehicle Infrastructure Integration	34,770	15,880	23,910
2. Integrated Vehicle Based Safety Systems	638	1,800	1,350
3. Cooperative Intersection Collision Avoidance Systems	8,764	4,925	4,400
4. Next Generation 911	2,530	0	0
5. Integrated Corridor Management	2,702	3,650	8,800
6. Emergency Management and Operations	1,280	1,000	0
7. Mobility Services for All Americans	738	2,775	1,200
8. Clarus	3,065	1,850	2,200
9. Road Weather Research and Development	1,239	2,775	3,300
10. I-95 (T)	6,335	6,420	7,800
11. Architecture and Standards (T)	6,567	4,290	4,700
12. Professional Capacity Building (T)	3,535	2,445	2,700
13. Program Assessment (T)	3,201	4,310	3,100
14. Outreach (T)	685	370	440
15. ITS Program Support	3,420	4,530	6,100
16. Congestion Relief Research and Development (T)	20,000	40,000	40,000
17. Rural Communications Corridor Study	1,810	4,620	0
D. University Transportation Research	**64,174**	**64,403**	**69,700**
1. University Transportation Research (T)	64,174	64,403	69,700
E. Other	**165,774**	**166,921**	**156,221**
1. State Planning and Research (SPR) 1/	165,774	166,921	156,221
F. **Administrative Expenses**	**17,556**	**17,960**	**18,373**
Subtotal, Research and Development	370,671	372,613	392,751
Subtotal, Technology Investment (T)	183,524	172,351	184,643
Subtotal RD&T Programs	**554,195**	**544,964**	**577,394**
Add: Bureau of Transportation Statistics	27,469	27,000	27,000
Less: Administrative Expenses	-17,556	-17,960	-18,373
Less: State Planning and Research (SPR)	-165,774	-166,921	-156,221
Total Title V Programs	**398,334**	**387,083**	**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 2009 Contract Authority amounts reflect SAFETEA-LU levels and do not include projected negative Revenue Aligned Budget Authority (RABA).

EXHIBIT V-1.b

RESEARCH, DEVELOPMENT & TECHNOLOGY
DEPARTMENT OF TRANSPORTATION
Obligation Limitation
(in thousands of dollars)

FEDERAL HIGHWAY ADMINISTRATION	FY 2007 Oblim	FY 2008 Oblim	FY 2009 Oblim (Est.)
A. Surface Transportation Research, Development, and Deployment Program	**180,829**	**169,369**	**185,410**
1. Safety	7,839	6,880	7,069
2. Safety (T)	6,413	4,861	5,783
3. Pavements	18,891	20,148	19,662
4. Pavements (T)	10,174	7,486	10,589
5. Structures	13,181	14,151	13,268
6. Structures (T)	10,785	7,885	10,856
7. Planning, Environment, and Realty	7,074	14,938	7,363
8. Planning, Environment, and Realty (T)	10,610	1,875	11,043
9. Highway Operations	4,268	5,755	4,442
10. Highway Operations (T)	2,845	1,008	2,961
11. Long-Term Pavement Performance	7,998	7,604	8,325
12. International Outreach	237	147	161
13. International Outreach (T)	0	79	86
14. Exploratory Advanced Research	11,064	10,520	11,516
15. Future Strategic Highway Research Program-SHRP II	40,504	38,511	42,158
16. OST, RITA, FMCSA, NHTSA & PHMSA	15,329	25,273	15,955
17. OST, RITA, FMCSA, NHTSA & PHMSA (T)	13,617	2,248	14,173
B. Training and Education	**24,583**	**24,671**	**25,206**
1. National Highway Institute (T)	8,535	8,566	8,751
2. Local Technical Assistance Program (T)	9,869	9,904	10,119
3. Eisenhower Transportation Fellowship Program (T)	1,956	1,963	2,005
4. Garret Morgan Program (T)	1,111	1,115	1,139
5. Transportation Education Development Pilot (T)	1,667	1,673	1,710
6. Freight Planning Capacity Building (T)	778	781	798
7. Surface Transportation Relief Assistance Program (T)	667	669	683
C. Intelligent Transportation Systems	**101,279**	**101,640**	**103,845**
1. Vehicle Infrastructure Integration	34,770	15,880	22,572
2. Integrated Vehicle Based Safety Systems	638	1,800	1,274
3. Cooperative Intersection Collision Avoidance Systems	8,764	4,925	4,154
4. Next Generation 911	2,530	0	0
5. Integrated Corridor Management	2,702	3,650	8,308
6. Emergency Management and Operations	1,280	1,000	0
7. Mobility Services for All Americans	738	2,775	1,133
8. Clarus	3,065	1,850	2,077
9. Road Weather Research and Development	1,239	2,775	3,115
10. I-95 (T)	6,335	6,420	7,364
11. Architecture and Standards (T)	6,567	4,290	4,437
12. Professional Capacity Building (T)	3,535	2,445	2,549
13. Program Assessment (T)	3,201	4,310	2,927
14. Outreach (T)	685	370	415
15. ITS Program Support	3,420	4,530	5,759
16. Congestion Relief Research and Development (T)	20,000	40,000	37,762
17. Rural Communications Corridor Study	1,810	4,620	0
D. University Transportation Research	**64,174**	**64,403**	**65,800**
1. University Transportation Research (T)	64,174	64,403	65,800
E. Other	**165,774**	**166,921**	**156,221**
1. State Planning and Research (SPR) 1/	165,774	166,921	156,221
F. Administrative Expenses	**17,556**	**17,960**	**18,373**
Subtotal, Research and Development	370,671	372,613	352,904
Subtotal, Technology Investment (T)	183,524	172,351	201,950
Subtotal RD&T Programs	**554,195**	**544,964**	**554,854**
Add: Bureau of Transportation Statistics	27,469	27,000	27,000
Less: Administrative Expenses	-17,556	-17,960	-18,373
Less: State Planning and Research (SPR)	-165,774	-166,921	-156,221
Total Title V Programs 2/	**398,334**	**387,083**	**407,260**

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/ Estimated Obligation Limitation includes projected negative RABA in FY 2009.

EXHIBIT V-2

FEDERAL HIGHWAY ADMINISTRATION
FY 2009 RD&T Budget Request
($000)

RD&T Program	FY 2009 Request	Safety	Reduced Congestion	Global Conn.	Environ Steward.	Security	Org. Excell.
Surface Transp. Research, Development, and Deployment Program	**196,400**	**36,975**	**121,253**	**2,574**	**32,273**	**600**	**2,725**
Safety	*13,614*	*13,614*					
Safety	*7,488*	7,488					
Safety (T)	*6,126*	6,126					
Pavements	*32,045*		*29,545*		*2,500*		
Pavements	*20,828*		19,203		1,625		
Pavements (T)	*11,217*		10,342		875		
Structures	*25,553*		*25,553*				
Structures	*14,054*		14,054				
Structures (T)	*11,499*		11,499				
Planning, Environment, and Realty	*19,497*	*100*	*7,912*	*1,313*	*8,046*	*0*	*2,126*
Planning, Environment, and Realty	*7,799*	40	3,165	525	3,219		850
Planning, Environment, and Realty (T)	*11,698*	60	4,747	788	4,827		1,276
Highway Operations	*7,842*		*7,842*				
Highway Operations	*3,137*		3,137				
Highway Operations (T)	*4,705*		4,705				
Long-Term Pavement Performance	*8,818*		8,818				
International Outreach	*261*			261			
Exploratory Advanced Research	*12,199*	3,000	6,000	1,000	1,000	600	599
Future Strategic Highway Research Program-SHRP II	*44,657*	17,863	19,137		7,657		
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**	**8,494**	**845**	**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				
Intelligent Transportation Systems	**110,000**	**29,570**	**77,730**	**2,700**	**0**	**0**	**0**
Vehicle Infrastructure Integration	23,910	12,200	11,710				
Integrated Vehicle Based Safety Systems	1,350	1,350					
Cooperative Intersection Collision Avoidance System	4,400	4,400					
Integrated Corridor Management	8,800		8,800				
Mobility Services for All Americans	1,200		1,200				
Clarus	2,200	1,100	1,100				
Road Weather Research and Development	3,300	1,100	2,200				
I-95 (T)	7,800	1,200	4,400	2,200			
Architecture and Standards (T)	4,700	2,000	2,700				
Professional Capacity Building (T)	2,700	1,000	1,700				
Program Assessment (T)	3,100	1,500	1,600				
Outreach (T)	440	220	220				
ITS Program Support	6,100	3,500	2,100	500			
Congestion Relief Research and Development (T)	40,000		40,000				
University Transportation Research	**69,700**	**0**	**69,700**	**0**	**0**	**0**	**0**
University Transportation Research (T)	*69,700*		*69,700*				
Other	**156,221**	**0**	**156,221**	**0**	**0**	**0**	**0**
State Planning and Research (SPR)	*156,221*		*156,221*				
Administrative Expenses	***18,373***						**18,373**
Subtotal, R&D	361,996	53,311	265,554	2,286	20,423	600	19,822
Subtotal, Technology Investment (T)	215,398	21,234	167,844	3,833	13,850	500	8,137
Subtotal RD&T Programs	**577,394**	**74,545**	**433,398**	**6,119**	**34,273**	**1,100**	**27,959**
Add: Bureau of Transportation Statistics	27,000						27,000
Less: Administrative Expenses	-18,373						-18,373
Less: State Planning and Research (SPR)	-156,221		-171,143				
Total Title V Programs	**429,800**	**74,545**	**262,255**	**6,119**	**34,273**	**1,100**	**36,586**

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Federal Highway Administration
RD&T Program Summary

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: SAFETY
AMOUNT REQUESTED FOR FY 2009: $13,614,000

Projects

Safety Research and Innovation Deployment Program

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

Description: 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:

- Enhance understanding of roadway departure crash causation.
- Develop analysis tools and procedures to support better roadside safety design and highway geometric design.
- Develop and evaluate countermeasures to keep vehicles on the road and to reduce the severity of crashes when motorists depart the lane or road.
- Promote appropriate use of new technologies to reduce roadway departure crashes including outreach, training course development, implementation materials, and demonstrations.
- Evaluate innovate infrastructure and operational configurations at signalized and non-signalized intersections.
- Assess the safety and operational impacts of access management techniques on surface street networks.
- Improve signal design settings to reduce red-light running at signalized intersections.
- Develop and promote improved safety analysis methods for intersections and freeway interchanges.
- Assess the impacts of traffic calming designs on pedestrian and bicyclist safety.
- Improve tools for evaluating pedestrian and bicycle improvement opportunities.
- Improve integration of pedestrian issues in the planning, design, operation, and maintenance of roadway facilities.
- Evaluate variable speed limits.
- Assess speed-reducing treatments on main roads through rural communities.
- Enhance the functions of the Digital Highway Measurement System.
- Deploy and enhance the Safety Analyst software.
- Disseminate and analyze Highway Safety Improvement System to improve understanding of crash causation, to provide useful crash typologies, and to support effective crash data analyses.
- Evaluate the effectiveness of various safety improvements in support of State Strategic Highway Safety Plans.
- Develop, demonstrate, and implement techniques for States to collect better data, to use the information appropriately to support Strategic Highway Safety Plans, and to evaluate the success of safety programs.

- Advance highway visibility technologies.
- Better define the visual requirements of road users.
- Improve incorporation of human-centered system considerations in all aspects of highway design, particularly innovative designs.

RD&T Partners: The FHWA engages a variety of partners in various activities within the Safety Research and Innovative Deployment Program. The NHTSA is a funding partner in the National Crash Analysis Center, which supports roadway departure RD&T. The FHWA works in cooperation with the NHTSA on pedestrian safety RD&T. On speed-related RD&T, the FHWA participates with the NHTSA and FMCSA on the USDOT Speed Management Team in carrying out the USDOT Speed Management Strategic Initiative. The FHWA is active on the Human Factors Coordinating Council, which identifies and coordinates crossmodal RD&T and ensures the appropriate application of the science of human factors to the design, development, implementation, and evaluation of transportation systems.

FY 2009 Funding: $11,110,000

Center for Surface Transportation Safety

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

Description: 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.
- Research results on examination of advanced roadway delineation and lighting systems.

RD&T Partners: The Center has formed a stakeholders committee comprised of organizations that wish to participate in improving road user safety both locally and across the nation. Stakeholders provide direct funding to the Center, provide input to research direction, and serve as overseers of research results. The Stakeholders' Committee currently includes the Virginia Tech Transportation Institute, General Motors Corporation, and the Virginia Transportation Research Center. The Center will also work with FMCSA regarding commercial vehicle safety (specifically driver fatigue), and with NHTSA regarding age-related impacts on driving performance and the impacts of headlight glare.

FY 2009 Funding: $654,000

Center for Excellence in Rural Safety

Objective: 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.

Description: The Center, as required by SAFETEA-LU Section 5309, is housed at the Hubert Humphrey Institute at the University of Minnesota. 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, including Advisory Committee at the Summer Institute, and other colleges.
- 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.
- Disseminate safety countermeasures to counties and localities.

RD&T Partners: The Hubert Humphrey Institute conducts projects in cooperation with the Claremont Graduate University, New England Transportation Institute, and Center for Transportation Studies. The Center Advisory Committee membership includes NHTSA, AASHTO, TRB, NACE, Minnesota DOT, and the ITS Institute, in addition to the FHWA. The Summer Institute invites these and other relevant organizations and professionals.

FY 2009 Funding: $761,000

Transportation Injury Research

Objective: Supports the Center for Transportation Injury Research at the Calspan University of Buffalo, New York.

Description: 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.

RD&T Partners: The FHWA collaborates with FMCSA, which provides technical input on activities related to motor carrier safety.

FY 2009 Funding: $1,089,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: PAVEMENTS
AMOUNT REQUESTED FOR FY 2009: $32,045,000

Projects

Innovative Pavement Research and Deployment

Objective: Researches, develops, demonstrates, promotes, supports, and documents the application of innovative pavement technologies, specifications and test methods, and practices.

Description: 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:

- Enhanced quality systems for highway paving
- Information and component models for "next generation" design and analysis
- Improved design systems, materials selection, and performance prediction technologies to optimize pavement performance for new and recycled materials
- Expanded guidance for effective pavement system management and preservation
- Guidance for optimization of pavement surface characteristics for safety, noise, and riding comfort
- Expanded guidance on environmentally sound pavement materials and practices

RD&T Partners: Continued coordination and collaboration with the FAA, AASHTO and its member agencies, the American Concrete Pavement Association, the National Asphalt Pavement Association and other industry groups to advance research and technology deployment in areas of mutual interest. Continue to sponsor the TRB Committee for Pavement Technology Review and Evaluation as a forum for stakeholder input on program content, conduct and products.

FY 2009 Funding: $19,715,000

Alkali-Silica Reactivity

Objective: Development and deployment of techniques to prevent and mitigate alkali silica reactivity.

Description: 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
- Develop ASR identification, monitoring, and testing procedures
- Implement findings and educate the public and private sectors

RD&T Partners: Continue to coordinate and collaborate with FAA to avoid duplicative efforts and maximize success in addressing ASR.

FY 2009 Funding: $2,135,000

Fundamental Properties of Asphalts and Modified Asphalts

Objective: Promote innovative technologies that will improve pavement durability, extend service life, and help reduce costs.

Description: 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. WRI will continue pinning down the fundamental mechanisms of oxidation and developing the fundamental mechanisms of fatigue cracking.

Outputs:

- Develop and validate an engineering performance prediction model of asphalt pavement that relates engineering properties to chemical/molecular parameters.
- 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.

RD&T Partners: Continue stakeholder (State highway agency and industry) review and evaluation of work through contractor participation in expert task group meetings and other appropriate stakeholder forums.

FY 2009 Funding: $3,660,000

Asphalt Research Consortium

Objective: Conduct research in flexible pavements and on extending the life cycle of asphalt.

Description: This research consortium will be led by the Western Research Institute 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.
- New technological capabilities to increase pavement durability, performance, and reduce life cycle cost.
- 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.

RD&T Partners: Continue stakeholder (State highway agency and industry) review and evaluation of work through contractor participation in expert task group meetings and other appropriate stakeholder forums.

FY 2009 Funding: $6,535,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: STRUCTURES
AMOUNT REQUESTED FOR FY 2009: $25,553,000

Projects

Seismic Research

Objective: Study the vulnerability and improve the resiliency of the Nation's bridges and highways to earthquakes.

Description: The program will develop and implement cost-effective methods to reduce vulnerabilities and economic loss through the conduct of seismic research and technology deployment, education, and training. 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 components for accelerated bridge construction in seismic regions
- Design criteria for protection of bridges against earthquakes and other hazards, with a focus on near-fault earthquake impacts
- Implement improved earthquake loss estimation technology
- Improve earthquake damage assessment technology

RD&T Partners: Federal agencies associated with the National Earthquake Hazard Reduction Program (NEHRP), State departments of transportation, industry and academia

FY 2009 Funding: $2,178,000

Long-Term Bridge Performance

Objective: Provide quality data on the performance of in-service highway bridges regularly inspected and monitored over a period of 20 years.

Description: 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
- Database of quantifiable bridge performance information
- Improved asset management investment and maintenance decision making for highway bridges

RD&T Partners: American Association of State Highway and Transportation Officials (AASHTO), State departments of Transportation, University Transportation Centers, industry

FY 2009 Funding: $6,753,000

Innovative Bridge Research and Deployment

Objective: 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.

Description: 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
- Develop and deploy Accelerated Bridge Construction techniques to increase safety and durability and reduce construction time and traffic congestion
- Continue the improvement in and deployment of high-performance materials for infrastructure applications
- Develop and deploy improved methods for economical bridge foundation designs

RD&T Partners: AASHTO, State departments of transportation, academia, industry

FY 2009 Funding: $11,415,000

High-Performing Steel Bridge

Objective: Demonstrate the application of high-performing steel in the construction and rehabilitation of bridges.

Description: 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
- Economically efficient and structurally durable corrosion-resistant steel

RD&T Partners: National Steel Bridge Alliance, U.S. Navy, AASHTO, State departments of transportation, academia, industry

FY 2009 Funding: $3,573,000

Steel Bridge Testing

Objective: Improve the capability for identifying fatigue cracking in steel bridges using nondestructive evaluation and testing technology (NDE/NDT).

Description: 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
- Guide for use of NDE technologies in steel bridge inspection and evaluation
- Guidance on cost-effective and timely repair and retrofitting of fatigue-cracked structures

RD&T Partners: AASHTO, State departments of transportation, academia, and industry

FY 2009 Funding: $1,089,000

Ultra-high-performance Concrete Demonstrations

Objective: Demonstrate the use of a steel-fiber-reinforced reactive powder concrete (known as Ultra-High Performance Concrete – UHPC) which has significantly improved strength, durability, and corrosion resistance characteristics over that of concrete used in typical bridge and structural applications.

Description: 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 precast UHPC bridge deck and other bridge systems
- Design provisions and examples compatible with AASHTO specifications

RD&T Partners: AASHTO, State departments of transportation, academia, and industry

FY 2009 Funding: $545,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: PLANNING, ENVIRONMENT, AND REALTY
AMOUNT REQUESTED FOR FY 2009: $19,497,000

Projects

Transportation, Economics, and Land Use System (TELUS)

Objective: Help MPOs and State DOTs develop their transportation improvement programs and carry out other transportation planning responsibilities.

Description: A fully integrated information management and decision support system, TELUS will help states and MPOs assure public participation in the transportation planning process.

Outputs:

- States and MPOs utilize TELUS in the development of transportation improvement programs and other transportation planning initiatives

RD&T Partners: Establish joint working group with the American Association of State Highway and Transportation Officials (AASHTO), the Association of Metropolitan Planning Organizations (AMPO) and the National Association of Regional Councils (NARC) to investigate improvements and updates to TELUS.

FY 2009 Funding: $872,000

Surface Transportation Environment and Planning Cooperative Research Program

Objective: Improve understanding of the complex relationship between surface transportation and the environment.

Description: Among other efforts, the program will support safety-conscious planning of surface transportation systems and improvements.

Outputs:

- Develop and/or support accurate models for evaluating transportation control measures and develop indicators of economic, social and environmental performance of transportation systems to facilitate alternative analysis
- Support transportation safety planning of surface transportation systems and improvements
- Improve planning, operation and management of surface transportation services and assets
- Advance the state of the practice in multimodal and intermodal transportation planning
- Conduct research to assess the potential impact of climate change on transportation
- Develop and deploy research to address congestion reduction efforts
- Improve understanding of the complex relationship between surface transportation and the environment
- Enhance knowledge of strategies to improve transportation in rural areas and small communities
- Strengthen and advance State/local and tribal capabilities regarding the complex relationship between surface transportation and the environment
- Improve transportation decision-making and coordination across borders
- Improve state of the practice regarding the impact of transportation on the environment
- Conduct research to promote environmental streamlining/stewardship

RD&T Partners: Coordinate any work addressing climate change with the Department's Climate Change Center. Partner with Federal, State, local partners to leverage STEP research funding.

FY 2009 Funding: $14,704,000

Center for Environmental Excellence

Objective: Assist states in planning and delivering environmentally sound surface transportation projects.

Description: 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
- Collaborate on research agenda development
- Document good practices through solicitation of case studies and best practices

RD&T Partners: Coordinate any work addressing climate change with the Department's Climate Change Center. Partner with State Departments of Transportation, Federal and State resource and regulatory agencies, academia, and non-governmental organizations.

FY 2009 Funding: $1,089,000

Center for Transportation Advancement and Regional Development

Objective: Assist in the development of small metropolitan and rural regional transportation systems that are responsive to the needs of businesses and local communities.

Description: Focusing on training, education, and research geared toward developing small metropolitan and rural regional transportation systems, the center is promoting 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

RD&T Partners: New England Transportation Institute, Delta Regional Authority

FY 2009 Funding: $545,000

Advanced Travel Forecasting Procedures Program

Objective: Continues deployment of the Transportation Analysis Simulation System (TRANSIMS) as a planning tool.

Description: 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
- Develop travel forecasting methods based on tracking individuals and vehicles. Apply methods to entire regions
- Use simulation technologies to understand the impact of operational improvements on the demand for travel
- Use simulation technologies to understand the impact of travel, by time of day, on overall mobility
- Provide training on methods
- Provide support for planning agencies in the implementation of new methods

RD&T Partners: Work with the Research and Innovative Technology Administration (RITA), the Illinois Department of Transportation and the Department of Homeland Security to develop an emergency evacuation model for Chicago.

FY 2009 Funding: $2,287,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: HIGHWAY OPERATIONS
AMOUNT REQUESTED FOR FY 2009: $7,842,000

Projects

Surface Transportation Congestion Relief Solutions

Objective: Develops information to assist State transportation departments and Metropolitan Planning Organizations (MPOs) in measuring and addressing surface transportation congestion problems.

Description: 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.
- Signal timing and ramp metering adjustment with Vehicle Infrastructure Integration data

FY 2009 Funding: $7,842,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: LONG-TERM PAVEMENT PERFORMANCE
AMOUNT REQUESTED FOR FY 2009: $8,818,000

Projects

Long-Term Pavement Performance

Objective: Provide answers to "how" and "why" pavements perform as they do.

Description: 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:

- Database and supporting documentation reflecting the completion of the originally planned 20-year period of monitoring for the LTPP test sections.
- Plans for appropriate post-2009 follow-on activities.
- Develop and implement LTPP product website

RD&T Partners: Continued collaboration with AASHTO, its member agencies and industry groups to complete the planned 20-year monitoring period and develop plans for appropriate post-2009 follow-on activities. Continue to support the TRB LTPP Committee and its supporting ETGs as a forum for stakeholder input on the conduct of the program.

FY 2009 Funding: $8,818,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: INTERNATIONAL OUTREACH
AMOUNT REQUESTED FOR FY 2009: $261,000

Projects

International Highway Transportation Outreach Program

Objective: Informs the U.S. highway community of technological innovations in foreign countries and promotes U.S. highway transportation expertise, goods, and services.

Description: 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 U.S. private sector companies through technology exchange and technical assistance.

- Acquire knowledge on new technology advances and best practices abroad
- Promote the U.S. highway transportation industry through technology exchange and technical assistance

RD&T Partners: Partners include American Association of State Highway and Transportation Officials (AASHTO) and the National Cooperative Highway Research Program (NCHRP). International AA Group and DA Advisory Group coordinate FHWA activities, programs, policies and priorities (HEP, HIF, HOP, ITS/JPO, border Divisions, and other Divisions involved internationally). Collaborate with border Divisions on Border Technology Exchange Program (CA, AZ, NM, TX, AK, WA, others). Support for Detroit-Windsor border crossing project (HEP, HIF, MI Division). Support for Scanning Program (depending on particular topics, all Divisions and most HQ offices potentially involved). Support for specific activities in support of Congestion Initiative (HOP). Support for specific activities in support of Safety Goal (Office of Safety).

FY 2009 Funding: $261,000

RD&T PROGRAM: SURFACE TRANSPORTATION RESEARCH, DEVELOPMENT, AND DEPLOYMENT PROGRAM: EXPLORATORY ADVANCED RESEARCH
AMOUNT REQUESTED FOR FY 2009: $12,199,000

Projects

Exploratory Advanced Research

Objective: To address mission-oriented technology and knowledge gaps by identifying breakthrough technologies and seeking research and development projects with the potential to make transformational advances in the highway and intermodal transportation systems.

Description: The program is competitive and is intentionally ambitious to address longer-term, higher risk research on a wide-spectrum of topics and objectives. In 2007, Federal Highway Administration issued a Broad Agency Announcement (BAA) seeking research and development projects that could lead to potentially transformational advances in the durability, efficiency, and environmental impact, productivity, and safety aspects of highway and intermodal transportation systems. In addition to the BAA, the Exploratory Advanced Research Program initiated a scanning and convening program element to identify fundamental research and breakthrough technologies that could be exploited for possible highway application.

Outputs:
- Nuclear system for nondestructive measurement of chlorides in concrete
- Guidelines for preventing delayed ettringite formation in concrete
- Guidelines for controlling strong chaotic motions in cable-stayed bridges
- Identify research to better understand the impacts of transportation on the environment
- Explore data acquisition and analysis techniques for improved systems monitoring and operational performance
- Explore and develop enabling network and sensor technologies, modeling capabilities, and systems analysis techniques,
- Policy research, including economic impact analysis of highway investment and congestion on business logistics costs

- Explore innovative financing alternatives for surface transportation

RD&T Partners: Partners for this program are in two categories 1) Program Management Collaboration and 2) Technical Topic Partners.

External partners include:

DOT's University Transportation Centers (UTC) Program
DOT's Climate Change Center
American Association State Highway Transportation Official's Research Advisory Committee (AASHTO/RAC)
Transportation Research Board's Conduct of Research Committee
Transportation Research Board's Research and Technology Coordinating Committee (TRB/RTCC)
World Conference on Transport Research Society
National Science Foundation
Research and Innovation Technology Administration
National Cooperative Highway Research Program (NCHRP)

FY 2009 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 2009: $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 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.
- Develop analytic procedures for determining the impacts of reliability improvement strategies
- Develop technologies for faster in situ construction
- Develop innovative and equitable contracting methodologies
- Develop framework for collaborative decision making on additions to highway capacity

RD&T Partners: National Academies, AASHTO

FY 2009 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 2009: $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.

Description: 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.

RD&T Partners: OST

FY 2009 Funding: $762,000

National Cooperative Freight Transportation Research Program (NCFRP)

Objective: Awards contracts and grants for research on critical freight transportation issues through an FHWA-funded program administered by the National Research Council.

Description: 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.
- 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.

RD&T Partners: The National Academies, State DOTs, Freight Industry Associations, and the Private Sector

FY 2009 Funding: $3,268,000

Biobased Transportation Research

Objective: 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.

Description: 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 fourth year in FY 2009. Funding in FY 2009 will allow grantees to continue projects funded in FYs 2006-2008. These multi-year 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 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.

RD&T Partners: Cornell University, University of Tennessee, South Dakota State University, Oklahoma State University and Oregon State University

FY 2009 Funding: $10,892,000

Commercial Remote Sensing Products and Spatial Technologies

Objective: Develops new applications of commercial remote sensing and spatial information technologies for national infrastructure development and construction

Description: 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.

RD&T Partners: RITA

FY 2009 Funding: $6,753,000

Technology Transfer Grant

Objective: Support the development and testing of technology solutions that will improve the Nation's transportation system.

Description: 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.

RD&T Partners: Interagency Agreement with the Department of Energy for Argonne National Laboratory, University of Illinois and Northern Illinois University, State of Illinois, Chicago Metropolitan Agency for Planning, Illinois Department of Transportation, Illinois Terrorism Task Force, Illinois Emergency Management Agency and Federal Highway Administration.

FY 2009 Funding: $3,485,000

Automobile Accident Injury Research

Objective: Support research and technology to prevent and minimize head, craniofacial, and spinal cord injuries resulting from automobile crashes.

Description: 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

RD&T Partners: NHTSA

FY 2009 Funding: $436,000

Rural Transportation Research Initiative

Objective: 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.

RD&T Partners: North Dakota State University, North Dakota Department of Transportation, City of Fargo.

FY 2009 Funding: $436,000

Hydrogen-Powered Transportation Research Initiative

Objective: Support a hydrogen-powered transportation research initiative at the University of Montana.

Description: 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.
- Develop nondestructive testing technologies for advanced hydrogen storage technologies
- Conduct materials compatibility research and facilitate the development of statistically validated consensus codes and standards

RD&T Partners: RITA

FY 2009 Funding: $655,000

Cold Region and Rural Transportation Research

Objective: Support the development of a research facility for basic and applied research on surface transportation issues facing rural and cold regions.

Description: 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.

RD&T Partners: Montana State University, Montana Department of Transportation, Fergus County Port Authority, Washington State Department of Transportation, Idaho Department of Transportation, Oregon Department of Transportation.

FY 2009 Funding: $871,000

Advanced Vehicle Technology

Objective: Support research and development of advanced vehicle technology concepts at the University of Kansas Transportation Research Institute.

Description: 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.

RD&T Partners: RITA

FY 2009 Funding: $2,178,000

Motor Carrier Efficiency Study

Objective: Identify inefficiencies in freight transportation and evaluate the safety, productivity, and cost reductions that may be achieved through the use of wireless technologies.

Description: 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 the 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

RD&T Partners: FMCSA, OST, RITA/BTS

FY 2009 Funding: $1,089,000

Hazardous Materials Research Projects

Objective: 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."

Description: 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.

RD&T Partners: National Academies, PHMSA, TRB

FY 2009 Funding: $1,089,000

RD&T PROGRAM: TRAINING AND EDUCATION
AMOUNT REQUESTED FOR FY 2009: $26,700,000

Projects

National Highway Institute

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
- Develop new course offerings to meet changing program requirements

RD&T Partners: In coordination and cooperation with State DOTs, MPO and local governments.

FY 2009 Funding: $9,270,000

Local Technical Assistance Program (LTAP)

Objective: 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.

Description: 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
- Expand course content and program scope to meet customer needs

RD&T Partners: In coordination and cooperation with State DOTs and local governments.

FY 2009 Funding: $10,719,000

Eisenhower Transportation Fellowship Program

Objective: 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.

Description: 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
- Increase number of Eisenhower Fellowships

RD&T Partners: In partnership with Academia.

FY 2009 Funding: $2,124,000

Garrett A. Morgan Technology and Transportation Education Program

Objective: To prepare the workforce for the 21st century by improving the preparation of students -- particularly women and minorities -- in science, technology, engineering, and mathematics.

Description: 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 for underrepresented student groups at the elementary and secondary school (K-12) levels.
- Enhance coordination throughout the education and transportation communities for career awareness and development

RD&T Partners: Educational school districts.

FY 2009 Funding: $1,207,000

Transportation Education Development Pilot Program

Objective: Train individuals at all educational levels for careers in transportation.

Description: 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
- Develop curriculum to address high-priority transportation workforce development needs

RD&T Partners: Academia/Institutions of Higher Education (e.g., colleges and universities.

FY 2009 Funding: $1,811,000

Freight Planning Capacity Building

Objective: Support research, training, and education in freight planning at the State and local levels.

Description: 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
- Provide information and tools to effectively enforce truck size and weight regulations

RD&T Partners: State and Local Freight Planning and Freight Data Analysis Specialists

FY 2009 Funding: $845,000

Surface Transportation Congestion Relief Solutions Assistance and Training

Objective: Offer technical assistance and training to State and local transportation agencies.

Description: 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.
- Advance State, local, and tribal capabilities regarding the complex relationship between surface transportation and the environment.

RD&T Partners: State and Local Transportation Management Organizations

FY 2009 Funding: $724,000

RD&T PROGRAM: INTELLIGENT TRANSPORTATION SYSTEMS (ITS)
AMOUNT REQUESTED FOR FY 2009: $110,000,000

Projects

Objectives and Descriptions of Intelligent Transportation Systems (ITS) projects are contained in the Research and Innovative Technology Administration (RITA) FY 2009 Budget submission. Funding is provided by Title V of SAFETEA-LU.

FY 2009 Funding: $110,000,000

RD&T PROGRAM: UNIVERSITY TRANSPORTATION RESEARCH (UTC)
AMOUNT REQUESTED FOR FY 2009: $69,700,000

Projects

University Transportation Centers Program

Objective: Provide grants to universities to conduct transportation research on critical transportation issues and to support education activities that will expand the work force of transportation professionals.

Description: The University Transportation Centers Program supports 52 university-based centers that conduct state-of-the-art transportation research, provides for technology transfers, and undertakes education activities that help educate the next generation of transportation professionals. This program is funded under Title V of SAFETEA-LU and is managed by the Research and Innovative Technology Administration (RITA) through reimbursable agreement with the Federal Highway Administration (FHWA).

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.

FY 2009 Funding: $69,700,000

EXHIBIT V-3

Federal Highway Administration
Support for Secretarial and Administration RD&T Priorities

Policy Initiative	Supporting RD&T Programs	FY 2009 Request ($000)
Safety *Secretarial Priority*	Safety Research and Innovation Deployment Program: 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.	$11,110
	Center for Surface Transportation Safety: Develops and disseminates advanced transportation safety techniques and innovations in both rural areas and urban communities. 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.	$654
	Center for Excellence in Rural Safety: 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. Among other activities, the program will address the online and seminar training needs of rural transportation practitioners and policy makers.	$761
	Transportation Injury Research: Supports the Center for Transportation Injury Research at the Calspan University of Buffalo, New York. This Center will perform interdisciplinary, systems-oriented research to reduce the occurrence, severity, and consequences of crash-related injuries.	$1,089
	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 preventing or reducing the severity of highway crashes by understanding how drivers interact with the vehicle, traffic environment, roadway characteristics, traffic control devices, and the environment and assessing	$17,863

	the changes in collision risk associated with each of these factors and interactions.	
	Automobile Accident Injury Research: Support research and technology to prevent and minimize head, craniofacial, and spinal cord injuries resulting from automobile crashes. This research will be conducted by the Forsyth Institute under a grant managed by NHTSA and funded by the FHWA.	$436
	Hazardous Materials Research Projects: 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." 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.	$1,089
	The Office of Planning, Environment and Realty supports safety transportation planning research through the Surface Transportation Environment and Planning Cooperative Research Program.	$100
	Motor Carrier Efficiency Study: Identify inefficiencies in freight transportation and evaluate the safety, productivity, and cost reductions that may be achieved through the use of wireless technologies. 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 the FHWA (freight and policy offices), OST (freight office), and RITA/BTS.	$218
	Supporting Training and Education Program: Provide leadership and resources for the development and delivery of training and education programs to improve safety of our highway system and its	$8,000

	intermodal connections. (National Highway Institute- $1M; Local Technical Assistance Program- $7M.	
System Performance and Reliability *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
	The FHWA Office of Operations (HOP) is conducting the Surface Transportation Congestion Relief Solutions Research Initiative to develop information to assist State transportation departments and metropolitan planning organizations measure and address surface transportation congestion problems.	$7,842
	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 with improving their approaches to surface transportation congestion measurement, analysis, and project programming.	$720
	The FHWA Office of Planning, Environment and Realty (HEP) supports research to reduce congestion via the Surface Transportation Environment and Planning Cooperative Research Program.	$650
	HEP conducts research to develop, improve and deploy analytical methods which respond to the system reliability and performance needs of planning and environmental decision making processes.	$250
	HEP supports U.S./Mexico working committee activities and research related to freight and port capacity.	$450
	Steel Bridge Testing: Improve the capability for identifying fatigue cracking in steel bridges using nondestructive evaluation and testing technology (NDE/NDT). 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.	$1,089

	Long-Term Bridge Performance: Provide quality data on the performance of in-service highway bridges regularly inspected and monitored over a period of 20 years. 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.	$6,753
	Seismic Research: Study the vulnerability and improve the resiliency of the Nation's bridges and highways to earthquakes. The program will develop and implement cost-effective methods to reduce vulnerabilities and economic loss through the conduct of seismic research and technology deployment, education, and training. Upgrades will be made to earthquake simulation facilities, as necessary, to carry out the program.	$2,178
	Innovative Bridge Research and Deployment: 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. 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.	$5,707
	Innovative Pavement Research and Deployment Program (IPRD): The technologies, specifications and test methods and practice developed, demonstrated, promoted and supported through the IPRD will contributed to improved system performance and reliability by improving the performance and longevity of highway pavements.	$11,715
	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 radio frequency.	All funds provided by the ITS program

	The FHWA Office of Freight Management and Operations (HOFM) supports five of six initiatives contained in the Secretary's National Freight Action Agenda. *Initiative 1: Facilitate the development and planning of major freight projects*. HOFM provides the 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 Management (EFM) ITS initiative and is the FHWA linkage for 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 pursuit of improved freight data. *Initiative 6: Accelerate development of short sea shipping*. HOFM provides substantial data and policy analysis to MARAD in support of the Short Sea Shipping initiative. HOFM is actively engaged in partnering with Customs and Border Protection (CBP) on the Electronic Freight Manifest (EFM) ITS initiative. This effort is designed to ensure that the electronic transfer of information relative to freight movement, that the EFM seeks to demonstrate, is compatible with and supportive of private sector needs as well as governmental regulatory requirements. HOFM was	

	also partnering with U.S. Army COE, USDA, and FRA through the Transportation Research Board in the scoping, development, and promotion of a national conference which was held in September 2006 to improve freight modeling for public transportation decision making. This effort also supports the Secretarial priority of Freight and Port Capacity by enabling better modeling and forecasting freight flows based on current available data.	
21st Century Solutions for 21st Century Transportation Problems *Secretarial Priority*	Exploratory Advanced Research: 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. 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.	$12,199
	The FHWA Office of Planning, Environment and Realty supports the national highway planning network; GIS and spatial data technologies research and technical assistance.	$350
	High-Performing Steel Bridge: Demonstrate the application of high-performing steel in the construction and rehabilitation of bridges. 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.	$3,573
	Ultra-high-performance Concrete Demonstrations: Demonstrate the use of a steel-fiber-reinforced reactive powder concrete (known as Ultra-High Performance Concrete – UHPC) which has significantly improved strength, durability, and corrosion resistance characteristics over that of concrete used in typical bridge and structural applications. 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	$545

	construction practices.	
	Innovative Bridge Research and Deployment: 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. 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.	$5,708
	Innovative Pavement Research and Deployment Program (IPRD): The research elements of the IPRD will pursue advanced and innovative technologies to address 21st century challenges.	$8,000
	Nanoscale research looking at selected components of asphalt is being conducted under the Fundamental Properties of Asphalts and Modified Asphalts research by the Western Research Institute.	$750
	The Office of Asset Management (HIAM) will continue to emphasize improving the condition of the Nation's highways and managing the system more efficiently through the greater use of operational technologies and Asset Management principals.	$500
	HIAM will develop, promote and deploy new technologies to improve implementation of Asset Management and System Preservation principles and practices.	$1,500
	HIAM will develop tools and undertake studies which address the management and monitoring of the transportation system, engineering and economic analysis, system preservation, and enhanced construction and maintenance quality and management.	$300
	HIAM will undertake activities to develop and promote the systematic approaches to the management of highway assets.	$300
	Commercial Remote Sensing Products and Spatial Technologies: Develops new applications of	$6,753

	commercial remote sensing and spatial information technologies for national infrastructure development and construction. 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.	
	Center for Excellence in Project Finance: To promote and support strategic national surface transportation programs and activities relating to the work of state DOTs in project finance. 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.	$762
	Motor Carrier Efficiency Study: Identify inefficiencies in freight transportation and evaluate the safety, productivity, and cost reductions that may be achieved through the use of wireless technologies. 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 the FHWA (freight and policy offices), OST (freight office), and RITA/BTS.	$871
Alternative Energy Sources	The Hydrogen-Powered Transportation Research Initiative is being carried out in cooperation with RITA and the University of Montana.	$655
	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
	Biobased Transportation Research: Supports biobased transportation research of national importance at the	$10,892

	National Biodiesel Board and at various research centers identified in the Farm Security and Rural Investment Act of 2002. This grant will be managed by RITA and funded by the FHWA.	
	Hydrogen Storage Research is being carried out at Delaware State University in Dover, Delaware.	$400 (Title I funds)
	Research is being conducted at the Rochester Institute of Technology Alternative Fuels and Life-Cycle Engineering.	$800 (Title I funds)

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EXHIBIT V-4

Federal Highway Administration
Implementation of the R&D Investment Criteria

R&D Investment Criteria	How Applied	Actions Reflected in FY 2009 Request
Relevance	o Research program is mission oriented and supports the FHWA and DOT strategic and organizational goals o Stakeholders are engaged throughout the R&T process, including agenda-setting and planning o Stakeholders are engaged in agenda-setting and planning through the TRB Research and Technology Coordinating Committee (RTCC), and other groups formed for specific designated programs o Stakeholders are engaged in development of multi-year program plans, which are revisited annually o External experts ensure program relevance throughout the research process o Stakeholders are engaged in technology transfer and innovation deployment activities o The program employs a number of mechanisms for customer feedback, including surveys and focus groups	o R&T activities support FHWA and DOT goals, and the Secretary's priorities of safety, system performance and 21st Century Solutions. o Exploratory Advanced Research Program is focused on longer term and higher risk breakthrough research with the potential for dramatic long term improvements to plan, build, renew and operate safe, congestion-free, and environmentally sound transportation systems. o Composition and management of the R&T program, including advanced research, reflect advice of the RTCC o Budget request is based on multi-year program plans tied to the strategic goals, which were updated in 2007 with stakeholder input
Quality	o Investment decisions are based on competition and merit review whenever possible o External experts are frequently consulted during the design and conduct of research o Merit reviews of results are conducted as a matter of routine o Influential scientific information is peer reviewed prior to dissemination	o Lab assessments scheduled for FY 2009 include: the Structures Lab, Photometric and Visibility Lab, and Concrete Labs. o Influential scientific information is peer reviewed prior to dissemination

R&D Investment Criteria	How Applied	Actions Reflected in FY 2009 Request
	o An assessment program of FHWA's 26 laboratories provides independent expert evaluation of research conduct, process, and quality standards.	
Performance	o Stakeholders are involved in reviewing performance retrospectively o Efficiency measures (cost and timeliness) link resources consumed and results achieved o Program results are linked to the FHWA and DOT performance plans o Performance is documented in an annual report	o 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.

RD&T Program Reviews, at which modal administrations discuss their R&T programs and priorities, are held at the DOT level by the RD&T Program Review Working Group, chaired by the Research and Innovative Technology Administration (RITA). The RD&T Program Review Group reports to the RD&T Planning Team, which includes the Associate Administrators for RD&T in the operating administrations, and the RD&T Planning Council, which is chaired by the RITA Administrator and comprises the heads of the operating administrations, the Under Secretary for Policy, and other senior DOT leaders. At these reviews, modal administrations show how they are implementing the Department's RD&T Strategic Plan, and applying the Office of Management and Budget's research and development investment criteria. The reviews also encourage collaboration and help prevent unnecessary duplication of effort across modes.

In FY 2007 the focus of the annual reviews was on RD&T evaluation practices. The objective was to document evaluation practices, along with evidence of implementation, as part of the Department's response to the findings of GAO-06-917 report on *Opportunities for Improving the Oversight of DOT's Research Programs and User Satisfaction with Transportation Statistics*. The FHWA's program was reviewed in February 2007.

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 improve mobility on our nation's highways through national leadership, innovation, and program delivery. It contributes to achievement of the Department's and agency's six strategic and organizational goals: safety; reduced congestion; global connectivity; environmental stewardship; security, preparedness and response, 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), and other groups formed to provide advice on specific designated programs. For

example, the TRB Pavement Technology Committee provides advice on R&T in the areas of concrete pavements, asphalt pavements, and pavement materials.

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 Department's and agency's strategic goals.

In addition, external experts 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.

Awarding Contracts Competitively. 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 applicant 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 conducted as a matter of routine, 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:

Research & Technology Coordinating Committee (RTCC): 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. This advice takes the form of letter reports to the Administrator and TRB Special Reports. RTCC membership includes top-level administrators, researchers, and practitioners from state governments, academia, and industry. The RTCC is scheduled to meet twice in FY 2009 and issue a letter report to FHWA documenting its findings and recommendations. The RTCC also plans to issue a special report evaluating the research programs authorized by SAFETEA-LU in terms of the Basic Principles Governing Research and Technology Investments, contained in Section 5201 of SAFETEA-LU.

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 relevance, 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 on track toward providing an appropriate knowledge base for achieving agency goals. The reviews focus on enhancing the quality of work performed in the labs (quality) but also address whether the work supports the goals of the agency and meets customer needs (relevance) and include 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. In response to the panel's observation that "There are standards for collecting, storing, and analyzing data, etc. These need to be documented," 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 2009 include: the Structures Lab, the Photometric and Visibility Labs, and the Concrete Labs.

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

Just as "relevance" means both relevance to the customer and relevance to the mission and goals of the agency, FHWA looks at performance both in terms of customer satisfaction and in terms of progress towards the goals.

Customer Feedback: The FHWA measures and tracks progress in deploying market-ready technologies and innovations that improve highway safety, reduce congestion, and streamline the environmental process. In addition, 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.

A nationwide Partner Satisfaction Survey was conducted in August 2006. It covered State DOTs, MPOs and local governments, and major transportation organizations, such as AASHTO. It will be repeated in FY 2009 based on a 3-year cycle. This single survey approach differs from the first partner satisfaction survey of FHWA State partners that was conducted in four waves during 2003 and 2004. The Partner Satisfaction Survey

measures what FHWA's partners' value in how we deliver the federal-aid program. It focuses on program delivery, technical assistance, technology and innovation deployment, and national policy leadership. The survey will help FHWA identify areas for improvement, and areas where they are "on target."

Goal Indicators: Because R&T are seen as tools for achieving the Department and agency's strategic goals, the overall performance measures for R&T are the goal indicators (highway related fatalities, pavement condition, etc.) Changes in goal indicators help FHWA determine whether its R&T activities are focusing on the "right things". In addition, research managers track outputs, cost and timeliness (efficiency measures). The efficiency measures link resources consumed and results achieved. These measures also enable FHWA to determine whether the R&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.

RD&T Annual Performance Report: The FHWA RD&T 2006/2007 Performance Plan and the FY 2006 Research Project Status Summary are published and available on line at www.tfhrc.gov. The Research Project Status Summary documents FHWA's performance retrospectively against outputs previously defined and published in the 2006/2007 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.