

SAFETY

STRATEGIC OBJECTIVE: *Promote the public health and safety by working toward the elimination of transportation-related deaths and injuries.*

Strategic Outcomes:

- Reduce the number of transportation-related deaths.
- Reduce transportation-related injuries.

Safety is our most important strategic objective. We strive to improve the benefits of transportation while constantly reducing the risk to their health and well being. In FY 2002, DOT safety programs continued to reduce transportation-related fatalities and injuries.

PERFORMANCE SUMMARY:

	1996	1997	1998	1999	2000	2001	2002	2002 Target	Met	Not Met
Highway fatalities/100 million vehicle-miles traveled (VMT)	1.69	1.64	1.58	1.55	1.53	1.51	1.50*	1.4		✓
Fatalities involving large trucks	5,142	5,398	5,395	5,380	5,282(r)	5,082(r)	4,984*	4,710		✓
Fatalities involving large trucks per 100 million commercial VMT	2.8	2.8	2.7	2.7	2.6(r)	2.45	2.4*	2.2		✓
U.S. commercial fatal aviation accidents/100,000 departures (Last 3 years' average)	0.051	0.057(r)	0.046	0.051	0.037	0.037	0.026*	0.038	✓	
Fatal general aviation accidents	382	378	396	364	341	359(r)	346*	379	✓	
Percent of all mariners in imminent danger rescued	84	84	84	87.5	82.7	84.2	84.4	85		✓
Train-accidents/million train-miles	3.64	3.54	3.77	3.89	4.13	4.22(r)	3.56	4.00	✓	
Grade crossing accidents divided by the product of million train-miles and trillion VMT	2.57	2.27	1.98	1.83	1.76(r)	1.64(r)	1.54	1.39		✓
Transit fatalities/100 million passenger-miles traveled	0.520	0.545	0.564	0.530	0.499(r)	0.480(r)	0.487*	0.492	✓	
Number of excavation damages to natural gas and hazardous liquid pipelines.	122	99	129	100	119	121	75*	111	✓	
Serious hazardous materials incidents in transportation	466	486	456	540(r)	565(r)	515(r)	189*	523	✓	

FY 2001 FINAL DOT PERFORMANCE REPORT

	1995	1996	1997	1998	1999	2000	2001	2001 Target	Met	Not Met
Highway injured persons/100 million VMT	143	140	131	121	120	116	109(r)	113	✓	
Injured persons involving large trucks (in thousands)	117	129	131	127	142	140	131(r)	122		✓
Percent highway fatalities alcohol-related	41	41	39	39	38	40	41	34		✓
Operational errors/100,000 activities	0.52	0.51	0.49	0.56	0.57	0.68	0.73	0.5		✓
Runway incursions	227	268	301	311	330	405	407	243		✓
Recreational boating fatalities	888	770	857	864	778	742	722(r)	749	✓	
Rail-related fatalities/million train-miles	1.71	1.55	1.57	1.48	1.31	1.30	1.36	1.23		✓
Natural gas transmission pipeline failures	4,767	4,964	4,871	4,160	4,467	2,750	2,831(r)	4,375	✓	

* Preliminary estimate

(r) Revised

HIGHWAY SAFETY: Highway crashes cause 95 percent of all transportation-related fatalities and 99 percent of transportation injuries, and are the leading cause of death for people ages 4 through 33. About 70 million people (25 percent) still do not use safety belts when driving or riding in motor vehicles. Alcohol is the single biggest contributing factor to fatal crashes – over 17,000 annually. About 12 percent of all people killed in motor vehicle incidents are involved in a crash with a large truck, yet trucks represent only 4 percent of registered vehicles and about 7 percent of the vehicle-miles of travel. Highway crashes place a considerable burden on our health care system – reaching \$230.6 billion a year, or an average of \$820 for every person living in the United States.

Performance measures:

Fatalities per 100 million vehicle-miles of travel (VMT).				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	1.6	1.5	1.5	1.4
Actual:	1.6	1.5	1.5	1.5#

Number and rate (per 100 million commercial VMT) of fatalities in crashes involving large trucks.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:				
Number:	N/A	4,934	4,830	4,710
Rate:	N/A	N/A	N/A	2.2
Actual:				
Number:	5,380	5,282(r)	5,082(r)	4,984#
Rate:	2.7	2.6(r)	2.45	2.4#

(r) Revised; # Preliminary estimate.

Note on data: Traffic fatalities are based on States’ monthly fatality counts for the first half of FY 2002 and are then annualized through an estimating process. Performance targets and results for 1999 through 2001 are on a calendar year basis, which are not materially different from FY 2002 targets and estimated results.

2002 Results: DOT did not meet the highway fatality rate target, and did not meet the truck-related fatality and fatality rate targets. Traffic fatalities totaled an estimated 42,605 in 2002, up from 42,116 in 2001. However, DOT has made substantial progress in reducing the traffic fatality rate per 100 million vehicle miles from 3.3 in 1980 to 1.5 in 2002.

NHTSA: Passenger vehicle occupant fatality rates are declining for all types of vehicles, despite a significantly rising number of vehicles being driven more miles. Fatalities among children ages 0-4 and 5-15 are decreasing. Although non-occupant injuries have been declining, non-occupant fatalities have been increasing lately, for the first time since 1995. In addition, alcohol-related fatalities and motorcycle fatalities increased.

Safety belts - The safety belt use rate is one of DOT’s highest priority safety programs. Belt use in 2002 reached 75 percent, which is the highest rate yet observed and continues a relatively steady pattern of increase since use was first measured by a comprehensive national survey at 58 percent in 1994. States that allow more stringent enforcement of their belt use laws (“primary” States) reached a milestone of 80 percent belt use in 2002, and substantial gains were also seen in the Northeast and in vans and sport utility vehicles.

NHTSA focused on at-risk populations whose safety belt use rates were below the national level and conducted two “Click-It or Ticket” Campaigns emphasizing aggressive enforcement. NHTSA worked with partners and stakeholders to encourage additional States to enact primary belt laws, the strategy that has proven to most dramatically raise safety belt use and save lives.

\$15 million was enacted in 2002 for Occupant Protection Incentive Grants, and grants were awarded to 29 States, the District of Columbia, Puerto Rico, and 2 Territories. For a State to be awarded such a grant they had to demonstrate their implementation of specific occupant protection laws and programs such as a safety belt law providing for primary enforcement or a law requiring use by individuals in all seating positions within the vehicle.

Impaired drivers - In combating this important traffic safety issue, NHTSA focuses on high risk drinking drivers. Its five-State alcohol demonstration program (begun in FY 1999) was expanded to include Indiana and Michigan, with their high alcohol-related fatalities. The on-going national public education campaign “*You Drink and Drive. You Lose.*” in conjunction with highly publicized July and December enforcement mobilizations, communicated hard-hitting prevention messages to the public. NHTSA also focused on repeat and high blood-alcohol content offenders.

TREAD - NHTSA revised child safety seat and tire standards, and published new requirements for a child safety seat ease-of-use rating system, tire labeling, and tire pressure monitoring systems in light vehicles. NHTSA also published regulatory notices for roof crush protection, school bus safety, occupant protection in interior impact and with advanced air bags, heavy truck braking and rear impact guards, electric vehicle crash safety, bus emergency exits and windows, and accelerator controls. NHTSA published a request for comments on a vehicle safety rulemaking priorities plan.

Grants - \$38 million was available for Alcohol-Impaired Driving Countermeasures Incentive Grants, and 34 States received these grants to implement and enforce alcohol-impaired driving countermeasures. To qualify for this grant, States had to either demonstrate that they had in place certain laws or programs, such as administrative license revocation laws and graduated licensing programs, or had to meet certain performance criteria based on their alcohol-related fatality rates. State highway safety program formula grants totaling \$160 million was also provided using a performance-based management process. States used this and their own funds to:

- reduce speed-related fatalities;
- encourage proper use of occupant protection devices;
- reduce alcohol and drug impaired driving;
- reduce crashes between motorcycles and other vehicles;
- reduce school bus crashes;
- improve police traffic services;
- improve emergency medical services and trauma care systems;
- increase pedestrian and bicyclist safety;
- improve general roadway safety; and
- improve State traffic record systems and highway fatality and injury data collection and reporting.

FMCSA and its State partners have reduced fatalities in crashes involving large trucks four consecutive years, from 5,395 in 1998 to an estimated 4,984 in 2002, a 7.6 percent reduction over the four-year period. The fatality rate for crashes involving large trucks, which takes into account increased risk exposure, has been reduced by 11 percent over the same time period. The large truck-related injury trend similarly has been encouraging, being reduced from 142,000 in 1999 to 131,000 in 2002.

Grants - In 2002, \$160 million in safety grants to States supported motor carrier compliance and enforcement activities, including traffic enforcement and over 2.7 million commercial motor vehicle roadside inspections.

Licensing - To improve the commercial driver’s license (CDL) program, FMCSA published a rule regarding driver disqualification and license requirements and penalties as required by the Motor Carrier Safety Improvement Act of 1999, completed 17 compliance reviews of State CDL programs, and distributed over \$33 million in grants to States for CDL improvements.

Enforcement and Compliance - FMCSA conducted 7,492 compliance reviews of motor carriers in FY 2002, and State authorities conducted an additional 2,756. FMCSA also issued an interim final rule for the New Entrant Safety Assurance Program, to become effective in January 2003. This rulemaking requires all

new entrants to pass an FMCSA safety audit within the first 18 months of operation in order to receive permanent DOT registration.

Border Safety Enforcement - FMCSA completed all requirements contained within Section 350 of the FY 2002 DOT Appropriations Act to open the U.S. - Mexico border to Mexican commercial vehicles, and issued rules governing safety monitoring, application for operating authority, and enforcement actions. FMCSA also provided policy guidance for enforcement at the border; developed centralized data systems; enhanced border inspection facilities; and hired, trained, and equipped an additional 214 border enforcement inspectors.

FHWA's approach to minimizing crash-related fatalities and injuries is to reduce the occurrence of the most frequent types of fatal crashes. In FY 2002, an estimated 38 percent of all fatalities occurred in roadway departures, 20 percent occurred at or near intersections, and about 11 percent involved pedestrians.

To address roadway departure crashes, FHWA issued a Technical Advisory containing improved information on shoulder "rumble strip" design and installation for rural National Highway System segments. Mississippi installed and tested different rumble strip designs combined with pavement marking overlays on rural roads. Initial evaluations from this test indicated improved safety results on rainy nights from the more-visible markings and audible rumble strip warnings.

To promote pedestrian and bicyclist safety, FHWA developed an Internet-based Bicycle Safety Education Resource Center to provide safety education information for bicyclists, motorists, and those who teach children to ride. The website contains a database of training materials, a guide to help interested parties identify the training needs of their audience, and guidance to assist with the development of new safety programs.

NHTSA and FMCSA supplementary performance measures:

Injured persons per 100 million vehicle-miles of travel.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	127	116	113	111
Actual:	120	116	109(r)	N/A

Number (000s) and rate (per 100 million commercial VMT) of injured persons in crashes involving large trucks.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:				
Number:	N/A	125	122	121
Rate:	N/A	N/A	N/A	56
Actual:				
Number:	142	140	131	N/A
Rate:	70	68	63	N/A

Alcohol-related fatalities per 100 million VMT				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	N/A	N/A	N/A	0.55
Actual:	0.59	0.63(r)	0.63(r)	N/A

Percentage of front occupants using safety belts.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	80	85	86	75

Actual:	67	71	73	75
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(r) Revised; N/A Not available.

FY 2003 Performance Plan Evaluation: DOT will be challenged to meet the highway fatality rate target in 2003. NHTSA will encourage additional States to enact primary safety belt laws and enforce them, and will continue efforts to reduce impaired driving. FMCSA also will be challenged in achieving the 2003 fatality rate target. FMCSA will focus on enforcement and compliance activities, and extend its compliance and enforcement program to include safety audits of new motor carrier operations (New Entrants) and at the southern border.

Management Challenge – Motor Vehicle Safety (IG)

In its 2002 update on DOT’s management challenges, the IG made three findings related to motor vehicle safety: (1) Despite the combined efforts of Federal, State, and local governments, safety belt use rates have remained relatively constant, ranging from 66 to 70 percent since 1993. 2002 safety belt use rates are at 75 percent nationwide, below the rate needed to attain 78 percent use by 2003; (2) Early identification of defects by NHTSA’s Office of Defects Investigation (ODI) can be improved. Congress questioned the preparedness of ODI to handle information that may contain early warning signs of product defects; and (3) the TREAD Act requires NHTSA to conduct 10 rulemakings in the areas of defects, tires, rollover tests, and child restraints. Six of the 10 rulemakings must be completed in 2001 or 2002. Since the IG found that it takes DOT an average of 3.8 years to complete a rule, significant management effort will be required to issue these rules in the time frame required by the Act. These issues are continued in the IG’s 2003 management challenges report.

NHTSA Actions:

Strategies to increase safety belt use and reduce alcohol-related fatalities are discussed above. To improve defects investigation, NHTSA published the TREAD §3(b) Early Warning final rule. NHTSA is improving recall initiation criteria. TREAD actions included:

- a final rule on Standards Enforcement, Defect Investigation and Noncompliance Reports Records Retention on July 10, 2002;
- work on final rules to improve tire labeling and to revise and update tire safety standards; and
- work on a rulemaking for improved child restraint safety, and creating a child restraint safety ratings program.

Management Challenge - Large Truck Safety (IG/GAO)

The IG identified major challenges in motor carrier safety at the U.S.-Mexico border, improving oversight of the commercial driver license (CDL) program, managing the security implications of open borders; strengthening oversight and reducing fraud in the CDL program; and improving U.S. motor carrier safety enforcement. As traffic materializes, FMCSA will need to assess the adequacy of its inspection resources, including those beyond the Border States. These issues continue the IG’s 2003 report. GAO’s concerns extend to staffing in FMCSA, truck safety data quality and causal analysis, adequacy of FMCSA’s resources, and safety rulemaking.

FMCSA 2002 activities and initiatives included:

- compliance reviews for high-risk carriers;
- security sensitivity visits, hazmat compliance reviews, and hazmat package and vehicle inspections;
- the interim final rule for New Entrant Safety, requiring new entrants safety audits in the first 18 months of their operation;
- in August 2002, FMCSA issued a new rule that requires all states to place Mexican commercial vehicles out of service if they do not have U.S. operating authority;
- completing all requirements of the FY 2002 DOT Appropriations Act, §350 to open the southern border to Mexican commercial vehicles;

- policy guidance for border safety enforcement, and four rules governing safety monitoring and motor carrier operating authority;
- centralized data systems, inspection facilities, and hiring, training, and equipping 214 more border enforcement personnel;
- work on rulemakings for drivers' hours-of-service and CDL improvements;
- review of 17 State CDL programs and significant improvement of their operation;
- advanced safety technology development, and deployment;
- PRISM and CVISN deployment to more States;
- operational tests of advanced commercial vehicle safety and security technology;
- with NHTSA, investigation of almost 500 large truck crashes in the Large Truck Crash Causation Study; and
- with NHTSA and the States, a commercial motor vehicle crash data collection system (CVARS) pilot test.

AVIATION SAFETY: Commercial aviation is one of the safest forms of transportation. While rare, aviation accidents can have catastrophic consequences, with large loss of life. The public demands a high standard of safety and expects continued improvement. General Aviation (GA) is also an important element of the U.S. transportation system and the U.S. economy. However, the majority of aviation fatalities have occurred in this segment of aviation. Since 1988, there has been a gradual trend downward in the number of general aviation accidents, but progress has not been steady.

Performance measures:

Fatal aviation accidents (U.S. commercial air carriers) per 100,000 departures (reported by 3-year average).				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	.048	.045	.043	.038
Actual:	.051	.037	.037	.026#

Number of fatal general aviation accidents.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	N/A	379	379	379
Actual:	364	341	359(r)	346#

(r) Revised. # Preliminary estimate

2002 Results: DOT met the general aviation fatal accident and the commercial aviation fatal accident rate targets.

Commercial Air Carrier Safety

FAA worked with the aviation community and other governmental agencies to identify causal factors of accidents and prevent strategies in three areas – aircraft technology, pilot safety, and maintenance and fleet management practices which prevent small safety problems from growing into large ones. In 2002, FAA, in concert with the aviation industry continued to:

- implement ‘Safer Skies’ interventions, and monitor the progress of strategies to prevent uncontained engine failure, controlled flight into terrain, approach and landing accidents, and loss of control;

- develop and implement the Air Transportation Oversight System (ATOS), the Safety Performance Analysis System (SPAS), Flight Operations Quality Assurance (FOQA), and the Aviation Safety Action Program (ASAP) – all of which are designed to catch safety problems and keep them from becoming causes of aircraft crashes; and
- work on aging aircraft systems and fuel tank safety, including fuel tank inerting;

FAA's regulation and certification program established aviation safety standards, monitored safety performance, conducted aviation safety education and research, issued and maintained aviation certificates and licenses, and managed rulemaking.

FAA continued to implement an integrated research plan with NASA to effectively leverage combined safety research and development resources to reduce the aviation fatal accident rate.

General Aviation Safety

Improving GA safety is a joint effort with the GA community to identify problems and implement solutions. GA safety in 2002 included:

- publishing a new Advisory Circular, Controlled Flight into Terrain (CFIT) Awareness;
- issuing the Aeronautical Information Manual (AIM) and guidance for pilots on the use of advanced weather products;
- developing a personal minimums checklist involving weather scenarios and operations; and
- upgrading safety equipment such as the flight service station automation system, automated weather observation systems, and communications systems that provide weather and altimeter settings.

Together with the GA industry, FAA initiated a new program, System Safety Approach for General Aviation, to foster aviation safety and awareness. This joint effort will encourage use of new technology and will provide training and education to enhance safety.

Runway Safety

A runway incursion is any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in a loss of separation with an aircraft taking off, intending to take off, landing, or intending to land. Reducing runway incursions lessens the probability of accidents that potentially involve fatalities, injuries, and significant property damage.

To help further reduce the number and rate of runway incursions, FAA:

- conducted education, training and awareness for pilots, and controllers/vehicle operators and distributed more than 250,000 program materials (brochures, videotapes, CDs and other visual aids);
- analyzed runway incursion risks by examining incursions from 1997 through 2001 and assigning those incursions to a severity category;
- published two runway safety reports;
- completed and distributed the Runway Safety Blueprint 2002–2004, which presents data collection results and analyses and defines objectives to be achieved during the next 2 years;
- conducted pilot/controller communications phraseology reviews and Air Traffic Teamwork Enhancement Training for Tower Controllers;
- developed and distributed training videotapes for airport vehicle operators and aircraft mechanics;
- published and distributed two advisory circulars for airport surface operations and, with industry, developed an advisory circular for vehicle operations; and
- conducted runway incursion “callbacks” – requests for information targeted at key factors of the runway incursion event -- through the NASA Aviation Safety Reporting System Program.

Several other efforts are helping to reduce runway incursions. The Department of Defense has developed radar-imaging software to display aircraft and other vehicular movement, which has helped reduce runway incursions at military airports. NASA and FAA are also working cooperatively on aviation safety research and technology development for runway safety and other areas. The NTSB works to investigate runway accidents and determine causal factors useful in refining our safety program design.

Operational Errors

When controllers fail to apply or follow aircraft separation standards and aircraft in flight pass too close, an operational error occurs. To give controllers better ways to determine aircraft location and reduce miscommunication between pilots and controllers, FAA:

- provided training to provide a common understanding of procedures and policies among controllers and pilots is a central strategy for reducing operational errors;
- identified factors that cause errors and implementing improvements in technology, such as the deployment of modern displays, new decision support tools, and improved communication systems; and
- used lessons learned in reducing runway incursions as a model for reducing operational errors.

In addition, FAA:

- investigated the use of the User Request Evaluation Tool (URET), a prototype conflict probe that provides controllers with more advanced notification of potential in-flight conflicts;
- investigated the initial deployment of Controller Pilot Data Link Communications to improve pilot and controller communications, thereby reducing operational errors caused by miscommunication;
- addressed and reduced repeat incidents by individuals through meaningful individual skill enhancement/remedial training. This was accomplished by better identification of causal factors, and refresher training on procedures for avoiding common types of operational errors;
- continued to conduct QAR's to identify and correct controller performance deficiencies prior to an occurrence of an operational error or deviation, and resolve performance deficiencies through corrective training; and
- with the National Air Traffic Controllers Association, developed and implemented a system to classify every operational error based on risk, and took action to train or discipline controllers based on an assessment of the cause and severity of the incident.

The FAA proposed changing separation standards to reflect the level of risk. Changes to current rules and regulations, and NTSB and other interested parties' concurrence is necessary before these new standards can be implemented.

FAA supplementary performance measures:

Number of operational errors where less than 80 percent of required separation is maintained.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	N/A	N/A	N/A	568
Actual:	570	610	674	615

Number and rate (per 100,000 operations) of highest risk runway incursions.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:				
Number:	N/A	N/A	N/A	53
Rate:	N/A	N/A	N/A	0.08
Actual:				
Number:	69	67	53	37
Rate:	.10	.10	.08	.06

FY 2003 Performance Plan Evaluation: DOT will meet the performance targets in FY 2003.

Management Challenge – Commercial and General Aviation Safety (Operational Errors and Runway Safety) (IG/GAO)

The IG and GAO have suggested FAA to take steps to reverse the trend in known safety risks such as runway incursions and operational errors, strengthen oversight and rulemakings, and manage the aviation safety and air traffic control workforce strategically over the long term. The IG stated that safety must take priority over the impact of increased demand, new technologies and budget cuts. The IG also listed several safety issues that the FAA must address.

FAA faces many challenges in promoting aviation safety in a dynamic industry. FAA will determine the feasibility of expanding the Air Transportation Oversight System (ATOS) beyond currently covered large air carriers to smaller commercial air carriers and complete system safety and risk analysis training for all ATOS-assigned field inspectors. The FAA will continue implementation of the Continuing Analysis and Surveillance System (CASS) improvements to address deficiencies in aircraft maintenance programs at some major air carriers through development and publication of advisory circular guidance to clarify 14 CFR §121.373, CASS Requirements, and to deliver updated FAA policy, procedures, and training courses to the inspection work force.

The IG indicated that the trend in runway incursions and operational errors are critical management challenges for DOT. Runway incursion are down approximately 10 percent from last year, and the number of operational errors was down from an all-time high of almost 1,200 in FY 2001 to 1,061 in FY 2002. However, operational errors still pose a significant safety risk, with an average of three operational errors per day and one serious error every 3 days (in which a collision was barely averted). FAA is continuing to pursue a number of initiatives to solve these problems, and as the IG reports, is identifying and evaluating technologies that can be quickly put to use in high-risk airports. Though both runway incursions and operational errors are down, they continue at high levels and remain on the IG's 2003 list of top management challenges.

MARITIME SAFETY: Recreational boating is a popular activity in America, and the popularity of personal watercraft continues to be strong. There are about 78 million recreational boaters in the U.S. - and most operators involved in accidents have had no boating safety training. The number of recreational and commercial vessel users continues to increase as more Americans move to coastal areas and global and domestic waterborne trade grows. Large numbers of Americans commute to work in ferries and enjoy leisure activities at sea such as commercial cruising.

Performance measure:

Percent of all mariners in imminent danger who are rescued.

	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	N/A	N/A	85	85
Actual:	87.5	82.7	84.2	84.4

2002 Results: DOT did not meet the performance target.

The Coast Guard answered nearly 37,000 calls for help, saving 3,653 lives in imminent danger. Overall, in 2002, there was a slight decrease in search and rescue caseload. For the second year in a row, the results show a slight improvement over the previous year, but are still insufficient to meet the performance target. Given three years' data, the number of persons who remained missing at the termination of search and rescue efforts continues to be significant - 233 persons. Inclusion of missing persons into the performance measure would result in saving just under 80 percent of all mariners in distress, highlighting shortcomings in USCG search and response efforts. This will be remedied as the replacement communications system for maritime safety comes on line, and as USCG adds additional command center and boat stations staff, beginning in 2003.

Despite a steady increase in the number of recreational boats registered with States, recreational boating fatalities have been reduced from 1999 through 2001. The number of boating fatalities per 100,000 registered boats has decreased 34 percent over the last decade, while drowning deaths have sharply decreased, suggesting that DOT and State boating safety and life jacket outreach and awareness campaigns,

and additional State laws requiring personal watercraft riders and youth on boats to wear life jackets, had an impact.

USCG supplementary performance measures:

Number of recreational boating fatalities (calendar year).				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	763	763	749	742
Actual:	778	742	722(r)	707#

Fatalities per million passenger capacity aboard passenger vessels.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	N/A	N/A	N/A	2.5
Actual:	4.1	1.9	1.0	0.4

(r) Revised; # Preliminary estimate.

FY 2003 Performance Plan Evaluation: DOT cannot characterize Coast Guard performance for FY 2003, since the Coast Guard will be a part of the new Department of Homeland Security.

Management Challenge – National Distress Response System (IG)

The IG stated that Coast Guard needs to plan for the procurement of the National Distress and Response System within available capital funding. Deficiencies in the Distress and Response System have existed for at least 10 years, and the NTSB criticized Coast Guard’s interim fixes as insufficient. The major task for Coast Guard is to present a specific system modernization plan that details what assets need to be acquired or modernized, how it will be done, what it will cost, and when funding will be needed. (For a discussion of DOT plans, see the Management Challenge box regarding the Coast Guard Capital Acquisition Budget in the Coastal and Port Security performance discussion.)

RAIL SAFETY: Approximately 50 percent of the rail-related fatalities were trespasser-related, and more than 45 percent occurred at highway-rail grade crossings in 2002. To reduce rail fatalities, FRA is forging safety partnerships with the rail industry, strengthening educational outreach, and rigorously emphasizing compliance with safety standards.

Performance measures:

Grade crossing accidents divided by the product of: million train-miles and trillion vehicle-miles traveled.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	2.19	1.57	1.39	1.39
Actual:	1.83	1.76(r)	1.64(r)	1.54

Train accidents per million train-miles.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	3.44	3.44	3.35	4.00
Actual:	3.89	4.13	4.22(r)	3.56

(r) Revised.

2002 Results: Based on eight months of data, DOT met the performance targets for train accidents, but did not meet the grade crossing accidents performance target. Depending on activity for the remainder of the year, DOT may meet both goals.

For 2002, train accidents were down slightly as compared with 2001 (2,597 vs. 3,330). Train miles decreased by 7.5% during that period, resulting in an increase in the train accident indicator.

Grade crossing accidents were down in 2002 at both public and private crossings, decreasing 16.6% (3,072 vs. 3,685).

For the eight-month period January-August 2002, rail-related fatalities increased over the same period in 2001 (668 vs. 655). Again, trespasser deaths are the primary cause of the rise, increasing 8.9%, from 348 to 379. Highway-rail crossing fatalities, on the other hand, dropped 13.0%, from 285 to 248.

FRA supplementary performance measure:

Rail-related fatalities per million train-miles.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	1.57	1.30	1.23	1.20
Actual:	1.31	1.30	1.36(r)	1.40

(r) Revised.

FY 2003 Performance Plan Evaluation: DOT will combine both performance measures above to better align with FRA’s safety program, and DOT will be challenged to meet both targets in 2003.

TRANSIT SAFETY: Public transit provides a flexible alternative to automobile and highway travel, offering a higher degree of safety as well. Currently transit is one of the safest modes of travel per passenger mile traveled. According to the National Safety Council, riding the bus is 47 times safer than car travel. By train, customers are 23 times safer than by car. The challenge is to further reduce the rate of fatalities and injuries even as the total number of people using transit increases.

Performance measure:

Transit fatalities per 100 million passenger-miles traveled.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	.507	.502	.497	.492
Actual:	.530	.499(r)	.480(r)	.487#

(r) Revised; # Preliminary estimate.

2002 Results: DOT met the performance target.

Recent growth in light rail grade crossing fatalities in the 1998 – 2000 period has been reversed. Light rail grade crossing fatalities were down 92 percent from 12 in 2000 to 1 in 2001. In the first half of 2002, this trend continued as there were only 2 light rail grade crossing fatalities.

Of the 309 total transit-related fatalities in 2001, 43 were patrons. Of the 180 total transit-related fatalities in the first half of 2002, 33 were passengers or revenue facility occupants. Many categories and definitions have been added or changed in the new National Transit Database in 2002 and will allow for improved and more timely analysis of trends of contributing factors such as trespassing in the future.

Strategies in 2002:

- through Formula Grants, Capital Investment Grants, and the Job Access and Reverse Commute Program, FTA invested in public transit infrastructure. Most of these funds improve transit safety by replacing older bus and rail systems with newer, safer public transit vehicles and improve the condition of tracks and transit facilities. For new projects, safety is a design consideration from the beginning;
- through the Transit Planning and Research Program, FTA worked with States, local transit authorities, and the transit industry to develop technology, provide training, and supply technical assistance that advances safety. FTA also conducted research and generates valuable data on safety and security, standards programs, and transit accident causal factors, which is used by FTA, States, and local transit agencies to improve safety;
- through FTA oversight of State rail safety programs, alcohol and drug testing programs, and transit security programs. FTA also provided oversight and guidance to transit properties on the direct safety features and safety implications of becoming compliant with the Americans with Disabilities Act; and

- through resolution of NTSB Recommendations. Seven outstanding recommendations were closed with acceptable actions. The remaining three recommendations involve FTA and other modes, and FTA is working with others in the Department to resolve them.

FTA supplementary performance measure:

Transit injured persons per 100 million passenger-miles traveled.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	123.2	121.9	120.7	109.4
Actual:	114.9	111.7	107.3	N/A

N/A Not available, since no comparable 2002 data exists due to revised definition of "transit injuries".

For 2002 the definition of what constitutes a reportable transit "injury," was changed in the new National Transit Database (the source of the transit injury data). Only an incident involving immediate medical treatment away from the scene now qualifies as a reportable transit injury. FTA made this change in consultation with the transit industry. Based on the first half of 2002, injuries using the new definition are occurring at approximately one third the rate of those occurring based on the previous definition.

FY 2003 Performance Plan Evaluation: DOT will meet the target in FY 2003.

PIPELINE SAFETY: A network of two million miles of pipelines transports natural gas to 60 million residential and commercial customers. While pipelines are among the safest modes for transporting liquids and gases, the nature of the cargo is inherently dangerous. Pipeline failures can pose an immediate threat to people and communities. Excavation damage causes 39 percent of pipeline failures for all types of pipelines. Corrosion also causes on average another 20 percent of all pipeline failures. Incorrect operation, construction/material defects, equipment malfunction, failed pipe, and other miscellaneous causes account for the remaining 41 percent of pipeline failures.

Performance measure:

Number of excavation damages to natural gas and hazardous liquid pipelines.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	N/A	N/A	N/A	111
Actual:	100	119	121	75#

Preliminary estimate.

2002 Results: DOT met the performance target.

Preliminary results are considerably lower than the 2002 target, most likely due to improved pipeline accident and incident data collection in 2002. RSPA categorizes outside force ruptures in more ways, leading to an apparent sharp decrease in excavation damage incidents.

For the past ten years, there were on average about 23 annual pipeline-related fatalities annually. 79 percent of fatalities occurred on natural gas distribution pipeline incidents, 12 percent on natural gas transmission pipelines, and 9 percent on hazardous liquid pipelines, with excavation damage as the leading cause of all pipeline failures.

RSPA improved operations, control, and monitoring technologies to enable better corrosion detection; validated direct assessment techniques for unpiggable pipelines; and researched better pipeline coatings. Better corrosion detection technology and direct assessment allows pipeline operators to detect pipeline defects before a release occurs. RSPA also supported efforts of the Common Ground Alliance to offer "Dig Safely" training sessions around the country for groups interested in implementing this important program.

RSPA supplementary performance measure:

Number of incidents for natural gas and hazardous liquid pipelines.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>

Target:	N/A	N/A	N/A	330
Actual:	341	381	292	293#

Preliminary estimate.

FY 2003 Performance Plan Evaluation: DOT will meet the target in FY 2003.

Management Challenge – Pipeline Safety (GAO)

GAO’s recommendations to RSPA for improving pipeline safety included: improving pipeline safety standards; strengthening enforcement of pipeline safety laws and regulations; enhancing Federal-State partnerships; providing the public better information and opportunities to participate; and supporting research and development of innovative pipeline safety technologies.

RSPA has made significant progress in improving pipeline safety and in accomplishing improvements suggested by IG, GAO, and NTSB in safety standards and technologies, regulatory enforcement, public participation in safety efforts, and in improving Federal-State-private sector safety partnerships. NTSB now rates more than 85 percent of RSPA responses to their safety recommendations as “acceptable,” not only an improvement from 75 percent in 2001, but one of the highest acceptable ratings of any transportation mode. In FY 2002, RSPA:

- made progress in finalizing actions required by Congressional mandates. RSPA will complete rulemakings that address all mandates by the close of calendar year 2002.
- completed reporting changes for natural gas transmission pipeline operators.
- increased oversight of accident reporting by operators and implemented revised procedures to examine accident reports submitted by pipeline operators. RSPA pursued enforcement action for reporting requirement non-compliance.
- completed training for Federal inspectors. In FY 2003, this training will be expanded to State pipeline inspectors.

HAZARDOUS MATERIALS SAFETY: Many of the materials used in manufacturing and many of the retail products people buy include hazardous materials. There are over 800,000 hazmat shipments each day in the United States. These range from flammable materials and explosives to radioactive materials, poisons and corrosives. Release of these materials during transportation could result in serious injury or death, or harm to the environment.

Performance measure:

Number of serious hazardous materials incidents in transportation.				
	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
Target:	N/A	N/A	N/A	523
Actual:	540(r)	565(r)	515(r)	189#

(r) Revised; # Preliminary estimate

Note on data: Mail security measures delayed hazmat incident reporting last year. Given the year-to-year fluctuation observed in this performance measure, it is difficult to determine whether a firm downward trend has been established. DOT expects that the number of hazmat incidents in FY 2002 will increase as all incident reports are received and analyzed.

2002 Results: DOT met the performance target.

Road accidents leading to hazmat releases continue to dominate overall serious hazardous materials incident statistics, but they decreased from 79 percent of total serious incidents to 73 percent. Serious rail incidents increased from 17 percent to 23 percent of the total.

FAA worked to reduce HAZMAT incidents as a percentage of cargo revenue ton-miles flown by focusing on improved compliance among manufacturers, distributors, retailers, and shippers before their cargo reached airports.

There was a marked reduction in serious incidents involving commercial motor vehicles in 2002. While this improvement is certainly encouraging, it may be attributable in part to market factors and/or mitigation activities in the months following the September 11, 2001 terrorist attacks, and may or may not be indicative of a new performance trend. FMCSA and DOT continue to monitor incidents, but it will be a year or so before it can be discerned whether a new performance baseline has been established.

FRA continued its integrated rail safety program, with the dual aim of reducing train accidents and HAZMAT releases. To the extent that train accidents are prevented, HAZMAT releases are also prevented. In 2001, 54 of 67 serious rail HAZMAT incidents were due to derailments, down from 63 of 95 incidents in 2000.

The Coast Guard enforced hazmat shipping regulations aboard U. S ships and foreign ships in U.S. waters as well as at port facilities. The Coast Guard operated the 24-hour National Response Center and the National Vessel Movement Center, for all reporting of hazardous materials releases, and for collecting and disseminating data on movement of vessels transporting dangerous cargoes to ensure adequate safety and security measures are taken to prevent intentional discharges of hazardous materials.

FY 2003 Performance Plan Evaluation: DOT will meet the target in FY 2003.