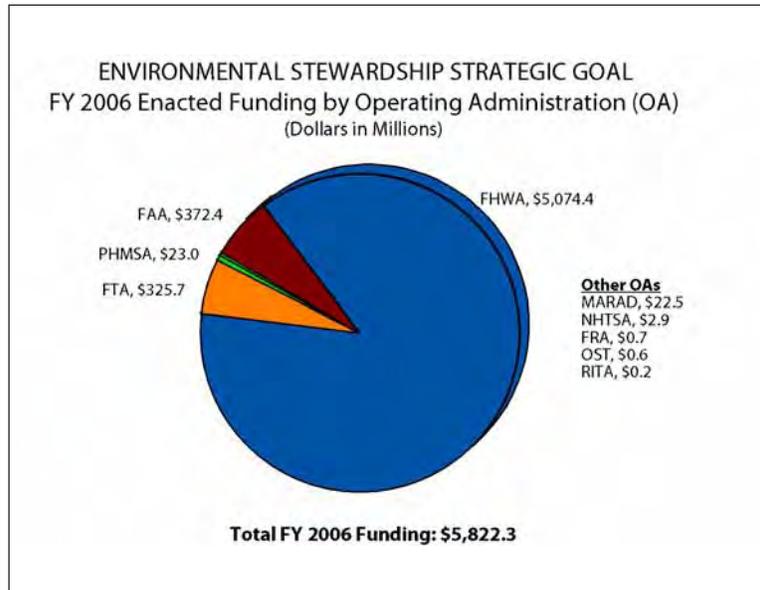




## ENVIRONMENTAL STEWARDSHIP STRATEGIC GOAL

PROMOTE TRANSPORTATION SOLUTIONS THAT ENHANCE COMMUNITIES AND PROTECT THE NATURAL AND BUILT ENVIRONMENT

FY 2006 ENACTED FUNDS: \$5,822.3 MILLION



### STRATEGIC OUTCOMES

- Reduce pollution and other adverse environmental effects of transportation and transportation facilities
- Streamlined environmental review of transportation infrastructure projects

### PERFORMANCE MEASURES

- Ratio of wetlands replaced for every acre affected by Federal-aid highway projects.
- Percent DOT facilities characterized as No Further Remedial Action under the Superfund Amendments and Reauthorization Act.
- 12-month moving average number of area transportation emissions conformity lapses.
- Tons of hazardous liquid materials spilled per million ton-miles shipped by pipelines.
- Percent reduction in the number of people within the U.S. who are exposed to significant aircraft noise levels.



## REDUCE POLLUTION AND OTHER ENVIRONMENTAL EFFECTS

**FY 2006 ENACTED FUNDS  
\$5,692 MILLION**

### WETLANDS RESTORATION

Wetlands are important natural ecosystems that filter pollutants and minimize potential floodwater damage. Before their value was fully recognized, many of the Nation's wetlands were adversely affected or lost in the development of transportation and other infrastructure facilities. In 1996, FHWA established a national policy on wetland protection that called for a net gain of wetlands in federally assisted projects. Over the past 10 years, considerable progress has been made in States and Federal Lands Highway Divisions.

**2006 Results.** Federal-aid projects nationwide replaced wetlands at a ratio of 2.6 acres of compensatory wetland mitigation for every acre impacted.

**FY 2007 Performance Forecast.** This measure will continue to be tracked internally, but no longer reported after FY 2006. A new measure tracking the number of Exemplary Ecosystem

Initiatives (EEI) will be reported on in FY 2007. An EEI is an action or measure that will help sustain or restore natural systems and their functions and values, using an ecosystem or landscape context. Examples include mitigation projects that support wildlife movement and habitat connectivity, the development of watershed-based environmental assessment and mitigation approaches, the use of wetland banking, and the use of special measures to prevent invasive species along highway rights-of-way.

Performance Measure				
Ratio of wetlands replaced for every acre affected by Federal-aid Highway projects				
	2003	2004	2005	2006
Target	1.5	1.5	1.5	1.5
Actual	2.7	2.1	3.3 (r)	2.6 #
(r) Revised; # Projection				

### DOT FACILITY CLEANUP

DOT has a special responsibility to ensure that its own facilities are compliant with environmental laws and regulations. Restoration activities involve identifying, investigating, and cleaning up contaminated sites. Compliance activities include the operation of facilities, equipment, and vessels in accordance with environmental requirements. Pollution prevention activities involve preventing future cleanup activities by avoiding the generation of pollutants in our operations or facilities.



**2006 Results.** DOT did not meet the target. FAA continued work under State agreements at several facilities, including five that the Environmental Protection Agency (EPA) identified as needing further evaluation or remediation. In FY 2006, FAA received a written determination of "No Further Remedial Action Planned" from the EPA for the Jackson Homer Beacon Annex in Jackson, Nebraska; and, a verbal notification of "No Further Remedial Action Planned" from the EPA for the Washington-Reagan National Airport. In addition, during this fiscal year, FAA achieved closure at 27 State regulated sites. To reduce the likelihood of petroleum contamination from mission critical equipment, FAA meets current EPA requirements for fuel storage tanks; continues to replace outdated fuel storage tanks at the end of their normal life cycle to prevent leakage; tests in-service tanks; and will investigate, remove or clean tanks at decommissioned facilities.

Performance Measure				
Percent DOT facilities characterized as No Further Remedial Action Planned under the Superfund Admendments and Reauthorization Act				
	2003	2004	2005	2006
Target	92	92	93	93
Actual	94	93	92	92

**FY 2007 Performance Forecast.** DOT expects to meet the target in FY 2007.

## SHIP DISPOSAL

MARAD conducts its Ship Disposal Program to help achieve DOT's Environmental Stewardship strategic goal to *promote transportation solutions that enhance communities and protect the natural and built environment*. By expediting the disposal of high- and moderate-priority ships via full and open competition, utilizing all feasible disposal options, MARAD will eliminate the risk posed by these ships to the local environment.



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MARAD was required by law to dispose of all obsolete ships in the National Defense Reserve Fleet by the end of FY 2006. MARAD did not meet the deadline due to limited domestic industrial capacity and regulatory impediments to expedited and cost-effective foreign recycling. The

presence of hazardous substances such as asbestos and solid and liquid polychlorinated biphenyls (PCBs), and concerns raised by the EPA about the export of PCBs, removed overseas recycling as a viable option for expedited disposal.

MARAD informed the Congress in 2002 that the deadline was unlikely to be met. However, MARAD has removed 72 obsolete ships since 2001 including all 37 ships identified as high disposal priorities, in 2001 with the exception of one ship that is on hold pending historic



assessment. It is anticipated that this vessel will be available for disposal by the end of FY 2006. While clearance through the historical assessment process at times affects the disposal availability of some specific ships, the process is not impeding the rate of vessel removals overall.

Additional ships are added to the disposal inventory as other merchant-type Federal vessels become obsolete. Thus, much of the improvement as seen in the decreased number of obsolete vessels awaiting disposal has been offset by additional vessels being declared obsolete. However, all high-priority vessels available to the disposal program have been removed from MARAD's reserve fleets so the risk to the environment has been reduced.

During FY 2006, MARAD removed 25 obsolete ships from three National Defense Reserve Fleet sites. This included 23 high and moderate priority vessels. All of the removals were the result of dismantling/recycling contracts with domestic ship disposal companies with the exception of one ship that was disposed of via deep-sinking. Depending on the characteristics of each vessel and the capability of each contractor, it may take from several months to over a year to dismantle a ship once it has arrived at a disposal facility. Dismantling was completed on 20 ships during 2006. These ships were removed from the fleet sites during the current and preceding fiscal years. The rate of dismantling is dependent on a number of external factors, including weather, contractor resource availability and the contractor's ability to quickly and properly arrange for disposal of hazardous materials. MARAD also entered into additional disposal contracts that will result in the dismantling/recycling of 22 additional ships in subsequent years.

## **MOBILE SOURCE EMISSIONS**

The National Ambient Air Quality Standards (NAAQS) target six major pollutants as among the most serious airborne threats to human health. Transportation is a major contributor to some of the pollutants, particularly ozone, carbon monoxide and particulate matter. Recent studies show that 27 to 56 percent of all emissions related to these pollutants originated from on-road vehicles. Areas exceeding certain NAAQS, known as air quality non-attainment areas, are required to meet transportation conformity requirements in the Clean Air Act. Failure to meet the requirements will place an area in a conformity lapse, during which only limited types of projects can proceed. The EPA recently revised the national ambient air quality standards for fine particulate matter. Under the more stringent standard, more areas will be designated as non-attainment and will be subject to conformity requirements.



**2006 Results.** Prior to FY 2006, approximately 6 non-attainment and maintenance areas were in a conformity lapse in any given month. In FY 2006, the 12-month moving average number of areas in a conformity lapse was 1.3. The number of conformity lapses was very low throughout most of FY 2006. As required by the Clean Air Act, non-attainment and maintenance areas are required to demonstrate that, through the conformity process, emissions estimated from the planned transportation system must be consistent with the clean air goal of the State. Many new non-attainment areas were required to demonstrate conformity for the fine particulate air quality standards by April, 2006. In anticipation of this deadline, DOT and EPA conducted numerous workshops, training sessions, and other outreach activities to raise awareness and to prepare State departments of transportation, State air agencies, and Metropolitan Planning Organizations (MPOs) to meet the requirements. In addition, guidance documents were issued by the two agencies to ensure that the transition to new conformity requirements went smoothly. State and local agencies took the initiative to coordinate the process well in advance of the deadline. As a result of the advanced preparation, all the non-attainment areas were able to meet conformity determinations by the April 2006, deadline.

Performance Measure				
12-month moving average number of area transportation emissions conformity lapses				
	2003	2004	2005	2006
Target	6.0	6.0	6.0	6.0
Actual	6.0	6.3 (r)	5.8 (r)	1.3 *
(r) Revised; * Preliminary estimate				

**FY 2007 Performance Forecast.** DOT expects to meet or exceed the performance targets in FY 2007 for areas in a conformity lapse. While there are multiple causes for a transportation lapse, including new conformity requirements for the new fine particulate matter air quality standard, the FHWA should be able to provide adequate guidance and assistance to these areas to address these causes and meet the more stringent targets in most instances.

## IN-DEPTH ACCOMPLISHMENTS PROMOTING AIR QUALITY

FHWA continued to work closely with States, MPOs, the Federal Transit Administration (FTA), and EPA to reduce on-road mobile source emissions. With the implementation of new SAFETEA-LU provisions, the Agency expects State and local partnering agencies to fund and implement even more cost-effective strategies often focusing on heavy-duty diesel emissions. FHWA seeks to increase the percentage of non-attainment and maintenance areas meeting the mobile source emissions budgets for ozone, carbon monoxide, and particulate matter. Following the



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release of more stringent standards for ozone and fine particulate matter, the Agency continued to address the impact of the regulatory changes and to maintain area transportation conformity lapses at current low levels. Through improved integrated transportation and air quality planning, the transportation conformity process is designed to ensure that emissions from an area's transportation system are consistent with the Clean Air Act. The EPA is required to revise the conformity regulation to reflect all the SAFETEA-LU transportation conformity changes by August 2007.

## PIPELINE HAZMAT SPILLS

One of the major consequences of pipeline incidents—particularly from hazardous liquid pipelines—can be adverse impacts to the environment. This is a function of the type, amount and location of commodity spilled.

PHMSA's first priority is the continued safe operation and reliability of all pipelines. PHMSA has taken a proactive approach to protecting the environment by designing and implementing a strong risk-based systems approach to ensure the safety, security, and reliability of the Nation's pipeline infrastructure.

Over the long term, PHMSA continues to significantly reduce the environmental impact of non-volatile hazardous liquid spills by achieving a 48 percent reduction in the five year average of hazardous liquid spill volume from 1996-2000 compared to 2001-2005, even with major hurricane damages in 2005 – an accomplishment due to several new initiatives adopted by PHMSA since 2001.

**2006 Results.** Based on the preliminary data, PHMSA expects to meet the FY 2006 performance target, despite two significant accidents in Kansas (Montgomery County and Wyandotte County). These two accidents account for 62 percent of the net tons lost in the first half of this year. This measure is very dependent on single large events because a single spill can account for 50 percent or more of the annual total spill amount for all reportable pipeline releases.

Performance Measure				
Tons of hazardous liquid materials spilled per million ton-miles shipped by pipelines				
	2003	2004	2005	2006
Target	.0073	.0068	.0064	.0060
Actual	.0071	.0102	.0090 (r)	.0059 *
(r) Revised; * Preliminary estimate				

In December 2000, PHMSA issued the hazardous liquid integrity management (IM) regulations to assess, evaluate, repair and validate the integrity of hazardous liquid pipelines that could affect High Consequence Areas (HCAs). At the end of 2005, the total number of pipeline segment



miles inspected that could affect HCAs (including environmentally sensitive areas) is approximately 80,000 miles, of which 22,500 miles were inspected in 2005 (the 2006 figure will be available in 2007).

The IM strategy is a long-term program investment. The expected environmental benefits of the IM approach in terms of reduction in number and consequences of hazardous liquid accidents in HCAs should be even more apparent over time. Since the inception of the IM regulations, over 3,000 conditions were repaired or mitigated that needed immediate attention, nearly 10,000 other conditions were repaired on a scheduled basis, and an additional 21,000 conditions were repaired beyond those required by the hazardous liquid IM regulations.

**FY 2007 Performance Forecast.** PHMSA expects to meet the FY 2007 target.

## IN-DEPTH ACCOMPLISHMENTS

In 2006, PHMSA proposed an important environmental protection through its new low-stress hazardous liquid pipeline Notice of Preliminary Rule Making. The rule would require operators to address the most common threats to these lines, corrosion and third-party damage, and provide other protections to the surrounding environment. The importance of this step was underscored by two spills from BP Corporation pipelines on Alaska's North Slope. DOT and PHMSA took command of these accidents, directed extensive testing of and repair to these previously unregulated pipelines, and is closely overseeing all work. DOT and PHMSA generally received high marks from all sides on its efforts including from the Congress in three oversight hearings.

PHMSA has strengthened and improved its oversight program to foster improved operator IM Programs and to assure compliance with the new IM rules that protect environmentally sensitive areas. PHMSA and its state partners will soon complete initial comprehensive inspections of all hazardous liquid operator IM Programs. Approximately 175 inspections have been completed encompassing more than 98 percent of the hazardous liquid pipeline mileage. Re-inspections of operators with especially poor performance have begun to assure they are making progress toward attaining full compliance.



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## AIRCRAFT NOISE EXPOSURE

The FAA is working to increase the number of flights at America's top airports to keep pace with forecasted demand. However, public concern and sensitivity to aircraft noise around airports continues to grow. Noise complaints increase even while quieter aircraft technology is introduced into the fleet. Aircraft noise is an undesired by-product of mobility, and FAA acts to reduce the public's exposure to unreasonable noise levels.

In the past decade, the phase-out of noisier commercial aircraft was principally responsible for the reduction in the number of people exposed to high levels of aircraft noise, although its efforts were complemented by noise compatibility projects funded under the Airport Improvement Program (AIP). While the new international aircraft noise standard will encourage the introduction of quieter aircraft into operations, AIP-funded noise compatibility projects will be the principal means employed by FAA to mitigate significant aircraft noise exposure in the near future.

**2006 Results.** DOT met the performance target. DOT continues to pursue a program of aircraft noise control in cooperation with the aviation community through the development and adoption of quieter aircraft, soundproofing and buyouts of buildings near airports, operational flight control measures, and land use planning strategies. FAA is authorized to provide funds for soundproofing and residential relocation, but each project must be locally sponsored and be part of a noise compatibility program prepared by the airport sponsor and approved by the FAA. The noise target is based on FAA's historical experience and reflects the relocation of people from significant noise areas through grant funding, but is also affected by market forces that drive changes in commercial aircraft fleets and operations.

<b>Performance Measure</b>				
Percent reduction in the number of people in the U.S. who are exposed to significant aircraft noise levels				
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Target	-1	-2	-3	-4
Actual	-15	-28 (r)	-29 (r)	-27 #
(r) Revised; # Projection from trends				

The significant performance improvement over the targeted goals in noise reduction grew out of a confluence of a number of external factors: the economic downturn, the impact of September 11th on the industry, and the severe acute respiratory syndrome (SARS) outbreak. These factors produced a dramatic downturn in operations as well as a large-scale premature retirement of older Stage Three aircraft (B727s, DC-9s, and MD-80s). This combination of lower operations and the rapid reduction of the average age of the fleets operating produced the dramatic improvements in the noise exposure environment.



Operational levels began to recover in FY 2004 and continue to increase. Taking into account the Next Generation Air Transportation System goal of increasing capacity threefold, the dramatic level of the improvements witnessed over the last three years is unlikely to persist.

**FY 2007 Performance Forecast.** DOT will meet the target in FY 2007.

**MEASURE UNDER DEVELOPMENT—  
ENVIRONMENTAL STREAMLINING**

**FY 2006 ENACTED FUNDS  
\$130.3 MILLION**

Project delays impede needed transportation system improvements and increase costs. Streamlining environmental reviews and documentation is essential to mitigating time delays and completing infrastructure projects on a more timely and cost effective basis. DOT has begun implementing new SAFETEA-LU requirements for an Environmental Impact Statement (EIS) review that are intended to make the process quicker and more predictable. The new requirements focus on better identifying agencies, issues, and methodologies; coordinating reviews by participating agencies in accordance with a coordination plan; and engaging members of the public at critical points early in the process.

Three DOT modes are affected by the new requirements: the Federal Highways Administration, the Federal Aviation Administration, and the Federal Transit Administration. These agencies expended significant funds in FY 2006 developing collection systems, revising procedures, and working with stakeholders in order to improve the Department's performance in processing EISs. DOT intends to report on progress against targets in FY 2008.

