

The information in this publication provides a condensed overview of facts and figures about the Nation's highways. This publication is designed to be of interest to the average citizen. The Federal Highway Administration (FHWA) is the source of the data, except where noted. State governments collect and provide these data to the FHWA each year. Unless otherwise stated, 2000 data are displayed in this publication. For more detailed data on many of the subjects covered, and other publications relating to this issue, visit the Office of Highway Policy Information at:
http://www.fhwa.dot.gov/ohim


After housing (32.6\%), transportation (18.9\%) accounts for the largest single household expenditure. Of the 18.9\% transportation expenditures, the largest expenditure is vehicle purchases (47.1\%). Other transportation expenditures, which includes maintenance and insurance, is the second largest transportation expenditure ( $38 \%$ ), followed by the purchase of gasoline and oil.


SOURCE: Bureau of Labor Statistics, 1999 Consumer Expenditures Survey

## Personal Travel by Mode of Transportation

The personal motor vehicle (automobile, light truck, van, and motorcycle) is the predominant form of personal transportation. Privately owned vehicles are used for $91.2 \%$ of all personal travel. Adding school bus (1.3\%), bus/streetcar (1.4\%), taxi ( $0.1 \%$ ) and private vehicles (91.2\%) together shows that $94 \%$ of personal transportation uses the highways.

FTivate vembinise (97.2\%)

- Auto, Station Wagon, Van - 67.5\% . Pick-Up - 13.8\% - Other Private Vehicle - 2.9-\%
- Utility Vehicle - 7.0\%

Public Transportation
(2.1\%)

- Airplane-3.4\% Amtrak-0.1\%
- Bus; Streetcar-1.4\%
- Commuter Train - 0.4\%
- Subway - 0.3\%


## Freight Transportation by Mode



SOURCE: Bureau of Transportation Statistics, National Transportation Statistics 2000.
The nation's highway system carried $28 \%$ of the total revenue of ton-miles of freight in 1998, compared to $19 \%$ in 1960 . More significant is that as of 1997 , almost $89 \%$ of the total dollar value of freight was highway transportation.

Freight Transportation Value by Single Mode - 1997


NOTE: The survey excludes establishments classified in the Standard Industrial Classification as farms, forestry, fisheries, oil and gas extraction, governments, construction, transportation, households, and some retail and service businesses.
SOURCE: Bureau of Transportation Statistics, 1997 Commodity Flow Survey.

Highway Indicators


Road and street mileage increased only $2.4 \%$ since 1980 , but the number of vehicles using those roads and streets has increased $39.8 \%$ and vehicle-miles of travel increased by $81.2 \%$. Highway capital outlay expressed in constant 1987 dollars has increased by $112.3 \%$ while the percent change from 1980 to 2000 for gallons of motor fuel per mile actually decreased by $21.6 \%$.

Federal and State Gasoline Tax rates


Despite significant increases in State motor-fuel tax rates during the 1980's, the weighted average gasoline tax rate expressed in constant 19704 actually decreased by about $38 \%$ from $7.02 \$$ per gallon in 1970 to $4.35 \$$ per gallon in 2000. Recent data indicates that State tax rates have risen slightly over the 1990's decade. Over the same 1970 to 2000 period, the Federal gasoline tax rate, expressed in constant $1970 \$$, increased by $3.7 \%$, from $4.00 \pm$ per gallon to $4.15 \$$ per gallon, as the nominal rate increased from $4.00 \$$ per gallon to $18.4 \$$ per gallon on October 1, 1993. During the 1990's, amounts between 2.5 and 6.8 c per gallon were diverted from the Highway Trust Fund for deficit reduction. As of October 1, 1997, these provisions were eliminated. While the deficit reduction impact does not affect the tax rate, it has resulted in additional revenue to the Highway Trust Fund.

## highway Expenditures per Vehicle-Mile of Travel.



In 2000, highway capital expenditures were $2.35 \$$ per vehicle-mile of travel (VMT) as compared to $1.04 ¢$ per VMT in 1970 - an 126\% increase. After accounting for inflation, however, 2000 capital expenditures were only $0.56 \$$ per VMT, a $46 \%$ decrease from 1970's capital expenditures. In 2000 , total highway expenditures were $4.40 \$$ per VMT as compared to $1.88 \$$ per VMT in 1970 - a $134 \%$ increase. After adjusting for inflation, total 2000 highway expenditures were only $1.02 \$$ per VMT, a $46 \%$ decrease from 1970's total highway expenditures. In effect, 2000's highway expenditures by all units of government, with inflation removed, were about $54 \%$ of what they were 30 years ago for each vehicle-mile of travel.

## Gross Domestic Product and Travel Relationship



There is a strong relationship between the Nation's economy and travel on the Nation's highway system. Since the 1930's, growth in the Gross Domestic Product (GDP) and vehicle-miles of travel (VMT) reflect strikingly similar patterns, including the period of energy disruptions during the 1970's.

## OUR NATIONS HICHWAYS

U.S. TELECOMMUTING POPULATION


SOURCE: Cyber Dialogue and the International Telework Association and Council.
The number of telecommuters in the U.S. in the third quarter of 2000 were estimated at 23.6 million. Of these, 16.5 million telework one day per month, and 9.3 million at least one day per week. About $89 \%$ of these are solely home-based, $7 \%$ are telework centers, and $4 \%$ are a combination.
These workers tend to be older and more experienced employees, who on average are in their early 40 s. The majority of teleworkers prefer telework, which allows them flexibility in balancing social and family responsibilities, while maintaining their careers.
Since 1995, there has been an increase in teleworking of $178 \%$, and the number is expected to climb to 30 million by 2004. This increase in telework is decreasing the amount of work trips being generated on the transportation system.

## Journey to Work: Mode Used by Workers Percent and Number of Workers, 2000



NOTE: Includes all workers 16 years and older living in households. C2SS did not survey Group Quarter Population.
SOURCE: 2000 American Community Survey (ACS): Census 2000 Supplementary Survey (C2SS).
Only 11.2\% of workers reported carpooling to work in 2000 , while 76.3 reported driving alone. This is a $2 \%$ drop in carpooling from 1990. The percent of workers report using transit for their journey to work, a stable percentage since 1990. Working at home has increased slightly, from 3.2 million workers ( $3 \%$ ) to 4.075 million workers ( $3.2 \%$ ).

Journey to Work：Average Travel Time U．S．TOTAL，1990－2000


> NOTE: Includes all workers 16 years and older living in households. C2SS did not survey Group Quarter Population.
> SOURCE: 2000 American Community Survey (ACS): Census 2000 Supplementary Survey (C2SS) and the 1990 Census Transportation Planning Package (CTPP).

Nationwide，the average travel time for the journey to work is 24 minutes and 20 seconds， an increase of nearly 2 minutes compared to 1990．Many more people are traveling 45 minutes or more，and fewer workers indicate it takes them less than 15 minutes．

TRAVEL TIME TO WORK


NOTE：Includes all workers 16 years and oider living in households．C2SS did not survey Group Quarter Population．
SOURCE： 2000 American Communily Survey（ACS）：Census 2000 Supplementary Survey（C2SS）．
States with many workers using transit for their journey to work also tend to have longer average travel times．New York reports the longest average time（over 30 minutes），while North Dakota and South Dakota average about 15 minutes． and Number of Automobiles per Capita
(DATA ARE FOR 1997 UNLESS OTHERWISE STATED)


NOTE: VMT per capita for Canada reflects 1990 data. VMT per capita for Mexico reflects 1991 data.

Americans travel much more than citizens of the other countries. The myth of Americans' love affair with our cars may actually be a marriage of convenience. Contemporary land use patterns require the use of private vehicles, whether or not we love those vehicles. Americans own more vehicles than the citizens of other countries. Not shown here is the huge increase in SUVs, Vans, and Pickup trucks, which are increasingly used as household vehicles in both the United States and Canada.

Annual vehicle-miles for automobiles follow a more pronounced pattern with per capita miles for the U.S. exceeding 5,500 and for Canada exceeding 4,800 . Sweden, Germany, the U.K., and France follow each with between 3,000 and 4,000 per capita miles.

## NATIONAL EMISSION TRENDS



SOURCE: Environmental Protection Agency's National Emission Inventory, Air Polfutant Emission Trends Office of Air Quality Planning and Standards, http://www.epa.gov/tin/chief/trends/index.html.

Most of the reduction in emissions can be attributed to reductions from motor vehicles. Emissions controls for cars and trucks have significantly reduced their emissions of carbon monoxide and volatile organic compounds (a primary ingredient of ozone) since 1970, even though travel more than doubled over the past 24 years. Emissions of these pollutants from other sources have fallen only slightly. At the same time, motor vehicle nitrogen oxide emissions, which contribute to ozone, have held about their 1970 levels, while those from all other sources have increased slightly.

## AIR QUALITY TRENDS



SOURCE: 1975-1995 data were tabulated from individual monitor records in EPA Aerometric information Retrieval Service (AIRS) database. These data are for the subset of monitors having complete data for at least 15 of the 21 years included in that period. Supplemental 1994-2000 data were tabulated from EPA A/RSDATA Monitor Trends Report, which can be found on the internet at: http://www.epa.gov/airsdata/montrnd.htm.

Residents of the Nation's urban areas are breathing easier these days. Atmospheric levels of ozone and carbon monoxide (CO) have declined consistently for several decades. Violations of the National Standards for Carbon Monoxide have been virtually eliminated. Controlling ground-level ozone (or "smog") has proven more challenging, but violations of the Federal 1-hour ozone standard have also been sharply reduced.


The number of registered motor vehicles continues to increase steadily. However, automobile registrations have decreased slightly ( $-0.1 \%$ or 0.1 million vehicles) since 1990 while truck registrations have increased significantly ( $61.1 \%$ or 33.3 million vehicles). Light single-unit trucks have seen a phenomenal growth in popularity and now account for $39.3 \%$ of total registered motor vehicles. In addition, prior to 1985, automobile registrations included personal passenger vans, passenger minivans, and utility-type vehicles. However, beginning with the 1985 data, these vehicles are included with truck registrations. Reference Highway Statistics Summary to 1995 for corrections or revisions made to previous published data.

## Market Share of Household Vehicles



SOURCE: Federal Highway Administration, 1995 Nationwide Personal Transportation Survey. Year 2000 reflects all vehicles as reported in Highway Statistics 2000.

Automobiles continue to lose their market share of household vehicles, from $80 \%$ in 1977 to $62.9 \%$ in 2000 . Minivans have been stable since 1995 , and slightly increased to $8.2 \%$ by 2000, from $7.8 \%$ in 1995. SUV's have made the greatest increase from $6.9 \%$ in 1995 to $10.2 \%$ in 2000.

## Average age of Automobiles and Trucks in Use



NOTE: Mean age is equal to the sum of the products of units multiplied by age; divided by the total units. SOURCE: Ward's Communications, Ward's Motor Vehicle Facts and Figures 2001, compiled from The Polk Company data.

The average age of automobiles has continued to increase, to a high of 9.0 years in 2000. The average age of trucks had actually declined from an all time high of 8.6 in 1993, to 8.0 years by 2000 . The increasing popularity of pickups, vans, and sport utility vehicles as personal vehicles may be influencing the age of trucks.

COST OF OWNing and Operating Automobiles, Vans, and LIGHT TRUCKs - 2001

${ }^{1}$ Total costs over 5 years, based on 70,000 miles.
2Includes depreciation, financing, insurance, registration fees, taxes, fuel maintenance, and repairs.
${ }^{3}$ Average MPG reflects city driving estimates (excluding highway driving).

SOURCE: Federal Highway Administration estimates based on the 2001 editions of The Complete Small Truck Guide and The Complete Car Cost Guide, from IntelliChoice, Inc., and sales figures from Automotive News.

OWNERSHIP AND OPERATING COSTS BY CATEGORY - INTERMEDIATE Size Vehicle - 2001 (Based on Average Cost of 46.9 $/$ /Mile)

| Repairs | $0.9 ¢$ |
| :--- | ---: |
| Depreciation | $16.4 ¢$ |
| Fuel Tax | $1.9 ¢$ |
| Fuel Cost | $4.2 ¢$ |
| (No Taxes) |  |
| Financing | $7.0 ¢$ |
| Maintenance | $2.3 ¢$ |
| State Fees | $1.4 ¢$ |
| Insurance | $12.7 ¢$ |



SOURCE: Federal Highway Administration estimates based on the 2001 editions of The Complete Car Cost Guide and Complete Small Truck Guide from Intellichoice, Inc. and sales figures from Automotive News.

The Federal Highway Administration estimates that combined Federal and State motorfuel taxes currently account for only $4 \%$ of the cost per mile of owning and operating an automobile, which is unchanged since 1998. The largest share is depreciation, which makes up $35 \%$ of total costs, up from $31 \%$ in 1998.

## Motor Vehicle Retail Sales



SOURCE: Ward's Communications, Ward's Molor Vehicie Facts and Figures 2000.
After a slight drop in 1991, total motor-vehicle retail sales are steadily increasing, with $17,812,000$ units sold in 2000 . We are still seeing a decline in the automobile share of retail sales $-50 \%$ of total sales in 2000, compared to $73 \%$ in 1978. Popularity of light trucks as personal vehicles continues to increase - retail sales of trucks for 2000 amount to $8,965,000$ units sold.

## HCENSED DRIVERS

Licensed Drivers by Age and Sex


There were $190,625,023$ licensed drivers in the United States in 2000. That is an increase of $23.73 \%$ since 1980 and a $12.39 \%$ increase over 1990. As the average age of licensed drivers shifts upward, we see that the 35-39 and 40-44 year old age groups contain the largest share of drivers.

The number of age 70 and over drivers holding a valid license has continued to increase. In 1980 drivers 70 years and over was 8.8 million, and rose to 18.9 million in 2000 . This is a $111 \%$ increase in older drivers since 1980.

Female drivers increased by about $39 \%$ from 1980 to 2000 , whereas the number of male drivers only increased by $24 \%$.


In 2000, $88 \%$ of the driving age population was licensed to drive a motor vehicle. Compared to 1950 , which was $57 \%$, this is an increase of 128 million drivers on our highways in the past 50 years. In 1975, the number of registered vehicles surpassed the number of licensed drivers- that trend has continued to this day. In fact, registered vehicles has surpassed even the driving age population since 1996.

Average Annual Miles per Driver by Age Group


SOURCE: Federal Highway Administration, 1995 Nationwide Personal Transportation Suvey.
Despite significant increases in women's driving, men still average 6,408 miles more per year than women. The disparity is closing for younger drivers, and it is expected that this gap will close considerably in the future.
total road mileage and Travel by Functional SYSTEM - 2000


Roads and streets are grouped into functional systems according to the type of service they provide. The arterial system (including the Interstate System) accounts for about 11.1\% of the Nation's total road and street mileage but carries $72.1 \%$ of total travel.

The Interstate System accounts for only $1.2 \%$ of the Nation's total miles of roadway; however, $24.1 \%$ of total travel occurs on this system. Conversely, local functional system roads account for $68.8 \%$ of the Nation's total road and street mileage but serve only $13.2 \%$ of total travel.

## FUNCTIONAL CLASSIFICATION

Interstate Sustem - The Interstate System consists of all presently designated freeway routes meeting the Interstate geometric and construction standards for future traffic, except for portions in Alaska and Puerto Rico. The Interstate System is the highest classification of arterial roads and streets and provides the highest level of mobility, at the highest speed, for a long uninterrupted distance.

Other Axterials - These consist of limited-access freeways, multi-lane highways, and other important highways supplementing the Interstate System that connect, as directly as practicable, the Nation's principal urbanized areas, cities, and industrial centers; serve the national defense; and connect at suitable border points with routes of continental importance.

Collectors - The collectors provide both land access service and traffic circulation within residential neighborhoods, commercial and industrial areas, and downtown city centers. Collectors connect local roads and streets with arterials and provide less mobility than arterials at lower speeds and for a shorter distance.

Lecals -... The bocl roads and street provide a high leve of access to abuting land but limited mobility.

## OWNERSHIP OF U.S. ROADS AND STREETS

| Surisdiction | Flita Mileage | \% | Urean Mileage | \% | Total Mileage | $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State | 663775 | 21.5 | 111539 | 130 | 775,294 | 19.6 |
| liocal | 2,311,269 | 74.7 | 746,341. | 86,8 | 3,057,610 | 77.4 |
| Federal | 116,724 | 3.8 | 1,484. | 0.2 | 118,208 | 3.0 |
| Tolat | 3.091 .748 | 100.0 | 859,364 | 100\% | 3951112 | 1000. |

The vast majority ( $77.4 \%$ ) of the Nation's roadways are owned by units of local government (town, city, county). Only $3.0 \%$ are owned by the Federal Government; this includes roads in national forests and parks and on military and Indian reservations. The rest of the roadways $(19.6 \%)$, including most of the Interstate System, are owned by the States.

Functional Systems Mileage

| Functional System | Rural | $\begin{aligned} & \text { \% Change } \\ & 1990-20000 \end{aligned}$ | Urban | $\begin{aligned} & \text { \% change } \\ & 1990-2000 \end{aligned}$ | Total | Co Change | © of Total Meage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1herstate <br> Other Freeways! Expressways: | 33, | 14 | $9,1$ | $\begin{array}{r} 162 \\ 189 \end{array}$ | $46677$ | 886 | 12\% |
| Other principal Arlemal | $99,013$ | $180$ |  | 26 | 152,567\% | 12.4 | $3.9$ |
| Minor Aiterial | 137 |  | 90,301 | 20.3 | 22 | 40 | 5.8 |
| Mijor Colllector | 433,907. | 0.8 |  |  | 433.927: | 0.8 | 110 |
| Mincr Collector. | 272,485 | 7 |  |  | 212485 | 7.5 | 6.9 |
| Collector |  |  |  |  | 88796 |  | 2.2 |
|  | 2,118,29t | , 0 | 603,991 | 154 | 2719,288 | \% | 68.8 |
| Fint | 8031.134 | +13 | 8599364 | 148 | 3,9514098 | 21 | $100 \%$ |

Roads and streets are grouped into functional systems according to the type of service they provide, and on how much traffic they carry. Although functional classification may change over time to better describe the changing role that a particular road or street may be playing, the total mileage changes only slightly over time.
Decreases in rural systems mileage are the result of the expansion of urban boundaries and the functional reclassification of roads from rural to urban.

## ANNUAL VEHICLE-MILES OF TRAVEL (MILLIONS)

| System | Rural | \% Change $1990-2000$ | Urban | \% Change $1990-2000$ | Total | $19902000$ | \% of Total Travel |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interstate | 270,315 | 34.5 | 397,288 | 41. | 667603 | 39.4 | , |
| Stlier Fiesways |  |  | 178,105 | 38.6 | 178,105 | 38.6 | 5 |
| Expressuays. |  |  |  |  |  |  |  |
| Other frinclpal Arterial | 24913 | 41.9 |  |  | 6503374 | 27.4 | $235$ |
| Minor Arterial | 172,780 | 10.5 | 326,855 | 37.5 | 499,635 | 27.5 | 18.1. |
| Malor Collector | 210,496 | 9.9 |  |  | 210,496 | 9.9 | 76 |
| Minor Collector | 58571 | 163 |  |  | 58,571 | 16.3 | 21 |
| Callector |  |  | 137,008 | 27,5 | 13\%,008 | 275 | 50 |
|  | 128,332 | 31.0 | 237,239 | 235 | 865,574. | 26.7. | 132 |
| Total | 1,089,631 | 24.9 | 1677.732 | 306 | 276\%363 | 28. | 1000 |

Since 1990 , total miles has increased only $2.1 \%$, while travel has increased $28.9 \%$. The urban travel increase of $30.6 \%$ has outpaced the rural $24.9 \%$ increase due to the Nation's continued growth in urbanization and expanded urban boundaries. The rural other principal arterial system had the greatest travel growth (41.9\%) during the 1990 to 2000 time period.

## National lichway System

## National Highway System



The National Highway System (NHS) is the network of nationally significant highways approved by Congress. It includes the Interstate System and over 100,000 miles of arterial and other roads. Designation of the NHS was completed on November 28, 1995, when the National Highway System Designation Act of 1995 (Public Law 104-59) was enacted.

The NHS represents only about 4\% of the Nation's total public road miles and 7\% of its lane miles, but carries over $44 \%$ of the travel. Most travel on the NHS takes place in urban areas even though there are more NHS miles in rural areas.


NHS MILEAGE


NHS TRAVEL

## National Highway System



Of the 161,188 NHS miles, $29 \%$ is made up of the Interstate System (IS). The NHS encompasses all of the Strategic Highway Network (STRAHNET), a system of national defense roadways that includes the IS and approximately $\mathbf{1 5 , 0 0 0}$ miles of non-IS mileage.

## InTERMODAL FACILITY CONNECTIONS



The NHS provides the key connections to our Nation's intermodal facilities. Over 1,440 are linked by more than 2,200 miles of NHS connectors to our Nation's highways. Public transit facilities have the most NHS connections while Port facilities have the most associated mileage of NHS connectors.

CONDITIONS. PEREORMANOE \& SAFE
Pavement Surface Condition of the NHS and Interstate System


Pavement condition overall has improved on the Interstate System and the NHS over the past several years. In $2000,96.6 \%$ of the Interstate System and $93.5 \%$ of the NHS was at acceptable ride quality as measured by the International Roughness Index (IRI). IRI is an objective instru-ment-based rating system that has been used as an indicator of pavement performance as measured by rideability. Pavements with $\mathrm{IRI}<170$ can be considered to have an acceptable ride quality, while those with an $\mathrm{IRI}<95$ can be considered to have a good or very good ride quality.

## BRIDGE CONDITIONS

|  |  | $14$ | omeret Thentras |  | Hent <br>  |  | TVI Whurt |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| turally | 8,17 | 6.3 | 005 |  |  | 211 |  |  |
| Functionally Obsolet | 21.712 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Total Bridges in Inven | 130,2 |  | 2.1 | 100 | 283,1 |  |  |  |

Includes all Interstate and other principal arterials:
2 hicledes all other highways exceptrinco collectors and local inaids and sfreets.
3heludes ruralminor celloctors and local coads and sheets

NOTE: FA = Federal aid.
SOURCE: Federal Highway Administration, Office of Engineering, National Brioge Inventory Data
Twenty-nine percent of the Nation's estimated 585,542 bridges are structurally deficient or functionally obsolete. Twenty-three percent of the 130,224 bridges on the NHS (Interstate and all other principal arterials) are structurally deficient or functionally obsolete.

A structurally deficient bridge is closed or restricted to light vehicles only because of deteriorated structural components. Structurally deficient bridges are not necessarily unsafe. Strict observance of signs limiting traffic or speed on bridges will generally provide adequate safeguards for those using the bridges.
A functionally obsolete bridge is one that cannot safely service the volume or type of traffic using it. These bridges are not unsafe for all vehicles, but have older design features that prevent them from accommodating current traffic volumes and modern vehicle sizes and weights.




Travel Congestion on Urban principal Arterial roads


Peak period travel congestion on urban principal arterial roads has remained fairly stable over the past 6 years. The measure of congestion used in this analysis is the Volume/Service Flow (V/SF) Ratio. As this ratio gets larger, traffic slows and eventually stops as the theoretical value of 1.00 is approached (the volume of traffic = service flow capability of the facility). V/SF ratio of greater than or equal to 0.80 is used here to indicate congestion.

MOTOR-VEHICLE FATALITIES AND TRAVEL


SOURCE: National Highway Traffic Safely Administration, Fatality Analysis Reporting System.
Fatalities decreased from a high of 51,093 in 1979 to a low of 39,230 in 1992. However, they rose to 42,387 in 2000 . Of the fatalities in $2000,13.5 \%$ occurred on the Interstate System.
FATALITY RATES


SOURCE: Nationai Highway Traffic Safety Administration, Fatality Analysis Reporting System.
The fatality rate - fatalities per 100 million vehicle-miles of travel (VMT) - on all highway systems continues to decline. In 2000, the fatality rate reached 1.53, a $54 \%$ decrease from 1980. The decrease in the fatality rate occurred despite an $81 \%$ increase in highway travel and a $40 \%$ increase in motor vehicle registrations during the 1980 to 2000 time period. The fatality rate $(0.85)$ on the Interstate System is a little more than one-half the rate on all highway systems.

## CONDIIIONS, PEREORMANCE, \& SARETY

Principal Classes of Motor-Vehicle Deaths


SOURCE: Nationai Highway Traffic Safety Administration, Fatality Analysis Reporting System.
In $2000,59 \%$ of motor-vehicle deaths occurred in places classified as rural. In urban areas, nearly $24 \%$ of the victims were non-occupants; in rural areas, the victims were mostly occupants of motor vehicles. Almost half of all deaths occurred at night.

Fatalities Involving Medium/Heavy Trucks ${ }^{1}$

${ }^{1}$ Mediurn/Heavy Truck - Single-unit truck with gross vehicle weight greater than $10,000 \mathrm{lb}$., tractor-trailer combination, truck with cargo trailer(s), or truck-tractor pulling no trailer.

SOURCE: National Highway Traffic Safety Administration, Fatality Analysis Reporting System.
There were 5,307 fatalities in crashes involving medium and heavy trucks in 2000, down from 5,374 in 1998. Occupants in other vehicles accounted for $78 \%$ of the fatalities involving medium and heavy trucks.

There were 67 fewer fatalities in crashes involving medium and heavy trucks from 1998 to 2000. Occupants in other vehicles shows a decrease of 71 fatalities involving medium and heavy trucks while the non-occupant fatalities also decreased by 15 over the same two years.

## Highway Fuel Use



From 1970 to 2000 , total highway fuel consumption increased to 162.3 billion gallons from 92.3 billion gallons. The highway use of gasoline, which includes gasohol, is predominately by automobiles while the highway use of diesel fuel is predominately by trucks.
During this period, the highway use of gasoline increased from 85.6 billion gallons in 1970 to 128.0 billion gallons by 2000 . As population and number of automobiles increased, the highway use of gasoline increased overall through the 1980's and into 2000 despite improved automotive fuel economy.

Vehicle-Miles of Travel, Highway Motor-Fuel Use and miles Per Gallon of Fuel for All Vehicles


Indices for vehicle-miles of travel, highway fuel use, and average vehicle fuel economy (miles per gallon) have increased significantly through the last decade. Average fuel economy for all vehicles has increased from 12.0 miles per gallon ( mpg ) in 1970 to 16.9 in 2000, a $29 \%$ increase. This improved fuel efficiency made it possible to have a $248 \%$ increase in vehicle-miles of travel with only a $176 \%$ increase in fuel use.

AnNuAL Vehicle-Miles of Travel


Annual travel on the Nation's highways reached an estimated 2.8 trillion vehicle-miles in 2000 , or nearly four times the level in 1960. Travel grew about 47\% during the 1960's, another $38 \%$ in the 1970 's, another $37 \%$ in the 1980's, and another $26 \%$ in the 1990 's.

Annual travel on roads and streets in urban areas accounted for 1.7 trillion vehicle-miles in 2000 or $61 \%$ of total travel compared to $44 \%$ in 1960 . Compared to the urban travel growth of $45 \%$ in the 1980's, rural travel grew 27\%. Much of the urban travel growth can be attributed to expanding urban boundaries.

Travel by Vehicle Type


Travel by all motor vehicles has increased by 148\% compared to 1970. Truck travel has increased $231 \%$ since 1970 . This includes travel by combination trucks and single-unit trucks. Combination truck travel is up over $285 \%$ and now accounts for $4.9 \%$ of total annual vehicle-miles of travel versus $3.2 \%$ in 1970. The most dramatic increase in travel has been by other 2-axle, 4 -tire vehicles with an increase of $650 \%$ since 1970 . This rapid increase is due to the popularity of minivans, pickup trucks, and sport utility vehicles. The percentage of annual travel by passenger cars in relation to travel by all vehicles has decreased from $82.9 \%$ in 1970 to $58.6 \%$ in 2000.

## Rural Interstate Travel by Vehicle Type (Distribution of Average daily Traffic Volumes and Equivalent axle Loads ${ }^{1}$ on the rural Interstate system as a Percent of total)


${ }^{1}$ Equivalent axle loads provide a means of measuring vehicle wear on pavements by relating them to an 80 kilonewton ( 18,000 pound) single axle load.
${ }^{2}$ Al 2-axle, 4 -tire trucks. Includes pickup trucks, vans, and other vehicles (such as campers, motor homes, etc.).
${ }^{3}$ All vehicles on a single frame having either 2 axies and 6 tires or 3 or more axles (including camping and recreational vehicles and motor homes).

On rural Interstate routes in 2000, combination trucks with 5 or more axles accounted for $18 \%$ of average daily traffic but $89 \%$ of equivalent axle loads. All other vehicles accounted for $82 \%$ of average daily traffic but only $11 \%$ of traffic loads. From 1990 to 2000, traffic on the rural Interstate routes increased by $36.4 \%$ and the equivalent axle loads increased by $88.3 \%$.

TRAVEL
Distribution of Person Trips and Person


SOURCE: Federal Highway Administration, 1995 Nationwide Personal Transportalion Survey
The 1995 NPTS data provides information on the reasons for travel. Family and personal business, which includes shopping and services such as haircuts, car repair and banking, accounts for $46 \%$ of all person trips and about $35 \%$ of person miles. Social and recreational trips, which include visiting friends and relatives, attending movies and parties, and participating in sports, comprise $25 \%$ of all trips and account for $31 \%$ of all miles. Trips to work and for work-related purposes, such as attending a meeting constitute $20 \%$ of person trips and $28 \%$ of person miles. The average person trip length, encompassing all trip purposes is 9.1 miles, and the average commute to work is 11.6 miles.

Walk/Bike Trips by Purpose


SOURCE: Federal Highway Administration, 1985 Nationwide Personal Transportation Survey.
The data from the 1995 NPTS shows that there are approximately 56 million daily walk trips in the U.S. Family and personal business trips, which are usually the shortest trips, account for just over $43 \%$ of all walk trips. Social and recreational activities share another $34 \%$, with the remainder of walk trips for going to school, church or work.
The majority of bike trips, $60 \%$, are for visiting friends and relatives and other social and recreational activities. Another $22 \%$ are for shopping and other family and personal business. Only $8 \%$ are for travel to and from work, which is not surprising given increasing work trip lengths and weather considerations.

Federal Highway Trust fund receipts


Most receipts from the Federal taxation of motor fuel, along with a number of other highway-related taxes, are deposited in the Federal Highway Trust Fund. The Trust Fund is made up of two accounts-highway and mass transit-and is dedicated for the funding of Federal surface transportation programs. In this way, taxes on highway users are used to fund highway facilities. The Trust Fund has provided a stable funding source for highway programs since it was established in 1956.

Motor-fuel tax receipts accounted for $\$ 30.3$ billion in Fiscal Year 2000 or $86.6 \%$ of all Trust Fund tax receipts. Other taxes accounted for $\$ 4.7$ billion. The balance in the Trust Fund currently earns no interest income.

Federal Highway Trust Fund Balance and Commitments


NOTE: The Highway Trust Fund was established July 1, 1956; the Mass Transit Account was established April 1, 1983.
The balance in the Highway Trust Fund has grown from $\$ 12.9$ billion at the end of FY 1985 to $\$ 31.1$ billion at the end of FY 2000. At the end of FY 2000, the Highway Account held a balance of $\$ 22.6$ billion and had unpaid commitments of $\$ 61.9$ billion. Funds for highway projects are committed when the project is initiated and are paid out as the project progresses. Because construction projects are long term in nature, the highway-user tax revenues can be committed to projects in advance of actual tax collection.

Obligation of Federal funds for roadway projects by Improvement Types on the National Highway System (NHS) and Total - ON and Off the NHS (All Projects - in Thousands)


NOTE: Capacify addition improvements include Relocation, some Reconstruction, Major Widening, and Reconstruction-added capacity. The portion of reconstruction miles resulting in capacity improvements is estimated for 1994 -based on new detail available beginning with the 1995 data. System preservation improvements include some Reconstruction, Minor Widening, Restoration and Rehabilitation, Resurfacing, and Reconstruction-no added capacity. Excludes certain improvement types such as Safety/Traffic/Traffic System Management, Environmentally-related Projects, Special Bridge Programs and other projects. SOURCE: Fiscal Management Information System.

Obligations for roadway projects in FY 2000 were $\$ 7.9$ billion for projects on the NHS and $\$ 16.2$ billion for projects both on and off the NHS. The majority of the obligations both NHS and Total were for projects involving System Preservation.

Highway Funding by Category 8\& Highway Expenditures BY Function


Total highway funding by all units of government reached $\$ 128.5$ billion in 2000 - a $222.5 \%$ increase compared to 1980 . At $63.0 \%$, highway-user fees make up the largest share of revenues used to fund highways. When compared to the $56.9 \%$ in 1980, the present share has slightly increased. The General Fund share of highway funding has decreased from $21.0 \%$ in 1980 to $13.3 \%$ in 2000 . Other taxes, investment income and bond proceeds account for $23.7 \%$ of the total highway funding as compared to $22.2 \%$ in 1980.

Capital expenditures currently account for $51.0 \%$ of highway expenditures compared to $48.6 \%$ in 1980; maintenance accounts for $24.4 \%$ compared to $27.4 \%$ in 1980. Expenditures for administration, highway patrol, and bond interest account for a slightly increased share of total expenditures - $20.1 \%$ in 2000 versus $19.9 \%$ in 1980 . Debt retirement accounts for $4.5 \%$ of total expenditures which is a slight increase from $4.1 \%$ in 1980.

HIGLWAY FUINDINE $\&$ EXPENDITURES
Total state disbursements for Highways in 2000 -


In 2000, States spent about $\$ 89.8$ billion for highways, including Federal-aid. The largest single component of State spending is for capital improvements to existing highways ( $\$ 38.2$ billion or $42.6 \%$ ).

HIGHWAY FUNDING AND EXPENDITURES BY GOVERNMENTAL UNIT (BILLIONS OF DOLLARS)


NOTE: Expenditures by the Federal Government only reflect direct expenditures by Federal agencies. Federal transfers are included with expenditures shown for State and local governments.
State governments account for the largest shares of highway funding and highway expenditures. Local governments account for the next largest share of highway funding and highway expenditures. The Federal share of highway expenditures is the smallest as most Federal funds are transferred to State and local governments for expenditure in their highway programs. Over the past 20 years, the relative share of Federal funding has decreased from $25.0 \%$ in 1980 to $24.0 \%$ in 2000 .

## Highway Capital Expenditures and Maintenance EXPENDITURES BY ALL UNITS OF GOVERNMENT



NOTE: Capital expenditures include construction, engineering, and right-of-way.
Highway capital expenditures increased 458.1\% from 1970 to 2000. Adjusted for inflation, 2000 capital expenditures (expressed in constant 1987 dollars) were only $33.7 \%$ above the 1970 level. Expenditures for highway maintenance in 2000 increased $555.1 \%$ compared to 1970. After accounting for inflation, 2000 maintenance expenditures were $47.6 \%$ above the 1970 level.

Federal Highway-User Fees ${ }^{1}$
(

[^0]Highway Construction Price Trends and the Consumer Price index


Apportionment of Federal Funds Administered by the Federal Highway Administration for Fy 1998, 1999, and $2000^{1}$ (IN MILLIONS OF DOLLARS)

| Selected Programs | 19982 | 19992 | $2000^{2}$ |
| :---: | :---: | :---: | :---: |
| Interstate Maintenance | 3294 | 3.769 | 3795 |
| Natonal itightay System | 3,989 | 4,607 . | 4659 |
| Sufface Transportation Program | 4,654 | 5,377 | 5,428. |
| Congestion Miligation and Ar Guality improvernent | 1,163. | 1.311 | 1324. |
| Appalachian Development Highway System | \% ${ }^{\text {\% }}$ | 443 | 443 |
| Aetreationtialls | 30. | 39 | 49 |
| Bridge Fiephacement and Rehabilitation | 2845. | 3,211 | 3,242 |
| Metropolitai Planing | 162 | 187: | 189 |
| Revenue Alligned Budget Authority |  |  | 1,358 |
| Aminim Cuaranteo | 538\%6. | 638\% | 6.199 |
| Tota3 ${ }^{3}$ | \$21,523 | \$25,32t | \$27198 |

${ }^{1}$ Fiscal year starts October 1 and ends September 30 .
${ }^{2}$ Apportioned pursuant to the Transportation Equity Act for the 21st Century (as amended by the TEA 21FRestoration Act) of 1998.
${ }^{3}$ Does not include funds from the following programs: emergency relies, highway-related satety, Federal lands highway programs, mandated projects, national magnetic levitation development, high-speed ground transpottation development, and infelligent vehicle-highway system, among others. These funds are aliccated from the Highway Trust Fund.

## Using Data for Comparisons

Even when data are consistently collected and reported, users need to recognize that highway statistical information is not necessarily comparable across all States. For many of the data items reported in Highway Statistics (HS '00), a user should not expect to find consistency among all States, due to many State-to-State differences. When making State level comparisons, it is inappropriate to use these statistics without recognizing those differences that impact comparability.

Use of reported State maintenance expenditures provides a clear example. Maintenance expenditures per mile can vary between States depending upon a number of factors including differences such as climate and geography, how each State defines maintenance versus capital expenditures, traffic intensity and percent trucks, degree of urbanization, types of pavement being maintained, and the level of system responsibility retained by the State versus that given to other levels of government. It would be inappropriate, therefore, when using data from Highway Statistics to compare per mile maintenance costs across all States to draw any conclusions without taking into account the differences that should be expected in these parameters based upon differing State conditions.

If choosing to compare State data, the user must be prepared to thoughtfully select a set of peer States that have similar characteristics in relationship to the specific comparison being made. Improperly selected peer States are likely to yield invalid data comparisons.

Differences that the user needs to consider in determining suitability of peer States for data comparison purposes include characteristics such as urban/rural similarities, population density, degree of urbanization, climate, geography, differing State laws and practices that influence data definitions, administration control of the public road system, similarity of the basic State economies, traffic volume similarities, and the degree of State functional centralization.

Beginning in 1994, FHWA provided a two-page "Peer State" table in each edition of Highway Statistics that lists some of these characteristics so that the data user might be made more aware of possible problems that may arise when comparing State-by-State data.

STATE \& URBANIZED AREA STATISTICS
Selected Statistics by State

| State | Resident Population (thousands) (HE'00, Table DL-1C) | Driving-Age Population (thousands) <br>  | Highway Motor Fuel Use (thousands of gallons) (HSTou, Table MF-24) | Total <br> Lane Miles (HS'00,Table HiN-46) | Total <br> Road and <br> Street <br> Mileage <br> (Hscoo, Table | Annual Vehicle-Mil of Travel (millions (Hsoo,Table vin |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 4,447 | 3,451 | 3,148,522 | 195,298 | 94,311 | 56,534 |
| Alaska | 626 | 458 | 338,750 | 25.991 | 12.828 | 4,613 |
| Arizona | 5,130 | 3,908 | 2,999,157 | 118,437 | 55,195 | 49,768 |
| Ankansas | 2,673 | 2,073 | 1.959 .484 | 198,161 | 97,600 | 29, 167 |
| California | 33,871 | 25,599 | 17,017,620 | 371,689 | 168,076 | 306,649 |
| Colorado | 4301 | 3,322 | 2450,177 | 176,093 | 85,409 | 41.77 |
| Connecticut | 3,405 | 2,651 | 1,697,878 | 44,474 | 20,845 | 30,756 |
| Delavare | 783 | 610 | 429,413 | 12,558 | 5,799 | 8,240 |
| Dist. of Columbia | a 572 | 469 | 192,440 | 3,774 | 1,425 | 3,498 |
| Florida | 15.982 | 12,742 | 8,648,333 | 253349 | 116,649 | 152,136 |
| Georgia | 8,186 | 6,251 | 6,030,954 | 241,087 | 114,727 | 105,010 |
| Havall | 1211 | 949 | 417.929 | 9,255 | 4,281. | 8,543 |
| Idaho | 1,293 | 969 | 847,974 | 95,178 | 46,456 | 13,534 |
| Ilineis | 12,49 | 9,530 | 6293.151 | 2883879 | 138,372 | 102866 |
| Indiana | 6,080 | 4,682 | 4,371,604 | 193,637 | 93,608 | 70,862 |
| lowa | 2.926 | 2881 | 1.99888 | 232,920 | 13,37\% | 29,433 |
| Kansas | 2,688 | 2,058 | 1,676,445 | 274,014 | 134,582 | 28,130 |
| Kentucly | 4,041 | 3,61 | 2,850,498 | 164.231 | 19.267 | 46,803 |
| Louisiana | 4,468 | 3,395 | 2,742,677 | 127,883 | 60,900 | 40,849 |
| Mainge | 1274 | 1,010 | 84, 317. | 46,346 | 22670 | 14190 |
| Maryland | 5,296 | 4,085 | 2,889,534 | 67,017 | 30,494 | 50,174 |
| Massachusetts. | 6349 | 5008 | 3,122,005 | 74505 | 35,314 | 52.796 |
| Michigan | 9,938 | 7,628 | 5,822,391 | 256,155 | 121,979 | 97,792 |
| Minhesota | 4,919 | 3,383 | 3154,032 | 271.176 | 132,260 | 52,601 |
| Mississippi | 2,844 | 2,160 | 2,035,655 | 151,701 | 73,498 | 35,536 |
| Missourl | 5.595 | 4292 | 3,971,442 | 251.209 | 123,039 | 67083 |
| Montana | 902 | 701 | 660,133 | 141,978 | 69,567 | 9,882 |
| Nebraska | 1711 | 1,315 | 1,188,911 | 188,273 | 92.701 | 18081 |
| Nevada | 1,998 | 1,538 | 1,188,724 | 79,050 | 37,854 | 17,639 |
| New Hampshire | 1,235 | 961 | 7598891 | 31366 | 15,211 | 12.021 |
| New Jersey | 8,414 | 6,545 | 4,748,655 | 78,163 | 36,022 | 67,446 |
| NevM Mexico | 1.819 | 1370 | 1,285.461 | 124,841 | 59927 | 22.750 |
| New York | 18,976 | 14,797 | 6,516,320 | 239,035 | 112,783 | 129,057 |
| North Carolina | 8.049 | 6,291 | 5,088,090 | 209,335 | 99,813 | 89,504. |
| North Dakota | 642 | 502 | 483,722 | 175,349 | 86,609 | 7,217 |
| Ohlo | 11.353 | 8,790 | 6.570 .881 | 248,722 | 116.964 | 105898 |
| Oklahoma | 3,450 | 2,666 | 2,478,132 | 232,710 | 112,634 | 43,355 |
| Oregon | 3,421 | 2.673 | 1,919,249 | 136,866 | 660902 | 35,010 |
| Pennsylvania | 12,281 | 9,694 | 6,323,548 | 249,169 | 119,642 | 102,337 |
| Phode Istand | 1.048 | 827 | 450,802 | 12,812 | 6.052 | 8,359 |
| South Carolina | 4,012 | 3,115 | 2,831,976 | 136,123 | 64,921 | 45,538 |
| Soctith Oakota | 754 | 577. | 562,591 | 169.060 | 83.471 | 8,432 |
| Tennessee | 5,689 | 4,446 | 3,759,136 | 183,640 | 87,419 | 65,732 |
| Texas | 20.651 | 15,618 | 13,252,841 | 639,853 | 301035 | 220.064 |
| Utah | 2,233 | 1,599 | 1,333,773 | 87,435 | 41,852 | 22,597 |
| vermont | 608 | 479 | 403,551 | 29,359 | . 14.278 | 6,811 |
| Virginia | 7,078 | 5,529 | 4,575,296 | 152,328 | 70,393 | 74,801 |
| Waslington | 5,894 | 4.553 | 3,180,398 | 167,211 | 80,209 | 53,330. |
| West Virginia | 1,808 | 1,455 | 1,091,359 | 76,671 | 37,277 | 19,242 |
| Wisconsin | 5.363 | 4157 | \% 0081051 | 231,340 | 112,359 | 57,266 |
| Wyoming | 493 | 382 | 590,437 | 56,780 | 27,326 | 8,090 |
| U.S. Total | 281,399 | 217,105 | 162,260,196 | 8,223,386 | 3,936,229 | 2,749,803 |

HS $00=$ Highway Statistics, $2000 ;$ HTF $=$ Highway Trust Fund.

| Total ighway italities 50, Teable Fi-10) | Fatalities (per 100 million VMT) | State Motor Fuel Taxes and Other Related Receipts (HS'OD, Table MF-1) | Total Highway Capital Outlay (thousands) (HS 00, Taple SF-2\} | Total <br> Disbursements for Highways (thousands) (HSHO, Table SF-2) | Payments into the Federal HTF (thousands) ( $\mathrm{HS} \mathrm{S}^{\prime} 0 \mathrm{O}$, Table $\mathrm{FE}-2.21$ ) | Apportionments from the Federal HTF (thousands) (HSO0, Table FE-2e1) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 995 | 1.76 | 579,812 | 719,722 | 1,246,223 | 638,977 | 589,698 |
| 108 | 223 | 27.817 | 321.612 | 50, 355 | 65940 | 378.674 |
| 1,036 | 2.08 | 565,982 | 960,137 | 2,040,266 | 583,068 | 494,747 |
| 652 | 224 | 398,717 | 4680053 | 817387\% | 415.571 | 397312 |
| 3,753 | 1.22 | 2,945,156 | 2,721,334 | 6,750,225 | 3,025,732 | 2,795,250 |
| , 681 | 1.63 | 521,721 | 780.129 | 1391,910 | 429,763 | 367.548 |
| 342 | 1.11 | 545,671 | 568,931 | 1,304,378 | 312,507 | 439,532 |
| 123 | 1.49 | 1081965 | 297,648 | 594,641 | 79,594 | 128.749 |
| 49 | 1.40 | 31,727 | 164,529 | 244,216 | 33,728 | 117,381 |
| 2999 | 1.97 | 1612,070 | 2,448,336 | 4,207.948 | 1,554,162 | 1390224 |
| 1,541 | 1.47 | 431,243 | 1,106,272 | 1,567,212 | 1,189,533 | 1,023,963 |
| , 181 | 1.58 | 68.872 | 1483004 | 272.268 | 69351 | 154.425 |
| 276 | 2.04 | 202,874 | 260,689 | 491,604 | 178,492 | 253,889 |
| 1418 | 1.88 | 1,231128 | 1,886,253 | 3446580 | $1,053,48$ | 986,434 |
| 875 | 1.23 | 746,424 | 1,035,129 | 1,932,198 | 767,408 | 688,839 |
| 445 | 151 | 394,458 | 696,681 | 1,493,639 | 353,281 | 345,026 |
| 461 | 1.64 | 358,989 | 697,463 | 1,206,470 | 346,783 | 338,426 |
| 820 | 4.75 | 489.785 | 1078,252 | 1,650,763 | 577.087 | 545,325 |
| 937 | 2.29 | 544,329 | 767,993 | 1,300,553 | 527,753 | 464,400 |
| -169 | 119 | 174,259 | 224.728 | 487,571 | 162,07 | 153 |
| 588 | 1.17 | 643,009 | 594,511 | 1,599,413 | 541,915 | 476,674 |
| 489 | 082 | 644889 | 2238,188 | 3524,344 | 545,690 | 536,068 |
| 1,382 | 1.41 | 1,047,898 | 2,136,479 | 2,747,958 | 1,074,219 | 961,800 |
| 625 | 149 | 585,997. | 697356 | 1,592,476 | 408,760 | 439,011 |
| 949 | 2.67 | 397,597 | 697,252 | 1,039,192 | 428,679 | 365,747 |
| 1,157 | 1.72 | 674,002 | 1006,426 | 1816,178 | 754,241 | 719,347 |
| 237 | 2.40 | 195,390 | 300,018 | 473,807 | 140,430 | 301,755 |
| 276 | 1.53 | 307.043 | 383,934 | 744,905 | 241,167 | 224,419 |
| 323 | 1.83 | 305,124 | 424,280 | 650,984 | 215,455 | 228,039 |
| 126 | 4.05 | 136,478 | 189,689 | $38 \% 468$ | 194452 | 148580 |
| 731 | 1.08 | 525,253 | 1,994,253 | 4,502,639 | 865,079 | 781,862 |
| 430 | 1.89 | 2388882 | 463,011. | 1, 162,422 | 269,496 | 307801\% |
| 1,458 | 1.13 | 1,406,054 | 2,582,541 | 5,306,825 | 1,249,954 | 1,485,648 |
| 1,172 | 164 | 1054,849 | 1,464,209 | 2,621,330 | 918,688 | 825844 |
| 86 | 1.19 | 102,201 | 180,072 | 384,538 | 101,377 | 194,296 |
| 1351 | 128 | 1484,302 | 1,650,422 | 3850,560 | 1,168,018 | 1006181. |
| 652 | 1.50 | 414,272 | 809,152 | 1,417,329 | 500,974 | 446,540 |
| 451 | 129 | 385,359 | 3573751 | 1,010, 277 | 3817440 | 384990 |
| 1,520 | 1.49 | 1,698,159 | 2,323,646 | 4,516,621 | 1,238,907 | 1,449,850 |
| 80 | 096 | 134,571 | 129527 | 255,637 | 82.095 | 1808896 |
| 1,065 | 2.34 | 467,948 | 502,049 | 970,218 | 554,376 | 483,066 |
| 173 | 205 | 116,489 | 346,269 | 465690 | 101.194 | 211222 |
| 1,306 | 1.99 | 777,581 | 836,144 | 1,439,811 | 759,820 | 685,545 |
| 3, 669 | 1.71 | 2780,214 | 3421.427 | 5,664,524 | 2,573,239 | 2,1091188 |
| 373 | 1.65 | 314,163 | 691,200 | 1,072,340 | 249,715 | 283,695 |
| 79 | 116 | 87,255 | 138,578 | 287,124 | 70,411 | 133,812. |
| 930 | 1.24 | 774,161 | 1,270,665 | 2,678,129 | 867,264 | 775,292 |
| 682 | 119 | 725,356 | 704,342 | 1,671,259 | 588.415 | 544,878 |
| 410 | 2.13 | 295,148 | 673,882 | 1,170,434 | 220,408 | 329,354 |
| \$799 | 1.40 | 795,105 | 886,708 | 1,663,266 | 602566 | 572, 883 |
| 152 | 1.88 | 100,435 | 270,786 | 395,725 | 151,317 | 228,408 |
| 11,821 | 1.52 | 31,470,283 | 47,616,404 | 89,832,934 | 30,347,210 | 29,945,654 |

STATE \& URBANIZED AREA STATISTIGS
Population, Drivers, Vehicles, Fuel and Travel by State

| State | Total <br> Registered Vehicles (HS'00, Table inv-1) | Total Licensed Drivers (HS'00, Table DL-22) | Licensed Drivers per 1,000 DrivingAge Population | Motor Vehicles per 1,000 Population | Motor Vehic per Licens Driver |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Alabama | 3,960,149 | 3,521,444 | 1,020 | 891 | 1.12 |
| Alasla | 594,399 | 465,256 | 1.016 | 950 | 128 , |
| Arizona | 3,794,538 | 3,433,995 | 879 | 740 | 1.10 |
| Allarsas | 1840,183 | 4,947,667 | 940 | 688 | 094 |
| California | 27,697,923 | 21,243,939 | 830 | 818 | 1.30 |
| Colorde | 3,626012 | 3107,258 | 985 | 843 | \% 117 |
| Connecticut | 2,853,449 | 2,652,593 | 1,001 | 838 | 1.08 |
| Deaware | 630,446 | 556,688 | 913 | 805 | 1.13 |
| Dist. of Columbia | 242,081 | 348,216 | 742 | 423 | 0.70 |
| Florlda | 11.781010 | 128858428 | 1009 | 737 | 0.92 |
| Georgia | 7,155,006 | 5,550,176 | 888 | 874 | 1.29 |
| Havali | 787.551 | 769388 | 811 | 609 | 0.96. |
| Idaho | 1,177,700 | 883,546 | 912 | 911 | 1.33 |
| 1mois | 8,972,584 | 7961.46 | 835. | 722 | 113 |
| Indiana | 5,570,942 | 3,976,241 | 849 | 916 | 1.40 |
| lowa | 3,106223 | 1,952,508 | 856 | 1062 | 1.59 |
| Kansas | 2,296,135 | 1,908,117 | 927 | 854 | 1.20 |
| Kentucky | 2826.403 | 2.694469 | 852 | 699 | 105 |
| Louisiana | 3,556,982 | 2,759,120 | 813 | 796 | 1.29 |
| Mane | 1024096 | 920235 | 811 | 804 | 111 |
| Maryland | 3,847,538 | 3,382,451 | 828 | 726 | 1.14 |
| Massachusetis | 5265.399 | 4,489,695 | 897 | 829 | 117. |
| Michigan | 8,435,721 | 6,925,246 | 908 | 849 | 1.22 |
| Miniosola | 4629940 | 2940.789 | 777 | 941 | 1.57 |
| Mississippi | 2,289,411 | 2,007,746 | 930 | 805 | 1.14 |
| Missouri | 4,579,629 | 3856.21 | 898 | 819 | 119 |
| Montana | 1,026,226 | 678,899 | 968 | 1,138 | 1.51 |
| Aebraska | 1618,933 | 1195,219 | 909 | 946 | 1.35 |
| Nevada | 1,219,725 | 1,370,643 | 891 | 610 | 0.89 |
| New Hampshire | 1051761 | 929,630 | 967 | 852 | 1.13 |
| New Jersey | 6,390,031 | 5,654,973 | 864 | 759 | 1.13 |
| NewMexico. | 1,523.810 | 1,239,043 | 904 | 840 | 1.23 |
| New York | 10,234,531 | 10,871,344 | 735 | 539 | 0.94 |
| Noiln Carolina | 6222.503 | 5,690,494 | 905 | 773 | 1.09 |
| North Dakota | 693,860 | 458,944 | 914 | 1,081 | 1.51 |
| Ohio | 10467,476 | 8205,524 | 934 | 922 | 128 |
| Oklahoma | 3,014,491 | 2,295,036 | 861 | 874 | 1.31 |
| Oregon | 3,021,574 | 2,495,059 | 933 | 883 | 121. |
| Pennsylvania | 9,259,967 | 8,229,490 | 849 | 754 | 1.13 |
| Phode Island | 759570 | 654,035 | 791 | 725 | 1,16 |
| South Carolina | 3,094,729 | 2,842,553 | 913 | 771 | 1.09 |
| Souit Daketa | 792509 | 543,817 | 942 | 1.051 | 1.46 |
| Tennessee | 4,819,799 | 4,251,228 | 956 | 847 | 1.13 |
| Texas | 14070,096 | 13,462,023 | 862 | 675 | 1.05 |
| Utah | 1,527,606 | 1,463,366 | 915 | 729 | 1.11 |
| Vermont, | 5148883 | 506085 | 1057 | 847 | 102. |
| Virginia | 6,046,127 | 4,836,993 | 875 | 854 | 1.25 |
| Washingtoy, | 5,115,866 | 4,54,501 | 912 | 868 | 1.23 |
| West Virginia | 1,441,735 | 1,347,207 | 926 | 797 | 1.07 |
| Wisconsh | 4365,525 | 3.770 .453 | 907 | 814 | 1.16 |
| Wyoming | 585,690 | 370,740 | 971 | 1,188 | 1.58 |
| U.S. Total | 221,475,173 | 190,625,023 | 878 | 787 | 1.16 |

HS ${ }^{\prime} 00=$ Highway Statistics, 2000.

| Persons per Registered Motor Vehicle | Gallons of Fuel per Vehicle | Miles per Gallon | Annual Miles per Vehicle | Vehicle-Miles per Capita | Vehicle-Miles per Licensed Driver |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.12 | 795 | 17.96 | 14,276 | 12,713 | 16,054 |
| 105 | 570 | 13.62 | 7,761 | 1,369 | 9915 ** |
| 1.35 | 790 | 16.59 | 13,116 | 9,701 | 14,493 |
| W, 145 | 1065 | 1489 | 15850 | 10.912 | 14974** |
| 1.22 | 614 | 18.02 | 11,071 | 9,053 | 14,435 |
| \%\%is 19 | 676 | 17.05 | 11520 | 9 9712 | 18443 , |
| 1.19 | 595 | 18.11 | 10,779 | 9,033 | 11,595 |
| 1. 124 | 681 | 19,19 | 13.070 | 10.524 | 14,602 . |
| 2.36 | 795 | 18.18 | 14,450 | 6,115 | 10,045 |
| \%. 136 | 734 | 1759 | ,12,914 | 9,519 | 11,836. ${ }^{\text {a }}$ |
| 1.14 | 843 | 17.41 | 14,676 | 12,828 | 18,920 |
| 6.1.64 | 567 | 20.44 | 11,583 | 7,055 | 11104. |
| 1.10 | 720 | 15.96 | 11,492 | 10,467 | 15,318 |
| 138 | 701 | 1635 | 11,464 | 8.283 | 12,92\% \% |
| 1.09 | 785 | 16.21 | 12,720 | 11,655 | 17,821 |
| ** 0.94 | 642 | 1476 | 9,475 | 10.059 | 15,074 |
| 1.17 | 730 | 16.78 | 12,251 | 10,465 | 14,742 |
| *) 1.43 | 1008 | 1642 | 16.559 | 11,582 | 17,370 |
| 1.26 | 771 | 14.89 | 11,484 | 9,143 | 14,805 |
| 124 | 827 | 16.75 | 13.656 | 11188 | 15420 * |
| 1.38 | 751 | 17.36 | 13,041 | 9,474 | 14,834 |
| 4. 124 | 598 | 16.91 | 10027 | B, 16 | 11759, |
| 1.18 | 690 | 16.80 | 11,593 | 9,840 | 14,121 |
| \% $\times 106$ | 681 | 16.68 | 11,361 | 10,693 | 17887. |
| 1.24 | 889 | 17.46 | 15,522 | 12,495 | 17,699 |
| 122 | 869 | 168\% | 14,648 | 11,990 | 1,3,96 ${ }^{\text {a }}$, |
| 0.88 | 643 | 14.97 | 9,629 | 10,956 | 14,556 |
| \$. 1.06 | 734 | 1521 | 11,168 | 10,568 | 15.128 |
| 1.64 | 975 | 14.84 | 14,461 | 8,828 | 12,869 |
| 4. 117 | 728 | 1582 | 14430 | 9,734 | 12,931. |
| 1.32 | 743 | 14.20 | 10,555 | 8,016 | 11,927 |
| \$2. 1119 | . 841 | 17.1 | 14.890 | 12512 | 18.369 ${ }^{\text {dex }}$ |
| 1.85 | 637 | 19.81 | 12,610 | 6,801 | 11,871 |
| \% 1129 | 818 | 17.59 | 14,384 | 11,120 | 15,729 . |
| 0.93 | 697 | 14.92 | 10,401 | 11,241 | 15,725 |
| 1. 108 | 628 | 16.12 | 10,117 | 9,328 | 12906, \% |
| 1.14 | 822 | 17.50 | 14,382 | 12,567 | 18,891 |
| 1.13 | 685 | 18.24 | 411.587. | 10.234 | 14,032 |
| 1.33 | 683 | 16.18 | 11,052 | 8,333 | 12,435 |
| . 188 | 598 | 18.54 | 111005 | 7,976 | 12,781 |
| 1.30 | 915 | 16.08 | 14,715 | 11,350 | 16,020 |
| \%.0.95 | \% 710 | 3. 14.99 | 10,646 | ,11183 | 15,505. |
| 1.18 | 780 | 17.49 | 13,638 | 11,554 | 15,462 |
| \%. 1448 | . 992 | 1661 | , 15,641 | 10,554 | 16347*** |
| 1.37 | 819 | 16.94 | 13,884 | 10,120 | 15,442 |
| \% 118 | 764 | 16.86 | 13228 | +1,202 | 13,458*** |
| 1.17 | 757 | 16.35 | 12,372 | 10,568 | 15,464 |
| 115\% | , 6.622 | 16.77. | 10.424 | 9,048 | $12837 \times$ |
| 1.25 | 757 | 17.63 | 13,346 | 10,643 | 14,283 |
| 1.23 | 701 | 18.71 | 13118 | 10,676 | 15188 |
| 0.84 | 1008 | 13.70 | 13,813 | 16,410 | 21,821 |
| 1.27 | 733 | 16.95 | 12,416 | 9,772 | 14,425 |

STATE 6 URBANIZED AREA STATISNICS

## Urbanized Areas with Populations Above 750,000

| Urbanized Area | Location |  | Estimated Urbanized Population (thousands) | Federal-Aid Urbanized Land Area (sq.miles) | Persons per Square Mile | Total Highwa Mileag |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State | State(s) |  |  |  |  |
| New York-Northeastern NJ | NY | N. | 17,089 | 3,962 | 4,313 | 37,623 |
| Las Angeles. | *A |  | 12384 | 2.231 | 5551 | 26,849 |
| Chicago-Northwestern IN1 | IL | IN | 7,702 | 2,730 | 2,821 | 23,764 |
| Philadelmis | PA | NJ | 4068 | 1347 | 3,020 | 13,417. |
| San Francisco-Oakiand | CA |  | 4,022 | 1,203 | 3,343 | 9,316 |
| Betroil | MII |  | 3,836 | 1,304 | 29942 | 13,808. |
| Dallas-Fort Worth | TX |  | 3,746 | 1,712 | 2,188 | 17,830 |
| Washington | DC | MD, va | 3,617 | 999 | 3.621. | 10,329 |
| Atlanta | GA |  | 2,977 | 1,757 | 1,694 | 13,145 |
| Boston | MA |  | 2,917 | 1,138 | 2,563 | 16,148 |
| San Diego | CA |  | 2,653 | 733 | 3,619 | 5,965 |
| Houston | TV |  | 2487 | 1.537. | 1,618 | 15,251 |
| Minneapolis-St. Paul | MN |  | 2,475 | 1,192 | 2,076 | 10,919 |
| Mami-hialeah | FL |  | 2,270 | 353 | 6,431 | 5,607 |
| Phoenix | AZ |  | 2,138 | 1,054 | 2,028 | 10,232 |
| Baltimore | MO |  | 2107 | 712 | 2959 | 6,608 |
| St. Louis | MO | IL | 2,044 | 1,124 | 1,819 | 8,064 |
| Seatte | WA |  | 1,994 | 844 | 2,363 | 7,101 |
| Denver | CO |  | 1,993 | 720 | 2,768 | 7,007 |
| Tampast Pete Clearvater | FL |  | 195\% | 650 | 3,005 | 7,539 |
| Cleveland | OH |  | 1,783 | 838 | 2,128 | 5,530 |
| stan lase | CA |  | 1,626 | 365 | 4455 | 4,11 |
| Fort Lauderdale-HollywoodPompano Beach | FL |  | 1,601 | 327 | 4,896 | 4,207 |
| Pitsburgh | PA |  | 1,569 | 1,086 | 1,445 | 8,441 |
| Milwaukee | WI |  | 1,532 | 518 | 2,958 | 5,095 |
| Noifolk-va Beach-Newport News | VA |  | 1,507 | 952 | 1.583 | 5,512. |
| Kansas City | MO | KS | 1,422 | 1,036 | 1,373 | 7,545 |
| Sacramento | cA |  | 1.394 | 383 | 3.640 | 4.569 |
| Riverside-San Bernardino | CA |  | 1,340 | 514 | 2,607 | 4,735 |
| Portland-Vancouver | On | WA | 1,338 | 469 | 2,853 | 5.615 |
| San Juan | PR |  | 1,303 | 274 | 4,755 | 2,811 |
| Las Vegas | NV |  | 1.256 | 270 | 4.652 | 2963 |
| Cincimnati | OH | KY | 1,176 | 630 | 1,867 | 4,887 |
| Orlandol | FL |  | 1.160 | 395 | 2.937 | 3.610 |
| San Antonio | TX |  | 1,143 | 485 | 2,357 | 5,002 |
| Buftilo-Niagara Falls | MV |  | 1112 | 664 | 1972 | 3,985 |
| Oklahoma City | OK |  | 1,083 | 647 | 1,674 | 4,714 |
| Now Oreans. | 14 |  | 1,065 | 270 | 3,944 | 3,290 |
| West Palm Beach-Boca RatonDelray Beach | FL |  | 1,041 | 307 | 3,391 | 2,591 |
| Columbus | OH |  | 940 | 476 | 1,975 | 3,426 |
| Memphis | TN | AR, MS | 919 | 420 | 2,188 | 3,369 |
| Indianapolis | 1 N |  | 915 | 422 | 2165 | 4,228 |
| Providence-Pawtucket | RI | MA | 907 | 515 | 1,761 | 4,399 |
| Sacksonille | 1 |  | 869 | 508 | 1.711 | 3,664 |
| Salt Lake City | UT |  | 830 | 353 | 2,351 | 3,334 |
| Loulsvile | Kr | IN | 823 | 384 | 2,143 | 3,763 |
| Tulsa | OK |  | 803 | 305 | 2,633 | 2,761 |

${ }^{1}$ Some urbanized area data are inconsistently reported; for example, the Pennsylvania portion of Wilmington, Delaware is reported with Philade|phia; Kissimmee, Florida is reported with Orlando; and the llinois portions of Aurora, Danville, Elgin, Crystal Lake,
Jotiet and Round Lake Beach are reported with Chicago. Other anomalies may exist.
SOURCE: All data reported by States through the Highway Performance Monitoring System. Numbers may differ from subsequently published 1390 Census data.

| Total Freeway xpressway Mileage | Total Freeway Miles per Urbanized Population | Total Daily Highway Vehicle-Miles (thousands) | Total Daily Freeway Vehicle-Miles (thousands) | Daily Vehicle-Miles per Capita | \% of Travel Served by Freeways | Annual Average Daily Traffic on Freeways |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1,130 | 66.1 | 263,905 | 101,299 | 15.4 | 38.4 | 89,639 |
| \%.652 | 52.7 | 280798 | 126.498 | 22.7 | 45, 1 | 193,875 |
| 477 | 62.0 | 158,240 | 48,276 | 20.5 | 30.5 | 101,167 |
| 347 | 85.4 | 71,005 | 24.883 | 189 | 318 | 70.457 . |
| 330 | 82.0 | 90,277 | 47,982 | 22.4 | 53.1 | 145,461 |
| 283 | 73.8 | 92,359 | 31125 | 241 | 38.7 | 109,882 |
| 594 | 158.5 | 116,548 | 49,197 | 31.1 | 42.2 | 82,872 |
| 306 | 846 | 82,959 | 34,538 | 229 | 416 | 114862 |
| 306 | 102.9 | 100,693 | 42,488 | 33.8 | 42.2 | 138,701 |
| 211 | 72.3 | 59,361 | 22890 | 20.3 | 38.6 | 108,468 |
| 246 | 92.8 | 62,809 | 33,745 | 23.7 | 53.7 | 137,029 |
| . 368 | 148.0 | 91,883 | \% 39.195 | 369 | 427 | 1166.458 |
| 316 | 127.8 | 60,720 | 27,094 | 24.5 | 44.6 | 85,640 |
| 120 | 531 | 43.577 | 13.584 | 192 | 31.2 | 112782. |
| 163 | 76.4 | 58,405 | 19,424 | 27.3 | 33.3 | 118,882 |
| - 278 | 1119 | 45,021 | 22,659 | 214 | 50.3 | 4, 550 * |
| 320 | 156.7 | 58,761 | 25,739 | 28.7 | 43.8 | 80,362 |
| 244 | 1210 | 51430 | 24,008 | 258 | 467 | 99,474 |
| 209 | 104.6 | 43,997 | 16,904 | 22.1 | 38.4 | 81,063 |
| \% 124 | 637 | 44,473 | 8356 | 228 | 18.8 | 67,181. |
| 227 | 127.3 | 37,800 | 17,284 | 21.2 | 45.7 | 76,169 |
| 126 | \%14 | 38,43 | 16,529 | 23.6 | 43.1 | 131,322 * |
| 109 | 67.8 | 37,335 | 12,832 | 23.3 | 34.4 | 118,225 |
| 2893 | 1.160s | 35,632 | 4. 11123 | 22.7 | 31.2 | 39,295 |
| 111 | 72.8 | 31,888 | 9,701 | 20.8 | 30.4 | 87,013 |
| 173 | 114.8 | 34588 | 11,269 | 23.0 | 32.6 | 65.150 |
| 374 | 263.3 | 41,187 | 19,307 | 29.0 | 46.9 | 51,566 |
| , 105 | 75.6 | 29,724 | 12,769 | 21.3 | 43.0 | 12111\% |
| 139 | 103.9 | 32,876 | 16,601 | 24.5 | 50.5 | 119,245 |
| 137 | , 1024 | 31,517 | 12,595 | 23.6 | 400 | 91,900. |
| 66 | 50.6 | 17,415 | 6,187 | 13.4 | 35.5 | 93,821 |
| 77 | 61.3 | 24,128 | 6.848 | 192 | 29.4 | 88.954. |
| 176 | 149.6 | 32,605 | 15,744 | 27.7 | 48.3 | 89,495 |
| 156 | 1349 | 32,288 | 9532 | 27.8 | 29.5 | 60,915 |
| 211 | 184.4 | 33,445 | 15,775 | 29.3 | 47.2 | 74,837 |
| 139 | 124.7 | 21,448 | 6,365 | 193 | 29.7 | 45900 |
| 150 | 138.7 | 25,980 | 8,932 | 24.0 | 34.4 | 59,444 |
| \%. 75 | \% 703 | 15444 | 5,613 | 145 | \% 864 | 74,954, \% |
| 87 | 83.6 | 25,277 | 8,368 | 24.3 | 33.1 | 96,167 |
| W4.149 | 4881 | 24,31 | 11885 | 268 | 48.1 | 80,044 |
| 92 | 99.8 | 22,724 | 6,887 | 24.7 | 30.3 | 75,077 |
| 130 | 448 | 29,398 | 11,259 | 321 | 383 | $86750 \%$ |
| 120 | 131.8 | 20,446 | 8,465 | 22.5 | 41.4 | 70,833 |
| - 156 | 1800 | 24,553 | 9,836 | 20.3 | 40.1 | 62,896 |
| 79 | 94.6 | 20,396 | 6,410 | 24.6 | 31.4 | 81,618 |
| 137 | 166.9 | 22.794 | . 10.040 | 27.7 | 440 | 73,103 . |
| 112 | 139.8 | 18,006 | 6,267 | 22.4 | 34.8 | 55,813 |






[^0]:    ${ }^{1}$ See tables FE-101A, FE-101B, and FE-21B in Highway Statistics 2000 for a more complete description of Federal highway-user fees.
    NOTE: This table reflects rates included in Taxpayer Relief Act of 1997.

