

Performance Goals - Human and Natural Environment

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STRATEGIC GOAL: HUMAN AND NATURAL ENVIRONMENT

Protect and enhance communities and the natural environment affected by transportation.

We Aim To Achieve These Strategic Outcomes:

- Improve the sustainability and livability of communities.
- Reduce the adverse effects of transportation on ecosystems and the natural environment.
- Improve the viability of ecosystems.
- Reduce the adverse effects of transportation facilities on the natural environment.
- Improve equity for low income and minority communities concerning the benefits and burdens of transportation facilities and services.
- Reduce the amount of pollution from transportation sources.

Transportation makes our communities more livable, enhancing the quality of our lives and our society. However, transportation generates undesired consequences too, such as pollution, noise, and the use of valuable land and fisheries. No matter how much is done to improve the capacity and efficiency of our transportation system, we cannot consider our programs to be successful unless we also manage the effects on our environment, and ultimately our quality of life.

DOT's objective is to advance the benefits of transportation while minimizing its negative environmental impacts. The FY 2003 budget proposes \$3.1 billion in environmental funding to maintain progress in achieving our outcomes.

A summary performance report and a detailed analysis of our 2003 strategies follow.

Performance Goals

Reduce Adverse Effects on Ecosystems and Improve Ecosystem Viability

Fishery Protection

Wetland Protection and Recovery

Reduce Adverse Effects of Transportation Facilities

DOT Facility Cleanup

Reduce Transportation Pollution

Mobile Source Emissions

Oil and Pipeline Spills

Aircraft Noise Exposure

Performance Report: Human & Natural Environment

	1995	1996	1997	1998	1999	2000	2001	2001 Target	Met	Not Met
Percent urban population living within 1/4 mile of a transit stop with service of 15 minutes or less (non-rush hour)	N/A	11.22	11.56	11.21	11.39	11.54	N/A	11.78		
Percent change in number of species designated as overfished	N/A	N/A	N/A	N/A	N/A	-9	-1*	-1	✓	
Percent DOT facilities categorized as No Further Remedial Action Planned under Superfund Amendments and Reauthorization Act	67	75	74	78	90	90	91	91	✓	
Tons (in millions) of mobile source emissions from on-road motor vehicles***	68.9(r)	69(r)	68(r)	66.9(r)	64.2(r)	64.0#(r)	62.9#	64.4(r)	✓	
Number of people in U.S. (in thousands) exposed to significant aircraft noise levels	N/A	N/A	N/A	722	585	440	446**	440**		✓
Gallons of oil spilled by maritime sources per million gallons shipped	6.6	7.2	1.6(r)	2.9(r)	2.6(r)	3.2	3.4	4.0	✓	
Tons of hazardous liquid materials spilled per pipeline million ton-miles shipped	0.0132	0.0232	0.0257	0.0119	0.0229	0.0131	0.0201*	0.0151		✓
Acres of wetlands replaced for every acre affected by Federal-aid Highway projects	N/A	2.3	2.6	2.2	2.3	3.8	2.1	1.5	✓	

Projection

N/A = Not Available

* Preliminary estimate

** Due to a change in methodology, the 2001 actual data and target are calculated using different methodologies, but 440,000 people exposed to noise as calculated by the current method is the equivalent of 600,000 people calculated by the former method.

*** The Environmental Protection Agency (EPA) revised the emissions methodology used in calculating these estimates, leading to changes in previously reported emissions estimates. Estimates used in this report reflect the current EPA methodology.

FISHERY PROTECTION: The U.S. Exclusive Economic Zone (EEZ) covers 3.36 million square miles of ocean, and provides a livelihood for commercial fishermen, a vast supply of food, and recreation. Commercial and recreational fisheries contribute about \$50 billion annually to the U.S. economy. The Sustainable Fisheries Act (SFA) of 1996 mandates a reduction in the number of over-fished stocks. Responsible management and enforcement of ocean resource management regimes is of critical importance as demand for fish protein grows.

Performance Goal:

Ensure that economic competition for harvesting fishery resources remains within legal and resource management plan boundaries.

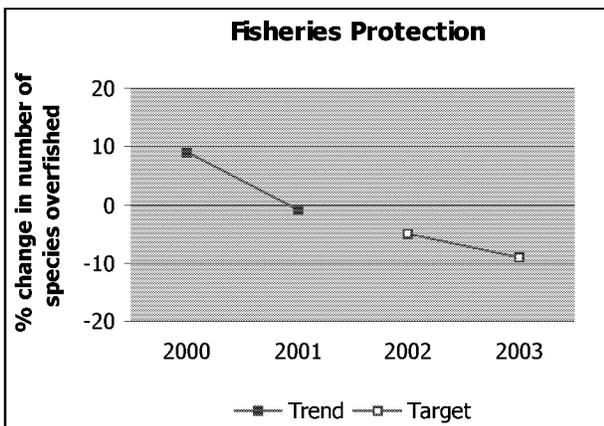
Performance Plan:

Performance measure:

Number of significant domestic fishery violations found.					
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Target:	N/A	N/A	N/A	133	105
Actual:	392	273	113		

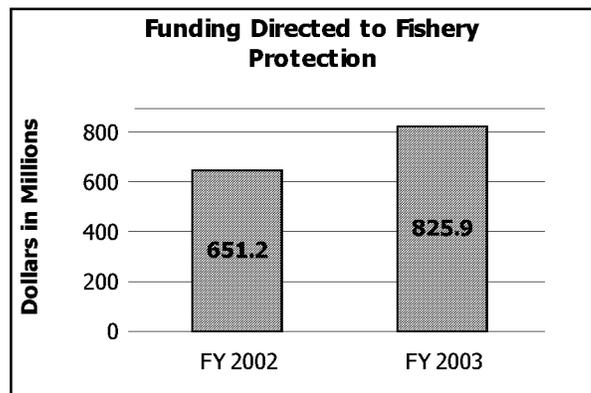
Note on Data: The former performance measure could not be correlated in any meaningful way to DOT’s contribution to economic resource protection. While the National Marine Fisheries Service measures the overall health of fish stocks, DOT contributes at-sea enforcement efforts in accordance with regional fishery management plans and NMFS regulations. “Significant Violations” is defined as those which result in one or both of the following conditions: 1) Significant damage or impact to the resource or to the fisheries management plan; 2) Significant illegal monetary advantage to the violator over their competitors.

External Factors: Economic pressure on fishers cause by dwindling fish stocks and strict catch limits may lead to higher levels of illegal behavior.



Strategies and Initiatives to Achieve 2003

Target: DOT resources attributable to this performance goal are depicted below:



Increased use of Vessel Monitoring Systems (VMS) will help with closed area enforcement but cannot be a substitute for an at-sea presence to ensure compliance with gear- and species-based regulations. NMFS is establishing a National VMS, and in FY 2001 the Coast Guard received funding to establish connectivity to this system. Also in FY 2001, the Coast Guard received funding to create new fisheries intelligence analyst positions in key Coast Guard regions. This will enable the Coast Guard to more effectively allocate its enforcement resources.

Continued close coordination with other Federal and State agencies will also be key to achieving success in this performance goal.

Other Federal Programs with Common Outcomes:

The NMFS and the Coast Guard play major and complementary roles in achieving the national goals of the Sustainable Fisheries Act of 1996. NMFS conducts scientific assessments of stock health, oversees development of regional fisheries management plans to sustain that health, and conducts shoreside enforcement of regulations. The Coast Guard provides at-sea enforcement. Numerous international fisheries

agreements and Executive Orders will soon enter into force that require coordination with the Departments of State and Justice, NOAA, and NMFS.

Performance Report:

Discontinued performance measure:

Percent change in number of species that are designated as overfished (only for fisheries management plans where Coast Guard has enforcement responsibility).

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Target:	N/A	8%	-1%	*	*
Actual:	N/A	9%	-1%#		

Preliminary results based upon draft NMFS report.

* Performance goal will be discontinued after 2001, to be replaced with the number of significant fishery violations.

2001 Results: DOT met the performance target. This was based on a National Marine Fisheries Service (NMFS) draft report which indicates 5 species added and 4 removed from the overfished list, and 8 species of Pacific Northwest salmon removed from the list because they are now being managed under the Endangered Species Act. The Coast Guard can take credit, in part, for the rebuilding status of Georges Bank Haddock due to their enforcement efforts in the New England area.

Significant fishery violations found by the Coast Guard during at-sea enforcement has been decreasing since 1999. This indicates that behavior is changing at sea. Fisheries Training Centers were established in FY 1995, and in the course of the ensuing years, the violation rate increased as the Coast Guard's Boarding Teams improved their enforcement. In response to improved enforcement, compliance in the fishing industry increased. Vessel Monitoring Systems (VMS) may have also had an effect - when fishing vessels are monitored by VMS, their propensity to violate the law is lower. These deterrent effects, along with better Coast Guard interaction with Fisheries Management Councils, may explain the recent declining trend.

FY 2002 Performance Plan Evaluation: DOT expects to meet the performance target.

WETLAND PROTECTION AND RECOVERY: Wetlands are an important natural resource. They provide natural filtration of pollutants, and they store and slow down the release of floodwaters, thereby reducing damage to downstream farms and communities. Wetlands also provide an essential habitat for biodiversity. But many of the Nation’s wetlands have been lost to development over the years, before their value was fully recognized. Highways and transportation facilities (location, construction, and operation) can be a significant factor affecting these ecosystems.

Performance Goal:

Replace each acre of wetland removed by a Federal transportation project with half again as much in mitigation.

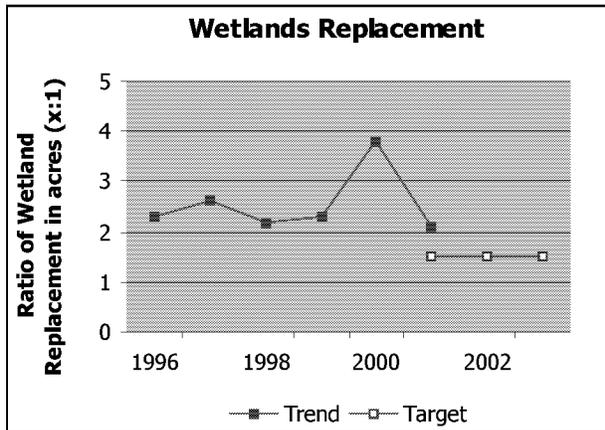
Performance Plan:

Performance measure:

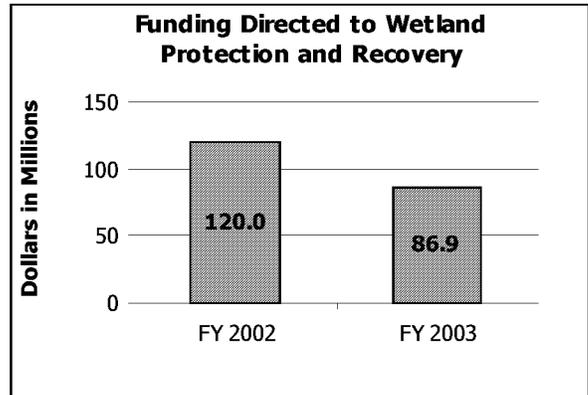
On a program-wide basis—acres of wetlands replaced for every acre affected by Federal-aid Highway projects (where impacts are unavoidable).

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Target:	1.5	1.5	1.5	1.5	1.5
Actual:	2.3	3.8	2.1		

External factors: Wetland impacts are sometimes unavoidable, especially when bridges are being built. Projects on existing alignments can cause wetland degradation that is impossible to avoid. In areas where the concentration of wetlands is high (southern bottomlands, Midwestern prairie potholes, and eastern pine flatwoods), transportation projects must often traverse wetlands to provide access to the area.



Strategies and Initiatives to Achieve 2003 Target: DOT resources attributable to this performance goal are depicted below:



FHWA, FTA, and Coast Guard work together to approve transportation projects that do as little harm as possible to the Nation’s wetlands.

FHWA promotes the design, construction, maintenance, and use of transportation projects that conform to Federal environmental legislation and regulations primarily through research, new technologies, analytical models, management training, and the transfer of technology. FHWA uses partnerships with resource agencies and reports, such as *Wildlife Ecology and Transportation Issues in Europe* jointly-sponsored by FHWA and the American Association of State Highway and Transportation Officials to publicize and promote best ways to avoid wetland takings in the first place, and good mitigation practices when projects unavoidably involve wetlands. FHWA will conduct additional research and development on wetland protection and enhancement, practical techniques of habitat restoration, and ecosystem analyses and characterization. This includes research on ecosystem analyses and methodologies, water quality course development, storm water management practices, functional evaluation of wetlands, and public information measures.

Performance Report:

2001 Results: DOT met the performance target. FHWA, FTA, and the Coast Guard, coordinated environmental mitigation efforts associated with permit-granting processes for Federal transportation projects with the Army Corps of Engineers to insure that transportation projects involving wetlands induced no long term harm to them.

Projects impacted approximately 1,905 acres of wetland, and provided 4,017 acres of compensatory mitigation. This mitigation performance represents about 2 percent of the estimated total nationwide wetland replacement, most of which comes from restoration of agricultural lands. This ratio is comparable for wetlands impact mitigation data for the Federal-aid program collected in FY 1996 through FY 2000, which average about 2.3:1.

FHWA sponsored the 4th International Conference on Wildlife Ecology and Transportation, and the 4th National Mitigation Banking conference. Both provided public information on wildlife and ecosystems, including wetland mitigation best practices.

FHWA published the Wetlands Accounting Database, a system designed to assist the State DOTs in managing their wetland mitigation activities. FHWA also published a report on wetland restoration case studies. Both publications emphasize a watershed approach and models in planning, developing, and managing data for mitigation and restoration activities.

FHWA continued to interact with other agencies, conducting joint research and developing implementation products on the hydrogeomorphic wetland assessment methodology (HGM). FHWA and the National Highway Institute presented the training course, Functional Assessment of Wetlands, which presents guidance and information to State DOTs and gathers feedback on use of the HGM.

Other Federal Programs with Common Outcomes: The Department coordinates wetland programs and research initiatives with EPA; the Departments of Interior, Commerce, and Agriculture; and the Army Corps of Engineers. FHWA is a member of several Federal Committees on wetlands and participates in joint research studies with other Federal agencies on wetland

evaluation and mitigation. Information is shared through all these activities.

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. The Maritime Administration (MARAD) is required by law to dispose of obsolete ships in the National Defense Reserve Fleet (NDRF) by the end of FY 2006. MARAD is the U.S. Government’s disposal agent for merchant type vessels 1,500 gross tons or more. Due to 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, sales for overseas disposal were halted in 1995. Additional ships will be added to the inventory as other merchant type Federal Government vessels become obsolete. Leaks from some of the ships in the NDRF have already occurred and the risk of environmental damage associated with the deteriorating ships continues to increase.

Performance Goal:

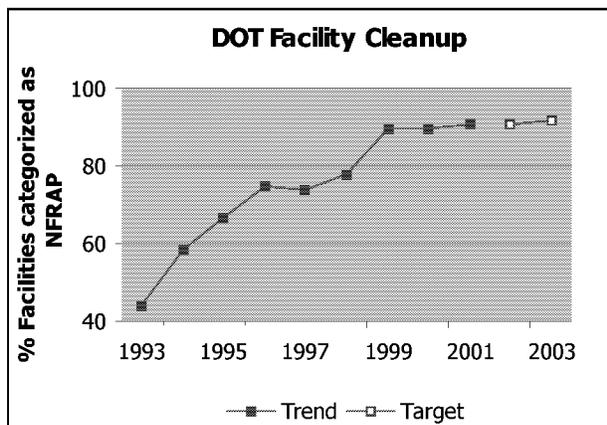
Ensure that DOT operations leave no significant environmental damage behind.

Performance Plan:

Performance measure:

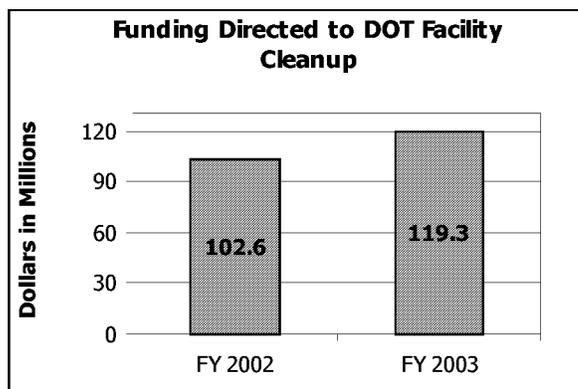
Percentage of DOT facilities categorized as No Further Remedial Action Planned (NFRAP) under the Superfund Amendments and Reauthorization Act (SARA).					
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Target:	80%	82%	91%	91%	92%
Actual:	90%	90%	91%		

External Factors: The Environmental Protection Agency (EPA) has the authority to reactivate previously NFRAP sites, and new sites may be identified. Also, requirements may change as laws and resulting regulation change to reflect new research and findings. Ship disposals are dependent on a continued commercial interest in ship recycling.



Strategies and Initiatives to Achieve 2003 Target:

DOT resources attributable to this performance goal are depicted below:



Facility cleanup will comply with the Superfund Amendments and Reauthorization Act (SARA) process and the requirements of the National Oil and Hazardous Substances Pollution Contingency Plan. A “worst first” prioritization system is used to assign highest priority to those facilities representing the greatest potential hazard to the public health and the environment. Regulatory factors at the local, State, and Federal levels are also considered in the decision-making process.

- The Coast Guard will spend \$17 million to carry out the Coast Guard’s environmental compliance and restoration responsibilities. These responsibilities include environmental cleanup and restoration of contaminated current and former Coast Guard facilities, and proactive measures to bring Coast Guard facilities, vessels, and aircraft into compliance with Federal and State environmental regulations. Major cleanup projects are

required to continue at Kodiak, Alaska and Elizabeth City, North Carolina in FY 2003 to comply with Federal and State requirements. EPA proposed the USCG Yard for National Priority Listing (NPL) on September 13, 2001. Final rulemaking for NPL listing is scheduled for the Federal register in February 2003. At that time, the Yard will be required to conduct remedial action at approximately \$500,000 per year for several years.

- FAA funds pollution prevention; complies with occupational safety, health and environmental regulations; promotes good energy management practices; and conducts environmental impact analyses (\$31.3 million). Cleanup activities in compliance with mandatory schedules are ongoing in the Alaskan Region, the Mike Monroney Aeronautical Center, and the William J. Hughes Technical Center (\$20.0 million). FAA will also replace outdated fuel storage tanks at the end of their normal life-cycle with newer, higher standard tanks; register and test in-service tanks; and investigate, remove or clean tanks at decommissioned facilities (\$8.1 million).
- FRA will continue to work with the Department of Justice to resolve State issues at the formerly owned facility in Alaska.
- FHWA will continue work at one facility to meet the legal requirements of the involved State.

Other Federal Programs with Common Outcomes: DOT facility cleanup is based on EPA standards and is in line with government-wide efforts under SARA.

Performance Report:

2001 Results: DOT met the performance target.

The Coast Guard continued remediation at LORAN Station, St. Paul, AK; Support Center Elizabeth City, NC; and Support Center Kodiak along with other smaller sites. The Coast Guard also made progress on the aids to navigation battery recovery program and commenced the long process of removing polychlorinated biphenals from its decommissioned vessel fleet.

The FAA progressed in remediating their facilities in 2001, achieving NFRAP status for an additional facility. Sixty-five of the 68 facilities on the

Docket have now been categorized as NFRAP. The remaining three facilities are in process of remediation or are awaiting EPA determination of NFRAP status. Most of the facilities on the Docket are located in the Alaskan Region, where all 60 listed facilities have achieved NFRAP compliance.

FRA has three designated facilities. EPA has determined that no further remedial action is necessary at two of these facilities, and one formerly government-owned facility is being remediated. Efforts are continuing to determine the nature and extent of contamination at that facility.

FHWA has one designated facility. EPA has determined that no further remedial action is necessary at this site. However, due to contamination in the source area, additional field work was required by the State. FHWA agreed to implement an interim measure to attempt to control migration of contaminants from the source area.

FY 2002 Performance Plan Evaluation: DOT expects to meet the 2002 performance target.

Management Challenge – Ship Disposal (IG/GAO)

Ship disposal is a management challenge separate from DOT's goal to clean up its shore facilities. The Maritime Administration (MARAD) is the U.S. Government's disposal agent for merchant-type vessels of 1,500 gross tons or more. MARAD is required by law to dispose of obsolete ships in the National Defense Reserve Fleet (NDRF) by the end of FY 2006. As of March 2002, 133 ships await disposal.

Since 1994, environmental concerns and hazardous material regulatory obstacles have prevented the export of ships, which had until that time been a disposal option that maximized financial returns to the Government. New legislation in FY 2001 allowed MARAD for the first time to purchase scrapping services as an expedient means to remove the most deteriorated ships and provided \$10 million for this purpose. From the start of FY 2001 to the present, nine obsolete vessels have been removed from the fleets for disposal through a combination of payment for scrapping services, prior year vessel sales and artificial reefing.

In 2003, MARAD will dispose of 3-5 high-risk vessels through domestic scrapping (\$11.2

million). Domestic scrapping is currently the most expedient, assured and cost-effective disposal method for the highly deteriorated ships that represent an imminent environmental threat.

In addition to scrapping obsolete ships, MARAD will dispose of them by any or all of the following means:

- Artificial reefing (including the establishment of national remediation standards through a joint effort with the EPA and the Navy).
- Soliciting for the sale of recyclable obsolete vessels having a material value to recycling companies.
- Pursuing legislative changes to expedite ship disposal or create new opportunities.

MARAD is also pursuing the following alternatives:

- Export of ships for recycling (teaming with the EPA and the State Department to resolve environmental and worker health/safety issues).
- Soliciting innovative proposals from industry for ship disposal solutions.
- Seeking additional funding sources and partnerships (domestic and international) for ship disposal based upon the environmental, safety and training aspects of the program.

Each of the above alternatives has the potential to realize cost savings (compared to paid ship scrapping) and increase the number of vessel disposals. However, the potential results for these alternatives cannot yet be accurately quantified. If MARAD is to meet the legislative deadline for eliminating the current inventory of obsolete ships, approximately 43 ships a year must be disposed of during the FY 2004-2006 timeframe.

MOBILE SOURCE EMISSIONS: The National Ambient Air Quality Standards 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. About two-thirds of transportation-related emissions come from on-road motor vehicles. The quality of our air is a public good, and the cost of these pollutants is not captured in the marketplace. For this reason, the Government works to mitigate this negative impact.

Performance Goal:

In support of the President’s Clean Air Initiative, ensure that emissions from transportation sources conform to Clean Air Act standards.

Performance Plan:

Performance measure:

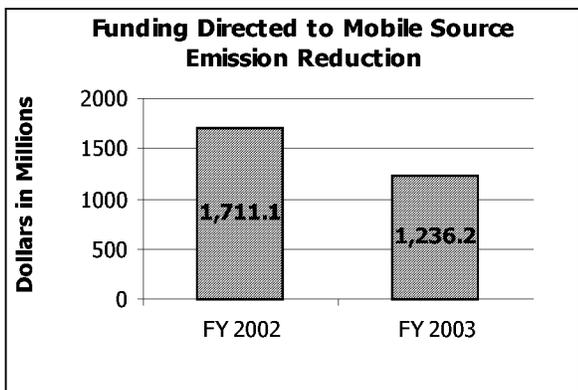
Monthly average number of area transportation emissions conformity lapses.					
	1999	2000	2001	2002	2003
Target:	N/A	N/A	N/A	6	6
Actual:	N/A	N/A	6#		

Preliminary estimate.

External Factors: Growth in the U.S. economy has translated into annual growth in vehicle-miles traveled (VMT). The principal component—private vehicles—provides flexibility to consumers. So diversion of users to other, more emission-efficient modes must be balanced with market choice and other economic factors.

Strategies and Initiatives to Achieve 2003

Target: DOT resources attributable to this performance goal are depicted below:



DOT aims to reduce mobile source emissions by encouraging the use of less polluting transportation; designing and implementing infrastructure that reduces congestion and emissions; researching and modeling the emissions impacts of investment choices; and

supporting the development of fuel- and emission-efficient vehicles.

Through research, new technologies, and analytical models, FHWA promotes the design, construction, maintenance, and use of highways that are compatible with the National environmental goals. In partnership with our stakeholders, FHWA supports the development of environmental analytical models to assist decision makers. FHWA provides resources, guidance, and technical assistance for States and local agencies to ensure compliance with the National Ambient Air Quality Standards, especially reducing transportation-related emissions.

Major programs in 2003 include: funding over \$1.2 billion in projects to reduce emissions through the Congestion Mitigation and Air Quality (CMAQ) program; identifying challenges in implementing amended conformity regulations for clean air by issuing guidance and providing technical assistance; assisting State and local partners in the implementation of the transportation conformity regulation in new non-attainment areas, and studying rural air quality issues and developing approaches to demonstrate conformity in rural non-attainment areas; expanding the transportation and air quality public education effort including the Alliance for Clean Air and Transportation.

Through continued research, FHWA will develop approaches to improve air quality and to evaluate emissions impacts and cost-effectiveness of transportation strategies. Activities include research on air toxics and a 2.5-micron particulate matter emission model to support new National Ambient Air Quality Standards. The Agency will also continue to participate in the DOT Center for Climate Change and Environmental Forecasting to research the connection between transportation, energy use and greenhouse gas emissions.

Other Federal Programs with Common Outcomes: FHWA and EPA work cooperatively to implement a number of initiatives, including the Transportation and Air Quality public education initiative, the transportation conformity regulation, and the CMAQ program. The DOT and EPA have also jointly funded a number of research efforts that target the reduction of mobile source emissions.

Performance Report:

FHWA Supplementary performance measure*:

Tons (in millions) of mobile source emissions from on-road motor vehicles.

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Target:					
Original:	64.9	63.5	62.2	61.1	N/A
Revised:	67	65.7	64.4	63.1	*
Actual:					
Original:	61.6	59.7&			
Revised:	64.2	65.7&	62.9&		

The Environmental Protection Agency (EPA) revised the emissions methodology used in calculating these estimates. The adjustments have led to changes in previously reported emissions estimates. Estimates used in this report reflect the current EPA methodology.

Metric tons (in millions) of carbon equivalent emissions from transportation sources.

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Target:	N/A	N/A	N/A	*	*
Actual:	492.8#	##			

(r) Revised; & Projected; # Preliminary estimate; ## Data not available;

** Performance measures discontinued after 2001, due to the lack of credible data. FHWA will continue to track the tons of emissions from mobile sources using EPA data, and will discuss progress in the context of this performance goal.*

2001 Results: Based on projections, DOT met the performance target for mobile source emissions. The performance goal for greenhouse gases relating to transportation was suspended in the 2002 Performance Plan and will be discontinued. During FY 2001, 97 percent of ozone non-attainment and maintenance areas met

their mobile emissions budgets, as did 100 percent of areas for carbon monoxide and 94 percent of areas for particulate matter (PM-10).

Through the CMAQ program, FHWA provided funding for State and local governments to encourage the use of alternative fuel vehicles, inspection and maintenance programs, and other transportation control measures. Between 1992 and 1999, at least six States with poor air quality used CMAQ funding for inspection and maintenance programs. In addition, FHWA provided CMAQ funds to State and local governments for many other transportation projects that provide air quality benefits. While individual projects yield small benefits, taken together CMAQ-funded projects have helped non-attainment areas meet their mobile source emission budget.

The joint FHWA/Environmental Protection Agency (EPA) Public Information Initiative on Transportation and Air Quality developed and implemented plans to expand the initiative in a second phase. Several new creative materials in the form of television, radio, and print public service announcements were developed for stakeholders. The initiative generated requests for program materials from 60 communities nationwide. The FHWA continued to support the Alliance for Clean Air and Transportation, a National alliance of more than 20 public and private organizations, to support an education program to reduce traffic congestion and improve air quality.

FY 2002 Performance Plan Evaluation: DOT expects to meet the performance target.

OIL AND PIPELINE SPILLS: A large share of the U.S. economy is fueled by oil. Over half the oil used in the United States today is imported, and most of the imported oil is carried in tankships. Furthermore, with offshore drilling occurring further offshore, and larger cargo and tank ships plying the oceans, the task of preventing oil spills will become even more challenging. Oil spills can devastate ecosystems and can incur enormous response costs. More than 617 billion ton-miles of petroleum and other hazardous liquids move across the country through about 157,000 miles of hazardous liquid pipelines. While this is usually the least costly way to transport these bulk cargoes, it also entails some risk. Because of the volume of liquid hazardous materials moved by pipelines, any spill into the environment is potentially a significant one.

Performance Goal:

Reduce amount of oil spilled 20 percent by 2006.

Performance Plan:

Performance measures:

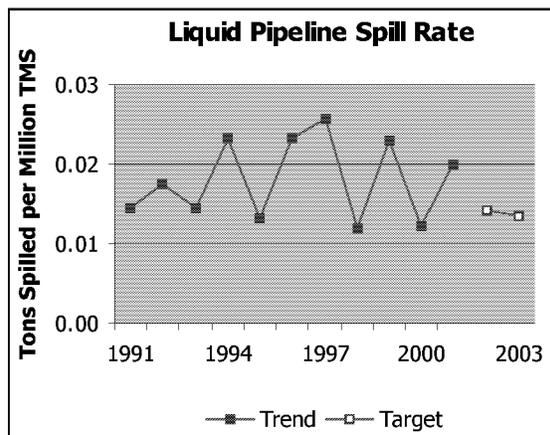
Gallons spilled per million gallons shipped by maritime sources.					
	1999	2000	2001	2002	2003
Target:	4.3	4.1	4.0	2.6	2.5
Actual:	2.7	3.2(r)	3.4		

Tons of hazardous liquid materials spilled per million ton-miles shipped by pipelines.					
	1999	2000	2001	2002	2003
Target:	.0171	.0161	.0151	.0142	.0134
Actual:	.0229	.0131	.0201#		

(r) Revised; # Preliminary estimate.

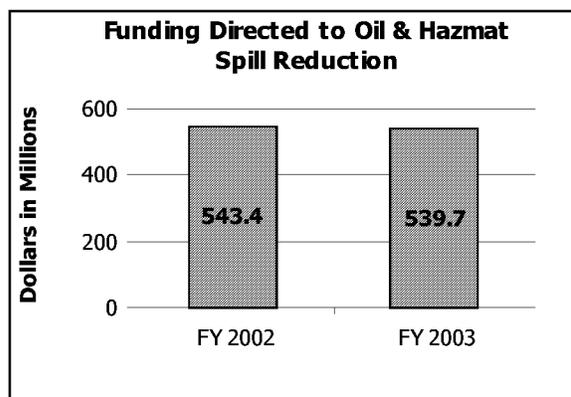
Note on data: The pipeline spill measure has a noticeable oscillation in the data over time with a general downward trend. Because of data variability, DOT will validate this measure in its current form and examine ways to improve this performance measure. RSPA is improving incident data to better identify potential solutions for reducing pipeline spills.

External Factors: Maritime trade is expected to double between 2001 and 2020; much of which will be on ships of other nations. Prevention and mitigation of pipeline spills requires improved site-specific knowledge of water and sensitive environmental areas to provide tailored actions to prevent leaks, and, if they do occur, assure that appropriate and timely response is undertaken.



Strategies and Initiatives to Achieve 2003 Target:

DOT resources attributable to this performance goal are depicted below:



The Coast Guard maintains an international engagement program as an essential part of its efforts to insure that substandard ships do not have the chance to foul the nation's coast or waterways. Domestically the Coast Guard ensures rigorous marine environmental protection efforts and regulatory safeguards continue. The Coast Guard aims to reduce oil spillage by 20% through both prevention and response efforts.

Adequate regulatory standards, and compliance programs to enforce those standards minimizes the risk of spillage for oil carried in ships and barges on American waterways, also for all aspects of oil exploration, production, storage and shipment under DOT's purview.

The Coast Guard develops pollution prevention standards, enforces pollution regulations and educates mariners on pollution prevention strategies and procedures. We employ the philosophy of "Prevention Through People" focusing on the human factors of the mariners and the industry. Past efforts in "Prevention Through People" are visible as the volume of oil spilled continues to decline.

The Coast Guard will employ emerging technology, lessons learned, and measurement systems to maintain and adjust existing prevention, response, and preparedness programs as the industry continues to research and develop additional oil supply sources, transport and storage methods.

RSPA will increase the safety and reliability of pipeline transportation by focusing on a goal to inspect and review the percentage of pipeline miles operated by large hazardous liquid operators subject to RSPA's integrity management program (IMP). In 2003, RSPA will increase IMP reviews to 75 percent of the number of miles operated by the nation's 65 largest hazardous liquid pipeline operators. RSPA will accelerate pipeline integrity testing, comprehensively evaluate all pipeline risks, and strengthen Federal/State pipeline safety oversight. Testing, evaluation, and repair will result in finding and solving problems before they lead to failures thereby directly supporting the goal of reducing spills. These initiatives support the Administration's new National Energy Policy (NEP) recommendations to facilitate growth of America's energy infrastructure by improving the integrity of, and public confidence in, the existing infrastructure. Pipeline integrity programs complement the safety goal for reducing excavation damages, the leading cause of pipeline failures. Other activities that will help further reduce spill size and consequence include:

- enforcing operator qualification requirements.
- expanding participation in industry consensus standards addressing inline inspection

technologies and qualifications criteria for the analysts who interpret their results.

- developing a standard for content and distribution of public education programs of operators.
- fielding engineering support for enhancing construction oversight, accident investigation, and monitoring remedial work on pipelines through contracted engineering services.
- enhancing analysis of the risks that pipelines pose to people and the environment through information systems improvements.
- enhancing readiness of both pipeline operators and local communities to recognize and mount effective and timely responses to pipeline accidents.
- improving oversight of pipeline operator emergency response activities, operator qualification programs, and hazardous liquid storage tanks.
- expanding pipeline operator oil spill response program exercises involving local, State, and other Federal personnel, with a new emphasis on security.

Pipeline integrity research helps assure that America's communities can live safely with pipelines by developing the technologies that detect or monitor the main causes of pipeline failure: construction-related damage, corrosion, material defects, and human error. These technologies will enable pipeline operators to identify and eliminate the defects that lead to death, injuries, and environmental damage.

R&D initiatives that help reduce spill size and consequence include:

- expanding ongoing acoustical monitoring technology that can help prevent construction-related damage to pipelines.
- developing new technologies to reveal defects in pipelines currently unpiggable using conventional in-line inspection technologies.
- enabling in-line inspection technologies to accurately detect and characterize longitudinal (e.g., seam) failures - an ability not shared by current in-line tools built primarily to detect circumferential defects from corrosion.

- beginning important new work on the application of remote sensing technologies to detection of right-of-way intrusion and remote monitoring of pipeline control systems.
- expanding airborne laser mapping leak detection technology.
- development of regulatory standards for leak detection technology and of related best practices.

Other Federal Programs with Common

Outcomes: The Coast Guard is the lead agency for oil pollution prevention and response in the coastal maritime zone, while EPA is the lead for inland waters; each agency may take immediate action as first Federal on-scene coordinator. During oil and gas exploration and development, the Coast Guard partners with the Minerals Management Service in environmental protection on the Outer Continental Shelf. For safety purposes and in coordination with Coast Guard investigations, the National Transportation Safety Board investigates some marine casualties that result in oil spills. The Coast Guard participates in a multi-agency workgroup to establish common or complementary goals for clean water.

RSPA will work to reduce the frequency and the size of spills by working with the Federal Energy Regulatory Commission, the National Oceanic and Atmospheric Administration, the Department of Energy, the U.S. Geological Survey, and others to help analyze risks to environmentally sensitive and populated areas through finalization of a National Pipeline Mapping System. RSPA is also working with the National Association of Pipeline Safety Representatives, trade associations such as the American Petroleum Institute, and other industry partners in designing new reporting systems and data improvements.

RSPA is working with the Environmental Protection Agency, the Department of Interior, and other natural resource trustees, environmental organizations, and the public to identify drinking water and ecological resources that are unusually sensitive to environmental damage from spills. RSPA has completed the Drinking Water Data Catalog as part of an environmental index initiative and has added the catalog to the web site, <http://ops.dot.gov>.

Performance Report:

2001 Results: DOT met the performance target for oil spills and missed the target for pipeline hazmat spills.

As in previous years, major and medium-sized oil spills were few in number but responsible for a large volume of the oil spilled. There were 4,518 oil spills, and only 12 were considered major or medium in volume. For example, in November 2000 the foreign-flagged tank vessel WESTCHESTER reported a possible grounding while anchored in the lower Mississippi River, which resulted in a single crude oil spill of more than 538,000 gallons. This single spill represents 55% of all the oil spills reported in FY 2001. The remaining 45% (445,758 gallons) comes from the other 4,517 reported oil spills.

Analysis reveals that vessel spill sources are shifting, from what was historically a barge and tank vessel source, to now include facilities. As the environment continues to change with exploration and production increases, continuing changes can be expected in the source of oil spills.

RSPA lowered the reporting threshold for hazardous liquid accident reporting from 50 barrels to five gallons beginning with accident reporting in 2002, and improved the usability of accident data in identifying strategies for further reducing pipeline spills.

RSPA continued to work with the American Petroleum Institute (API) to pilot test the new voluntary industry pipeline information system, created with joint industry/State/Federal input and participation. The API voluntary information system will provide data on much smaller spills than captured by the current threshold for Federal spill reporting, providing better trend data, information about precursors to leaks and environmental impacts, and remediation effectiveness.

RSPA continued to work closely with the Coast Guard and the Environmental Protection Agency in implementing the Oil Pollution Act of 1990 as it applies to onshore oil pipelines, which will decrease the likelihood of pipeline spills, diminish the environmental consequences of spills, and ensure that the responses to spills are swift and well planned. Operators are required to develop

response plans, test their plans in exercises, and implement them effectively in actual responses.

As detailed in the Safety chapter above, RSPA continued to increase public awareness of one-call centers to help reduce excavation damage to pipelines and to identify areas that are unusually sensitive- to environmental damage. By identifying where spills would cause the most environmental damage, RSPA is able to target its efforts to improve pipeline structural integrity and maximize the efficient use of available resources.

FY 2002 Performance Plan Evaluation: DOT expects to meet the 2002 performance targets.

AIRCRAFT NOISE EXPOSURE: Public concern and sensitivity to aircraft noise around airports is high. In recent years, noise complaints have increased even while quieter aircraft technology has been introduced. Aircraft noise is an undesired by-product of our mobility, and the Government acts to reduce the public’s exposure to unreasonable noise levels.

Performance Goal:

With the international aviation community, work toward further reduction of aviation noise at its source.

Mitigate the harmful effects of aviation noise for those living or going to school inside the significant aviation noise footprint.

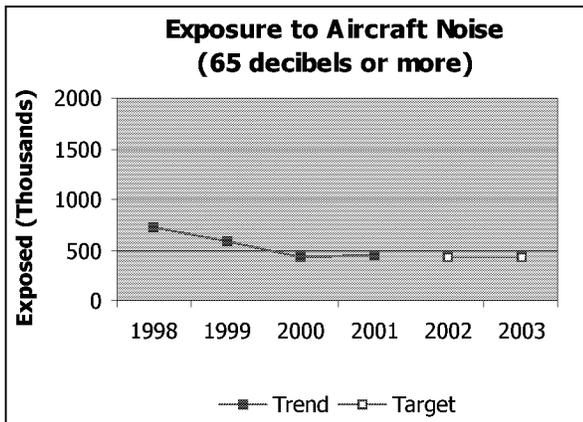
Performance Plan:

Performance measure:

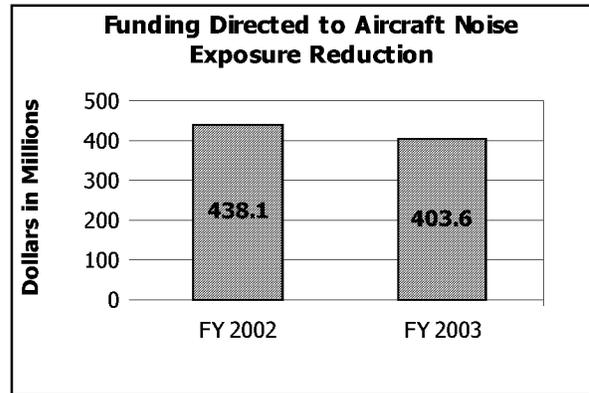
Number of people in the U.S. (in thousands) who are exposed to significant aircraft noise levels (65 decibels or more).					
	1999	2000	2001	2002	2003
Target:	N/A	N/A	440	440	440
Actual:	585	440(r)	446		

(r) Revised.

External Factors: Population growth around airports and increasing flight activity are factors that can negatively impact the FAA’s ability to meet future noise exposure goals.



Strategies and Initiatives to Achieve 2003 Target: DOT resources attributable to this performance goal are depicted below:



DOT pursues a program of aircraft noise control in cooperation with the aviation community through noise reduction at the source (development and adoption of quieter aircraft), soundproofing and buyouts of buildings near airports, operational flight control measures, and land use planning strategies. In 2003:

- The FAA’s Airport Improvement Program will continue to provide funds for such noise reduction activities as the soundproofing of residences and buildings used for educational or medical purposes near airports, purchase of buffer zones around airports, and noise reduction planning.
- The FAA will continue to develop noise research and assessment technologies.
- FAA Air Traffic Services will implement operational flight control measures to help reduce neighborhood exposure to aircraft noise.
- FAA will continue examination and validation of the methodologies used to assess aircraft noise exposure, including incorporation of the effects of land-use policies and residential sound insulation programs.

In cooperation with the National Park Service, FAA will assess noise exposure at, and develop Air Tour Management Plans for, an estimated 45 national parks, as authorized in AIR-21. This is distinct from the issue of noise exposure around airports.

Performance Report:

2001 Results: DOT did not meet the performance target.

However, difficulties in measuring FAA's noise reduction or mitigation effects will not abate the continual efforts FAA undertakes in both international fora, and in regulatory and air traffic operations in this country to minimize harmful effects of aircraft noise.

Other Federal Programs with Common Outcomes: FAA has been engaged with NASA in joint noise reduction technology research. NASA in coordination with FAA and its industry partners is formulating a new Quiet Aircraft Technology (QAT) initiative to build upon the current research. The goal of the QAT is to reduce the perceived noise levels of future aircraft by a factor of 2 (10 decibels) within 10 years and by a factor of 4 (20 decibels) within 25 years, using 1997 subsonic aircraft technology as the baseline.

TRANSIT SERVICE: For the 80 million Americans who do not drive, public transit provides access to school, work, market, community services and family. Public transit also lessens highway congestion and helps maintain environmental quality by slowing the growth of automobile traffic. And it provides transportation alternatives. Together, these features help improve our communities.

Performance Report:

Discontinued performance measure:

Percent of urban population living within 1/4 (or .25) mile of a transit stop with service frequency of 15 minutes or less (non-rush hour).

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
Target:	11.56	11.68	11.78	*	*
Actual:	11.39	11.54	N/A		

N/A - performance information is not available.

** Performance goal and measure will be discontinued after 2001 because this performance goal overlaps others in the Mobility and Economic Growth chapter describing DOT efforts to increase transit ridership and transportation accessibility. Transit service delivery levels which this performance goal captured is primarily a matter for State and local governments' decisions, and is largely outside Federal control .*

External Factors: The traditional commute from the suburbs into the city is becoming just one of many commuting patterns. People are moving farther away from the central cities, and jobs are increasingly located in the suburbs. Demographic shifts are often translating into longer commutes, and more scattered travel patterns.

2001 Results: DOT most likely did not meet the performance target, judging from previous trends.

Other Federal Programs with Common

Outcomes: DOT works with several other Federal agencies to coordinate transportation, housing, economic development and environmental programs. In conjunction with the Department of Health and Human Services, DOT has actively participated in a joint coordinating council that has successfully encouraged local Medicare agencies to utilize regularly scheduled transit service for medical appointments in lieu of more expensive, specialized transportation. DOT and the Environmental Protection Agency are working together to promote the Commuter Choice initiative that helps mitigate congestion and encourages transit use, and also to

implement joint transportation planning and environmental guidance.