

## FEDERAL HIGHWAY ADMINISTRATION New Jersey Division Office

# FY2007Strategic ImplementationPlan

FEDERAL HIGWAY ADMINISTRATION

## FY 2007 Strategic Implementation Plan

## **FINAL**

New Jersey Division Office December 14, 2006

## Table of Contents

#### OVERVIEW

3

CHAPTER 1

Facts, System Trends and Projections 10

#### **CHAPTER 2**

Strategic Implementation Plan Goals	16
Goal 1- Safety	17
Goal 2- Mobility and Productivity	21
Goal 3- Global Connectivity	26
Goal 4- Environment	29
Goal 5- National Security	33
Goal 6- Organizational Excellence	36

#### APPENDICES

1-A:	Resource Allocations Table	40
<b>2-A</b> :	Federal Oversight	41
3-A:	NJ Risk Assessment Procedure	42

## Overview



The Federal Highway Administration (FHWA) New Jersey Division Office fiscal year (FY) 2007 Strategic Implementation Plan outlines the Division Office near term strategy to achieve the multi-year goals and objectives in the FHWA and U.S. Department of Transportation (USDOT) strategic plans, as well as the goals and objectives developed in collaboration with our customers/partners at the local level.

The Federal Highway Administration (FHWA) was established in 1967 as one of the operating administrations within the United States Department of Transportation. The agency has been in existence since 1893. Prior to 1967, the agency was known by other names such as the Office of Road Inquiry and the Bureau of Public Roads. Through the years, our name has changed, but our dedication to providing world-class transportation in America has remained the same.

The organizational structure of FHWA consists of the Washington Headquarters, the Resource Center, 52 Division offices and the Federal Lands Highway offices. Approximately one half of FHWA's employees are located in Washington, D.C., where legislation and regulations are developed. The Resource Center provides technical expertise and serves the technical needs of the Division offices. The center acts as an internal consultant to the Divisions on technical issues. The Division offices are located in the 50 States, plus the District of Columbia and Puerto Rico. These offices work closely with their respective State Transportation Agency to implement the Federal-aid program. The Federal Lands Highway offices handle road construction projects on Federal and publicly owned lands such as National Parks. There are three Federal Lands Highway offices and numerous project offices across the nation.

Under the Federal-aid highway program, FHWA does not decide which roads and bridges will be improved or who will do the work. Instead, the Federal-aid highway program is a federally assisted, State-administered partnership. The State Transportation Agencies, working with local officials and acting through metropolitan and statewide planning processes, determine where the Federal funds should be spent. FHWA provides technical assistance and approvals at key phases of the project, including compliance with related laws such as the National Environmental Policy Act.

#### Strategic Direction:

The FHWA Vision is "Improving Transportation for a Strong America."

The FHWA Mission is "Enhancing Mobility Through Innovation, Leadership, and Public Service."

#### Role of the FHWA:

#### Leaders for National Mobility

The role of FHWA is to carry out our mission by providing leadership, expertise, resources, and information in cooperation with our multi-modal transportation partners at all governmental levels. Our success depends upon each FHWA employee's ability to provide leadership in his or her daily activities, program responsibilities, and personal contacts.

#### Stewards for National Highway Programs

The strategic implementation plan provides the necessary strategic focus and direction in the delivery of financial and technical assistance to our partners and stakeholders responsible for planning, constructing, improving, preserving, and operating America's highway system. Every unit in the FHWA contributes to the strategic implementation plan through the delivery of the Federal-aid highway program (FAHP). Accomplishment of the national strategies and objectives can only be achieved through an efficient and effective program delivery system. It is through this system that the FHWA provides national leadership, ensures the resources entrusted to the Agency are used in the public interest, protects the fiscal and technological integrity of the program, and maintains the public trust.

#### Innovators for a Better Future

To meet the challenges ahead, transportation managers will need the benefits of technology and innovation that only a carefully considered, well-developed, and clearly communicated Research and Technology (R&T) program can provide. The FHWA meets these challenges by realizing its full potential as a leader in the transportation research and technology field.

#### Strategic Goals:

Six strategic goals--Safety, Mobility and Productivity, Global Connectivity, Environment, National Homeland Security, and Organizational Excellence--are addressed in the FY 2007 NJ Strategic Implementation Plan.

- Safety (SF) --Continually improve highway safety.
- Mobility and Productivity (MP) --Preserve, improve, and expand the Nation's highway transportation system while, at the same time, enhancing the operation of the existing highway system and intermodal connectors.
- Global Connectivity (GC) --Promote and facilitate a more efficient domestic and global transportation system that enables economic growth.
- Environment (EN) --Protect and enhance the natural environment and communities affected by highway transportation.
- National Security (NS) -- Improve highway security and support national defense mobility.
- Organizational Excellence (OE) -- Advance FHWA's ability to manage for results and innovation.

#### Vital Few:

The Vital Few (VF) is the key areas with performance gaps that must be addressed for the FHWA to be successful in the short term. Achieving performance improvements in the following priority areas will require greater emphasis on our part during FY 2007.

- Safety
- Congestion Mitigation
- Environmental Stewardship and Streamlining

#### Key Business Processes

The FHWA has identified the following core business processes in the Division offices:

- National Policy Leadership
- Program Delivery
- Technical Assistance
- Technology Deployment
- Research and Development
- Mission Support

Most of the national strategies and activities identified in the strategic implementation plan require the execution of the key business processes. Our partners and customers rely on the NJ Division Office to provide front-line program delivery and technical assistance, including but not limited to, planning and environmental support, design, construction, asset management, civil rights, engineering services, technology transfer, research, and technical expertise. In addition, we assist our partner agencies in understanding and complying with the laws and requirements that are a prerequisite to using FAHP funds.

#### Why Does the New Jersey Division Office Exist?

The New Jersey Division office contributes to the national goals by focusing on the following products and services:

#### Customer Service

- Offering cost-effective options to solve customer problems.
- Ensuring customers are knowledgeable of FHWA policies and procedures.
- Informing customers of FHWA's limitations based on law and regulations.
- Providing fair and equitable treatment for all customers.
- Being responsive to customer needs.
- Developing effective partnerships.
- Provide timely technical assistance to all customers.

#### Quality

- Ensuring the highest quality project plans which incorporate Context Sensitive Solutions.
- Matching new technologies to identified needs.
- Sharing information on new recommended practices. •

#### Measurable Results

- . Improving the operation of New Jersey's transportation system.
- Improving the condition of New Jersey's transportation infrastructure.
- Improving safety on New Jersey's transportation system. •
- Streamlining the project delivery system. •
- Enhancing the environment.
- Efficiently and effectively using Federal-aid funds. •

#### New Jersey (NJ) Risk Assessment Process

Nationally, Federal Highway Administration implemented a quantitative Risk Assessment Process to identify the Top Risks within a given state. Also, FHWA HQ requested information on how New Jersey prioritizes core elements. Core elements are specific programs or activities that are subject to FHWA oversight. In addition in FY 2006, the Division was in the process of changing our approach to risk to better align our resources with top concerns in New Jersey. Interim procedures were created in fiscal year 2006 to meet the requirements issued by FHWA HQ (See Appendix 3-A). In FY 2007, the Division Office will revise the Risk Assessment Procedures to seek input from our partners at the New Jersey Department of Transportation (NJDOT). Any program reviews, process reviews/product evaluations, program evaluation techniques, and continuous process improvement initiatives developed through the Risk Assessment Process are then documented as activities in Teams' Work Plans or individual performance objectives.

<u>ELEMENTS</u>					
CORE ELEMENTS					
1. Funds Management	16. Internal EEO/AA	31. Planning-NEPA linkage	46. Title VI		
2. Locally Administered Project		32. Managing Traffic Under Unusual			
(Construction)	17. Bridge Construction**	Traffic Conditions	47. Planning Conformity		
3. Planning-STIP Development	18. Acquisition/Appraisal	33. DBE	48. Federal-aid Billing		
4. Management Systems and Systematic			49. Planning -Travel Demand		
Process	19. PS&E	34. Data Collection/Inventories	Model		
	20. Managing Traffic Under		50. Planning-Congestion		
5. Relocation Assistance	Normal Traffic Conditions	35. Environmental Stewardship	Management Process		
			51. Consultant Selection &		
6. Pavement Smoothness**	21. Focused Safety Programs	36. Strategic Highway Safety Plan	Administration		
7. Highway Safety Improvement Program	22. Pavement Design	37. Highway Bridge Program**	52. Interagency Coordination		
			53. EEO Contractor		
8. Project Authorization/Mods.	23. NBIS**	38. Bridge and Structure Design	Compliance		
9. Material Quality Assurance (Construction)	24. Environmental Process	39. ADA/504	54. Traveler Information		
10. Program Management	25. Roadway Design	40. Context Sensitive Solutions	55. Planning/NEPA Linkage		
11. Strategic Planning and Performance	26. Locally Administered Project	41. Transportation Demand	56. Planning-Public		
Measure	(Finance)	Management (TDM)	Involvement		
			57. Planning-Fiscal		
12. Programming and Financing	27. Emergency Preparedness**	42. Traffic Records System	Constraint		
13. Contract Administration	28. Bridge Management**	43. Research**	58. Highway Beautification		
14. Geotechnical Eng.**	29. Foundation for Operations	44. Mandated Safety Programs	59. Major Projects		
	30. Material Quality				
<ol> <li>Hydraulic Engineering**</li> </ol>	(Pavements)**	45. ITS**			

## PRIORITIZED PROGRAM DELIVERY IMPROVEMENT TOOL (PDIT) CORE

\*\* Non-PDAT Core Element.

<u>RISK RESPONSE STRATEGY</u>				
P R O G R A M A R E A	CORE ELEMENTS	RISK STATEMENT	R I S K R E S P O N S E S T R A T E G Y	
Planning	Planning-STIP Development	(1) Need for a transparent and universal asset management approach to planning and programming. Need to link projects programmed in the STIP with established performance goals.	Accept (active)- develop contingency plan	
Transportation System Preservation	Management Systems and Systematic Process	(2) Need for a "systematic process" to prioritize the use of federal funds.	Accept (active)- develop contingency plan	
Finance	Funds Management	(3) Need to resolve the root cause of inactive Federal-aid projects.	Mitigate- perform FIRE activities; continue monitoring Financial Management Improvement Program (FMIP)	
Safety	Highway Safety Improvement Program	(4) Need to have projects programmed and authorized after the safety needs have been identified through the HSIP.	Accept (active)- develop contingency plan	
Pavement	Pavement Smoothness	(5) Need to increase enforcement of IRI specification and construction monitoring to improve quality, increase life of pavement, and reduce life cycle costs.	Accept (active)- proposed process review	
Pavement	Pavement Smoothness	(6) Increased and consistent funding for preventive pavement maintenance to reduce deterioration of New Jersey's pavement and increase efficient use of Federal-aid funds.	Avoid- work resolutions of risk through Asset Management	
Construction	Locally Administered Projects	(7) Improvement of the Local-aid procedures will result in greater consistencies among district offices.	Mitigate- perform training & further development of procedures	
Finance	Funds Management	(8) NJDOT needs to develop a systematic process for the collection and compilation of essential data for the preparation of financial plans in order to meet the requirements of Section 1904 of SAFETEA-LU on projects greater then \$100million.	Accept (active)- develop contingency plan	
Safety	Highway Safety Improvement Program	(9) NJDOT uses weighted severity index to prioritize projects and therefore may not be addressing fatal and serious injury crash locations.	Accept (passive)- continue monitoring projects until sufficient data is developed	
Right of Way	Relocation Assistance	(10) Need for adequate documentation of relocation assistance to support conclusions of fair and equitable treatment and support for payments.	Mitigate- propose process review	

#### NJ Process Reviews

The following are three areas which the NJ Division plans on conducting process reviews:

	Tentative Milestone Dates		
Process Reviews	Create Work Plan	<u>Complete</u>	
		<b>Review</b>	
Right of Way/F.I.R.E- Fulfillment of grant review requirements	Fall 2006/Winter 2007	Spring 2007	
in F.I.R.E.			
Local Aid- Construction- Evaluate methods to improve local	January 2007	June 2007	
aid procedures during construction.			
Pavement- Evaluate IRI specifications and construction February 2007 July 2007			
monitoring on transportation projects.			
<b>F.I.R.E-</b> Evaluate labor cost for NJDOT billing.	February 2007	May 2007	
Prestressed Concrete- Review of the fabrication procedures for	November 2006	October 2007	
prestressed concrete.			

As the process reviews advance during fiscal year 2007, a more definitive time schedule will be created.

#### NJ Stewardship and Oversight Program

FHWA is charged to be stewards of the public funds entrusted to us. The Division Office must ensure that the Federal-aid highway program in NJ is delivered in a method consistent with all applicable federal laws, regulations, and policies in an efficient and effective manner. To accomplish this task the Division Office performs a number of stewardship and oversight activities. At the project level, Division personnel perform financial reviews at time of authorization, PS&E reviews, construction inspections, technical reviews, and etc. At the program level, Division personnel are involved in process reviews, certifications, listening sessions, risk assessments, and etc. In addition, the Division is heavily involved with state and local developmental meetings such as the Capital Program Committee meeting where fiscal year transportation projects are discussed and approved at key stages of development.

#### NJ Strategic Implementation Plan

The role of the Division Office is to assure that the New Jersey portion of the Nation's transportation system meets the needs of all citizens. This is accomplished through our assistance to the State of New Jersey in delivering a quality transportation program through the Federal-aid highway program. To help accomplish these goals and to determine our performance, the Division office develops a Strategic Implementation Plan each year through a collaborative process utilizing teams comprised of Division and NJDOT staff. Input is gathered from the FHWA National Strategic Implementation Plan, our partners at the NJDOT, MPOs, and Division Office Staff. This collaboration helps ensure the goals and measures included in the plan are consistent with the State and MPO Capital Investment Strategies, Regional Transportation Plans and Transportation Improvement Plans. The National Plan identifies the National Goals and Objectives and activities that will be required of the Division Office.

The Division Office has identified 18 performance measures that will form the basis of our collective success. 7 of the 18 performance measures represent "Key Performance Measures" Senior Staff have formed as a realistic approach f or achievement during FY 2007. The "Key Performance Measures" represent a controllable measurement in determining the collective success of the Division Office for team awards, performance awards, and office recognition. All 18 performance measures will be utilized for trends and included within the mid-year and annual reports. However the 7 Key Performance Measures will be exclusively tracked during the FY 2007 year on a monthly basis and discussed in the senior staff meetings for progress results.

#### FY 2007 Key Performance Measures:

- 1. Implement countermeasures at 20 high crash locations (intersection, roadway departure). (FY 2005 Baseline: 4)
- 2. Implement countermeasures at 5 high crash pedestrian crossing locations. (FY 2005 Baseline: 0)

\*High crash locations are defined as locations that generated from the Highway Safety Improvement Program.

- 3. Percent of travel on NHS with IRI of <95 inches per mile (FY 2005 baseline is 36.0%) (FY 2007 target is 40.0%).
- 4. Reduce the number of scour critical bridges by 25 percent by 2011 (FY 2006 Baseline: 155 scour critical bridges) (FY 2007 target is 5% or 9 bridges).

#### 2007 NEW JERSEY STRATEGIC IMPLEMENTATION PLAN

- 5. Limit the average incident duration time to 1.75 hours in FY 2007. (FY2005 Baseline:2.08)
- 6. Reduce the running balance of inactive projects reported by FMIS using FIRE criteria by 25.0% in 2007. (FY 2006 Baseline: 348 projects).
- 7. Complete all process reviews on schedule. (FY 2007 target is 3 projected process reviews).

Although the remaining 11 performance measures are vital to the Division office, the factors determining success will occur over several years. In addition, several of the performance measures arose for reporting purposes and managing of the Federal-aid program. The Division office will utilize these performance measures for internal evaluation of performance in a long-term capacity. As stated previously, all performance measures will be utilized for trends and included within the mid-year and annual reports. The remaining performance measures are provided below.

- 8. Reduce the percentage growth of total deficient bridge deck area to zero by 2011 (FY 2005 Baseline: 2,494,886 square meters deficient) (FY 2007 target is 2.0% reduction or 2,396,090 square meters).
- All EIS and EA projects have schedules established and entered into the Environmental Document Tracking System.
- 10. Decrease median processing time for all Environmental Impact Statements (EISs) and Environmental Assessments (EAs). Reduce median time by 5% in FY 2007. (FY 2007 targets are 36 and 12 months respectively).
- 11. Track cost growth greater than 10% on \$25 million projects. (FY 2006 trend of average growth rate is 11%).
- 12. Track and report traffic related fatalities and serious injuries.
- 13. Track and report intersection related fatalities and serious injuries.
- 14. Track and report pedestrian related fatalities and serious injuries.
- 15. Track and report roadway departure related fatalities and serious injuries.
- 16. Integrate FHWA's Highways-for-Life concept with NJDOT innovative methods.
- 17. Achieve a rate of 50% of Engineer's Estimates within 10% of the Award amount. (FY 2006 Baseline: 38%)
- Increase the use of the Asset Management Systems to development projects included in the STIP (i.e. bridge and pavements).



## Facts, System Trends and Projections

Figures I thru VIII contain charts tracking some of our key performance indicators.



Sources: New Jersey Statewide Transportation Improvement Program, DRAFT FY 2007-2010

Figure 1



Sources: NJDOT, Factbook 2005 NJDOT, 2004 National Highway System Route List

Figure 2



Figure 3



Source: National Highway Traffic Safety Administration (NHTSA), Fatal Accident Reporting System

Figure 4



Source: National Highway Traffic Safety Administration (NHTSA), Fatal Accident Reporting System

Figure 5



Figure 6



Figure 7



Figure 8



Source: U.S. Census Bureau, American Community Survey

Figure 9



Source: U.S. Census Bureau, American Community Survey

Figure 10



Source: FMIS as of 10/4/06



## Chapter

## **Strategic Implementation Plan Goals**

Six broad policy goals have framed this plan:

- **Safety**-Improve safety for system users.
- Mobility and Productivity improve mobility of people and goods.
- **Environment**-enhance sensitivity to the environment.
- Global Connectivity-improve international connectivity.
- National Security-increase security of the system.
- Organizational Excellence-improve organizational performance.

In this chapter, we explore these goals and the descriptions of performance targets and staff actions. Within these goals, the Administration has identified the vital few goals: Safety, Congestion Mitigation, and Environmental Stewardship and Streamlining. We break each goal into discrete objectives, and provide metrics and performance measurements over time to track our progress in achieving these goals. We include input from each of the Division's teams, in addition to discussions with the NJDOT, NJTPA, DVRPC, SJTPO, and other relevant stakeholders.

In addition to charting the Division's own progress in meeting the Strategic Implementation Plan goals, the plan defines a complimentary set of measures to gauge the performance of the entire statewide transportation system as improved by the projects implemented through the New Jersey Statewide Transportation Improvement Program for Fiscal Years 2007-2009. These system performance measures include safety ratings, pavement and structures conditions, and technology deployment.

## **Safety**

<u>Goal:</u> Continually reduce the frequency and severity of crashes statewide.

The Federal Highway Administration's Strategic Implementation Plan for fiscal year 2007 identifies two national performance objectives for safety with respective performance measures and strategies as outlined below. The performance objectives, measures and strategies (i.e. actions) of the New Jersey Division Office align with and support the National Strategic Implementation Plan, while encompassing the objectives, measures and actions of our State and local partners. New Jersey remains a focus state for pedestrian safety, as more than 20% of NJ's traffic fatalities are pedestrian related, whereas nationally, approximately 11-12% of traffic fatalities involve pedestrians.

#### National Performance Objectives

<u>SF1:</u> Implement comprehensive, integrated and data driven safety programs at the Federal, State, and non-state owned roadway systems. <u>SF2:</u> Implement countermeasures to reduce highway-related fatalities (Vital Few).

Division Performance Objectives & Measures

- Implement countermeasures at 20 high crash locations (intersection and roadway departure). (FY 2005 Baseline: 4) **(SF2)**
- Implement countermeasures at 5 high crash pedestrian crossing locations\*. (FY 2005 Baseline: 0) (SF2)
  - \*High crash locations are defined as locations that are generated from the Highway Safety Improvement Program.
- Track and report traffic related fatalities and serious injuries. (SF1)
- Track and report intersection related fatalities and serious injuries. (SF2)
- Track and report pedestrian related fatalities and serious injuries. (SF2)
- Track and report roadway departure related fatalities and serious injuries. (SF2)

SAFTEA-LU places significant emphasis on safety by establishing extensive new resources and opportunities to advance highway safety. The biggest change is that SAFETEA-LU elevated the Highway Safety Improvement Program (HSIP) to a stand alone core Federal-aid highway safety program. The HSIP creates a positive agenda with a renewed call for data-driven, strategic highway safety programs focusing on results and provides increased funding, as well as flexibility in State funding for safety. In addition, two new programs were created under SAFETEA-LU: Safe Routes to School and the High Risk Rural Roads Program. A large part of NJ's FY07 SIP will be dedicated to implementing the provisions of SAFETEA-LU.

Traffic records data is the essence of any successful safety program. The NJDOT has taken significant strides to improve the accuracy, completeness, timeliness and availability of New Jersey's crash data over the past few years. However, the years to come will focus on NJ's traffic records system as a whole and not just the crash records portion of that system. SAFETEA-LU provided a funding opportunity for States to implement the strategies and recommendations included in their Traffic Records Strategic Plan through NHTSA's State Traffic Safety Information System Improvements Grants. NJ submitted an application to NHTSA containing seven projects totaling \$750,000 to \$2,025,000, depending on the amount of award. Provided below is a summary of these projects, as well as additional actions that will take place throughout federal fiscal year (FY) 2007 to continue the improvement of NJ's traffic records.

#### Traffic Records Improvements

- ✤ Expansion of pilot EMS electronic patient care reporting system
- ✤ EMS electronic patient care report system for EMS volunteers
- ✤ Co-location of fatal crash data units
- ✤ Integrate EMS and crash records data
- ✤ GPS units for police departments
- Vehicle identification number validation program
- Blood alcohol content export program
- Electronic data capabilities will be piloted with 3 police departments. Upon rollout of new NJTR-1, electronic data transfer will be made available to all.
- Develop and disseminate (with training) crash data analysis software that can be used by state, regional, county and local engineers, planners and police departments.

SAFETEA-LU also requires States to develop and implement Strategic Highway Safety Plans (SHSPs), in consultation with other key State and local highway safety stakeholders. NJ began the development of a Comprehensive Strategic Highway Safety Plan prior to the passage of SAFETEA-LU. NJ's CSHSP is in the final development stages and approval and implementation of the plan will be a large part of our efforts in FY07. The goal of NJ's CSHSP is to:

#### Continually reduce the number and severity of crashes on New Jersey's roadways

Overall Performance Indicators				
Year	Total Crashes	Fatal Crashes	Injury Crashes	
2003	283,627	649	76,627	
2004	282,252	666	75,851	
2005	274,029	678	72,028	

Source: NJDOT Crash Records (excludes private and US government property and State/County Park and Institutions)

A detailed analysis of NJ's crash data and a survey of safety stakeholders assisted in identifying areas where we should focus our efforts to best achieve this goal. These emphasis areas and respective performance indicators are illustrated below. These performance indicators will be monitored on an annual basis to evaluate trends and countermeasure effectiveness.

Performance Indicators									
Emphasia Area	2003 2004				2005				
Objective	Total	Fatal	Injury	Total	Fatal	Injury	Total	Fatal	Injury
Objective	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes	Crashes
Reduce Impaired Driving	9,656	108	3,924	9,690	83	3,812	9,729	111	3,856
Reduce Crashes									
Involving Young Drivers	60,789	120	17,669	61,972	106	17,644	59,547	95	16,708
Prevent and Minimize Roadway Departure Crashes									
Keep Vehicles on the Roadway	21,477	193	7,838	21,793	225	8,122	22,310	224	8,107
Minimize Consequences of Leaving Roadway	57,576	377	19,009	57,357	363	19,009	56,142	378	18,278
Head On Crashes	6,489	76	2,573	6,124	98	2,524	5,740	83	2,312
Reduce Pedestrian, Bicycle, Rail and Vehicular Conflicts									
Pedestrian	5,917	132	5,232	6,100	152	5,370	5,977	162	5,279
Bicycle	2,651	10	2,202	2,715	15	2,265	2,583	15	2,166
Highway Rail Incidents	50			43			44		
Increase Driver Safety Awareness	-	-	-	-	-	-	-	-	-
Improve the Design and Operation of Intersections	124,138	223	37,482	101,418	177	32,042	109,334	147	32,780
Sustain Safe Senior Mobility	41,120	139	11,682	42,050	134	11,731	41,464	121	11,096
Curb Aggressive Driving	68,733	221	21,909	69,108	193	21,912	69,422	205	21,435

Source: TSRC – NJDOT Crash Records (Green indicates crashes decreased as compared to the previous year, while red indicates an increase in crashes)

A multitude of strategies and their respective actions were identified for each of the above emphasis areas. NJ's CSHSP will be implemented over a four to five year period. Therefore, only those items that are determined to be implemented in the next year will be included in the FY 2007 strategic implementation plan. Subsequent year's actions will be included in future strategic implementation plans.

The FHWA-NJ Division office works collaboratively with the NJDOT, MPO's, Division of Highway Traffic Safety, New Jersey State Police, Rutgers University, local government & law enforcement, and other safety-related agencies to improve the safety of New Jersey's roadways. Some of the specific actions that will occur in FY 2007 are described below.

#### Division Actions

- Continue the development and dissemination of "A Safety Update...", the NJ Division Safety newsletter.
- Coordinate the development and dissemination of revised materials for the 2007 12 Months of Traffic Safety Public Outreach Campaign.
- Conduct safety presentations at conferences, meetings and schools.
- Assist NJDOT to implement the new Work Zone Final Rule.
- Assist NJDOT develop marketing plan to increase driver safety awareness with assistance from HQ.
- Assist NJDOT with the implementation of SAFETEA-LU requirements (SRTS, HSIP, HRRR, 5%).
- Provide technical assistance to safety partners and citizens.
- Promote roundabouts as a viable intersection design alternative.
- Promote Road Safety Audit (RSA)'s at the PE and Design stages.
- Host/sponsor the following courses: Designing Streets for Pedestrians, Landscaping for Safety

#### NJDOT/MPO Actions

- Approve CSHSP and implement strategies identified for each emphasis area.
- Implement strategies and/or countermeasures identified in the Pedestrian Safety Action Plan.
- Develop a Pedestrian Safety Corridor Program which identifies state highway corridors with high incidents of ped crashes/fatals and recommend safety improvements.
- Implement countermeasures at 8 high crash pedestrian locations.
- Implement countermeasures at 20 high crash intersection locations.
- Implement countermeasures at 6 high crash roadway departure locations.
- Conduct 3 safety impact team reviews of designated safe corridors and implement recommendations.
- Implement 3 safety projects on local roads through the local federal safety program.
- Develop and Implement SRTS and HRRR Programs.
- Continue implementation of median crash crossover prevention program

## **Mobility and Productivity**

<u>Goal:</u> Preserve, improve, and expand the Nation's highway transportation system while, at the same time, enhancing the operation of the existing highway system and intermodal connectors.



Route 4 & 17 Interchange Project

#### **Summary**

The basis for any transportation system is the efficient movement of people and goods with relative ease in a reliable manner. Strategies for ensuring mobility must consider projections of future growth and the location where this new growth will occur. We need

to focus on the corridors in New Jersey in which growth will create the greatest demands on the regional systems; the need to maintain the current system even as the State experiences ever increasing demands for new improvements; and the need to coordinate and operate the multiple state, regional and local elements of the transportation system as a single integrated network are major challenges. Users want to reach destinations efficiently, with a reasonable and predictable investment of time and money. Users want convenience, with no unreasonable effort required, and a good choice of possible means of transportation. Users are also interested in a safe, comfortable, and even pleasant trip. A truly effective system puts a user's desired destination within "reach," making them accessible.

#### National Performance Objectives

<u>MP1</u>: Mitigate congestion and improve system reliability through actions targeted at key causes of congestion (Vital Few).

<u>MP2</u>: Mitigate the impacts of congestion by fully integrating system management and operations into project and program delivery decisions. (Vital Few).

**MP3:** Effectively use asset management principles to manage and allocate resources to improve our Nation's transportation system's performance.

<u>MP4:</u> Provide longer lasting highway infrastructure thru improved research, design, and quality of construction, system preservation, and size and weight enforcement.

**MP5:** Improve pavement smoothness characteristics.

<u>MP6</u>: Accelerate the adoption of innovation and new technology in construction to significantly improve safety and quality and reduce congestion due to construction.

<u>MP7</u>: Increase the use of non-traditional, i.e., non-motor fuel based revenue sources for system management and expansion. Sources will include Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance, Grant Anticipation Revenue Vehicle (GARVEE) bonds, and private activity bonds.

#### Division Performance Objectives

- Reduce non-recurring congestion from events such as traffic incidents, weather, and work zones. (MP1)
- Mitigate overall impacts of congestion. (MP2)
- Provide longer lasting highway structures (bridges and pavements). (MP4)
- Develop improved processes to provide smoother, longer lasting pavements through new technology and pavement preservation. **(MP5)**
- Deploy innovations using the Highways-for-Life concept. **(MP6)**

#### Division Performance Measures

- Limit the average incident duration time to 1.75 hours in FY 2007. (FY2005 Baseline:2.08) (**MP1**)
- Reduce the percentage growth of total deficient bridge deck area to zero by 2011 (FY 2007 target is 2%). (MP3)
- Reduce the number of scour critical bridges by 25 percent by 2011 (FY 2007 target is 5%).(**MP4**)
- Percent of travel on NHS with IRI of <95 inches per mile (FY 2005 baseline is 36.0%) (FY 2007 target is 40.0%).(MP5)
- Integrate FHWA's Highways-for-Life concept with NJDOT innovative methods. (MP6)

The vitality of the State's economy has both increased daily travel and spotlighted weaknesses in the transportation system. Signs of how much work must be done to achieve the mobility goal include overcrowded transit service, the growing congestion on regional freeways and local systems, the lack of transportation alternatives in some congested corridors, underutilized ridesharing programs, and the difficulty in getting to and from the State's highways on local connectors. Even localized congestion within major metropolitan centers has increased as new development continues to outpace capacity expansion.

#### Stakeholder Input

Concerning Mobility and Productivity, several sections within NJDOT provided input.

- Transportation conditions such as congestion, aging infrastructure, and reliability continue to deteriorate.
- The need to invest in maintaining the State's highways and bridges that have already been constructed is universally noted.
- There is a need to improve the performance of the existing transportation system and services (signal timing, improved inter-modal connections, etc.)
- Congestion has been identified as the most significant transportation problem.
- A stronger, more committed preventive maintenance program for the Interstate system is needed in New Jersey.
- Innovative contracting methods should be explored.
- New technology needs to be implemented to improve the efficiency of the system.

Division Actions	<u>Team</u>
<ul> <li>Reduce delays associated with recurring and non-recurring congestion through the use of ITS Technologies.</li> </ul>	Technology
• Increase the use of prefabricated bridge elements and systems and accelerated construction techniques for bridges.	Structures
• Implement a preventive maintenance program for bridges.	Structures
• Develop action plans for all State-owned, scour critical bridges in accordance with the NBIS regulation.	Structures
• Perform vulnerability assessments for extreme events for critical NHS bridges and tunnels.	Structures
• Ensure that Pontis is used as a tool for optimizing bridge investments.	Structures
Encourage NJDOT to continue to implement the recommendations of the Pavement     Smoothness Action Plan.	Technology
• Provide technical assistance and training to NJDOT on the Highways-for-Life program.	Technology
• Increase the number of DBE firms awarded prime and or subcontracts for the first time.	Civil Rights Specialist
Encourage NJDOT to implement the recommendations of the National Center for Pavement Preservation (NCPP) Report.	Technology

#### NJDOT/MPO Actions

- Improve the reliability of the system so that users can expect consistent travel times.
- Implement the 511 traffic information system.
- Improve travel time in congested corridors.
- Implement low-cost, quick-turnaround projects to address congestion and safety concerns.
- Explore innovative solutions such as roundabouts, CSS, etc.
- Preserve the condition of the exiting system.
- Implement perpetual pavement design.
- Continue to implement the Pavement Smoothness Action Plan.
- Coordinate the Hyper build program with the Highways-for-Life Program.
- Implement the Scour Action Plan and develop bridge-specific plans.
- Encourage the development of a Pavement Management System for Local Government.
- Implement the recommendations contained in the National Center for Pavement Preservation (NCPP) Report.

Program/Project	FY 2007
Pavement Preservation – Sect. II, Pg. 81	\$3,000,000
Resurfacing Program – Sect. II, Pg. 92	\$60,000,000
Route 1&9 Secaucus Road to Broad Avenue (28) - Sect. II, Pg. 141	\$25,935,124
Emergency Service Patrol – Sect. II, Pg. 40	\$ 10,100,000
Statewide Incident Management Program – Sect. II, Pg. 110	\$ 2,000,000
Rte 18 Rte 1 to Northeast Corridor Amtrak Line – Sect. II, Pg. 162	\$34,477,000

Illustrative and partial listing of NJDOT Mobility projects from current STIP:

Sources: New Jersey Statewide Transportation Improvement Program, DRAFT FY 2007-2010

New Jersey commits a significant portion of its resources to maintaining the State's existing infrastructure (fix it first). Highways and bridges need constant repaving and repair; signal timing plans need to be adjusted over time; cracks in sidewalks and bike paths must be remedied. All of this work requires ongoing funding, which must be part of the State's overall transportation program.

The public's frustration with high levels of congestion has created greater interest in finding near-term solutions at lower costs. The plan's mobility strategies strike a balance of large-scale initiatives that can meet future demand, and smaller, faster, less expensive fixes to current problems. This plan supports managing the existing transportation system better and making it more efficient for its users.

The FHWA has consistently stressed the importance of the systems approach to operating transportation facilities and services. Programs that support this system operations concept continue to grow and evolve. These include NJDOT's traffic operations centers, emergency service patrols to help clear incidents, signal equipment updating, and traveler information services. The variety of projects that use electronics, communications or information processing, or intelligent transportation systems (ITS), have been in use in New Jersey for many years. The State and regional ITS architectures are well underway, and integration is proceeding. This architecture will guide future project development, using the regional, state, and national ITS frameworks, so that new transportation services and facilities can be better coordinated to enhance operations.

The New Jersey Division Office is committed to working with our partners to lessen the impacts of work zones on the traveling public. Past experience has demonstrated success in reducing congestion in work zones through various traffic mitigation techniques, such as enhanced public transportation services, websites, marketing campaigns, information centers, etc. Other efforts in this area include innovative contracting and accelerated construction techniques to deliver projects in a more efficient manner. The use of new technologies and techniques need to be implemented to be successful in delivering longer lasting and more efficient products.

The FY 2007 NJ Strategic Implementation Plan supports several approaches for improving mobility and productivity by:

- Assist the NJDOT in resolving implementation issues on deployment of the 511 traveler information system.
- Continue planning the implementation of the RIMIS (Regional Integrated Multi-Modal Information Sharing) project.
- Work closely with TRANSCOM, DVRPC ITS Technical Task Force, Incident Management Task Force (IMTF), Highway Operations Groups (HOGs), I-95 Corridor Coalition, and the Committee for a Smart New Jersey (CSNJ) to solve regional mobility issues.
- Implement a process with NJDOT for using the Regional ITS Architecture in project development.
- Develop countywide diversion routes for the last six counties.
- Promote the use of TRANSMIT and other probe based traffic monitoring technologies to measure travel times and delay and ultimately provide real-time traffic information to the system user.
- Improve traffic incident coordination and communications by implementing an Information Exchange Network (IEN) to link the NJDOT's Traffic Operations network directly to TRANSCOM.
- Implement Work Zone Safety Final Rule requirements
- Participate in evaluating of the performance of Stone Mastic Asphalt.
- Use rapid bridge construction technologies, especially prefabricated bridge deck systems.
- Implement a preventive maintenance program for bridges.
- Continue to develop and expand the use of high performance materials, including fiber reinforced polymer composites, as appropriate.
- Co-sponsor a workshop on High Performance and Self-Consolidating Concrete at Rutgers University in October 2007.
- Assist NJDOT in redesigning the Pavement Management System..
- Assist in implementing Action Plan for the finding of the National Center for Pavement Preservation (NCPP) Report.

## **Global Connectivity**

<u>Goal:</u> Promote and facilitate a more efficient domestic and global transportation system that enables economic growth.



**Summary** The productivity and efficiency of the transportation system is a major factor in sustaining the economic vitality of the State of New Jersey, the nation, and the global economy. New Jersey's regional economy has experienced a dramatic resurgence with the development and expansion of major inland port facilities in Newark, Elizabeth, Bayonne, and Jersey City. The region has multiple job centers, each with its own specialization within the larger economy, requiring an effective transportation system to promote exchanges in people, products and services between these centers.

New Jersey companies effectively draw from a regional labor pool, such that employees may live at considerable distance from their work locations due to either choice or housing options. Getting people to and from their homes and jobs will continue to be a major challenge; particularly as different job sectors grow and contract, with a constant rearrangement of commute patterns.

#### National Performance Objective

<u>GC1:</u> Improve travel time reliability for freight movements at Ports-of-entry and along corridors. <u>GC2:</u> Improve efficiency and reliability of goods and people movement at international border facilities.

#### Division Performance Objectives

- Sustain the economic efficiency of goods movement on the surface transportation system. **(GC1)**
- Reduce non-recurring congestion from events such as traffic incidents and work zones. (GC1)
- Increase reliability of the transportation system for the movement of freight. **(GC1)**

#### Division Performance Measures

- Delivery of transportation projects that increase the accessibility of major job centers to the region. (GC1)
- Incident management strategies for major truck routes; incident detection, emergency service patrols, freight priority, etc. (GC1)
- System delay; non-recurring congestion measures, etc. (GC1)

To remain competitive in the global economy, New Jersey must maintain the ability to quickly move people and cargo to other parts of the world by air, rail, land, and sea. The region's surface transportation links must be kept in balance and at pace with the air and sea terminal capacities for the entire system to work effectively.

#### Stakeholder Input

NJDOT, MPOs, and the New Jersey Public Survey provided the following insights into the goal of Global Connectivity.

- The high cost of housing forces employees to endure longer and longer commutes. This makes it difficult to attract and retain employees, and affects workers' productivity.
- The public recognizes the need for the movement of goods, but is somewhat negative about mixing trucks with automobile traffic. The American Trucking Association (ATA) lawsuit is a prime example of this sentiment. Citizens would rather see more freight diverted to rail, as long as the rail corridors are not in their jurisdiction.
- Trucking firms believe it would be helpful to get more commuters into transit and carpools to free up capacity for trucks-typically, highways are the best (and only) option for moving freight.
- The localized impacts of goods movement (parking and on-street truck deliveries) also tend to draw negative responses from the public.
- Safety is a concern due to the number of truck crashes (which may be caused by trucks/cars getting "in the way" of less maneuverable tractor trailers).

Division Actions	Team
• Ensure effective intermodal and freight planning strategies are implemented in New Jersey.	Planning, Environment, & Realty
• Ensure outcomes of plan are incorporated into annual work plans, regional plans, and TIPs for freight priority locations.	Planning, Environment, & Realty

#### NJDOT/MPO Actions

- Ensure key freight corridors have the benefits of a full suite of traffic management strategies, such as ESP, etc.
- Establish freight priority project scoring criteria and related performance goals.
- Increase system reliability of the transportation system for the movement of freight.
- Continue to help interaction and communication between the involved stakeholders ,including public agencies, authorities, private industry and citizens.

Illustrative and partial listing of NJDOT Freight projects from current STIP:

Program/Project	FY 2007
FREIGHT PROGRAM, Section II Pg. 44	\$10,384,000
Haynes Ave. Bridge over Waverly Yards/AMTRAK, Sect. II, Pg. 50	\$20,000,000

Sources: New Jersey Statewide Transportation Improvement Program, DRAFT FY 2007-2010

While the citizens of New Jersey might like to see more freight shifted to rail or on other non-highway modes, shipping freight by truck is more cost effective than rail shipment for distances of less than 500 miles, and only a small percentage of the goods moved on NJ's highways might be candidates for diversion to rail. Putting some of the cargo that crosses the state on rail to reduce trucks on bridges would be expensive to trucking firms if they had to pay for the operations. Truck-only road facilities are also unlikely because of real estate costs and land use constraints in our urban areas.

For their part, the trucking companies would like to see fewer vehicles on the key truck routes, and more reliable freeway operations, including quicker removal of incidents. Reliability is important to industries that minimize their inventory by relying on just-in-time deliveries. However, avoiding the rush-hour peak is also getting increasingly difficult as the peak period grows.

The FY 2007 NJ Strategic Implementation Plan supports several approaches for expediting the movement of goods:

- Expand capacity and operations on major truck routes.
- Develop and implement freight-priority corridors and performance measures.
- Provide continual response teams to manage incidents to keep the system flowing quickly following an incident.

#### **Environment**

<u>Goal:</u> Protect and enhance the natural environment and communities affected by highway transportation.



#### **Summary**

New Jersey's environmental quality and condition must not be sacrificed as we address the challenges presented by expansive growth and increasing transportation system demands. Historically, the major areas of

environmental concern include automobile emissions (air quality), noise from transportation sources, wetland impacts due to construction of facilities, visual impacts of transportation projects, historic significance and community disruption. There are many Federal and State environmental laws and policies that govern responsible transportation planning, such as the Clean Air Act, the National Environmental Policy Act, Freshwater Wetlands Protection Act, and Section 106 of the National Historic Preservation Act, to name a few. The air quality requirements are based on a set of National Ambient Air Quality Standards for six criteria pollutants. The standards describe maximum allowable concentrations of each pollutant with respect to human health and environmental impacts. These pollutants are sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide, lead, and ground-level ozone.

The National Environmental Policy Act (NEPA) was initiated in response to an overwhelming national sentiment that federal agencies should take the lead in protecting the environment. NEPA established a process by which federal agencies must study the environmental effects of their action. The purpose of NEPA is: to declare a national policy that will encourage productive and enjoyable harmony between humans and their environment; to promote efforts that will prevent or eliminate damage to the environment and biosphere and stimulate human health and welfare; to enrich the understanding of the ecological systems and natural resources important to the nation, and to establish a Council on Environmental Quality (CEQ). New Jersey is a focus state for State Implementation Plan (SIP) mobile emissions budgets.

#### National Performance Objectives

**<u>EN1</u>**: Meet timeliness targets for Environmental Impact Statements and Environmental Assessments. (Vital Few)

**EN2:** Advance Context Sensitive Solutions Implementation by States and FLH Division. (Vital Few) **EN3:** Advance and showcase exemplary ecosystem (EEI) and exemplary human environment (EHEI) initiatives in the Federal-Aid Highway Program (FAHP) and Federal Lands Highway Program (FLHP). (Vital Few)

**EN4:** Minimize the number of areas not meeting State Implementation Plan (SIP) mobile source emissions budgets.

Division Performance Objective

• Improve planning and environmental processes to achieve better results and timeliness. **(EN1)**  Division Performance Measures

- Decrease median processing time for all Environmental Impact Statements (EISs) and Environmental Assessments (EAs). Reduce median time by 5% in FY2007. (FY 2007 targets are 36 and 12 months respectively). (EN1)
- All EIS and EA projects have schedules established and entered into the Environmental Document Tracking System. (EN1)

Proactive environmental stewardship is essential if we are to preserve and sustain our natural resources. Maintenance of the transportation system requires significant resources and investment in management strategies that minimize environmental effects.

FHWA's Vital Few Environmental Goal is Stewardship and Streamlining. Environmental Streamlining drives us to improve project delivery without compromising environmental protection. Environmental Stewardship helps demonstrate that we are mindful of the natural and human environment while addressing mobility and safety needs of the public. FHWA promotes actions that show we are responsible stewards of the environment. We take advantage of opportunities to enhance environmental protection and encourage partnerships that promote ecosystem conservation or encourage broader mitigation strategies that seek corridor or watershed based approaches.

#### Stakeholder Input

NJDOT's Bureau of Environmental Resources and Systems Planning & Research provided the following comments for discussion:

- Statewide assessments of environmental goals typically illustrate a higher priority ranking than other goals.
- Common threads in the area of environment as it relates to transportation projects are the (perceived) need and importance of increased transit, bicycle and pedestrian accommodations, and increased automobile fuel efficiency.

- NJDOT has a Smart Growth Initiative that supports the Governor's Smart Growth policies which provides assistance to counties and/or municipalities and provides funding for Public/Private Partnerships. Smart growth is a concept intended to protect and preserve valuable natural and cultural resources and encourage economic development in targeted locations.
- Context Sensitive Solutions/Context Sensitive Design (CSS/CSD) is an approach to planning and designing transportation projects based on active and early partnerships with communities. NJDOT has incorporated CSS/CSD principles into its projects since 1999 and is committed to a process that encourages transportation officials to collaborate with community stakeholders so the design of the project reflects the goals of the people who live, work and travel in the area. This collaboration results in creative and safe transportation solutions.
- NJDOT is looking at a watershed-based planning approach to address transportation system impacts on stormwater management and water quality. On a watershed scale, the impact of impervious surfaces may be lessened through coordinated and managed use of a variety of mitigation methods, known as Best Management Practices. These practices include ways to reduce stormwater runoff through infiltration, and retention practice that maintains pre-developed flow releases for an area.
- Continue to expand Transit Village Program.

Division Actions	Team
Develop multi-unit coordination meetings with NJDOT	Planning, Environment, & Realty
• Develop a policy on bridge aesthetics and encourage the NJDOT to adopt it.	Structures
• Develop an Action Plan to manage EIS/EA schedules.	Planning, Environment, & Realty and Program Operations
• Provide active oversight and technical assistance to decrease median times for EAs and EISs in FY 2007.	Planning, Environment, & Realty and Program Operations.
• Improve assistance to stakeholders and our partners for the environmental process by hosting 2 – 3 Environmental workshops.	Planning, Environment, & Realty

#### NJDOT/MPO Actions

- Enhance Environmental Awareness throughout the Department and its agents.
- Ensure Environmental Stewardship continues to be an integral part of all phases of the Project Development process.
- Ensure principles of Environmental Stewardship are followed in construction practices.
- Ensure Environmental Stewardship is followed in practices related to facilities operations and maintenance.
- Streamline Environmental Processes.

Illustrative and partial listing of NJDOT projects from current STIP:

Program/Project	FY 2007
Recreational Trails Program, Section II	\$1,217,000
Transportation Enhancements, Section II	\$10,000,000
Transportation and Community System Preservation Program,	\$4,850,000
Section II	

The FY 2007 NJ Strategic Implementation Plan supports several approaches for protecting the natural environment:

- Host a videoconference between New Jersey and Michigan on Stormwater Management Regulations.
- Conduct an Environmental workshop on the Environmental Management System.
- Conduct a Bridge Scour Analysis Workshop with stakeholders.
- Host a New Jersey Green Highways Partnership Workshop.
- Facilitate/host interagency meetings with resource agencies.
- Encourage NJDOT leadership to reinforce their Context Sensitive Solutions (CSS) policies.
- Provide guidance, training and assistance to ensure NJDOT and each MPO is equipped to meet transportation conformity requirements, especially for new National Ambient Air Quality Standards.

## **National Security**

Goal: Improve highway security and support national defense mobility.



#### Summary

In the post-9-11 era, National Security has become a focus area for the entire nation, including the FHWA. 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 virtually every emergency event. New Jersey's transportation system must function efficiently in order to evacuate threatened populations, allow first responders to get to the scene, facilitate the movement of supplies into and out of an area, and restore mobility in the days and months after an event. Major social and economic impacts result when the transportation system is affected by an extreme event such as earthquakes, fire, collision, or scour. Since 9-11, we have been more aware that the transportation infrastructure may be the target of terrorist attacks.

Improvements to highway security and support of national defense mobility through collaboration with the Department of Homeland Security, the State of New Jersey, local governments, the private sector, and other federal agency partners is a critical strategic objective. Another critical step in meeting the National Security goal is performing a vulnerability assessment of New Jersey's infrastructure. A systematic, quantitative process is used to evaluate infrastructure components and determine a risk factor. The higher the risk factor, the greater the need to mitigate the threat (for example, security, control of access) or mitigate the consequence through an engineered solution such as hardening. Indicators of success will be the extent to which security plans are in place and security assessments are completed in key metropolitan areas.

#### National Performance Objectives

NS1: Ensure the integrity and performance of the Nation's highway system by ensuring preparedness for, response to, and recovery from the effects of hazards of all types, including terrorism, and promoting consistency with the National Response Plan and the National Infrastructure Protection Plan.

Division Performance Objectives & Measures

- Reduce the vulnerability of critical transportation infrastructure and enhance the security of the transportation network. (NS1)
- Meet military transportation needs. (NS1)
- Improve disaster preparedness, response and recovery plans at the federal, state, and local level. (NS1)

Proactive stewardship and oversight of the State's security measures will be essential for the security and well being of the State and the nation as a whole.

#### Stakeholder Input

The Office of Transportation Security provided the following comments for discussion:

- Initial screening of high-risk bridges has been accomplished using the AASHTO criteria.
- No national standards for target hardening or mitigation have been developed which would provide a minimum threshold standard.
- The NJDOT Commissioner has established the Office of Transportation Security, which reports directly to the Deputy Commissioner. The function of this office is to coordinate transportation security with the public and private transportation industry sectors.
- The "Best Practices" for highway bridges and tunnels have been approved by the Governor and have been distributed to the appropriate transportation agencies.
- Training is continuing in the following areas:
  - o Security training for appropriate NJDOT and agency transportation personnel is planned for FY 2007.
  - Transportation security/homeland security NTI Awareness training is being provided to all NJDOT Operations field personnel and other selected NJDOT personnel.
  - o Training for bridge risk assessment and general vulnerability assessment.

Division Actions	<u>Team</u>
Update (re-write) the Continuity of Operations Plan (COOP).	Structures/Tech.
<ul> <li>Hold a follow-up meeting with appropriate State and military transportation specialists.</li> </ul>	Structures/Tech.
• Review and approve security plans for all major, full-oversight bridge projects.	Structures
<ul> <li>Encourage the Department to perform risk-assessments for every project early in project development.</li> </ul>	Structures
Continue to make Emergency Relief program requests the top priority for processing.	Structures

#### NJDOT/MPO Actions

- Perform Security Self-Assessment.
- Process Emergency Relief program requests in accordance with established time frames.
- Administer the Emergency Response Planning and Preparedness Self-Assessment.
- Attend and participate in military coordination meeting.
- Ensure that reports for all major projects include state-of the-art security considerations.

Programs/Projects	FY 2007
Transportation Facility Security	\$1,000,000
Transportation Security Initiatives	\$1,000,000
Transportation Security Initiatives – Waterside Port Monitoring	\$1,000,000

Illustrative and partial listing of NJDOT projects from current STIP:

The FY 2007 NJ Strategic Implementation Plan supports several approaches for improving National Security by:

- Incorporating security considerations into all projects during the design process.
- Continuing coordination with the military to discuss its transportation needs.
- Coordinating closely with the NJDOT Office of Transportation Security on homeland security issues.
- Sharing emerging information on transportation security with the Department and other affected State transportation agencies.

It remains clear that providing a safe and secure transportation system by hardening and/or protecting facilities and potential targets is an essential component of national security initiatives. New Jersey's transportation system is comprised of many critical bridges, tunnels, airports, gateways, and ports, all requiring adequate evaluation and assessment of potential vulnerability. Simulation exercises and coordination with the various military operations and command centers in and around the region will be of paramount importance.

## **Organizational Excellence**

Goal: Advance FHWA's ability to manage for results and innovation



**Summary** In FY 2007, the FHWA defined organizational excellence in terms of our ability to oversee transportation projects and programs and efficiently manage FAHP funds; improve the state of the art in transportation planning; ensure customer and employee satisfaction, and enhance agency effectiveness in determining research priorities and deploying technologies and innovation. Among our many

responsibilities for program oversight and stewardship, we will place a special emphasis on more cost efficient funds administration and project management and more effective use of FAHP funds.

A number of material weaknesses in FHWA's accounting practices and procedures were identified during the conversion to the new USDOT corporate accounting system and the results from the financial statement audit for FY 2003.

The FHWA will continue to strive to improve its financial programs and practices to ensure that the funds Congress entrusts to the USDOT are appropriately accounted for, and used effectively, to meet the USDOT and FHWA goals and priority objectives.

National Performance Objectives

**<u>OE1</u>**: FHWA partnerships develop, maintain and improve capability to deliver and steward the Federal Highway Administration program with high performance and integrity. **<u>OE2</u>**: Improve the Agency's relevancy, efficiency, and effectiveness.

Division Performance Objectives

- Develop partnerships that maintain, and improve capability to deliver and steward the federal program with high performance and integrity. **(OE1)**
- Provide stewardship of funds and coordinate efforts to ensure integrity for stakeholders, value for partners, and quality for system users. **(OE)**

Division Performance Measures

- Reduce running average of inactive balance by 25%. (FY 2006 Baseline: 348 projects with unexpended balances approximately \$48 million). **(OE)**
- Maintain 100 % of process reviews on schedule. (FY 2007 target is based on 4 projected process reviews). **(OE1)**
- Track cost growth greater than 10% on \$25 million projects. (FY 2006 trend of average growth rate is 11%). (OE)
- Achieve a rate of 50% of Engineer's Estimates within 10% of the Award amount. (FY 2006 Baseline: 38%) **(OE)**
- Increase use of Asset Management in the state of New Jersey. (OE)
- Provide technical assistance to stakeholders concerning SAFETEA-LU transportation bill. (OE1)

#### Stakeholder Input

Comments below were taken from the 2006 Customer Satisfaction Survey, a joint Financial Management Task Force, and general discussions with New Jersey Department of Transportation.

- Based on the most recent (2006) satisfaction survey for the New Jersey Division, our partners are significantly more satisfied overall than FHWA partners as a whole.
- The top improvement priority for New Jersey partners involves program development.
- New Jersey partners are most satisfied with providing technical assistance and training and deploying technology/innovation. Our partners are least satisfied with communicating and interpreting policies/regulations.
- In August 2004, the Joint NJDOT/FHWA Financial Management Task Force issued its initial report to senior management of NJDOT and FHWA NJ. The report concluded there were significant opportunities for improving Federal funds management in five critical areas. The areas are (1) capital programming, (2) continuous reduction of inactive projects, (3) training and education, (4) innovative contracting, and (5) performance based management. The work of the FMIP continues to be carried on by the Financial Management Steering Committee, and semi-annual progress reports are issued to the senior leadership of the NJDOT and the New Jersey Division. Significant progress has been achieved on four of the five opportunities for improvement (items no's 2-5).
- The NJDOT self-assessment is a valuable tool that is in use to assure management controls are in place to achieve critical internal control objectives.

#### 2007 NEW JERSEY STRATEGIC IMPLEMENTATION PLAN

Division Actions	<u>Team</u>
• Plan and conduct the Financial Integrity Review and Evaluation Program (FIRE).	Finance
Participate in the implementation of the Financial Management Improvement Program.	Finance and Program Operations
<ul> <li>Host 2-3 training sessions/workshops for Local-Aid Staff, Counties and Municipalities in order to enhance their knowledge of the environmental process.</li> </ul>	Planning, Environment, and Realty
• Conduct DBE support service activities and technical assistance through providing workshops, and training programs.	Civil Rights Specialist
<ul> <li>Host training sessions/workshops for relocation and acquisition in coordination of R.O.W program.</li> </ul>	Planning, Environment, and Realty
Deliver two training sessions/workshops to increase Federal-aid     Program knowledge of Local-Aid Project Managers.	Program Operations

#### NJDOT/MPO Actions

- Implement all elements of the FMIP through FY 2007.
- Ensure financial and administrative risks involving the FA program are maintained at acceptable levels through the use of an annual risk assessment, and monitoring of internal controls, management systems, processes and procedures.
- Implement NJDOT pre-apprentice training program on Federal-aid projects.
- Conduct DBE support service activities and technical assistance through providing workshops, training programs and the implementation of best practices.

During FY 2004 the Agency, with the assistance of field financial management personnel developed a new policy and review program for financial oversight of the Federal-aid program. An order was received in FY 2005 to implement the FIRE program. The policy and review program was developed to address the internal control weaknesses cited in the FY 2003 financial audit of the Highway Trust Fund. The program places renewed emphasis on field office oversight and stewardship responsibilities for Federal-aid funds, which are distributed and expended by program recipients and FHWA field offices. The policy and program are effective October 1, 2004, and each Division office strategic implementation Plan must address the requirements of the FIRE program.

The FY 2007 NJ Strategic Implementation Plan supports several approaches for improving our organization performance:

- Conduct listening sessions with our customers/partners on a regular basis.
- Monitor Mutual Service Standards performance.
- Leadership Development Program meetings will be held on a monthly basis.

## APPENDICES

		Projected	
	19 Doutour an An Magazina	Person	Projected
	16 Performance Measures	Hours	, Costs
	7 KEY MEASURES	110010	00000
1.	Implement countermeasures at 20 high crash locations	565	\$500
	(intersection and roadway departure). (FY 2005 Baseline: 0)		
-		365	\$500
Ζ.	Implement countermeasures at 5 high crash pedestrian crossing locations. (FY 2005 Baseline: 0).	505	\$500
3.	Percent of travel on NHS with IRI of 95 inches per mile or less	2225	\$2,050
	(FY 2005 Baseline: 27.3%; FY 2007 target: is 40%).		
4.	Reduce the number of scour critical bridges by 25 percent by 2011	237	
	(FY 2006 Baseline: 155 scour critical bridges) (FY 2007 target is		
	<u>5% or 9 bridges).</u>		
5.	Limit the average incident duration time to 1.75 hours in FY 2007.	709	
	(FY 2005 Baseline: 2.08)		
6.	Reduce the running balance of inactive projects reported by FMIS	457	
	using FIRE criteria by 25.0% in 2007. (FY 2006 Baseline: 348		
	projects)	000	
7.	<u>Complete all process reviews on schedule. (FY 2007 target is 3</u>	990	
	projected process reviews).		
8.	Reduce the percentage growth of total deficient bridge deck area to zero	2067	
	by 2011 (FY 2005 Baseline: 2,494,886 square meters deficient) (FY 2007		
	target is 2.0% reduction or 2,396,090 square meters).	1.45	¢100
9.	All EIS and EA projects have schedules established and entered into the	165	\$100
10	Environmental Document Tracking System.	250	\$100
10.	Decrease median processing time for all Environmental Impact	338	\$100
	Statements (EIS s) and Environmental Assessments (EA s). Reduce		
11	Tuella east another than 100/ on \$25 million puriests (EV 200/	40	
11.	trend of every growth rate is 11%	-10	
12	Track and report traffic related fatalities and serious injuries	55	\$300
12.	Track and report intersection related fatalities and serious injuries	55	\$300
13.	Track and report intersection related fatalities and serious injuries	55	\$300
14.	Track and report roadway departures related fatalities and serious	55	\$300
15.	iniuries		#200
16	Integrate FHWA's Highways-for-Life concept with NIDOT innovative	446	
10.	methods.		
17.	Achieve a rate of 50% of Engineer's Estimates within 10% of the	95	
	Award amount. (FY 2006 Baseline: 38%)		
18.	Increase the use of the Asset Management Systems to development	1190	\$3000
	projects included in the STIP (i.e. bridge and pavements).		
	TOTAL HOURS FOR NJSIP 07	10129 hrs	\$7,450

**1 - A** <u>Resource Allocation Table</u>

2007 NEW JERSEY STRATEGIC IMPLEMENTATION PLAN

**2 - A** <u>Federal Oversight</u>

#### Approved Federal Oversight Agreement between FHWA-NJ and NJDOT.

PROJECT TYPE	CONCEPT DEVELOPMENT	FEASIBILITY ASSESSMENT	FSD	INITIAL DESIGN	FINAL DESIGN	CONSTRUCTION
INTERSTATE NEW/RECON.	FULL	FULL	FULL	FULL	FULL	FULL
INTERSTATE 3R	FULL	FULL	FULL	ALT	ALT	ALT
NHS NEW/RECON UNDER \$30 MIL	FULL	FULL	FULL	ALT	ALT	ALT
NHS NEW/RECON OVER \$30 MIL <sup>1</sup>	FULL	FULL	FULL	FULL	FULL	FULL
NHS 3R	ALT	ALT	ALT	ALT	ALT	ALT
NON NHS	EXEMPT	EXEMPT	EXEMPT	EXEMPT	EXEMPT	EXEMPT
MAJOR UNUSUAL ON NHS <sup>2</sup>	FULL	FULL	FULL	FULL	FULL	FULL
MAJOR UNUSUAL OFF NHS	EXEMPT	EXEMPT	EXEMPT	EXEMPT	EXEMPT	EXEMPT
INNOVATIVE CONTRACTING <sup>3</sup>	FULL	FULL	FULL	FULL	FULL	FULL

Notes:

<sup>1</sup> Oversight will be established by mutual agreement.

<sup>2</sup> Includes all tunnels, moveable bridges, major hydraulic structures or bridges with deck area greater than 12,000 sq. meters

<sup>3</sup> Includes design/build contracting, extended warranty contracting, public private partnerships or others as mutually determined

#### 3 - A <u>DRAFT</u> <u>NJ Risk Assessment Procedure</u> Effective Fiscal Year 2006

#### **BACKGROUND:**

Below is the revised edition for the NJ Risk Assessment Process. This revised edition will replace the existing procedure approved in December 2005. Essentially, the revised edition combines the existing New Jersey Division Risk Assessment with guidance from the FHWA Headquarters' Interim User Guide for Risk Management. Changes were made to reflect current Division deliverables to FHWA headquarters. Formal written procedures are subject to change to reflect additional changes in HQ/Division deliverables or possible changes based on the Risk Management Framework (HQ final guidance that has yet to be submitted to Division Offices). The revised edition details steps that the Division Office will follow for fiscal year 2006. A copy of the prescribed tools is included in Appendix A.

#### **DEFINITIONS:**

Risk Statement:	a statement that details the positive or negative influence that a particular risk has on the program area/core element
Cause:	identifies the "trigger" needed to create a positive or negative impact on a particular program area/core element
Effect:	identifies the "end result" if the cause continues without any changes made to the particular program area/core element
Core Element:	component within the team's program area that is subject to oversight by FHWA Headquarter/Division Office
Prescribed Core element:	core element established by FHWA Headquarter
Non-prescribed Core element:	core elements established by Division's Program Director/Specialist (part of the original procedures developed in December 2005)

#### PROCEDURES:

Basic steps detailing work to be completed and timeframes are provided below.

	Division Activities (Responsible Persons)	Completion Date
Step 1	Information gathering- (Program Area Teams)	•
	Program area teams will gather information related to their specific program area. Examples of information are new transportation legislation; changes to Federal regulations, requirements, or policies; modifications to the Division's Stewardship Agreement with NJDOT; National Goals; Vital Few Goals, staff's general program knowledge/expertise, or completed process review reports)	
Step 2	Risk Identification- Program Area Teams)	STEDS
	<ul> <li>Option A: Develop risk statements using a risk register table (See App B for completed examples). A risk register table identifies cause and effect. The cause and effect can be combined to give the risk statement.</li> <li>Option B: If a team is having difficulty with formalizing a risk statement than skip to step 3 and complete the Prescribed Assessment Form for each Core Element (CE) see App A. Next, review high scores for each criterion. Create risk statements based on criteria of concern. Place risk statements on the risk register table.</li> </ul>	#1- 4 to be complete prior to May 12 <sup>th</sup> . Discussions concerning steps #1-4 will be led by
Step 3	Core Element Analysis- Program Area Teams)	each program area
	Complete the Prescribed Assessment Form and the Criteria Scoring Tool in App A. Refer to Appendix A for examples. For the prescribed assessment form, each Core Element will have likelihood and impact criteria score. To determine this score average both the likelihood and impact criteria score for each CE.	team at the office retreat.
	<ul> <li>If more than one risk statement is identified on the Criteria Scoring Tool for a particular Core Element than prioritize the risk statements based on personal knowledge.</li> </ul>	
Step 4	Prioritizing of Core Elements- Program Area Teams)	
	Rank all core elements within the team's program area. The ranking should be based on the "expected value". The expected value is obtained by multiplying the average likelihood criteria by the average impact criteria. See App A.	
Step 5	Prioritize Top Risks- Senior Staff	Action to be
	<ul> <li>DA/ADA will normalize all data collected from the prescribed assessment</li> </ul>	complete prior to
	<ul> <li>form and criteria scoring tool. Senior Staff will create a list of Top Risks.</li> <li>Develop a complete listing of prioritized core elements and group into categories of HIGH, MEDIUM, and LOW.</li> </ul>	Senior Staff Retreat on June 15 <sup>th</sup> .
Step 6	Identify Risk Response Strategies- Senior Staff	Action to be
	<ul> <li>Develop a risk response strategy (RRS) for prioritized risk statements or prioritized CEs. RRS are commonly divided into four types: avoidance, transference, acceptance, and mitigation.</li> </ul>	complete prior to Senior Staff Retreat on June 15 <sup>th</sup> .
Step 7	Incorporate RRSs into the draft FY 2007 NJSIP	Action to be
	<ul> <li>Assign personnel to risk statement or CE identified on the RRS.</li> </ul>	completed prior to submission of draft FY 2007 NJSIP to DA/ADA
Step 8	Monitor & Evaluate RRS in the FY 2007 NJSIP- Senior Staff	Date to be
		aetermined

The Risk Assessment will cover 14 program areas and 59 Prescribed Core Elements and Nonprescribed Core Elements. Program Area Teams, will review the current list of Core Elements in their respective Program Areas to be included in the Risk Assessment. Changes made to add or delete non-prescribed core elements are at the discretion of the program area teams. Keep in mind that the prescribed core-elements can not be revised. The following teams are multi-disciplinary and were set up for each program area. The goal is to have cross-functionality of team members.

- Finance- Ron Bersch/ Dave Hawk/ Patty Leech/ Helen Calhoun
- Planning- Larry Cullari/ Matt Zeller/ Jeanette Mar
- Right of Way- Linda Beyer/ Young Kim/ Ron Bersch
- Environment- Jeanette Mar/ Tanya Emam/ Roger Lall
- Design- George Hoops/ Roger Lall/ Luc Saroufim
- Construction- Dave Hawk/ Dan Mott/ Hadi Pezeshki
- Operations- Karen Yunk/ Ekaraj Phomsavath/ Tameka Macon
- Transportation Systems Preservation- Larry Cullari/ Bill Hoffman/ Ekaraj Phomsavath
- Safety- Karen Yunk/ Bill Hoffman/ George Hoops
- Civil Rights- Bob Cosgrove/ Toni Brown/ Dave Hawk
- National Security- Helene Bowman/ Tanya Emam/ George Hoops
- Pavements- Hadi Pezeshki/ Bill Hoffman/ Dan Mott
- Research- Larry Cullari/ Patty Leech/ Joung Lee
- Bridge- Helene Bowman/ Luc Saroufim/ Matt Zeller

In summary, the following documents will be submitted to FHWA HQ as requested for Division deliverables.

- 1. Top Risk Statements (final number has yet to be finalized)
- 2. Prioritized Core Elements (grouping by high/med/low vs. numerically ranked has yet to be finalized)
- 3. Completed forms for the Prescribed Assessment Form (remaining as a Division deliverable has yet to be finalized)

## A p p e n d i c e s

Appendix A: Criteria Scoring Tool & Prescribed Assessment Form

## Criteria Scoring Tool – With Context

Division Offic	ce: New Jersey	
Core Element:		Avg. Likelihood:_ Avg. Impact: EV:
Expected Value (EV) = Avg. Likelihood * Avg. Impac		

### **RISK STATEMENT:**

#### RISK STATEMENT:

**RISK STATEMENT:** 

## <u>PRESCRIBED ASSESSMENT FORM -</u> <u>WITH CONTEXT</u>

Likelihood Criteria The scoring metrics applied to indicate a high probability of sufficient likelihood of the criteria to cause potential damage to the program	Likelihood Indicators The scoring metrics applied to indicate a high probability of sufficient likelihood of the criteria to cause potential damage to the program	Scoring Context	Scoring
<b>Staffing (Levels &amp; Experience)</b> is in regards to whether the FHWA and DOT staff assigned to the effort sufficient? Do they have a clear knowledge, understanding, and ability with the	Severely understaffed or no experience (5)	It is unrealistic to expect the staff assigned <i>not</i> to need supplementation or augmentation before the end of the effort	
	Understaffed or some experience (2)	Staff assigned will be over utilized and run the risk of being incapable of completion if additional responsibilities are assigned, or lack experience	
element and its implications	Adequately staffed or competent (0)	Adequately staffed or competent	
<b>Operational Procedures</b> asks whether there are documented and relevant	<b>None</b> (5)	There are no documented or relevant procedures	
procedures for this element of the program?	Some (2)	There are some documented procedures or tangentially related procedures	
	Good and up-to-date (0)		
Guidance is whether there is relevant guidance?	<b>None</b> (5)	There is no documented or relevant guidance	
	Some (2)	There is some documented guidance or tangentially related guidance	
	Good and up-to-date (0)		
<b>Problem History</b> asks whether the programs of this nature have had	<b>A lot of</b> (5)	There are historical events that tie directly to the problem history	
significant problems or ongoing series of problems related to this element?	Some (2)	There are rumors or organizational legend of problems related to this element in this type of program	
ı.	<b>None</b> (0)		
<b>New Program, Phase or Component</b> is deciding if this program or element of the	Cutting Edge (5)	No one has addressed this type of work in this element before	
program is truly novel?	Some experience (2)	Some people have done this type of work in the past or have done related work	
	Old news (0)	It's what we do, routine	
<b>Complexity</b> is asking if there is a high level of intricacy or challenge associated	<b>High</b> (5)	The Core Element involves integration of multiple agencies, consultants, contractors and FHWA HQ	
with the Core Element?	Moderate (2)	This Core Element involves integration of DOT, FHWA and one other outside agency	
	Low (0)	This Core Element involves only DOT and FHWA personnel	

<b>Outside Control</b> is whether there is an opportunity for outside agencies to assert	High (5)	Numerous outside agencies have the opportunity and ability to voice concerns, influence or direct
control or interference?	Moderate (2)	One or two outside agencies have the opportunity and ability to voice concerns, influence or direct
	Low (0)	There is virtually no opportunity or ability for outside agencies to voice concerns related to this Core Element
Potential for Waste, Fraud and Abuse	<b>A lot of</b> (5)	There is limited oversight and ability to identify waste, fraud and abuse
this type of inappropriate behavior?	Some (2)	There is some oversight, but there are gaps in our ability to identify waste, fraud and abuse
	<b>None</b> (0)	There is virtually total oversight and no opportunity to identify waste, fraud and abuse
		<b> </b>
Work Force Development and Training is asking if there is a program ir	None (5)	There are no training or mentoring programs
place to keep training and development in place for the personnel related to this Core Element?	<sup>a</sup> Some (2)	There are training and/or mentoring programs, but they are not universally available
	<b>A lot of</b> (0)	There are training and mentoring programs, broadly available to FHWA and DOT personnel
FHWA Involvement is whether our	<b>None</b> (5)	Division office personnel have visibility but no management control
managing the Core Element?	Some (2)	Division office personnel have management control over some aspects of the Core Element
	<b>A lot of</b> (0)	Division office personnel have active management control over most aspects of the Core Element
	1	
<b>Consultant Use</b> is whether consultants	<b>A lot of</b> (5)	The DOT is using a broad range of consultant to address the Core Element
are actively being applied as primary resources in the effort?	Some (2)	The DOT is sharing responsibilities with consultants related to this Core Element
	<b>None</b> (0)	The DOT has full responsibility for all aspects of this Core Element
Other is asking if there are other areas of concern related to this Core Element that	High (5)	Please document criteria used to label this as "high"
are not addressed in the frequency criteria?	Moderate (2)	Please document criteria used to label this as "moderate"
	Low (0)	Please document criteria used to label this as "Low"

## TOTAL:

## AVERAGE LIKELIHOOD SCORE:

Impact Criteria Whether these are the areas of concern that are deemed as a high impact to the FHWA.	Impact Levels The scoring metrics applied to indicate the impact level of the criteria to cause potential damage to the program	Scoring Context	Scoring
Federal Interest is how extensive is the attention that the OIG, Inspector General and other agencies pay to	High (5)	One or more agencies have an extensive history of investigation, audit or evaluation in this Core Element	
this Core Element?	Moderate (2)	This Core Element has been investigated, audited or evaluated once or twice in the past by significant agencies	
	Low (0)	Never investigated, audited or evaluated.	
<b>Stakeholder Interest</b> asks whether this Core Element attracts attention	High (5)	Multiple groups of stakeholders have a history of interest and involvement	
from a broad spectrum of stakeholders?	Moderate (2)	This Core Element has been drawn the attention historically of one or two groups of stakeholders	
	Low (0)	Very few stakeholders, if any have expressed interest or involvement	
Exposure (Public, Media or	<b>High</b> (5)	The public and media have a history of tracking this element	
<b>Political)</b> is how extensive the	Moderate (2)	This Core Element has been the subject of media attention once or twice	
element	Low (0)	Virtually no media attention has ever been paid to this element	
Funding Level is how significant is	High (5)	This Core Element accounts for 25% or more of the program costs	
Element?	Moderate (2)	This Core Element accounts for 5-24% of the program costs	
	Low (0)	This Core Element accounts for <5% of the program costs	
<b>Goals</b> are the objectives of the	High (5)	There are clear objectives related to this Core Element that have a direct connection to the objectives in our strategic plan	
program acmevable.	Moderate (2)	There are objectives related to this Core Element; however, they are only	
	<b>I</b> amo (0)	tangentially related to the objectives in our strategic plan	
	Low (0)	No trai objetuves	<u> </u>
<b>Controversy or Lawsuits</b> is whether this program or element of the	<b>High</b> (5)	The Core Element in this environment draws the attention of both internal and external investigators	
program is subject of internal and/or external controversy?	Moderate (2)	This Core Element has driven controversy, but has the full force and backing of FHWA HO management	
	Low (0)	This is a low-controversy issue/area when considered in terms of the Core Element	
	·	·	
Effect on Safety	<b>High</b> (5)	This Core Element directly affects this area	
	Moderate (2)	This Core Element indirectly affects this area	
	Low (0)	This Core Element has no affects on this area	

Effect on Congestion	High (5)	This Core Element directly affects this area
	Moderate (2)	This Core Element indirectly affects this area
	Low (0)	This Core Element has no affects on this area
Effect on the Environment, or quality is asking whether the Core Element generate influence in these areas?	High (5)	This Core Element directly affects these areas
	Moderate (2)	This Core Element indirectly affects these areas
	Low (0)	This Core Element has no affects on these areas
Potential to Effect Public Trust and Confidence is asking if this Core Element has the potential to have these effects?	e <b>High</b> (5)	Public trust and confidence may potentially be eroded by the impact of this Core Element
	Moderate (2)	Public trust and confidence will be only nominally affected by the impact of this Core Element
	Low (0)	Public trust and confidence will not be affected at all by this Core Element
Emerging Initiatives is whether there will be new ideas, policies, or twists associated with this Core Element?	High (5)	This involves multiple emerging initiatives in this program
	Moderate (2)	This involves only one emerging initiative in this program
	Low (0)	This Core Element involves no emerging initiatives in this program
Other is whether there are other areas of concern related to this Core Element that are not addressed in the severity criteria?	High (5)	Please document criteria used to label this as "high"
	Moderate (2)	Please document criteria used to label this as "moderate"
	Low (0)	Please document criteria used to label this as "low"

## TOTAL:

## AVERAGE IMPACT SCORE:

## Appendix B: Completed Example of the Risk Register Tables

#### <u>Risk Register Example 1: A risk statement is the combination of the "cause"</u> <u>and "effect".</u>

RISK STATEMENT	CAUSE	EFFECT
<u>Core Element:</u> Funds Management		
(1) loss of adequate internal control over Federal-aid funds by the NJDOT, as evidenced by the inability to maintain minimum required standards of financial management, ref. 49 CFR Part 18 Common Rule for administrative requirements for recipients of federal grants in aid	(1) accelerated loss of essential financial management skills and abilities and knowledge of the FAHP resulting from continued attrition of critical personnel in the Divisions of Accounting and Auditing and Capital Planning, Investment and Development.	(1) FHWA unable to rely on the accuracy and integrity of NJDOT financial transactions and information, which would halt the flow of FAHP funds to State of New Jersey
(2) NJDOT is unable to formulate and/or update financial plans for projects of \$100 million or greater, as required by Section 1904 of SAFETEA- LU	(2) NJDOT fails to develop a systematic process for the collection and compilation of essential data for the preparation of the required financial plans	(2) Failure to file financial plans for projects of \$100 million or greater would preclude the NJDIV office from processing Federal- aid authorizations for these projects.
(3) NJDOT financial records management system fails, and documentation in support of Federal-aid transactions is lost	(3) transactions fail to be scanned into the electronic file management system or the system suffers a catastrophic failure and original documentation is routinely destroyed by policy.	(3) FHWA and other independent parties such as external and internal auditors are unable to verify the voracity of recorded financial transactions for lack of claim and supportive documentation; unsupported transactions would fail Federal-aid eligibility

#### Appendix B: Risk Register Example 2

#### Core Element: Bridge Design

Causes:

- Overuse of consultants
- Ineffective QC/QA Consultants
- Ineffective QA State
- Lack of experienced/knowledgeable staff

#### Effects:

- Errors/omissions in contract documents
- Not in compliance with regulations (ex.: proprietary/sole source, Buy America)
- Outdated design codes (not using current design practice)
- Uneconomical designs
- Misuse or misapplication of new technology
- Not enough use of new technology

#### Risk Statement:

- 1. Overuse of consultants in the future causes increase in errors is contract documents, increases cost of projects, safety implications, public trust.
- 2. Lack of Staff Experience causes outdated design codes causes inefficient designs, and costly solutions.
- 3. Ineffective QC/QA causes non-compliance with regulations, delays project and non-participation

#### Core Element: NBIS Program

Causes:

- Cutting down scope to save cost
- Lack of long-term (>1 cycle) tracking of condition
- QC/QA not catching data errors
- Emergency/Priority Repair Procedures not being followed
- Lack of experienced/knowledgeable staff

#### Effects:

- Data inaccurate
- Data not updated in a timely manner
- Not in compliance with NBIS
- Inadequate documentation
- Emergency repairs not timely
- Repairs improperly classified as Emergency/Priority 1
- Impending failures

#### Risk Statement:

- 1. Increasing amounts of cutting down inspection scope to save cost, causes inaccurate data and improper programming. Monetary stewardship failure.
- 2. Data documentation not updated and/or is inadequate causing increased likelihood of bridge failures.
- 3. Emergency repairs not being followed up upon, results in bridge failure.
- 4. Lack of scour data causes repairs not being followed up upon.
- 5. Poor quality of project plans, designs causes change orders and claims.