

DOT Today

October 1993
Volume III, No. 1
U.S. Department of Transportation



Moving America Together

ENERGY

We use and abuse it every day in many forms. As we move closer to the dawn of a new century, there is no question that we must continue our search for new, clean sources of energy, and conserve energy in all our activities — especially in transportation.



The United States, with less than 5 percent of the world's population, emits 22 percent of the world's carbon dioxide. We are also the most wasteful nation on earth, producing more solid waste per capita than any other country. The good news is that many efforts are underway to turn things around.

Recycling, which just a few years ago was "too much trouble" or something only "earth nuts" did, is now a part of most offices, homes, and communities in the country.

Bicycling has become a real transportation option that more and more people are taking advantage of. Clean, efficient mass transit is now available to millions of commuters. Car manufacturers put safety and fuel efficiency high on their list of options.

Safety and health are a large part of our lives. Our personal safety and health is taken for granted much of the time until an accident happens. Safety and health must be promoted as a team effort — employees working together to recognize and remove hazards in the workplace environment, and taking responsibility for making safety a high priority.

The choices we make during the last years of this century will have a profound impact on what kind of life the next generation of Americans and those around the world will have. In this special issue of DOT Today, we emphasize Energy Awareness Month and Fire Protection Week with a collection of articles on what we as a department are doing to help the environment, conserve energy, improve the quality of life for our employees, and better serve our customers, the American traveling public.

A Message to all Employees on the National Performance Review

I am sure that all of you have read reports by now about the new National Performance Review headed by Vice President Al Gore. Its basic goal, which we all share, is to create a government that works better for the American people and costs less of taxpayers' hard-earned money.

Unlike most past reports on ways to reform our government, the NPR has been produced by federal employees — not by outside consultants or critics. It doesn't just cite problems — it suggests solutions that will make our work lives more effective and rewarding.

Hundreds of DOT staffers contributed suggestions to the Review. And in both my brown bag lunches with employees and the Vice President's visit, you have shown great enthusiasm for positive change. In a real sense, this is *your* blueprint for a better future — proof positive that those who work for government really do want government to work better for all Americans.

We will be implementing many of the NPR's recommendations almost immediately — and other reforms will follow once Congress votes on them. The overall aim is to put our "customers," the American people first; to cut red tape; to empower DOT employees to get results; and finally to focus more clearly on our basic mission: maintaining the world's safest, most efficient, most productive transportation system, and building the infrastructure to keep it that way.

This means, for example, that we will be simplifying the ways we handle grants and other applications to cut paperwork and save time and money for both our clients and ourselves. It also means that we will be giving you more authority to buy things ranging from computers to paper clips — more control over your work lives and more responsibility.

Implementing the NPR will, of course, save billions of taxpayers' dollars over time. But these savings will not come at federal workers' expense. We will be seeking greater productivity as much as possible through reduction in paperwork, red tape and other time-consuming waste.

For example, two initiatives already underway illustrate the spirit of the NPR. They are "laboratories" of reform

that the department launched earlier this year within the Coast Guard and the Federal Highway Administration, both of which were designed to cut down on red tape that hindered DOT's service to our customers.

The Coast Guard has begun building a national data base system to automate 1.8 million merchant mariner records that have been maintained manually at 17 independent examination centers in the past. This has sometimes required mariners licensed originally in Miami but who have moved to Seattle, to return to Miami just to get a license upgraded or reissued. Automation will create a national system and avoid this sort of absurdity.

Similarly, FHWA has designed a system using electronic signatures on contract agreements to enable state program officials to execute these key documents by electronic mail. This will save time and money formerly wasted in paper handling. FHWA plans to extend this service to all interested states soon.

These are the sorts of ideas and innovations we will seek in the months and years ahead. The issuance of the National Performance Review is not the end of the process of "reinventing government," it is the beginning.

The process of making government more responsive to the American people — simpler and more "transparent" to deal with will continue. We aim to pare away the waste and bureaucracy that so often stifles federal workers' creativity, baffles citizens and makes your own work frustrating.

I urge all of you to join in this endeavor. Your ideas and suggestions for change are still as welcome as they were in the NPR study itself. Your contributions can directly shape the change we seek — and empower you to do your own jobs better.

As we rebuild the vital bond between the American people and the government that serves them, I believe that you'll find your jobs more rewarding and your pride in government service rising.

Sincerely,

Federico Peña

The Chemical Spill That Wasn't....But Could Have Been

by Kevin P. O'Malley, Saint Lawrence Seaway Development Corporation

A tour boat departed Alexandria Bay, N.Y. on the St. Lawrence River August 21. While negotiating a turn, the boat was caught in a strong river current. Suddenly, it collided with a tanker carrying xylene, a hazardous cargo. The captain of the tanker lost control of the vessel and ran aground.

The Saint Lawrence Seaway Development Corporation, along with the Jefferson Co. (N.Y.) Emergency Management Office and more than 250 participants from more than 45 U.S. and Canadian local, state, provincial and federal agencies and environmental groups responded that day. They had all been designated in the Seaway Corporation's Emergency Response Plan to assist in any emergency situation along the St. Lawrence River. Fortunately, this was just an exercise — a worst-case scenario involving multiple disasters, the third joint exercise co-sponsored by the Seaway Corporation.

Following the simulated radio distress call from the vessels to the Seaway Corporation's Vessel Traffic Control Center, local volunteer fire departments were rushed to the scene to handle vessel fires and assist with first aid to the 23 volunteer "victims" who were on the Seaway Corporation's barge (the "tour boat"). A Military Assistance to Safety and Traffic helicopter manned by the 229th Medical Detachment crew from Ft. Drum, N.Y., airlifted some of the more critical "victims" to the local hospitals.



One hour into the exercise, pollution control boats carrying booms entered the area, deploying 600 feet of the boom to limit the flow of the simulated spill into the Alexandria Bay basin. The

A U.S. Army helicopter from Ft. Drum (N.Y.) prepares to lower a medic onto the Seaway Corporation's barge during the Aug. 21 emergency response exercise on the St. Lawrence River

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Wellness Meets TQM

Protecting the Earth

FAA Establishes Environmental Network

A network designed to act as a compliance advocate, encouraging and providing forums for environmental issues impacting the agency, was established by the Federal Aviation Administration in 1990.

The environmental network currently has more than 70 members at headquarters and in the regions. Immediate plans call for establishing additional networks at the Aeronautical Center in Oklahoma and the Technical Center in New Jersey.

The network's aim is to improve the agency's environmental program

and increase information flow. Another purpose will be to identify and resolve issues of concern in the area of environmental services. In addition to solving site-specific problems, ranging from where to site radar to "de-icing" incidents, network activities include finding funding sources for environmental processes, assisting in maintaining the agency policy handbook, and developing and facilitating agency environmental training courses and workshops.

The headquarters network focuses only on compliance with the

National Environmental Policy Act (NEPA) of 1969 and related environmental laws, regulations and executive orders. The Hazardous Materials and Special Projects Staff coordinates hazardous waste cleanup issues with the Airways Facilities environmental and safety compliance committee. Issues raised by that committee are brought to the attention of the headquarters network; regional networks address both NEPA and hazardous materials issues.

The networks meet once a month separately and once jointly in a nationwide teleconference. The head-

quarters network is chaired by Jerry Schwartz, Office of Environment and Energy, Policy and Regulatory Division. Regional networks work closely with deputy regional administrators. Every quarter, the Office of Environment and Energy, assisted by the network coordinator, conducts a teleconference with the deputy regional administrators and chairs of regional networks to discuss policy.

SOURCE: FAA Headquarters Intercom

Energy Awareness Quiz



1 How much money is spent annually on energy used in U.S. residential and commercial buildings?
a. \$350 million b. \$4.5 billion
c. \$2.7 billion d. \$170 billion

2 How much money could be saved annually through full-scale use of compact fluorescent light bulbs?
a. \$20-25 million b. \$75-100 million
c. \$5-8 billion d. \$20-25 billion

3 The average new refrigerator sold today uses how much less energy to produce the same cooling as the average unit sold in 1972?
a. 24 percent b. 39 percent
c. 55 percent d. 75 percent



4 In the average U.S. household, what kitchen appliance consumes more electric energy than any other single electric appliance?
a. food processor b. refrigerator
c. toaster d. microwave oven

5 Raising the efficiency standards of refrigerators and freezers by one-third above current levels would save an amount of electricity annually that is equal to the output of how many large nuclear power plants?
a. 1 b. 2.5 c. 4 d. 9



6 How long does it take to realize energy savings from installing insulation on a water heater tank?
a. 6 to 7 years b. 3 to 4 years
c. 2 years d. less than one year

7 Implementing cost-effective efficiency measures in federal buildings alone throughout the United States could feasibly save how many millions of dollars annually?
a. \$900 million b. \$450 million
c. \$50 million d. \$25 million



8 If every gas-heated home were properly caulked and weather-stripped, we'd save enough natural gas each year to heat how many homes?
a. 150,000 b. 900,000
c. 4 million d. 10 million

9 Depending on the climate, you can save up to how much on monthly energy bills (in all seasons) by simply planting trees and shrubs around your house?
a. up to 5 percent b. up to 15 percent
c. up to 28 percent d. up to 40 percent



10 If you air dry your dishwasher load, rather than using the heat dry setting, how much of the dishwasher's energy use will you save?
a. 10 percent b. 20 percent
c. 40 percent d. 80 percent

11 How much energy does a microwave oven use compared to a conventional oven to cook the same dish?
a. 15 percent less b. 25 percent less
c. 40 percent less d. 50 percent less



answers below

SOURCE: Colorado Governor's Office of Energy Conservation

DOT Today

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Secretary of Transportation
Director of Public Affairs
Editor
Design

Federico F. Peña
Richard Mintz
Sue Challis
Tomara Arrington and Catherine Vass,
OST Graphics

This is your publication, and we value your input.

If you would like to submit letters, comments or articles, please address them to: Editor, DOT Today, OST, Office of Public Affairs, A-10, Room 9419, 400 Seventh Street, S.W., Washington, D.C. 20590, (202)366-5578; FAX (202)366-3703.

The deadline for the November 1993 issue is October 21

This newsletter is
recyclable



Please Recycle

Chemical Spill (continued from page 1)

potential flow of the spill was determined by the Seaway Corporation's oil spill computer model. The model can calculate the flow of the spill once data such as weather conditions and spill amount are entered into the program.

Observers included Seaway Corporation Administrator Stanford E. Parris, DOT Chief of Staff Ann Bormolini, RSPA's Acting Administrator Rose McMurray, and RSPA's Director of the Office of Emergency Transportation Lloyd Milburn.

Administrator Parris declared the exercise a success and said that it provided an opportunity for emergency and cleanup agencies to contribute their specialized skills and apply their training to a simulated incident.

"We started these exercises three years ago with the various New York emergency service offices to get local officials involved with our Emergency Response Plan," he said. "By involving the responsible agencies in a real-life scenario, we can be assured that everyone will know their roles and be prepared to move rapidly in the event of a real incident."



Pollution control boats deployed booms during the "spill"

FHWA Wildflower Program Takes Root

Coreopsis. Lupine. Butterfly weed. Prairie coneflowers. Black-eyed Susans. Wild roses.

These are the kinds of wildflowers you're likely to see in the near future along many highway rights-of-way, thanks to an offshoot of initiatives contained in the Federal Highway Administration's National Wildflower Program.

The notion that the road landscape does have some importance began back in 1965 when Lady Bird Johnson's beautification program was in its infancy. After leaving the White House, Mrs. Johnson's interest continued, and she remained involved — helping in 1987 to amend The Surface Transportation and Uniform Relocation Assistance Act to require all departments of transportation using federal funds to use 1/4 of one percent of their landscape budget for native wildflower planting — those plants that existed naturally in the landscape before European settlement.

ISTEA does not specifically mention wildflowers, but its provisions do reinforce the earlier legislation by including landscaping in the list of eligible enhancement activities which receive a minimum of 10 percent of all Surface Transportation

Program funds — \$2.8 billion over six years.

DOTs participating in the program are not only planting wildflowers along roadsides and within medians; they're also educating people about planting. For example, the Colorado Department of Transportation has published an instructional booklet for engineers called *A Seeding Guide to the Eastern Plains*, and other states are conducting public awareness campaigns using videos and radio spots.

Bonnie Harper-Lore joined FHWA headquarters this year from the Minnesota DOT, where she began their wildflower planting program. She is currently working on guidelines and a resource book for states to help them gain success in their efforts. A nine-minute video has also been completed and distributed to the states as "a gentle reminder of what they're supposed to be doing," she says.

This kind of program doesn't just provide us with something pretty to look at. The wildflowers also need less maintenance; provide new wildlife habitat, and improve erosion control.



"The wildflowers add diversity to a landscape that has traditionally been boring," says Harper-Lore. "If we are careful about what we plant, we will have diversity not only from year to year, but from season to season."

Wisconsin's Interstate 94, three years after native wildflower planting.

Ergonomics: Essential in Today's Office Environment

The office environment of the 90s has changed dramatically from that of years past. Technology has made it more automated — few workplaces of today lack some kind of computer system. While widespread use of computers has made things more productive, an important consideration — ergonomics, has sometimes been overlooked.

Ergonomics is the scientific shaping of the physical work environment so that employees can operate at maximum productivity and efficiency. Incorporating ergonomics not

only increases productivity, but can also improve overall employee health. Research has shown that poorly designed workplaces lead to a variety of physiological problems, including lower back pain, eye strain, headaches, fatigue, tension, and stress. Many of these are caused by poorly designed workstations, static postures and highly repetitive tasks like keyboarding. Many of these can be eliminated by some fairly simple seating and workstation changes. Faced with mounting medical problems and employee absences, many

federal managers have taken a closer look at how office workers react with their environments. The result has been comfortable, safe and efficient office designs.

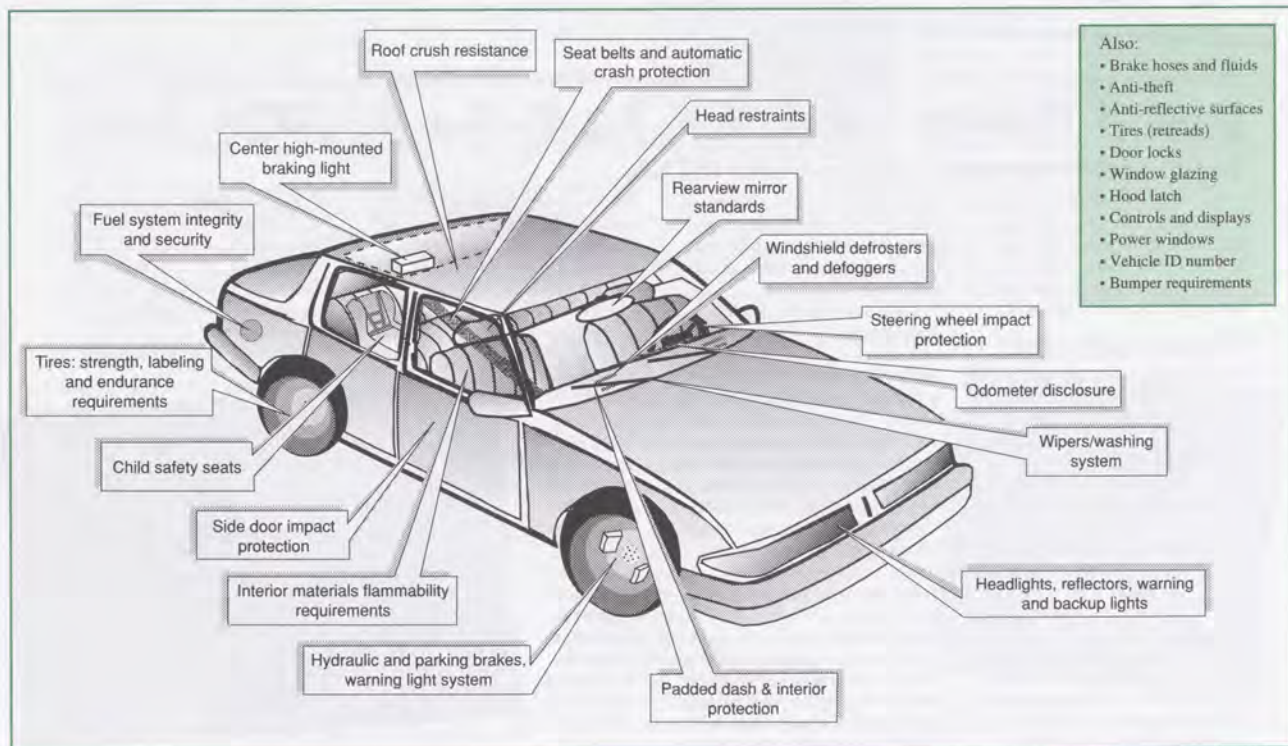
For workers required to sit for long periods, such as postal sorters, ergonomists suggest chairs that provide fluid motion. When backaches among air-traffic controllers reached all-time highs a few years ago, the Federal Aviation Administration opted for fluid-motion seating. Weight-activated mechanisms cause the chairs to budge periodically, thus

relieving circulatory and muscular stress. In other words: furniture should adapt to users — not the other way around. There are signs around DOT that the message is getting through. Many of the old wood and high-back leather chairs are out in the hall at headquarters labeled "surplus," being replaced by those of sleek construction with adjustable seat pitches and movable armrests that relieve pressure on neck and shoulder muscles.

SOURCE: *Government Executive Magazine*

NHTSA's Motor Vehicle Safety Standards

Over the years, passenger cars have been made a lot safer because of NHTSA's motor safety standards for:



STEEL RECYCLING

by Jim Gower, OST

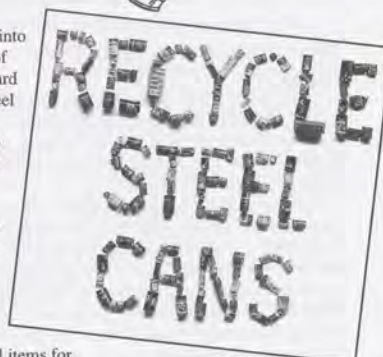
When you think of recycling steel, the U.S. Department of Transportation is probably not the first thing that pops into your mind. Take a second look. The transportation industry uses steel everywhere. Steel is used in the construction of roads and bridges. Think of the steel used in planes, trains, autos, the maritime shipping fleet, and the U.S. Coast Guard Fleet. So what happens to steel once it has come to the end of those vessels' and vehicles' lives? Like most of the steel used in the U.S., it too becomes recycled.

The North American steel industry has been recycling its products for nearly a century, converting scrap steel into new steel to make a variety of products. Few people realize just how much steel the industry has been recycling. For the last three years, the steel industry's overall recycling rate was 66 percent, and for the last 50 years, the industry has recycled over 50 percent of all steel produced. This makes steel America's most recycled material.

In the past, recycling steel cans has taken a back seat to the profitable scrap steel recycling process. This is changing however. Each year about 35 billion steel cans are produced in the U.S.—nearly 100 million steel cans are used by Americans each day.

In the past, steel cans were often referred to as tin cans, but they are actually made of high quality steel with a very thin tin coating. Some examples of steel cans include soup cans, coffee cans, bandage boxes and beverage, paint and aerosol cans. Magnetic separation makes steel the easiest material to separate from other recyclables and to remove directly from the solid waste stream. Magnetic separation ensures reclamation of steel cans and other steel items for shipment to end markets. Here are a few facts:

- Every time a ton of steel is recycled, 2,500 pounds of iron ore, 1,000 pounds of coal and 40 pounds of limestone is preserved.
- The steel industry's annual recycling saves as much energy as it would take to electrically power 18 million households for a year.
- In the end, the steel that is recycled from both steel cans and scrap metal is used to make new cars, appliances, toys, tools, construction materials, bridges, roads, ships, any number of uses.



ARE YOU A GREEN CONSUMER? by Jim Gower, OST

Choosing products that will do the least amount of damage to our environment may come easy to some, but for others the lack of information to make such decisions could lead to making the wrong choice. We make

choices every day that affect the environment. Because we do, we should be well equipped to handle the environmental choices that confront us. Environmental matters are complex and because they are, we need to be well informed. Much of the information that reaches the public is simplistic or downright inaccurate. Test yourself on the following two questions to see whether or not you are well equipped in making decisions that will do minimal harm to the environment.

To show that recycling paper actually saves energy would require analyzing energy use for the entire lifecycle of paper made from both raw materials — pulpwood and waste paper. So far, no convincing analysis of this type has appeared. Recycling paper **definitely** preserves landfill space. Paper makes up 32%, by volume, of municipal solid waste — the largest single component by far in landfills.

If global warming is occurring, which of the following actions would best help slow it down?

How does buying products made from recycled paper help the environment?

- It saves forests
- It saves energy
- It saves landfill space
- All of the above

- Not buying aerosol cans
- Joining a carpool
- Recycling cans and bottles
- None of the above

If you picked d) all of the above, you picked the wrong answer. The correct answer is c) It saves landfill space. Recycling paper does **not** "save" forests. Trees used for paper are usually grown on "tree farms" and are harvested at sustainable rates. Virtually no paper comes from the logging of ancient, irreplaceable tree

The answer is b) joining a carpool. By reducing emissions of the leading "greenhouse" gas, carbon dioxide, carpooling does indeed help. Many believe that avoiding aerosols would help. While it's true that CFCs, besides destroying stratospheric ozone, also are potent greenhouse gases, it is also true that today's aerosols contain virtually no CFCs.

SOURCE: *Consumer Reports*, November 1992

RECYCLING

YOU
Can Make a Difference.

By Recycling Your
Office Paper

YOU
Alone, in One Year, Can

SAVE:

- 2.2 Trees
 - 49 Gallons of Oil
 - 910 Gallons of Water
 - Enough Energy to Power Your Home for 23 Days.
- Reduce • Reuse • Recycle

Recycling Fast Fact courtesy of Federal Railroad Administration

Pedal Power

Bicycle and Pedestrian Programs under ISTEA

Bicycling is hot. Walking is more popular than ever. Air quality issues, environmental concerns, health and exercise are all on the side of the argument for making bicycling and walking valid forms of transportation.

Under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, state planning organizations were given more power to plan for their communities — including long range planning for bicycle and pedestrian programs. The provisions of this act offer significant funding opportunities for bicycle and pedestrian programs. Some funds will go to on-road facilities, where bike lanes share the road with cars; others feature off-road facilities for pedestrians and bicyclists.

ISTEA also requires the appointment of bicycle/pedestrian program coordinators in each state's transportation department. Recently the coordinators met for a conference,

with 48 of the 50 states represented. Those with already successful programs shared their knowledge with those just getting started or having problems getting started.

A national study has just been completed that identifies what problems and safety issues must be addressed to increase bicycling and walking in communities around the country. The actions needed to be carried out at federal state and local levels are presented in the final study report. Twenty-four case studies have come out of the larger study; 17 have now been delivered to the Federal Highway Administration, covering all aspects of bicycle and pedestrian issues. The authors of these studies include groups and individuals in the field.

In addition, *Prevention* magazine has just completed a survey that found more people would ride bicycles or walk to work if they felt safer. Things like providing more facilities,

improving lighting along a bike or walking path, properly maintaining (i.e. pot-hole free) roads, and emphasizing road safety are some of the concerns to be addressed.

FHWA's Intermodal Division oversees the bicycle and pedestrian program, which is managed by John Fegan and Barbara McMillen. Much of their work is dealing with FHWA's field offices, and the public, answering questions and sending out requested information. The staff is currently setting up a formal clearinghouse to han-

dle requests. The ISTEA publication outlining how to apply for bicycle and pedestrian program funding had an initial printing of 40,000. More than 30,000 have already been requested and sent out since December 1992.

Call (202) 366-4634 for a copy.



photo by Richard F. Staples, Jr.

8 WAYS TO CLEAN THE AIR ON THE ROAD

by Jim Gower, OST

Nearly every human activity produces smog. The paint you use, the hairspray you buy, the way you light your barbecue, even the number of times you flip on a light, all produce smog. The greatest producer of smog by far is automobiles. Motor vehicles are responsible for 70 percent of the emissions that turn our blue skies to brown. The remaining 30 percent comes from stationary, or fixed sources, including power plants, industries, businesses, and of course, our homes. How then can we reduce the amount of smog we produce when we are on the road? Here are some ways to think about:

Ride share. You can cut down on pollution by sharing a ride. Carpooling or vanpooling also reduces highway congestion.

Leave the driving to them. Use public transportation. The bus means less car repair and commuting costs, along with less stress on you.

Ride a bicycle or walk. Cycling and walking are great for short trips. Human power produces no smog and the exercise has its own benefits.

Combine errands into one trip. Instead of hopping in the car whenever you need something, plan your errands. Cluster as many as possible. Every time you start a cold car, you could be generating as many emissions as the whole rest of the trip.

When you're out, walk into — don't drive thru — banks, cleaners, and fast food restaurants. Engine idling produces large amounts of carbon monoxide and other pollutants. Drive thru lanes may be convenient, but they are also serious smog factories.

Make sure your car air conditioner is working properly. Leaky car air conditioners are the greatest source of chlorofluorocarbons (CFCs), a greenhouse gas. Check your auto air conditioner to make sure it's leakproof. If it needs to be recharged, have its CFCs recycled. Ask your mechanic if he or she has a system for recycling freon.

Prevent gas spillage — don't top off your tank. Topping off fills your tank with gas and at the same time fills the air with contaminants. Remember, gasoline vapor is another source of smog since it contains pollutants such as benzene.

Keep your engine well tuned. Dirty carburetors, clogged air filters, worn points and plugs not only waste gas and lower engine performance, they cause increased emissions of particulate matter and nitrogen oxides.

FAST FACTS

In one year, traffic congestion alone wasted 3 billion gallons of gasoline in the U.S. — about 5% of the nation's annual gas consumption.

— The Earthworks Group

- * At current prices, if only 10% of the Americans who commute by car switched to public transportation, the U.S. would shave nearly \$1 billion off its oil import bill.
- * Through recycling, 2.5 quarts of "new" motor oil can be extracted from 1 gallon of used oil. (It takes about 42 gallons of virgin oil to make 2.5 quarts of motor oil.)
- * One quart of motor oil, when completely dispersed, can contaminate as much as two million gallons of drinking water.
- * The amount of used, nonrecycled motor oil that is dumped in the U.S. each year constitutes 10 - 20 times the amount that leaked from the Exxon Valdez oil tanker during the 1989 Alaska oil spill.
- * If current trends continue, Americans will drive 3 trillion miles in the year 2000, almost a trillion miles more they drove in 1988.

• Reduce • Reuse • Recycle

RECYCLING

Recycling Fast Fact courtesy of Federal Railroad Administration

You can also report smoking vehicles by calling 1-800-CUT-SMOG. Call the toll free number to report cars, buses and trucks that emit visible smoke exhaust for more than 10 seconds. Drivers will be advised in writing to make repairs.

SOURCE: Air Quality Management District, El Monte, Calif.

Plugging In Your Car? - Here Comes Electric

by Susan Lee White, NHTSA

Many of us will be driving into the next century in electric cars if all goes well — so say engineers and manufacturers around the world. We tend to think of electric cars as new technology, but the truth is the first electric car motor was built in 1837 by Thomas Davenport of Brandon, Vermont, 36 years before the first gas powered car, the Benz, was built in Germany.

As our world becomes more environmentally conscious, the electric car may finally fulfill the potential its early inventors envisioned for it.

The big three U.S. auto makers — Chrysler, General Motors and Ford — and foreign car manufacturers in Germany, Switzerland, Denmark, and Japan have electric cars on their drawing board; preparing to offer electric car options to consumers as part of meeting 1988 and 1992 Clean Air Act Amendments.

In May 1992, 159 countries signed on to the Convention on Climate Change, finalized in October 1992 at the Earth Summit in Rio de Janeiro, Brazil. The voting countries are in favor of substantially reducing emissions of carbon dioxide (CO₂) — a byproduct of burning fossil fuels — by the end of the decade. Electric cars, which are potentially zero emission vehicles (ZEVs) can help us reach that goal.

California leads the nation and the world in tightening motor vehicle emission standards — and rightly so, since California has the most severe air quality problems and also accounts for 12 percent of the U.S. vehicle market. Nine other states recently endorsed and may adopt California's emission regulations. By 1998, California will require that two percent of all motor vehicles licensed there be ZEVs. In that year, the state plans to have a network of "recharge stations" for electric cars. The stations would require a minimum of 480 volts to recharge batteries. The vehicles can take up to eight hours to recharge at lower voltages, depending on the type of battery. Utility companies in California are encouraging future electric car owners to recharge their vehicles at home on regular 120 and 240 volt outlets, and may offer them discounts to do so.

The 1992 Clean Air Act Amendments require 10 percent of all federal government car fleets to be electric battery-operated vehicles by 1998. Lead-acid batteries will most likely be used until batteries are developed with the capability to power cars at higher speeds for greater distances.

Some manufacturers are testing electric cars that will go up to



Above: One of today's electric test cars
Right: The first electric motor, 1837



55 or 60 mph, but it is expected that most of the cars will be slower, for street driving, not highway driving. Many of these vehicles may be used for commercial purposes, such as security patrol cars. By 2003, it is estimated that ZEVs will make up 10 percent of total auto sales.

NHTSA currently has a program underway to test two electric vehicles against a number of federal safety standards, including windshield defrosting, braking, frontal occupant protection system, and transmission. After crash testing, the vehicles will be monitored for spillage of battery electrolytes and performance of battery restraints designed to prevent intrusion into the passenger compartment. Results will be available in mid 1994. NHTSA issued a Notice of Proposed Rulemaking for electric vehicles modifying the requirements of existing standards for hydraulic brake systems, windshield defrosting, and state-of-charge indicators. The next regulatory steps on these rulemakings should be completed by early 1994.

Manufacturers are now testing transitional electric cars, called HEV (hybrid electric vehicles), that have both battery and fuel systems. They would run on fuel until the battery is charged, and could run at higher speeds. For instance, in GM's experimental 1994 model year electric Saturn car, an internal combustion engine run on liquid alternate fuels provides the primary source of power, while an electric drivetrain provides auxiliary power during acceleration and other instances requiring peak power.

Some time within the next century, all cars on the road could be zero emission electric cars.

FHWA at the Fair

The Federal Highway Administration, Colorado Division and the Colorado Department of Transportation shared a booth and exhibit at this year's Colorado State Fair. The booth featured a display on Glenwood Canyon, one of the most environmentally sensitive highway construction projects in the country; samples of various materials used in highway construction, and electronic survey equipment with satellite-based global position system (GPS) capabilities. The state fair this year had over one million visitors.

Shown here are (left to right) Jerry L. Sweet, University of Southern Colorado, prime sponsor of the Industry and Technology Building, Wellington J. Williams, FHWA Colorado Division Coordinator, and George H. Osborne, FHWA Colorado Division Administrator, Honorary Ribbon Cutter. The children are state fair visitors.



Earth n' jeopardy

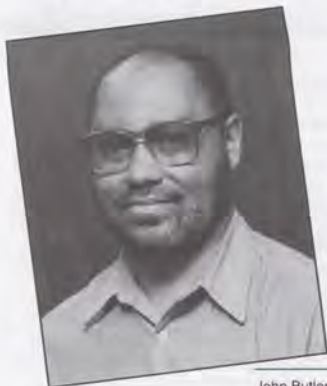
Regardless of how trivial our actions may seem, some of them will inevitably affect the environment — some in a lethal way. We should shape our everyday behavior so that our actions will have as little an effect on the environment as possible. Earth'n Jeopardy is an environmental trivia game designed to heighten awareness of how some of our everyday actions affect the environment. Answer the following questions to the best of your ability, and see how environmentally aware you really are.

- The greatest consumers of energy in the world live in:
 - Japan
 - Germany
 - USA
 - Chile
- The greatest cause of acid rain is:
 - increased use of cars and trucks
 - toxic dumping
 - pollution from coal burning power plants and factories
 - water chlorination
- How many times can a cloth diaper be used?
 - 3 times
 - 20 times
 - Up to 75 times
 - Up to 200 times
- An 18 watt fluorescent bulb provides the same amount of light as a 75 watt incandescent bulb. True or False?
 - True
 - False
- People in the U.S. throw away how many tires each year?
 - 5 million
 - 110 million
 - 240 million
 - 5 billion
- Who uses more pesticides per acre: Farmers or Homeowners?
 - Farmers
 - Homeowners
- How much oil in the U.S. is consumed for transportation?
 - 20%
 - 40%
 - 60%
 - 80%
- How far could an average car travel on the amount of energy used annually in a home?
 - Minnesota to California
 - Alaska to Peru
 - Japan to England
 - twice around the world
- A leaky toilet wastes enough water in a year for how many showers?
 - 40
 - 100
 - 250
 - 450
- How much of the increase of worldwide carbon dioxide levels is the result of deforestation?
 - 3%
 - 7%
 - 15%
 - 25%

answers on page 9

WHY DOES THE HEIMLICH

by Jim Gower, OST



John Butler

John Butler was in trouble, and he knew it. The fish bone that had just lodged in his throat was beginning to choke him and he knew he didn't have much time. John was taking a late lunch, close to 2:30 p.m., so the headquarters cafeteria was next to empty. He got up, walked to the middle of the cafeteria and tried to drink some water from the fountain to clear his clogged esophagus. It didn't work. He tried hitting his chest trying to knock the fish bone loose. This didn't work either. He then sat back down at his table and motioned for one of the cafeteria staff to come and help him. John's repeated hits to

his upper chest made it all too clear he was choking and in pain. The cafeteria employee immediately understood what was the matter. She called for someone to bring a glass of vinegar for John to drink.

In the midst of all this, not far away, sat Hy Levasseur, of the Headquarters Fitness Center staff, eating lunch with another DOT employee. Seeing that John was in trouble, Hy went over to where he was seated, and immediately began performing the Heimlich Maneuver on him — the manual application of sudden upward pressure on the upper abdomen of a choking victim to force a foreign object from the windpipe or esophagus.

It only took a few times before Hy was able to dislodge the fish bone from John's esophagus and allow him to breathe normally. But John's troubles didn't stop there. When he was completely relaxed and through with his ordeal he found out why the cafeteria employee had called for a glass of vinegar. John had to drink it. He had dislodged the bone in his esophagus by completely swallowing it. His digestive tract would need some help breaking the bone down and so, down went the vinegar. Vinegar will cause bone to become flimsy, and it will desharpen any pointy ends, making digestion much easier. Needless to say, the vinegar was the worst tasting liquid he had ever had, but he will be thanking Hy and the cafeteria staff the rest of his life for letting him have that drink!

The following steps should be followed when confronted with a conscious choking victim:

- Identify complete airway obstruction by determining if victim is able to speak or cough. If the victim is able to speak or cough effectively, do not interfere with his or her attempts to expel the foreign body. Continually check for success.
- If there is complete airway obstruction, perform the Heimlich Maneuver.

- Stand behind victim and wrap your arms around his waist.
- Make a fist with one hand, and grasp it with your other hand. Place thumb side of your fist in the midline, slightly above the navel.
- Press fist into abdomen with quick inward and upward thrusts. Each abdominal thrust should be delivered decisively. Such thrusts can force air upward into the airway from the lungs with enough pressure to dislodge the foreign body.

In the event your victim is late in pregnancy or obese, use chest thrusts:

- Stand behind victim and place your arms under her armpits to encircle the chest.
- Grasp your fist with your other hand and place thumb side on the middle of the breastbone.
- Press with quick upward thrusts.

Do not waste any time when confronted with a person who is choking. Assess the situation and take the appropriate action. Immediately call for help if a choking victim is found to be unconscious.

SOURCE: American Heart Association, *A Student Handbook for Cardiopulmonary Resuscitation and First Aid for Choking*

IN SYNC WITH NATURE

FAA Surveys Environmental Training for Employees

As environmental regulations continue to increase and change — having far-reaching impacts on the federal and private sectors — FAA is taking a hard look at what its employees need to know to ensure compliance.

To minimize environmental liability to the agency and its employees, FAA's Hazardous Materials and Special Projects staff is developing and distributing an environmental training needs

assessment. It will look at the complexity of environmental requirements as they relate to agency job classifications and associated duties.

The survey is intended to provide information on FAA's environmentally regulated activities. In addition, the Office of Training and Higher Education is conducting an FAA-wide hazmat training requirements analysis.

Training will equip FAAers with the knowledge and skills necessary to perform their job duties at the highest level of environmental awareness to

minimize negative environmental impacts and potentially costly corrective actions.

This training will also be offered at the FAA Academy in Oklahoma City, to provide centralized training for the agency's technical specialties. Designed to develop skills, knowledge, attitudes and job function performance capabilities, courses are geared toward achieving and supporting FAA requirements and program objectives.

HIGHRISE EVACUATION

by Willie Seabrooks, USCG, Fire Safety Specialist

GET OUT! STAY OUT! is the theme of Fire Prevention Week, October 3-9. Those who live and work in highrise buildings face special fire hazards when compared to those in single story buildings.



USCG Headquarters Building, Washington, D.C.

Fires start in highrise buildings the same way as any other — the most common causes being smoking, children playing with matches and lighters, electrical systems, cooking, and arson. During Fire Prevention Week, we should redouble our fire prevention awareness, and on the job, make a special effort to ensure that we know what to do during fire emergencies.

Thousands of buildings and homes become victims of fires each year. A serious fire is a deadly combination of heat, blinding smoke and toxic gases. Toxic gases and smoke can kill victims trapped in a burning building long before the flames reach them. Fires can produce temperatures over 1,000 degrees Fahrenheit in just minutes! At higher temperatures, there are possible dangers of flashover, where a room immediately becomes engulfed in flames in an explosion-like reaction.

Oxygen is essential for human life, but is also the key to supporting the life of fire. One major effect of lack of oxygen is the impairment of judgment. You may not realize it, but the lack of oxygen on the way out of a burning building may impair your ability to think clearly and rationally. Once you have made your way out of a burning building, you may already be suffering the effects of lack of oxygen. When fire and humans compete for the limited amount of oxygen available within a burning building, fire always wins!

How you react in a fire will depend on how well you've prepared yourself before it happens. Here are a few factors to consider:

- * Know the location of the two exits closest to your work area. Count the number of doors between your office and each of those exits in case you might have to evacuate through a darkened or smoke filled corridor.
- * Locate the nearest fire alarm and learn how to activate it.
- * Become familiar with the sound of your building fire alarm.

* Become familiar with your building's emergency plan, emergency telephone numbers and local fire department number.

* If you have any disabilities that could delay you in an evacuation or could prevent you from using the stairs to escape, let someone in authority know. Every individual with a disability should be assigned a coworker and an alternate who can render assistance in case of fire or other emergency. Participating in drills is especially important for people with disabilities.

* No matter how small the fire may be, sound the alarm. Large fires all start as small ones!

During evacuation, follow the directions from fire and security personnel. Once outside, move well away from the building so you will not be in the way of fire fighters.

GET OUT, STAY OUT! Never attempt to go back into a burning building for any reason. If someone is missing, inform the appropriate authorities such as building management or firefighters. Firefighters have the resources, training and personnel to perform search and rescue operations for fire or other emergencies.

Fire Prevention Week is also a good time to address home fire safety. The proper use of smoking materials, use and maintenance of smoke detectors, and home fire drills are all good educational topics for your next family discussion.

NEW HEADQUARTERS FIRE PROTECTION SYSTEM

by John Hancock, OST

The DOT Headquarters Nassif Building has 10 floors. Most of us don't really think about how we'll get down to the safety of the courtyard in the event of fire. That's why the building management team at headquarters is here. Also luckily for all of us, they are currently finalizing construction and testing of a new fire detection, alarm, and sprinkler system for the building. The system will improve the safety of our building, change the sound of the alarm, and change how we respond to fire emergencies. The most significant change in the emergency response will be the use of a "selective" evacuation procedure. This means that if an alarm station is pulled or a sensing device detects the presence of smoke, only persons on the floor where the signal originated and the floors directly above and below that floor will be evacuated initially. Listen carefully to the instructions. If additional areas need to be evacuated, the evacuation process will be done in sequence. This method of evacuation from high rise structures is endorsed by the National Fire Protection Association as well as public and private sector fire officials. Selective evacuation also reduces congestion in the stairwell for emergency response personnel and minimizes disruption of the workplace if there is a false alarm. It is essential to follow the announced instructions in an immediate, orderly fashion. Here are the six major components of the new system:

Smoke Detection

Smoke detectors have been placed on each floor in elevator quadrants to provide early warning of a fire. Elevators in a quadrant will be recalled to the lobby only when the smoke detectors sense the presence of smoke in that area.

Automatic Sprinklers

A water sprinkler system has been installed which automatically activates when exposed to a preset temperature. Sensors in the sprinkler system detect any water flow and automatically sound the alarm.

Alarm Pull Boxes

As with the old alarm system, the system provides manual pull stations for occupants to activate if there is a fire emergency in their area. Strobe lights above each pull box provide a visual signal to those who are hearing impaired. The pull stations are located along the corridors and at each exit. Until the old pull boxes are removed, there are two pull stations. Both stations should be pulled to guarantee activation of the alarm.

Tone and Alarm Announcements

The red boxes mounted on the ceilings throughout the building contain an alarm speaker. Alarm tones, spoken alarms, and announcements will be made through these devices. The new alarm system sounds very different than the old system. The new alarm produces three electronic tones and then voice instructions. After hearing the tone, occupants of the buildings should move close to the speakers to hear any instructions clearly.

Full Time Monitoring

The alarm system will be monitored around the clock by security personnel. In the event of an alarm condition, the situation will be immediately investigated and appropriate action taken. In addition, the system self monitors and reports any malfunctioning unit. Alarm panels in each of the main lobbies provide the location of the emergency.

Elevator Response and Evacuation of Persons with Disabilities

Elevators in a quadrant will be recalled to the lobby only when the smoke detectors sense the presence of smoke in that area. All other elevators will remain in service. If the responding alarm sensor or pullbox is in a ground floor lobby, the elevators in that corner will go to the second floor and stop. Occupants of the elevator should leave the elevator and proceed to the nearest exit stairway. Elevators will continue to be used by the Occupant Emergency Warden Teams for relocating persons with disabilities to a safe area.

Environmental Marketing Terms

by Jim Gower, OST

There is a new age dawning — an environmental age. To be environmentally aware, you need to understand what they're talking about out there. This new age brings with it new ideas, strategies, programs and terminology. The media has begun to use many terms that deal specifically with the environment and recycling. Get to know these terms if you plan on participating and actively contributing in making the globe a healthier place to live. Here is a list of commonly used words and phrases and their definitions used in the new age of environmental awareness:

- * **Biodegradable Material:** Waste material that is capable of being broken down by microorganisms into stable compounds such as carbon dioxide and water.
- * **Composting:** A natural process by which organic material decays into a soil conditioner known as humus.
- * **Contaminant:** Any physical, chemical, biological, or radiological substance or matter that has an adverse effect on air, water, or soil.
- * **Hazardous Waste:** Byproducts of society that can pose a substantial or potential hazard to

human health or the environment when improperly managed.

- * **Incinerator:** A facility that burns solid waste, often converting waste to energy.
- * **Pollution Prevention:** Reduction or elimination of the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources, or the protection of natural resources by conservation.
- * **Post Consumer Waste:** A material or product that has served its originally intended use and has been discarded for disposal or recovery after passing through the hands of a final customer.
- * **Recovered Material:** Material that can be used in place of raw or virgin material in manufacturing a product. Consists of materials derived from post consumer waste, industrial scrap and other items which can all be used in the manufacturing of new products.
- * **Recyclables:** Materials that still have useful physical or chemical properties after serving their original purpose and that can be reused or

remanufactured into new products.

- * **Recycled Content:** The portion of a product's or package's weight that is composed of materials that have been recovered from waste. This may include pre-consumer materials.
- * **Virgin Material:** A raw material, including previously unused copper, aluminum, lead, zinc, iron, or other metal or metal ore, any undeveloped resource that is, or with new technology, will become, a source of raw material.
- * **Densifier:** A machine that melts commonly used plastic disposables.

The same awareness is needed when doing your shopping. Many manufacturers today use a lot of claims like "environmentally friendly" or "eco safe," which have vague meaning. What you should look for is specific information needed to compare products and packaging on environmental merits. How much of the product is recycled content? Is it made from post consumer waste? Can it be recycled? Comparing precise data from different products will enable you to choose the most environmentally sound product.

Source: Various Recycling Guides



Wellness Meets TQM

by Capt. Al Steinman, Chief, Wellness Programs Branch, USCG Headquarters

Try taking a fresh look at your lifestyle.

Maybe with just a little "tweaking" here and there you can ditch your tobacco addiction, get more physically fit, resuscitate your good nutrition

sense, melt away your unwanted fat, increase your lean body mass, better manage your stress, and become a happier and healthier person. So what does all this have to do with TQM? Well, that's the fresh look part. So buckle your seat belts and follow along as we look at The TQM Model of Wellness.

By now everyone should be familiar with the value of TQM to an organization. Total

Quality Management is a set of leadership and management principles designed to improve an organization's flexibility and efficiency so it can make better use

of its people, time and assets. How does this relate to wellness? Simply this:

TQM is a healthy organization's lifestyle.

Wellness is a healthy individual's lifestyle.

A major principle of TQM states that the focus should be on the customer, and each step in the process of supplying a product or service to the customer should add value. In wellness, your lifestyle is the process. Your internal customers are your body, mind and spirit, and your external customers are your family,

friends, coworkers, employer and society at large. Your supplies are heredity, food, exercise, stress, rest,

tobacco, alcohol and drugs.

In managing your lifestyle, you control

most of the supply variables (except heredity) and you control all of the processes. Here's how it works: By the way you live your life, you add either positive or negative value to your internal customers (your brain, heart, liver, muscles, lungs, kidneys, intellect and spirit) by your choice of supplies. Tobacco always adds negative value; rest almost always adds positive value. The value of the other supplies can be positive or negative depending on their quality and quantity. For example, stress can be both good and bad. A little stress stimulates your performance; too much

stress degrades it. Food can be nourishing, but it can also be fattening.

Exercise is great in moderation, but it can be injurious in excess. Alcohol is usually negative, but in small doses can sometimes be beneficial. And so it goes with most things you do in your life. You determine whether your internal customers' needs are met and whether they're happy with what you provide them.

You can also control your impact on your external customers. Too much booze and all your customers (family, friends, coworkers, employer, society) are apt to be unhappy. On the positive side, your customers will be real happy if you have enough strength and endurance to do your job, and live a healthy life.

Remember, wellness, like TQM, is a continuous process of improvement.

So there you have it, TQM works for wellness, too. It's simple: Improve your you!



FHWA Employees are On the Road to Good Health

by Rosalynn Whitehead Lawson
FHWA Wellness Program Coordinator

People who don't find time for exercise sooner or later have to find time for illness. The Earl of Derby said that in the 1800s. And it's still true today. In fact, we now know good health — or wellness — doesn't just include exercise. It includes mental and emotional fitness. And considering life's demands of juggling work, school, family and our personal needs, it's a real challenge to stay well. To help meet that challenge, the Federal Highway Administration has developed a wellness program which consists of 5 components: fitness, physicals and screenings, health education, child and elder care, and employee assistance programs.

FHWA offices nationwide are promoting good health and fitness. Here are some highlights:

In Region 1, in Albany, several agencies pooled funds to establish a fitness center in unoccupied General Services Administration space.

Region 3, in Baltimore, made an initial

contribution with neighboring federal agencies to provide fitness equipment and activities in their building. Because of this initial contribution, employees pay only a minimal amount to use the center.

The Iowa Division arranged for two additional restrooms, showers, and exercise bikes so employees could jog or exercise during their lunch periods.

The Texas Division participates in a Health Improvement Center which is operated by the Internal Revenue Service. The Center includes exercise equipment, medical testing, and health education programs.

The American Heart Association provided a free seminar about low-fat cooking strategies during the headquarters Wellness Program Kickoff.

Regions 6 and 7, Texas and Missouri, contract with local hospitals to provide wellness assessments and health education sessions for employees.

More Popular Than ISTEAA?

The FHWA Headquarters
Highway to Health Program

It's almost more talked about than Intermodal Surface Transportation Efficiency Act (ISTEA)! The FHWA headquarters wellness program, Highway to Health, has become a topic of office conversation. The program started in January with the distribution of a health risk appraisal to all employees. Employees completed a confidential questionnaire and, a few weeks later, obtained a personalized report of the health risks affecting their lifestyles, along with an explanation of risks that may be within their own control. The appraisal was followed by a survey. Employees ranked a list of health and fitness topics according to their level of interest. The Office of Personnel and Training developed a monthly calendar of events based on the survey results. Every month a health education professional speaks to headquarters employees and answers related questions. Topics include, "Living With Your Allergies," "Suitcase Workouts/Workouts for People on the Go," "Healthy Brown Bag Lunches," "Women's and Men's Health Issues," "Communicating with Your Partner," and "Mind/Body Bonding for Good Health." The Highway to Health program is also offering the Weight Watchers At Work program which meets weekly. For more information, call 202-366-0485.

New Lights at Headquarters

by George Kuehn, OST

The three headquarters buildings are getting new energy efficient lights. Modern lighting technology which includes T-8 lights, electronic ballasts and reflectors can reduce by 50 percent or more the power required for lighting while improving light quality. Work has been completed at FAA headquarters and will begin soon at the USCG and DOT headquarters buildings. These retrofit projects are being paid for by GSA with rebates from Pepco. At the FAA headquarters, GSA received a one-time \$267,000 rebate and should save over \$115,000 each year in electric cost. Even greater savings are anticipated at the department's headquarters building where over 13,000 light fixtures will be retrofitted with this new technology, saving over \$300,000 per year. After a substantial rebate, this lighting improvement will pay for itself in about one year.

Some additional energy conservation projects completed, planned or being considered at headquarters buildings are: high efficiency exit lights; new higher efficiency window air conditioner units in the Nassif building; occupancy sensors that turn off lights in conference rooms, restrooms and copy centers when unoccupied; and the installation of an energy management control system at Coast Guard Headquarters.

Changing your light bulbs can save in many ways

Modern compact fluorescent light bulbs about \$38. You can also help reduce pollutants emitted

produce the same light as the traditional bulb but use 75% less power and last 10 times longer. Over the life of the compact fluorescent bulb you should save



from electrical power plants by reducing total demand for power. These new bulbs cost more initially, but really produce savings over the long haul.

DOT'S Waste Prevention and Recycling Program

by Tami McVey, OST

Americans produce more and more solid waste each year; we generate more per capita than any other nation. But, we're running out of places to dispose of it. Landfill capacity in some places is almost filled to the saturation point, and solid waste facilities continue to be difficult to build because of public resistance, commonly known as "Not in My Backyard" syndrome.

The federal government is one of the nation's largest generators of solid waste and can make a large contribution to solving municipal solid waste problems. On October 31, 1991, President Bush signed an Executive Order requiring each federal agency to initiate cost-effective programs to promote waste reduction and recycling of reusable materials in all operations and facilities and to adopt a program to procure more items made from recycled materials.

The DOT Recycling Coordinator is Ronald D. Keefer, Director of the Office of Administrative Services and Property Management. He and his staff are responsible for departmental policy and oversight for waste prevention and recycling. They also serve as the interface between DOT and the Council on Federal Recycling and Procurement Policy, coordinate the development of DOT reports required by the executive order, and monitor implementation of the departmentwide waste prevention and recycling program. Each operating administration is responsible for implementation of the waste reduction and recycling program. DOT is also developing a Recycling Information Manual to provide detailed policy guidance and a comprehensive departmental program in support of DOT efforts to promote cost-effective source reduction, reuse, and recycling of reusable materials.

In July 1992, the Department established a Recycling Committee (REC) which consists of designated technical and procurement representatives from the Office of the Secretary and each operating administration. REC members work in procurement, facilities, environmental, and administrative offices.

In September 1992, the USCG established a policy-level Pollution Prevention Committee with membership from all USCG offices to coordinate the planning and development of their in-house Pollution Prevention Program.

Some of DOT's major waste reduction and recycling accomplishments and success stories include:

Recycling Legislation. The USCG introduced a legislative proposal and received Congressional approval in the Coast Guard Authorization Act of 1992 that authorizes the Commandant to establish a

Recycling Program allowing the USCG to retain proceeds from the sale of recyclable materials.

Aid to Navigation Solarization Program. About 10 years ago, the USCG initiated an Aid to Navigation (ATON) Solarization Program. This involved converting the ATON power source from primary (e.g., zinc/air depolarized) batteries to solar charged, secondary (lead/acid) batteries, which are recyclable. The program, now more than 97 percent complete, has proven to be an efficient, cost-saving venture.

Steel Grit Blasting. Since the construction of a blast/paint shop at the marine/maintenance base in 1992, SLSDC has been able to retrieve and reuse up to 90 percent of the steel grits for blasting buoys and other metal structures and thereby reduce substantial amounts of solid waste.

Supply Ordering Policy. At MARAD's Suisun Bay Reserve Fleet, the primary method of waste reduction has been a change in supply ordering policy. Requests for supplies are being scrutinized to ensure that they do not over order, that any shelf life will not be exceeded prior to the dates of intended use, and materials are ordered in large reusable containers when possible.

Soy-based Ink. The DOT headquarters printing plant is now using soybased ink.

Digital Photography. The department has purchased a digital photography system. The system will be installed and operational in November 1993. High quality photographic prints are produced in color or black and white via computer, without the need for darkrooms or chemical processing.

FHWA Wide Area Network (WAN). During fiscal year 1993, the FHWA completed a multi-year effort to bring all offices nationwide onto the WAN. The WAN allows employees to correspond by electronic mail (E-Mail) instead of using memorandums and facsimile messages.

ISTEA Study on Recycled Paving Material. "A Study of the Use of Recycled Paving Material," was delivered to Congress in June 1993. The report was designed to determine the environmental, health, and performance of asphalt pavements containing recycled tire rubber, and to identify opportunities for re-use of materials in highways. Seven workshops were conducted by FHWA around the country in February and March of 1993. Over 1,400 agency and industry representa-

tives attended the two day program on recycled rubber in asphalt. A symposium on other recycled materials is scheduled for October 19-22, in Denver.

SLSDC's Recycling Plan. SLSDC implemented their recycling plan for every office in January 1992. All of their 150 employees and tenants are asked to cooperate by separating waste into two basic categories: paper and garbage, and placing them in separate containers.

Polystyrene Recycling. Employees eating in the DOT headquarters building cafeteria separate polystyrene from other garbage. The building's trash contractor delivers the segregated polystyrene to Georgetown Paper Company who transports it to the National Polystyrene Recycling Company in New Jersey for processing.

Headquarters Collection Program. High grade paper is source separated by DOT headquarters employees. In addition, the Nassif and Transpoint building owners' trash removal contractor separates other recyclables including low grade paper, metals, plastic, glass, cardboard, and newspaper from the trash collected every night. At the FAA building, cartons are provided on each floor for recyclables.



Earth 'n' Jeopardy Answers

1. C. The U.S. burns nonrenewable fossil fuels at a rate 30 to 60 times that of many other countries. Third world countries consume the least energy.
2. C. In Europe 25 to 50% of the forests are already damaged by acid rain.
3. D. While cloth diapers may be slightly more work, they are certainly more friendly to the environment. Disposable diapers use nonrenewable oil for the plastic, valuable trees for the liner, and then after only one use they add to our landfill problem. We are currently using 18 billion disposable diapers each year in the U.S. A diaper service for a year costs less than disposables for the same period.
4. True. The bulb also lasts ten times as long and over its lifetime saves about twice as much as it costs. More than one hundred power plants are needed to supply U.S. lighting needs. Each one percent improvement in lighting efficiency eliminates the need for one power plant.
5. C. 240 million. Piles of tires often catch fire (nearly impossible to extinguish), causing air pollution.
6. B. Homeowners use up to ten times more toxic chemicals per acre than farmers do. This amounts to 5 to 10 pounds per lawn; a national total between 25 million and 50 million pounds. A healthy lawn can be achieved by using natural products that won't poison birds, pets, or groundwater.
7. C. 60% of all petroleum fuels we use is consumed by transportation, most of it for commuter transportation. Over half the oil consumed in the U.S. is imported.
8. D. While automobiles can be made much more efficient, energy savings in the home can produce even greater savings.
9. D. A leaky toilet leaks 24 hours a day, wasting more water each day than is used for a single shower.
10. D. Trees are the primary absorbers of carbon dioxide, one of the greenhouse gases. Increased greenhouse gases will retain more of the sun's heat and cause ecologically disruptive increases in global temperature. To reverse the greenhouse effect, experts say it would be necessary to plant enough trees to cover an area approximately equal to the size of Australia.

SOURCE: *Earth 'n' Jeopardy*, An Environmental Trivia Game, Minnesota Earth Day Network, April 1991. Used with permission.

MARAD's Environmental Compliance Program

by Richard Corley

Two words describe the Maritime Administration's environmental program: "TEAM EFFORT." MARAD, whose primary function is to promote American flag ship operation and shipbuilding, continues to manage and work with many federal agencies and organizations in developing pollution prevention and environmental compliance techniques.

Faced with many of the environmental compliance problems that all federal installations encounter, on February 20, 1991, MARAD established an Environmental Coordinating Committee (ECC) to better manage environmental programs and resources. The Environmental Coordinating Committee, headed by H. T. Haller, Associate Administrator for Shipbuilding and Ship Operations, consists of representatives from the Reserve Fleet Sites at Suisun Bay, Calif.; Beaumont, Tex. and James River, Va.; the U.S. Merchant Marine Academy at Kings Point, N.Y.; and the Fire Training Center in Ohio. The committee meets twice a year to review ongoing environmental programs and pollution prevention techniques.

As a participant in the marine maintenance and repair industry, MARAD facilities generate a diverse amount of waste streams during repair and maintenance of mechanical systems, structural components, electrical equipment and ship hulls. Typical wastes generated are oils, coolants, lubricants, paints, and coatings. MARAD, by implementing an environmental program at the Reserve Fleets has effectively been recycling waste oils and paints and accomplishing surveys on facilities to properly identify and remove PCB transformers. Additionally, MARAD now has secondary containment for fuel storage and has obtained oil containment booms and recovery equipment.

To help ensure compliance, internal environmental audits are accomplished by utilizing a DOT environmental audit checklist developed using EPA's Federal Facilities Audit Checklist.

Nationally and internationally, MARAD continues to look for more solutions and techniques to prevent pollution and save our vital resources.



HAZSTRIKE 93

SUCCESS
through
Intermodal
Teamwork

by LTJG Stephen Schroeder, USCG

HAZSTRIKE 93 was a three day long, multi-agency task force involving over 75 people from the departments of Transportation and Treasury, and state and local agencies, The Marine Safety Office, San Francisco Bay, the Bureau of Alcohol, Tobacco and Firearms, the California Highway Patrol (CHP), California Public Utilities Commission, Railroad Safety Branch, and the California State Fire Marshal. This was the second joint operation in the San Francisco Bay area involving all the agencies that regulate the shipment of hazardous materials in California. This was not a drill.

The primary goal of the operation was to determine both the type and amount of hazardous materials moving through the Port of Oakland and the level of compliance by shippers with federal and state regulations. HAZSTRIKE 93 also focused on illegal shipments of explosives, especially fireworks. Eleven intermodal container facilities, two vessels and three local railyards were inspected.

The operation began in early morning last spring with the Coast Guard and the Highway Patrol com-

FHWA and CHP personnel discuss a violation at one of the truck inspection stations

mand posts established and briefings conducted. Four USCG facility inspection teams were formed, assisted

by FHWA's Office of Motor Carriers (OMC) and FAA personnel. USCG and OMC personnel also assisted Federal Railroad Administration inspection teams that were sent to the railyards. The Highway Patrol and OMC manned the on-road inspection sites. Several truck inspection stations were established to check for hazmat shipments moving in and out of the port by vehicle. Inspectors verified the qualifications of the drivers and the condition of their vehicles and trailers.

The first day ended without any major incidents. Once the road inspection sites were established, the amount of vehicle traffic diminished. The second day brought similar results. Most of the violations were minor in nature, however, a total of five shipments were delayed, having had more serious violations. One leaking container was found at one of the railyards. Pollution and hazmat teams responded.

Again this year, FRA personnel received information that some hazmat rail shipments were being held (hoping to avoid inspection) at

Rocky Mountain and Midwest locations until the end of the operation; still others at various California locations until after the inspection teams had concluded for the day. As a result, one FRA inspection team began their working hours at 4 p.m. in an attempt to catch those shipments arriving at night. Similar conditions were experienced with the trucking industry, with many shipments moving only after the conclusion of the daily inspections.

Media interest was high. Public awareness of hazardous materials had been heightened the week before, when a radioactive shipment was lost along Interstate 5 for several days.

Most of the violations found during the enforcement efforts of HAZSTRIKE 93 were minor in nature, with shipping paper discrepancies the most prevalent. It was also difficult to judge the amount of hazmat moving through the port due to the numerous shipments being held back, especially on the rails.

Officials said a much larger scale operation is apparently needed, including simultaneous inspections at all the major port and railway centers

in conjunction with road inspections near and around these locations.

HAZSTRIKE operations are now a part of the annual events for Marine Safety Office, San Francisco Bay. The operating administrations of DOT benefit greatly from the experience of working together, allowing each to see how the others work, improving inter-



agency communications and serving as an excellent opportunity for training. The success of any operation, though, comes from the hard work of the men

and women from all the different organizations pulling together as a team.

Lt. Donald Uelmen of the California Highway Patrol conducts his portion of the morning briefing as Coast Guard, FAA, FHWA and California State Fire Marshal personnel look on.



Secretary Peña and Federal Transit Administrator Gordon Linton met with members of the FTA Region IX Staff after the announcement of a Full Funding Grant Agreement for San Francisco's Municipal Railway Metro Turnback Project. The project will allow the Metro to increase efficiency and capacity by extending the tunnel system, permitting trains to reverse direction without delaying other service on the station platforms. Members of the staff were responsible for the preparation and execution of several of the grants announced during the Secretary's West Coast visit September 1.

(left to right) Leslie Rogers, Raymond Sukys, Renee Marler, Jim Kenna, Portia Palmer, Hymie Luden, Ingrid Silva, Michael Goodhart, Secretary Peña, Jerome Wiggins, Administrator Linton, Evangeline Ong, and Donna Turchie.

National Highway Traffic Safety Administration Rules Continue to Improve Passenger Safety

As a result of a NHTSA final rule issued in September, all model year 1998 passenger cars and 1999 light trucks will be required to have air bags in both the driver and passenger seat positions. As air bags become more prevalent, "the human element" will either contribute to or detract from their safety benefit. It is important to understand what air bags can and cannot do, as well as how to maximize the protection they provide.

While air bags offer excellent supplemental protection in frontal crashes, and have an impressive on-the-road performance record, they can't cure everything. For maximum protection in frontal crashes, and primary protection in side, rear and rollover crashes, a seat belt must be used. In short, seat belts and air bags work together to provide the best possible protection.

One caution in a car equipped with an air bag on the passenger side: do not place a rear-facing infant child safety seat in the front passenger seat. While

there have been no actual injuries or fatalities reported to children in that position, NHTSA tests confirm that placing rear-facing infant seats in a seating position with an air bag could result in serious injury. In that location, the rear-facing infant seat rests on or almost touches the dashboard. An inflating air bag can strike the seat with enough force to cause head and chest injuries. NHTSA advises parents to place all child safety seats in the rear seat of the vehicle, which avoids the problem entirely.

The new NHTSA airbag rule also requires manufacturers to print the "do's and don'ts" of air bags in owner's manuals and on a car's sun visor. In addition to the two cautions mentioned above, occupants will be instructed not to sit unnecessarily close to the bag, and to avoid placing any objects between themselves and the air bag.

The good news is there's nothing you can do to prevent an air bag from deploying. They work when you need them and are extremely reliable. The better

REMOVE UNSAFE VEHICLES FROM OUR ROADS.

CALL THE AUTO SAFETY HOTLINE. 800-424-9393

National Highway Traffic Safety Administration

news is that air bags save lives. Air bags alone can reduce the chance of suffering a fatal injury in a crash by 20 to 40 percent; in combination with a lap/shoulder belt, they can reduce the chance of fatality by 45 to 55 percent.

Federal Women's Week is October 25-29

Recent Honors Go To Two DOT Professionals



Shirley Terrell, a communications management specialist in the Telecommunications Management and Operations Division, FAA, received the General Service Administration's FTS2000 Award for Cost Effectiveness. GSA initiated the interagency awards program to recognize groups and individuals responsible for saving money and

improving services through the use of

the FTS2000 Network. Terrell managed the transition of the FAA's weather-briefing system and other agency telecommunications services to the network, resulting in significant savings to the agency and increased efficiency. She was presented with a plaque at the FTS2000 Users Forum in Phoenix and with a cash award at headquarters by Cynthia Rand (shown here, left), DOT/OST's director of information and resource management.

Catherine McCullough, a program analyst with the National Highway Traffic Safety Administration, was recently elected the first woman chair of the Washington section of the Society of Automotive Engineers. Membership is limited to engineers and others working engineering-related fields. McCullough, who has been in federal service for 28 years, attended college and an accelerated 10-month masters of business administration while working full-time. Society members describe her as a tireless supporter of the section's activities. Although not an engineer, her interest level is high. "If I don't understand something, I just take real fast notes and then ask someone," she says. I find the society's subject matter fascinating." She will serve as chair until May 1994.



DOT Fellows Named

For the third consecutive year, a number of top performing midlevel managers at the Department of Transportation (DOT) anxiously awaited notification from the Secretary of their selection from a group of highly competitive candidates for the 1993 - 94 DOT Fellows Program. These are the candidates selected for next year's program:

Mary Adams, FAA	Aramis Lopez, FHWA
Malinda Battle, FAA	Patricia Mattone, FAA
Rosemary Booth, RSPA	Roberta Mayer, NHTSA
David Burk, FHWA	Jeffrey McMahon, MARAD
Robert Callan, FHWA	Jeanne O'Leary, OST
Louise Carter, FTA	John Paoletta, FRA
Deborah Conway, FAA	Pamela Pelcovits, USCG
Gerald Davis, USCG	Gregory Phillips, FAA
Barbara Faigin, NHTSA	Michael Ragsdale, USCG
Sharon Feland, FAA	Cecelia Royster, USCG
Jeanne Fuller, RSPA	Linda Strine, OST
Ebrakpo Gbemiyi-Etta, FAA	Joseph Washington, FAA
Lauren Grace, FAA	Rita Weiss, NHTSA
Dwight Horne, FHWA	John Williams, USCG
Phyllis Howard, FAA	Glenn Wiltshire, USCG

In addition, the following two employees will represent DOT at the Council for Excellence in Government's (CEG) Governmentwide Program: Patricia Collins, USCG, Scott Greene, FRA.

The DOT Fellows Program, sponsored jointly by the Office of the Secretary and CEG, is designed to enhance leadership skills through a series of interactions with successful leaders from major business and government organizations. While continuing in their current jobs, Fellows from headquarters as well as field organizations participate in a series of monthly seminars, retreats, site visits and similar developmental activities. Several times throughout the year, DOT Fellows also get together with representatives from the Governmentwide Fellows Program. These interactions provide numerous opportunities to explore the challenges confronting public and private sector managers in the decade ahead.

The inaugural class of DOT Fellows, 1991-92, in a letter to the Secretary, wrote, "The DOT Fellows Program is an excellent mechanism to increase communication and understanding of intermodalism throughout the department. In addition, through interaction with industry corporate leaders and other government agencies, we have increased our ability to build more effective relationships and improve our organizations."

Appointments

Frank C. Weaver has been appointed Director of DOT's Office of Commercial Space Transportation. Weaver has headed UNET Communications, Inc., a consulting firm, since 1990. Before that, he was director of General Dynamics Commercial Launch Services' office in Washington, D.C. From 1977-1988, Weaver held several positions with RCA Astro-Electronics (now Martin Marietta Astro-Space). He currently serves on the board of directors of the Washington Space Business Roundtable, is a senior fellow in the American Institute of Aeronautics and Astronautics, and is a member of the National Space Club.

Steven Akey has been appointed Federal Highway Administration's Director of External Communications. Prior to his appointment, Akey served in Presidential Personnel at the White House as Search Manager/Public Affairs, directing the recruitment, screening and placement of public affairs staff throughout the executive branch. From 1989 to 1992, he

was vice president of Raskey & Company, a Boston-based public affairs consulting firm. He was also a key media consultant for the Clinton-Gore campaign.

Antonio J. Califa, chief legislative counsel for the American Civil Liberties Union (ACLU) in Washington, D.C., has been appointed director of DOT's Office of Civil Rights. "Tony has amassed a wealth of knowledge while working in the area of civil rights," Secretary Peña said. "He is eminently qualified for this position and I welcome him to my management team." Califa was with the ACLU from 1985-1993, and with the Department of Education from 1980 to 1985. He has written extensively on civil rights issues, including several guest columns in the Los Angeles Times and the National Law Journal.

Admiral Albert J. Herberger, a 35-year Navy veteran, was formally sworn in Sept. 14 by Secretary Peña as Administrator of the Maritime Administration.

IRS To Tax Some Temporary Duty Reimbursements

The amended Internal Revenue Code will make some temporary duty (TDY) reimbursements incurred or paid after December 31, 1992, taxable. Travel for extended periods, i.e., one year or longer, will now be considered indefinite travel, which is also taxable. Agency guidance is still forthcoming, but the following is known at this point:

Reimbursements received for the entire period of a TDY assignment are taxable including lodging, meal, and transportation reimbursements (e.g. car rentals).

The amount taxed cannot be offset by allowances for relocation or business expenses.

Your servicing finance office will provide employees with technical assistance and keep us posted as additional information becomes available.

Call that office in your operating administration for details.

Hotel/Motel Room Rates

Hotel room rates listed in the Federal Travel Directory include state and local tax. If charged these taxes - on top of the rate quoted in the directory, remind hotel management of this GSA-hotel agreement. If you are still charged the tax, pay it and report it to your servicing finance office. This information will then be forwarded to GSA, which monitors any difficulties government travelers have in obtaining agreed upon rates. Be sure to carry a copy of your travel authorization and government ID with you.

Unused Airline Tickets

Remember to return all unused airline tickets to your servicing accounting office or your travel management office for refunds.

CALENDAR OCTOBER

Energy Awareness Month
Fire Prevention Week
Federal Women's Week
National Quality Month

National Disability Employment Awareness Month
thru October 15 Hispanic Heritage Month

- 8 Combined Federal Campaign begins
- 11 Columbus Day
- 13 Annual Secretary's Awards Ceremony
- 20 Annual Humorous Contest, noon to 1 p.m.,
Headquarters, Nassif Building courtyard. Presented by Toastmasters International. Includes contestants from Federal, FEMA, Merchant Mariners, and New Southwest areas.
- 23 Grand Aviation Reunion, sponsored by the Air Traffic Control Association in cooperation with the Southern Region FAA Retirees Association, will be held in Nashville on two days prior to ATCA's 38th annual meeting. To receive more information, write: ATCA Grand Aviation Reunion, 2300 Clarendon Blvd, Suite 711, Arlington, Va. 22201.
- 31 Halloween

NATIONAL PERFORMANCE REVIEW REPORT ISSUED

In a nationally televised White House ceremony last month, Vice President Gore presented final recommendations of the National Performance Review, "From Red Tape to Results: Creating a Government That Works Better & Costs Less." The Vice President hailed the report as a blueprint for "clearing away the useless bureaucracy, waste, and senseless rules." When implemented, these action items are expected to save the American taxpayer \$108 billion over the next five years.

The review contains over 200 recommendations – some that apply to all government agencies and others particular to specific agencies. DOT has 23, resulting from the efforts of the National Performance Review team and our own operating administrations and cross cutting review teams (see below for details).

During the last few months, DOT employees identified many frustrating impediments to accomplishing their work efficiently and recommended changes to such areas as the procurement and grant processes. Many of these concerns were voiced during the department's Town Meeting with Vice President Gore back in May. In addition, employees participated in focus groups and used the hotline to call attention to such issues as:

* Despite the significant participation on the part of the DOT in the small purchase credit card program (17,000 cardholders and \$70 million in purchases yearly), an employee who wants to buy a \$350 piece of equipment for environmental analysis must still check with five mandatory sources to see if the equipment is available. If the equipment is available from the General Services Administration's Federal Supply schedule, but does not meet the employee's specific needs, the employee must seek a waiver from GSA before purchasing the item on the open market. The entire process can take months. A recommendation to

streamline federal source selection procedures will address this cumbersome process.

* DOT employees also identified burdens that the government has placed on grantees that just don't make sense. For example, as a condition of receiving federal grants, recipients must certify compliance with selected laws, Executive Orders, and regulations. It sounds simple enough, but certifications must be submitted to each funding agency for each grant and must be resubmitted even if the recipient gets multiple grants each year from the same agency. The time and paper waste for requiring multiple signatures could be easily eliminated by a one-time certification to a single federal point of contact.

The 23 DOT specific recommendations reflect a commitment to cut the red tape; put customers first; empower employees to achieve results; and get back to basics of doing the jobs we are supposed to be doing for the American public. Cost savings will be accomplished by improving the delivery of DOT services to customers and better managing DOT resources. For example:

* FAA estimates that streamlining the civil penalty enforcement process will save more than \$1 million annually in workload hours. Currently, penalty violations are processed the same way regardless of the severity of the violation or whether the violation is contested. This results in penalty letters being issued as late as 6 months after a violation occurs – wasting time and money.

* Reducing certain essential air service subsidies would save \$13 million a year. These subsidies are designed to benefit the most people at the least cost for service to remote locations. There are some locations currently being funded, however, where



White House Photo

this simply does not make sense. Case in point is a resort community where the federal subsidy for the 1,500 travelers served annually is \$500,000 per year – or \$340 per passenger to fly to a vacation area!

* Contracting out low level air traffic control tower operations would save \$20 million per year beginning in 1999. FAA has estimated that almost \$200,000 can be saved annually for every underutilized tower converted to contract operations with no degradation in service. For example, an air traffic control tower operated by the FAA at Johnson County Airport in Kansas averages just 250 daily takeoffs and landings. Compare this with towers where the busiest hours involve an average of one takeoff or landing every two minutes. The Johnson County tower employs 11 people and cost the FAA \$616,000 to operate last year alone. A contractor could efficiently operate this tower with 7 people at an annual cost of \$250,000.

In addition to these recommendations, DOT will continue with its own reinvention efforts focusing on safety, rulemaking, grants delivery, administration, environment, and field activities and issues. Stay tuned for these results when the department's own report is released later this fall.

NPR RECOMMENDATIONS

* Measure Transportation Safety. NPR recommends the development of common, governmentwide measures of transportation safety.

* Streamline the Enforcement Process. NPR recommends pilot programs in the U.S. Coast Guard, the Federal Aviation Administration, and the Federal Highway Administration, designed to offer greater flexibility in enforcement methods.

* Use a Consensus-Building Approach to Expedite Transportation and Environmental Decision-making. DOT should conduct two demonstration projects to apply a problem-solving approach to transportation planning, development and decision-making as a means of reducing costs and improving the efficiency of agency decision-making.

* Establish a Corporation to Provide Air Traffic Control Services. NPR recommends development of a detailed action plan and statutory language for changes in air traffic control management to make it more businesslike. The proposal is not to make air traffic control a private business, but to transform it into a government "enterprise" with special flexibility and responsibility as a government corporation.

* Permit States to Use Federal Aid as a Capital Reserve. This recommendation would allow Federal transportation grant recipients to use grant funds capital reserve to back debt financing to construct eligible transportation projects.

* Encourage Innovations in Automotive Safety. NPR recommends allowing the National

Highway Traffic Safety

Administration to grant more exemptions from highway safety standards for auto manufacturers to develop new safety systems.

* Examine User Fees for International Over-Flights. DOT should conduct a cost allocation study to determine whether foreign air carriers passing over U.S. air space are paying their fair share and whether direct user fees to cover the costs of air traffic management should be imposed.

* Increase FAA Fees for Inspection of Foreign Repair Facilities. To ensure full cost recovery, increase the fees charged for certification and surveillance of foreign aircraft repair stations.

* Contract for Level I Air Traffic Control Towers. NPR recommends converting 99 Level I (low-use) air control towers to contract operations and reviewing the remaining Level I towers for possible decommissioning.

* Establish an Aeronautical Telecommunications Network to Develop a Public-Private Consortium. FAA should pursue the creation of a public-private consortium under a cooperative agreement with industry to develop an Aeronautical Telecommunications Network.

* Improve Intermodal Transportation Policy Coordination and Management. DOT should institute a strategic planning process to promulgate national, integrated transportation policies.

* Develop an Integrated National Transportation Research and Development Plan. DOT should

examine the nation's transportation-related research and development portfolio and develop an integrated national transportation plan that considers specific transportation research needs as well as intermodal transportation plans.

* Create and Evaluate Telecommuting Programs. DOT should implement a telecommuting plan within the agency and should evaluate transportation-related behavior and other topics requiring research in this area.

* Improve DOT Information Technology Management. The department should develop an information management strategy which will enable the sharing of data among its component agencies and reduce costs.

* Provide Reemployment Rights for Merchant Mariners. Guarantee reemployment rights to U.S. seafarers at their private sector jobs if called to serve during a war or national emergency.

* Establish an Independent Commission to Review the U.S. Maritime Industry. NPR recommends a detailed examination of the future of the maritime industry in the U.S. and the benefits derived by the taxpayers from maritime industry subsidies and related issues.

* Eliminate Funding for Highway Demonstration Projects. Rescind funding for existing highway demonstration projects. These demonstration projects should compete at the state level for the limited highway resources available and not be singled out for special treatment at the federal level.

* Reduce Spending for the U.S.

Merchant Marine Academy. As an economy measure, federal funding for the U.S. Merchant Academy should be cut by half. The Academy should be given the ability to charge tuition to cover a portion of its operations.

* Rescind Unobligated Earmarks for the FTA New Starts and Bus Program. Rescind unobligated balances for fiscal year 1992 and prior earmarked funding under this FTA program that remain unobligated after three years.

* Reduce the Annual Essential Air Service Subsidies. This recommendation would set new, more restrictive criteria for small airports to qualify for essential air service subsidies.

* Terminate Grant Funding for Federal Aviation Administration Higher Education Programs To reduce costs, eliminate federal grant funding of two FAA post-secondary education programs.

* Assign Office of Motor Carriers (OMC) Field Staff to Improve Program Effectiveness and Reduce Costs. OMC should develop a resource allocation model so that regional managers will be able to optimize geographic assignment of staff, schedule carrier reviews in an efficient manner, and eliminate unnecessary travel requirements.

* Automate Administrative Requirements for Federal Aid Highway Projects. NPR recommends improvements in the flow of information on Federal Aid Highway projects that will reduce paperwork and reduce staff time in completing certain forms and other current requirements.