

# HIGHWAY INFORMATION

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## Our Nation's Highways—Selected Facts and Figures

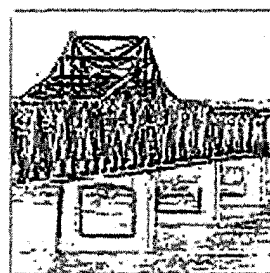
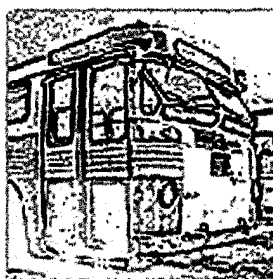
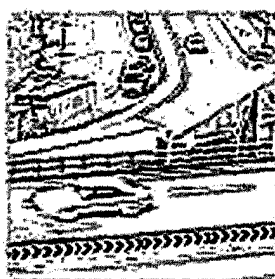
The newly available *Our Nation's Highways* provides charts, graphs, and summaries of data on a variety of topics including: air quality, the U.S. vehicle fleet, licensed drivers, the highway system and its condition and performance, the National Highway System, motor fuel use, travel, and financing of our highways. The publication utilizes data submitted from the States, which is published as detailed tabulation in the annual *Highway Statistics*

series, and also uses information from a wide variety of public and private organizations.

*Our Nation's Highways* can be found online at:  
<http://www.fhwa.dot.gov/ohim/onh.htm>

If you have any questions about this publication, or would like a hard copy, call (202) 366-0160.

## U.S. DOT Releases Conditions and Performance Report



The U.S. Department of Transportation's *Condition and Performance Report: 1999 States of the Nation's Highways, Bridges, and Transit*, is a biennial report to Congress that provides information on the physical and operating characteristics and future investment needs of the highway, bridge, and transit segments of the nation's surface transportation system. The latest report was transmitted to Congress in May 2000. Much of the basic data for the report are derived from the Office of Highway Policy Information's **Highway Performance**

**and Monitoring system (HPMS)**, and **State and local finance reported by the States** in accordance with FHWA's *Guide for Reporting Highway Statistics*. It also relied extensively on data and analyses from the **1995 Nationwide Personal Travel Survey (NPTS)**.

Report highlights include:

1. The report finds that an average annual investment of \$94.0 billion (1997 dollars) by all levels of government

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## U.S. DOT Releases Conditions and Performance Report, *(continued from Page 1)*

- for the 20-year period 1998-2017 would be required to accomplish all beneficial improvements to highways and bridges. The average annual cost to maintain physical conditions of highways and bridges at current levels is projected to be \$56.6 billion. An additional \$3.5 billion would be required annually to maintain user costs at current levels, while an additional \$17.1 billion would be required annually to maintain average travel times.
2. An average annual investment of \$16.0 billion would be required to bring the average condition for each major transit asset type up to a level of "good". The average annual cost to maintain transit conditions and performance at current levels is projected to be \$10.8 billion.
  3. Capital spending on highways and bridges would need to rise 16.3 percent above 1997 levels to reach the \$56.6 billion projected as the cost to maintain physical conditions of highways and bridges. This difference is projected to decrease to 5.7 percent over the full life of the Transportation Equity Act for the 21st Century (TEA-21), as capital spending increases.
  4. Capital spending on transit would need to increase 41 percent to reach the \$10.8 billion projected as the cost to maintain transit systems. This difference is projected to decrease to 12.9 percent over the life of TEA-21.
  5. Total spending on highways and bridges was \$101.3 billion for highways and bridges in 1997, an 8.4 percent increase over 1995. Of this, \$48.7 billion was for capital improvements, a 10.2 percent increase. The federal government contributed 41.1 percent of the capital outlay, down from 44.5 percent in 1995.
  6. Total spending on transit was \$25.1 billion in 1997, a 5.5 percent increase over 1995. Of that total, \$7.6 billion was for capital improvements, an increase of 8.6 percent. The federal government contributed 27 percent of public funding for transit, up from 25 percent in 1995.
  7. In addition, the report finds that the pavement condition of the nation's urban and rural highways has improved overall. Since 1993, the percentage of Interstate road miles with acceptable ride quality increased from 91.2 percent in 1993 to 92.4 percent in 1997. The percent of total road miles in poor condition dropped from 8.6 percent to 6.6 percent over that same time period.
  8. The report also finds that the condition of the nation's bridges has improved, with the percentage of deficient bridges overall at 29.6 percent in 1998, compared with 34.6 percent in 1992. The Interstate system has the lowest percentage of deficient bridges, 16.4 percent in rural areas and 26.8 percent in urban areas. Deficient bridges are not necessarily unsafe but, in many cases, are not built to meet current traffic demands.
  9. Transit systems route miles show a 10-year increase of 44.2 percent in rail service and 10.4 percent in non-rail increased 17.1 percent over the period. In 1997, rail travel accounted for almost 53 percent of transit passenger miles while serving just 5.1 percent of road miles.
  10. The average condition of urban bus vehicles was 3.1 on a scale of 5.0, or "adequate," with the status largely unchanged over the last decade. The average condition of rail vehicles was 4.0, or "good." The downward trend in rail vehicle condition is caused primarily by a deterioration in the nation's heavy rail vehicles, which comprise 60 percent of rail vehicles and whose average condition rating decreased from 4.7 in 1987 to 3.9 in 1997.
  11. The study finds that most measures of congestion show an increase over the last several years. Travel density in terms of travel per lane mile is clearly increasing. Delays increased on all highways between 1993 and 1997, rising from 8.3 to 9 hours per 1,000 VMT. Although daily VMT has grown for both rural and urban highways, it has increased at a faster rate on rural routes. DVMT grew by 3.4 percent on rural interstates between 1987 and 1997.
- Copies of the report can be obtained by calling toll-free 1-800-240-5674. Or in the Washington, D.C. area, (202) 366-9899. The report is also available on the web at: <http://www.fhwa.dot.gov/policy/1999cpr/>.

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## Highway Finance Re-assessment News Briefs

In July 1999, FHWA's Office of Highway Policy Information began a comprehensive reassessment of its highway finance reporting series, including both State and local finance and Federal highway finance reporting (FA-series, SF-series, and LF-series). These data are published annually in the Federal Highway Administration's (FHWA's) *Highway Statistics* publication and have a number of key uses. Steady progress has been made on a number of items:

1. **Customer Survey:** OHPI, through a consultant, surveyed many of the customers of its Highway Finance data to better understand what current uses are made of the data and to determine how FHWA could best meet future customer needs. About fifty customers within FHWA, other U.S. Department of Transportation, State DOT's, other Federal agencies, associations and trade organizations, planning organizations, banking industry, transportation consultants, and academia were interviewed. The interview results and consultant recommendations are included in a consultant report available on OHPI's web-site at <http://www.fhwa.dot.gov/ohim/ohimstat.htm>. In addition, OHPI surveyed its web customers and received key feedback from them.
2. **Outreach sessions:** OHPI met with several key AASHTO groups as well as top leadership of the Association of Metropolitan Organizations on this effort. Barna Juhasz met with representatives at the Standing Committee on Planning in Orange Beach, AL

(March 2000) and during the AASHTO executive meeting in St. George, Utah (April 2000). Tom Howard met with AASHTO's Financial Management Subcommittee in Biloxi, MS (May 2000). Feedback from all these groups was very useful to OHPI. Also, members from these various groups agreed to partner in its re-assessment work.

3. **Task Force formed:** A Task Force to support FHWA in its re-assessment is being formed during Spring/Summer 2000. Using the HPMS and motor-fuel efforts as a model, the Task Force will be chaired by a FHWA field leader and be composed of State representatives, AMPO representation, as well as FHWA staff. Mr. Steve Moreno, FHWA's Idaho Division Administrator, will chair this effort. An initial meeting to brainstorm issues and help chart a course of action is planned in late 2000. Please contact Tom Howard at [Tom.Howard@fhwa.dot.gov](mailto:Tom.Howard@fhwa.dot.gov), or phone at (202) 366-0170.

OHPI is also advancing software that will improve its own analyses of the State-reported highway finance data and ultimately help States report higher quality data. As a first step, FHWA is converting its software from LOTUS 1-2-3 to EXCEL. This conversion will give FHWA more analytical capacity and bring FHWA's software into better alignment with State reporting. In the future, "smart forms" for reporting as well as databases that can be more easily related to one another will be developed.

## HPMS Computer Based Training Update

The Office of Highway Policy Information with cooperation and funding from the National Highway Institute (NHI) and twenty DOTs has contracted with Cambridge Systematics to develop an HPMS Computer Based Training (CBT) CD ROM. The HPMS CBT will instruct users on the proper coding of HPMS data items as well present information and instruction on HPMS Sample Management.

In the HPMS data coding portion, the user follows two data collectors as they attend office training where

an instructor describes each data item, discusses relations between data items, and provides interactive exercises on collection and coding of data items. The user also follows the data collectors into the field where photos, instructions, and exercises are again used to demonstrate the proper collection and coding of the data.

The sample management portion uses a similar format to describe the HPMS use of data sampling to provide information for all roads within a State without actually collecting data for all roads. This portion discusses

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## HPMS Computer Based Training Update, *(continued from Page 3)*

the theory behind statistical sampling as well providing instruction on how to develop a sample panel for individual States.

To date, a prototype of the CBT has been developed which shows the look and feel of the software. Additionally, a review of the first of three story boards

was recently completed with a review of the second in September and the third later this year. After this, the audio portion will be recorded and combined with graphics and photos for a finished product to be completed in April 2001. For more information contact Russ Robertson at 202-366-5048 or e-mail at [Russell.Robertson@fhwa.dot.gov](mailto:Russell.Robertson@fhwa.dot.gov).

## Updated HPMS Catalog of New Technology and Techniques

In September 1998, the Highway Systems Performance Division (HPPI-20) published the *Highway Performance Monitoring System Catalog of New Technology and Techniques* (publication No. FHWA-PL-98-045) as a result of the HPMS reassessment activities. We are announcing an update to Part II of the catalog which is posted along with the original on the Office of Highway Policy Information web site at: <http://www.fhwa.dot.gov/ohim/hpmspage.htm>.

The catalog is intended to be a means of distributing and sharing technical information regarding HPMS data collection techniques and usage among the HPMS data community. The entries in the catalog were submitted

by the States and contain information related to field data collection techniques, GIS/GPS applications for data collection integration and presentation, other data integration and presentation techniques, automated data collection equipment (including pavement characteristics and condition, traffic/travel, and congestion), and private data sources and privatization of data collection. The catalog may just provide some useful information that you were looking for. Check it out!

For additional information or if your State/MPO would like to add to the catalog, contact Robert Rozycki, (202) 366-5059, e-mail [Rober.Rozycki@fhwa.dot.gov](mailto:Rober.Rozycki@fhwa.dot.gov).

## Motor-Fuel/Highway Trust Fund Attribution News Briefs

FHWA continued progress in its motor-fuel reporting re-assessment effort. Motor-fuel and motor-fuel based highway trust fund receipts are major TEA-21 formula factors, with about \$13 billion annually distributed to the States using these factors.

With its February 2000 Denver workshop, FHWA's concluded its motor-fuel re-assessment outreach efforts. In total, more than 100 participants from State transportation agencies, revenue agencies, and others attended workshops held in Atlanta (December 1999), Philadelphia (January 2000), or the Denver workshop.

1. **Comments requested on proposed changes—**  
Relying on input from these workshops, from the re-assessment task force, and others, FHWA is proposing some changes to the current motor-fuel

reporting processes and procedures. These proposed changes will be described in a *Federal Register Notice* expected to be published Summer 2000, and State and other stakeholder comments are requested. In general, the proposed changes are related to reporting of motor-fuel, the treatment of motor-fuel data in the attribution process, and process management. The proposed changes are expected to improve data quality and equity across the States as well as streamline reporting. To give States and other stakeholders a chance to learn about the proposed changes and to discuss them before commenting, FHWA is conducting a one-day meeting to discuss the proposed changes contained in the *Federal Register Notice*. This meeting, planned for October 5, 2000 in Washington, DC, is scheduled during the comment period. This will

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## Motor-Fuel/Highway Trust Fund Attribution News Briefs, (continued from Page 4)

allow States and others a chance to learn about the proposed changes before comments are due. Meeting participation is invited. Call Gina Burge, FHWA contractor arranging the meeting (202) 347-3511.

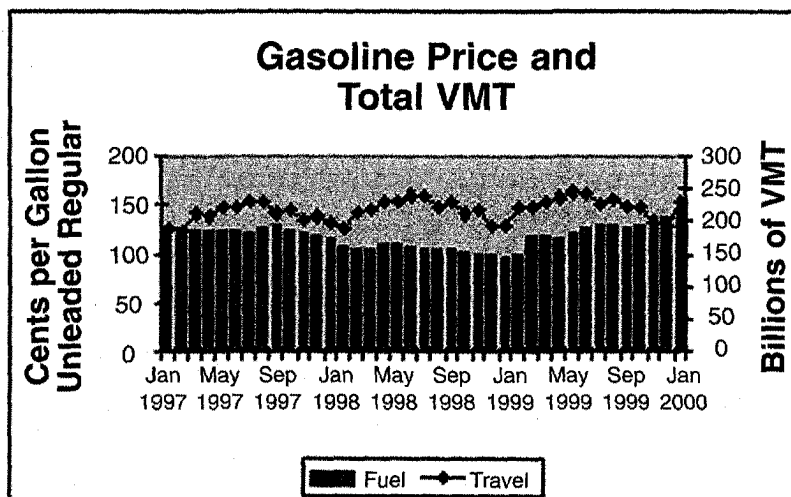
2. **Report on Highway Trust Fund Data**—In June 2000, General Accounting Office (GAO) released a report *Problems with Highway Trust Fund Information Can Affect State Highway Fund* (GAO/RCED/AIMD-00-148). GAO studied aspects of the U.S. Department of Treasury's financial management of the Federal HTF and the FHWA's

processes for motor-fuel analyses and HTF attribution. The GAO report makes several recommendations in the motor-fuel/HTF attribution area. These include the review of State motor-fuel data, the documentation of FHWA's current motor-fuel/HTF attribution process, and a review of motor-fuel/HTF attribution methodology. FHWA agreed with the GAO report recommendations and is incorporating these recommendations along with others improvements that result from the reassessment into an action plan. The GAO report is available on the GAO website <http://www.gao.gov>.

## Motor Fuel and Travel Demand

Since January 1997, prices of motor-fuel have been more variable than travel demand. The first graph shows the price of regular unleaded motor gasoline to users in 85 urban areas and total vehicle miles of travel (VMT)

from January 1997 to March 2000. The following compares the percent change from the previous January for price of gasoline and for total VMT.



### Change in percentage from previous January

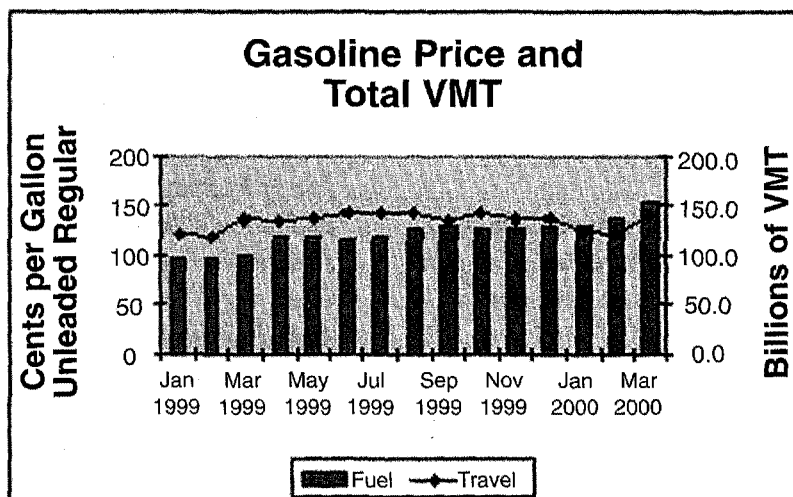
	Price	Total VMT
January 1998	-10.3	+4.5
January 1999	-14.1	-1.7
January 2000	+33.85	+2.94

By March 2000, the price of regular unleaded motor gasoline was 55.5% higher than March 1999, while travel had increased about 3.2 percent.

The second graph shows that urban travel had increases a little more than 2% on average in early 2000 in spite of sharply rising prices.

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## Motor Fuel and Travel Demand, (continued from Page 5)



The Energy Information Administration is the source of the price data (<http://www.eia.doe.gov>); FHWA's *Traffic Volume Trends* report at <http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.htm> is the

source of the vehicle miles of travel data. OHPI intends to make other relevant data comparisons and welcomes feedback and suggestions.

## The full Continuum of Travel: The NPTS/ATS 2000 Surveys

The Nation's investment in its transportation infrastructure has led to the United States being the world's most mobile nation. Future investments will assure that the infrastructure is effectively managed. These investments will focus on promoting safety, as well as enhancing and encouraging innovative technologies to provide better use of the existing system. The challenge for transportation programs in the next century is to better understand and respond to the transportation needs of the American public.

In the year 2000, the Nationwide Personal Transportation Survey and the American Travel Survey are re-evaluating traditional ways of looking at travel. This joint FHWA and BTS initiative is an attempt to provide a glimpse of the continuum of travel—from trips across the country to trips around the block. The surveys will obtain complete estimates of vehicle and person miles of travel, a more robust sample of trips, and a more accurate reflection of travel behavior within each sampled household.

At one end of the continuum, we have defined long distance trips as those of fifty miles or more from home. This definition will be extremely useful for looking at

corridor travel, long commutes, longer shopping trips, and weekend jaunts. While we are collecting travel by all modes, for shorter trips, we are collecting more detail on the frequency of walk and bike since these are of special interest in assessing policies related to auto and transit use, land use planning, air quality, and public health.

The NPTS/ATS 2000 pretest will tell us how we can most effectively combine two large transportation survey efforts. A significant challenge will be to assure adequate response rates. The NPTS/ATS pretest included the use of telephone surveys which have been used as a cost-effective means of contacting household members. Unfortunately, telephone usage has been tarnished by a decade of aggressive telemarketing that has encouraged people to screen their calls. In addition, home voice lines are used for multiple purposes, for instance computer modems, which adds to the difficulty of getting through.

Once contacted, people drop out of the interviewing process because of the multiple contacts it takes to complete a survey—a respondent has to be home when called, be willing to participate by having everyone in the household fill out a travel diary on the designated day,

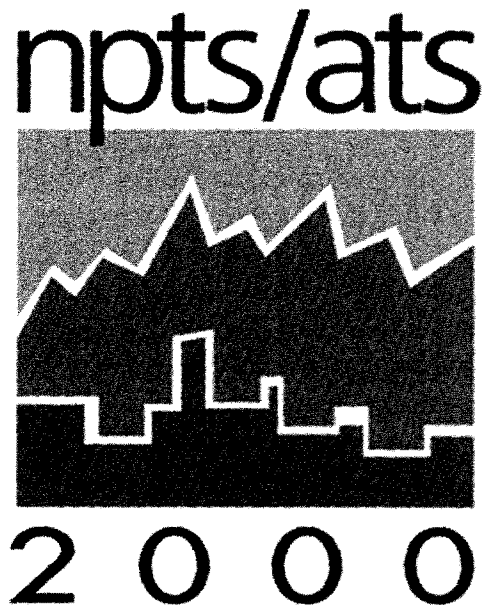
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## The full Continuum of Travel: The NPTS/ATS 2000 Surveys, *(continued from Page 6)*

and then each household member must complete the travel interview. Research has shown that those first few minutes on the phone are critical to increasing people's interest in being part of the surveys.

Looking to the future we will be collecting information about occupation, including multiple jobs, immigration status, Internet use, cell phones, and multiple lines. Some of these data will help us understand telecommuting behavior, and the effect it may have on travel. Other data items help us understand travel behavior in niche markets, such as travel by people who have recently immigrated to the United States, who are an important segment of transit users.

To keep up with the progress of the NPTS/ATS 2000, log onto our website at: <http://www.nptsats2000.bts.gov> or contact Susan Liss at (202) 366-5060.



## Highway Information Seminar & VTRIS/TVT Workshop

The Office of Highway Policy Information will be holding its annual **Highway Information Seminar** on November 14-16, 2000, at the Holiday Inn-Capitol in Washington, D.C. The Vehicle Travel Information System (VTRIS) & Traffic Volume Trend (TVT) workshop will be held at DOT Headquarters on Monday, November 13. A request for nominees went out to FHWA field offices on June 29. All participants who have received acceptance letters and are planning to stay at the Holiday

Inn are reminded to make their arrangements directly with the hotel by **October 1** and to identify themselves as being with the **DOT/FHWA Highway Information Seminar** to receive the special rate. Reservations received after that date will be provided on a space-available basis.

Questions concerning the course and workshop, please contact David L. Jones directly at (202) 366-5053, or e-mail [David.L.Jones@fhwa.dot.gov](mailto:David.L.Jones@fhwa.dot.gov).

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