

HUMAN AND NATURAL ENVIRONMENT STRATEGIC OBJECTIVE:

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

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 degradation of fishery habitat. 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. In FY 2003, DOT environmental programs prevented as much harm as possible from being done to the environment by transportation projects and operations.

Performance Summary:

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2003 Target | Met | Not Met |
|--|--------|--------|--------|---------------|--------|--------------|--------|-------------|-----|---------|
| Acres of wetlands replaced for every acre affected by Federal-aid highway projects | 2.6 | 2.2 | 2.3 | 3.8 | 2.1 | 2.7 | 2.7 | 1.5 | P | |
| Percent DOT facilities needing no further remedial action under Superfund Amendments and Reauthorization Act | 74 | 78 | 90 | 90 | 91 | 91 | 94 | 92 | P | |
| 12 month moving average number of area transportation emissions conformity lapses | N/A | N/A | N/A | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | P | |
| Tons of hazardous liquid materials spilled per pipeline million ton-miles shipped | 0.0257 | 0.0119 | 0.0229 | 0.0137 (r) | 0.0201 | .0202 (r) | .0141* | 0.0134 | | P |
| Number of people in U.S. (in thousands) exposed to significant aircraft noise levels | N/A | 722 | 585 | 440 | 411 | 294 (r) | 289* | 437 | P | |

(r) revised; * preliminary estimate

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 measure:

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

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|------|------|------|
| Target: | 1.5 | 1.5 | 1.5 | 1.5 |
| Actual: | 3.8 | 2.1 | 2.7 | 2.7 |

2003 Results: DOT met the performance target.

Federal-aid projects nationwide impacted 1,278 acres of wetland, and provided 3,431 acres of compensatory mitigation. FHWA continues to coordinate wetlands programs and research initiatives with Federal agencies including the Environmental Protection Agency (EPA), the Department of the Interior, the Department of Commerce, the Department of Agriculture, and the Army Corps of Engineers.

FHWA, EPA, and the Army Corps of Engineers released guidance on how the preference on the use of mitigation banks can be exercised under the Section 404, National Environmental Policy Act (NEPA) permitting process, which is one of the first actions completed under the National Wetlands Mitigation Action Plan.

FY 2004 Performance Plan Evaluation: DOT will meet the target in FY 2004.

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. MARAD is the U.S. Government's disposal agent for merchant type vessels weighing 1,500 gross tons or more, and is required by law to dispose of obsolete ships in the National Defense Reserve Fleet (NDRF) by the end of FY 2006. 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. EPA, however, allowed a pilot overseas disposal program to begin in 2003. Additional ships will be added to the inventory as other merchant type Federal Government vessels become obsolete.

Performance measure:

Percentage of DOT facilities needing no further remedial action under the Superfund Amendments and

Reauthorization Act (SARA).

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|------|------|------|
| Target: | 82 | 91 | 91 | 92 |
| Actual: | 90 | 91 | 91 | 94 |

2003 Results: DOT met meet the performance target.

Facility cleanup complies with the SARA process and with the National Oil and Hazardous Substances Pollution Contingency Plan. Working with States, local governments, and the EPA, DOT used a “worst first” prioritization system to attack the overall problem presented by DOT facilities where significant pollution problems present themselves.

FAA has 64 facilities classified as no further remedial action planned. Work continues at four facilities including: the FAA Technical Center in New Jersey; the Mike Monroney Aeronautical Center in Oklahoma; the Kirksville Air Force Station in Missouri and the Ronald Reagan Washington National Airport in Virginia.

FHWA has completed the work required by the EPA at the FHWA Materials Laboratory in Denver, Colorado; however, work continues under state requirements at that site.

MARAD removed two vessels for disposal from the National Defense Reserve Fleet sites.

FY 2004 Performance Plan Evaluation: DOT will meet the target in FY 2004.

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. Areas throughout the U.S. with a non-attainment or maintenance designation are required to meet transportation conformity requirements in the Clean Air Act. Transportation conformity ensures that emissions from planned transportation activities are consistent with clean air goals of the area, and will not create new violations of the NAAQS, increase the frequency or severity of existing violations, or delay the attainment of the NAAQS in designated non-attainment or maintenance areas.

Performance measure:

Monthly average number of area transportation emissions conformity lapses.

| | 2000 | 2001 | 2002 | 2003 |
|----------------|------|------|------|------|
| Target: | N/A | N/A | 6 | 6 |
| Actual: | 6 | 6 | 6 | 6 |

2003 Results: DOT met the performance target.

During FY 2003, the average number of areas in a conformity lapse at any given time was 6 out of a total of approximately 130 designated areas. FHWA worked closely with the EPA and Federal Transit Administration on revising the conformity rule to reflect a significant court ruling and to clarify and

improve the transportation conformity process. Some non-attainment and maintenance areas may face challenges attaining new air quality standards for ozone and fine particulate matter (PM 2.5) when EPA publishes a final new standards rule as early as FY 2004. As a result, further reductions in pollutant emissions from transportation sources may be required. In anticipation of the implementation of new ozone and PM 2.5 standards, FHWA is working with EPA and FTA on a separate conformity rule revision for the implementation of the new air quality standards.

FHWA completed a transportation conformity scan at 6 non-attainment and maintenance areas to document and share experience and practices in meeting conformity requirements. In cooperation with Association of Metropolitan Planning Organizations (AMPO), FHWA formed an Air Quality Subcommittee to address specific conformity issues faced by MPOs, specifically on emissions modeling issues and emerging issues related to the implementation of the new air quality standards.

FY 2004 Performance Plan Evaluation: DOT will meet the target in FY 2004.

Pipeline Hazmat Spills: Each year, almost 620 billion ton-miles of petroleum and other hazardous liquids move across the country through 176,280 miles of pipelines. While this is usually the least costly and safest way to transport these bulk cargoes, it also entails risk. Spills into the environment always have the potential to be significant, especially when they occur in unusually environmentally sensitive areas.

Performance measures:

Tons of hazardous liquid materials spilled per million ton-miles shipped by pipelines.

| | 2000 | 2001 | 2002 | 2003 |
|----------------|----------|-------|----------|--------|
| Target: | .0161 | .0151 | .0142 | .0134 |
| Actual: | .0137(r) | .0201 | .0202(r) | .0141* |

(r) Revised: * Preliminary estimate.

2003 Results: DOT did not meet the performance target.

Although DOT missed the target for FY 2003, the volume of spills per miles shipped has generally declined since 1994, representing an improvement in safety performance and environmental protection.

RSPA's pipeline safety program has the ancillary effect of preventing environmental harm from occurring when environmentally harmful products are released from leaking pipelines. Two large spills (18,000 barrels combined) occurred with no recovery of the spilled product. One spill resulted in fire and the second resulted in an unrecoverable vapor cloud. However, had DOT excluded all Highly Volatile Liquid (HVL) spills, it would come very close to meeting the target. HVL spills vaporize without polluting land or water and are primarily a safety concern.

FY 2004 Performance Plan Evaluation: DOT will be challenged to meet the target in FY 2004.

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 DOT acts to reduce the public's exposure to unreasonable noise levels.

Performance measure:

Number of people in the U.S. (in thousands) who are exposed to significant aircraft noise levels (65 decibels or more).

| | 2000 | 2001 | 2002 | 1999 |
|----------------|------|------|--------|------|
| Target: | N/A | 440 | 440 | 437 |
| Actual: | 440 | 411 | 294(r) | 289* |

(r) Revised; * Preliminary estimate.

2003 Results: DOT met the performance target.

DOT pursued 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. After the events of September 11 and the economic downturn that followed, air carriers accelerated their plans to retire Stage Three aircraft, which are not only less fuel efficient but also noisier. The result has been a steep decline in the number of people exposed to significant aircraft noise levels.

FAA is committed to manage aviation's growth in an environmentally responsible manner and has an aggressive plan to do this through mitigation, measurement and standards, and research.

FAA established a Center of Excellence for Aircraft Noise and Aviation Emissions Mitigation to allow partnerships with universities, research institutions, and industry. FAA will continue to work with NASA to identify noise and emissions reduction technologies that may enter the marketplace within 10-15 years and work with NASA, airports, and airlines to develop operational procedures to provide near-term reductions in noise and emissions. In addition, FAA continues to invest almost \$500 million annually to alleviate the environmental impacts of airport projects, primarily aircraft noise.

FAA increased the cumulative annual number of people in residential communities benefiting from federally funded noise compatibility projects to 13,800, exceeding the target of 12,500.

FY 2004 Performance Plan Evaluation: DOT will meet the target in FY 2004.