

# OUR NATION'S HIGHWAYS



2000

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>**

## 2 OUR NATION'S HIGHWAYS

The highway system is vital to the Nation's economy. Over 1 billion ton-miles of freight were moved over the highways in 1998.

## 9 AIR QUALITY

Most of the reduction in atmospheric concentrations of carbon monoxide, volatile organic compound, and nitrogen oxide emissions can be attributed to reduced emissions by motor vehicles.

## 10 THE VEHICLE FLEET

The 2001 cost-per-mile for operating an intermediate-size vehicle was 46.9¢.

## 14 LICENSED DRIVERS

Of the 191 million licensed drivers in the United States in 2000, the largest number of drivers falls in the age group of 40-44 year-olds. (11.1%)

## 16 THE HIGHWAY SYSTEM

The United States has 3.9 million miles of roadway, of which 3 million miles are rural roads. The Interstate System accounts for only 1.2% of total mileage but carries 24.1% of total travel.

## 18 NATIONAL HIGHWAY SYSTEM

The National Highway System consists of over 161,000 miles which includes the Interstate System and portions of other functional systems.

## 20 CONDITIONS, PERFORMANCE, AND SAFETY

The fatality rate on the Interstate System has dropped since 1970 and was at a low in 2000 which has not been matched since 1992.

## 23 MOTOR-FUEL USE

In 2000, 162 billion gallons of fuel were consumed for highway use, averaging about 719 gallons per motor vehicle or 16.9 miles per gallon.

## 24 TRAVEL

Motor vehicle travel in 2000 reached 2.8 trillion vehicle-miles, an average of 12,177 miles per vehicle per year. Automobiles and light trucks are responsible for 92% of this travel.

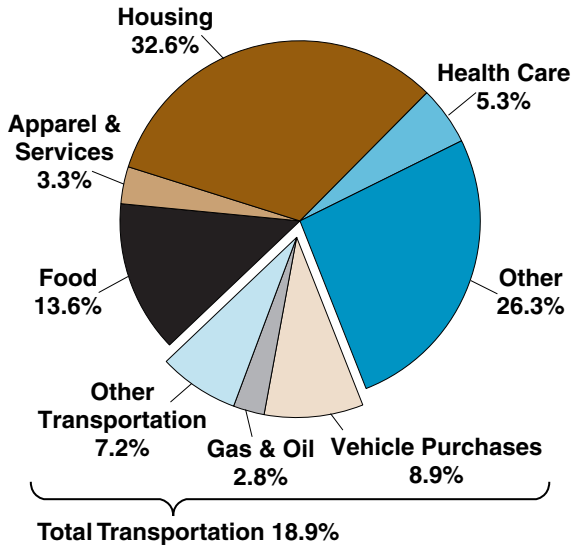
## 27 HIGHWAY FUNDING AND EXPENDITURES

Although expenditures for highways now exceed \$126 billion a year, this amounts to less than 4.7¢ per vehicle-mile traveled.

## 33 STATE AND URBANIZED AREA STATISTICS

## TRANSPORTATION EXPENDITURES AT THE HOUSEHOLD LEVEL

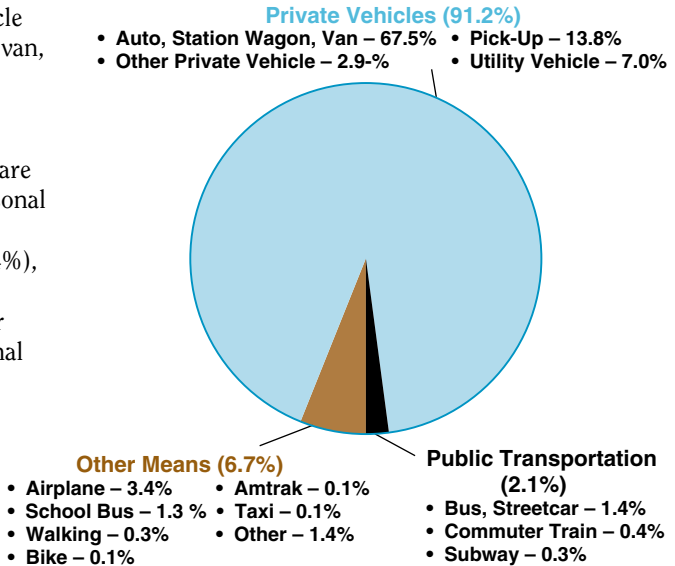
After housing (32.6%), transportation (18.9%) accounts for the largest single household expenditure. Of the 18.9% transportation expenditures, the largest expenditure is vehicle purchases (47.1%). Other transportation expenditures, which includes maintenance and insurance, is the second largest transportation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



SOURCE: Bureau of Labor Statistics, 1999 Consumer Expenditures Survey.

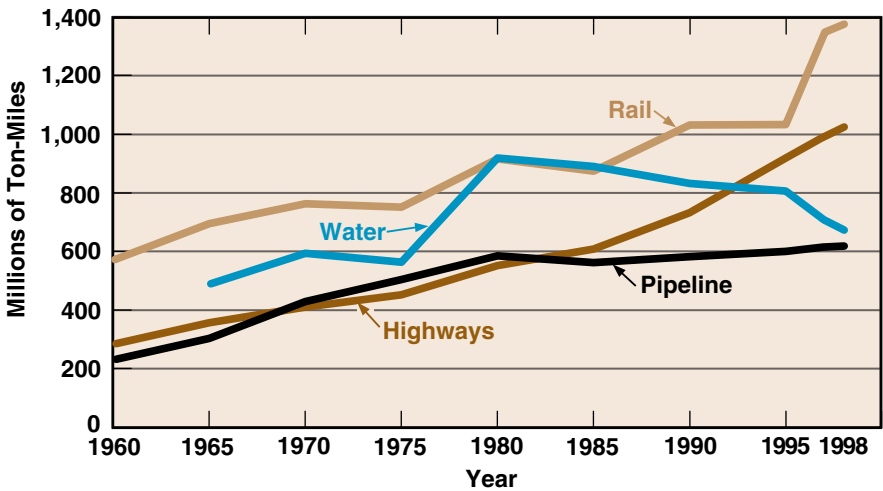
## PERSONAL TRAVEL BY MODE OF TRANSPORTATION

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.



SOURCE: Federal Highway Administration, 1995 Nationwide Personal Transportation Survey.

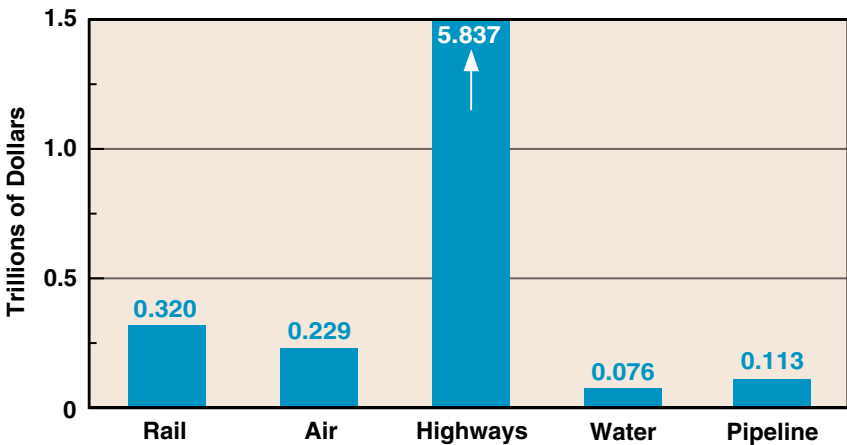
FREIGHT TRANSPORTATION BY MODE



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.

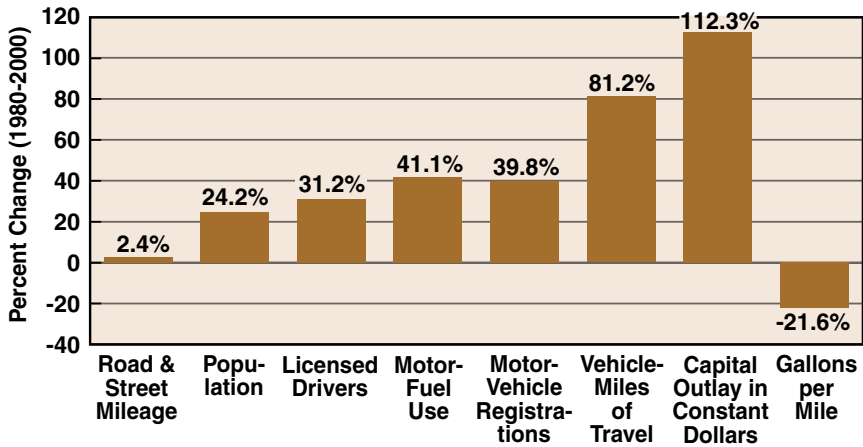
FREIGHT TRANSPORTATION VALUE BY SINGLE MODE - 1997



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.

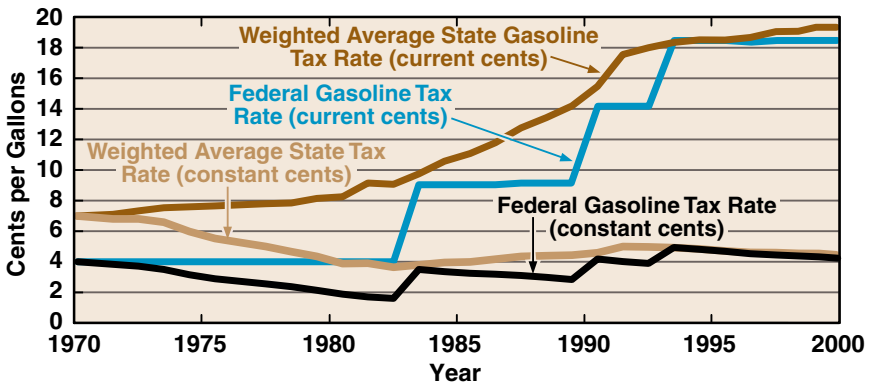
SOURCE: Bureau of Transportation Statistics, *1997 Commodity Flow Survey*.

## 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%.

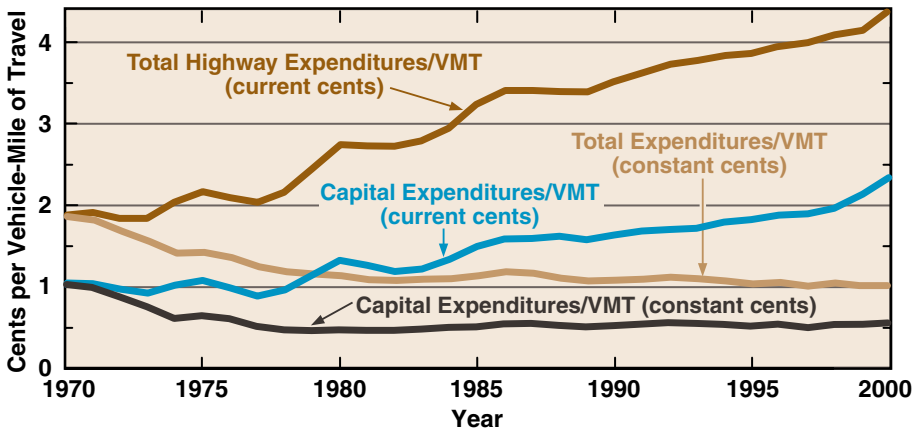
## FEDERAL AND STATE GASOLINE TAX RATES



Despite significant increases in State motor-fuel tax rates during the 1980's, the weighted average gasoline tax rate expressed in constant 1970¢ 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¢ 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¢ 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.

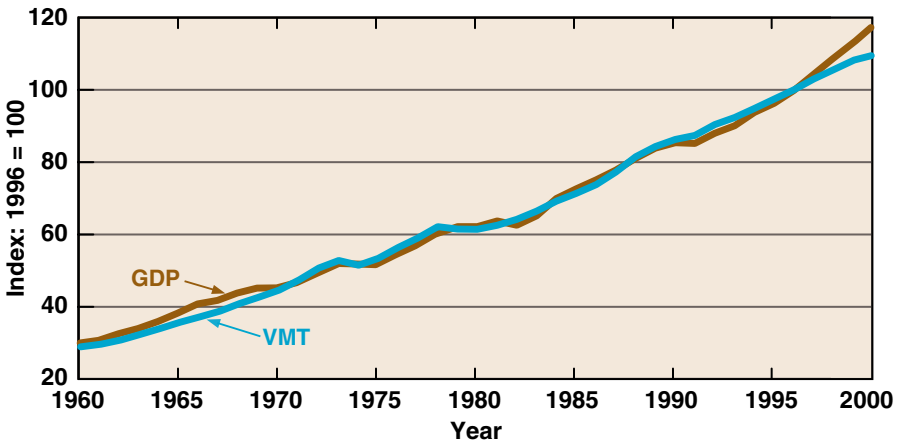


HIGHWAY EXPENDITURES PER VEHICLE-MILE OF TRAVEL



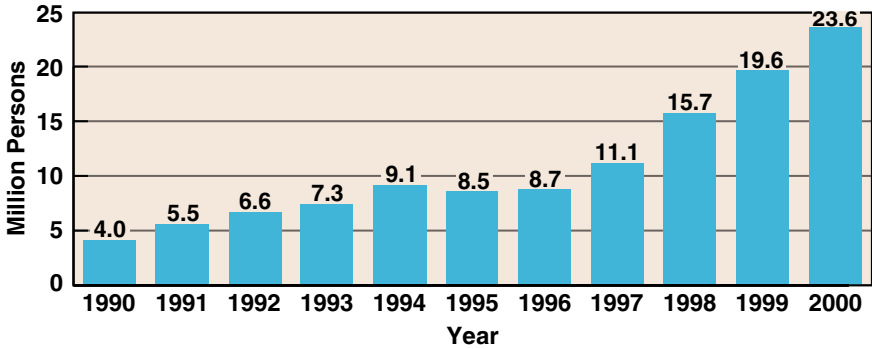
In 2000, highway capital expenditures were 2.35¢ per vehicle-mile of travel (VMT) as compared to 1.04¢ per VMT in 1970 — an 126% increase. After accounting for inflation, however, 2000 capital expenditures were only 0.56¢ per VMT, a 46% decrease from 1970’s capital expenditures. In 2000, total highway 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.

## U.S. TELECOMMUTING POPULATION



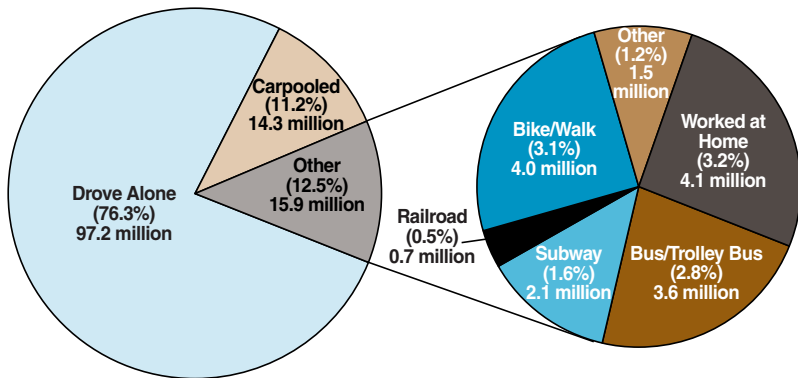
SOURCE: Cyber Dialogue and the International Telework Association and Council.

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 40s. 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



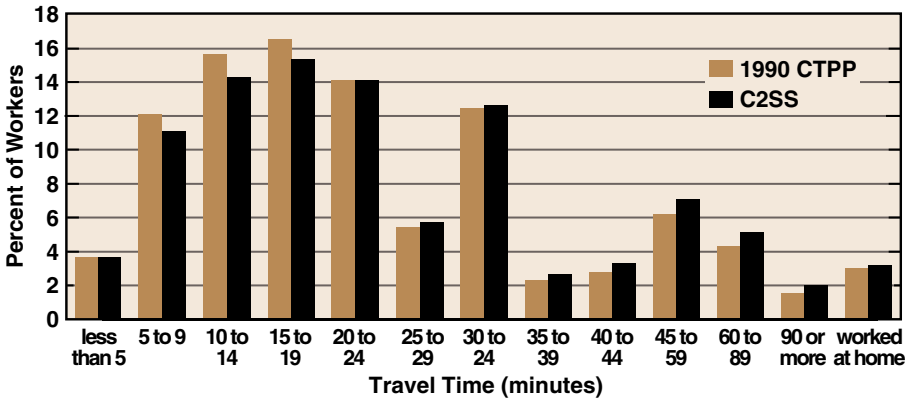
NOTE: Includes all workers 16 years and older living in households. C2SS did not survey Group Quarter Population.

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**

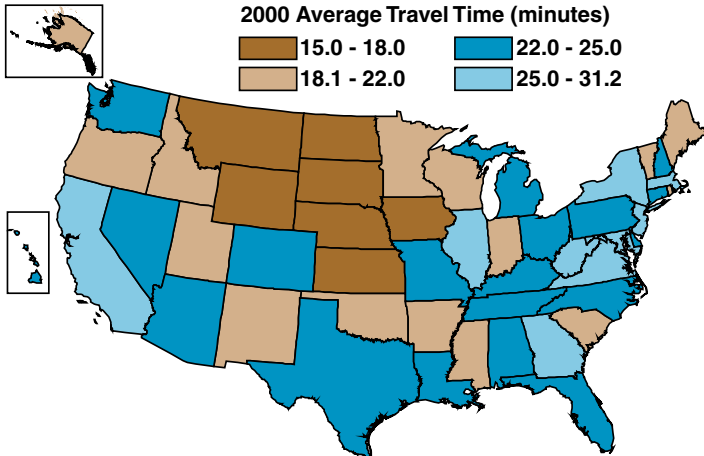


NOTE: Includes all workers 16 years and older living in households. C2SS did not survey Group Quarter Population.

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**



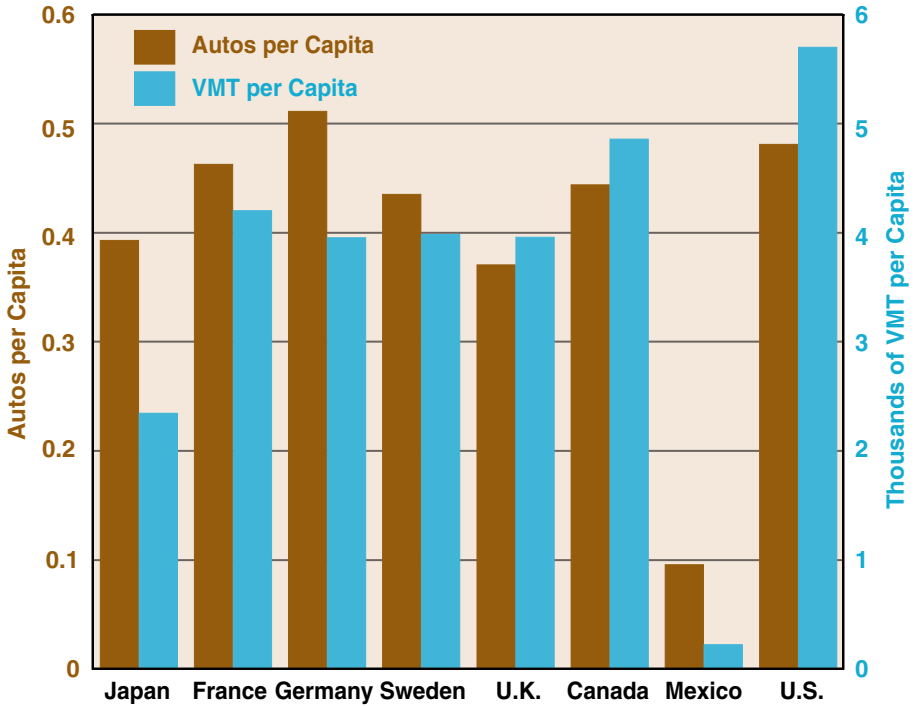
NOTE: Includes all workers 16 years and older living in households. C2SS did not survey Group Quarter Population.

SOURCE: 2000 American Community 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.

## ANNUAL AUTOMOBILE VEHICLE-MILES OF TRAVEL PER CAPITA AND NUMBER OF AUTOMOBILES PER CAPITA

(DATA ARE FOR 1997 UNLESS OTHERWISE STATED)

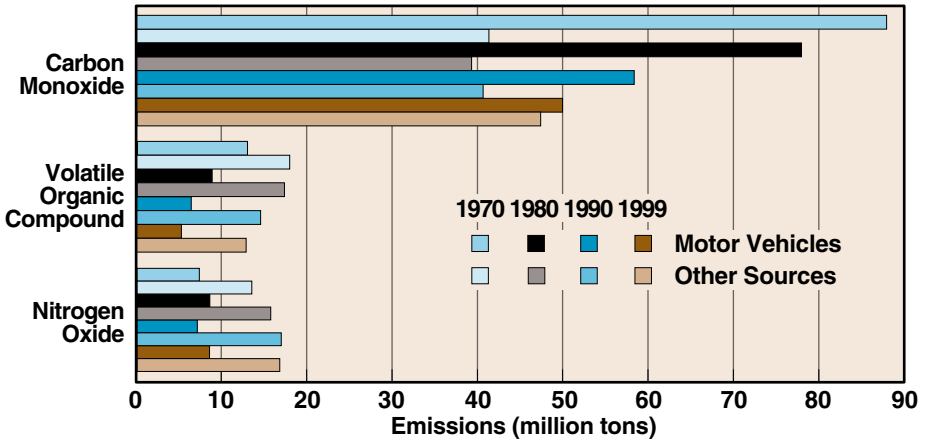


NOTE: VMT per capita for Canada reflects 1990 data. VMT per capita for Mexico reflects 1991 data.

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.

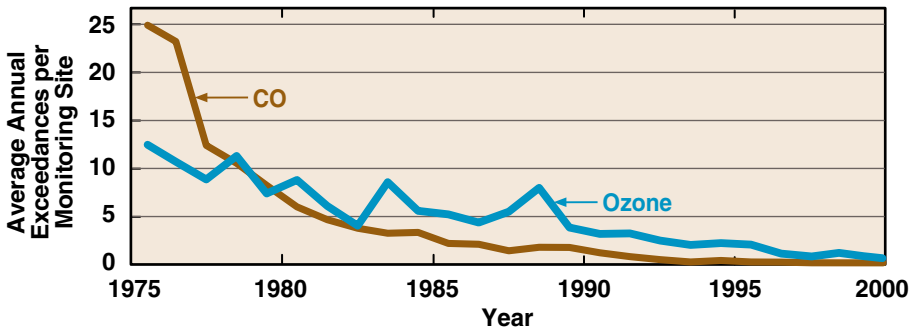
NATIONAL EMISSION TRENDS



SOURCE: Environmental Protection Agency's National Emission Inventory, Air Pollutant Emission Trends Office of Air Quality Planning and Standards, <http://www.epa.gov/ttn/chieftrends/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



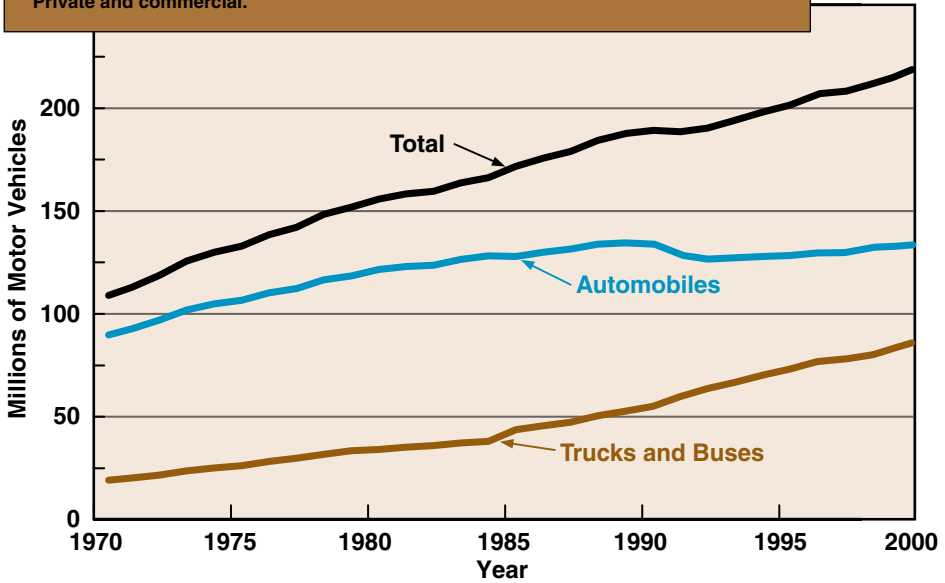
SOURCE: 1975-1995 data were tabulated from individual monitor records in EPA Aerometric Information Retrieval Service (AIRS) database. These data are for the subset of monitors having complete data for at least 15 of the 21 years included in that period. Supplemental 1994-2000 data were tabulated from EPA AIRSDATA 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.

MOTOR-VEHICLE REGISTRATIONS

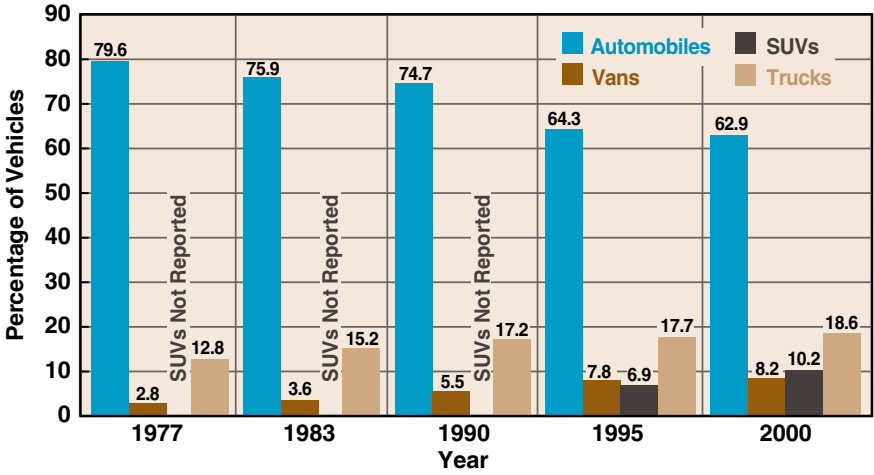
	(in millions)		Change (%)
	1990	2000	1990/2000
Automobiles	133.7	133.6	-1.0
Buses	0.6	0.7	16.7
Trucks	54.0	87.0	61.1
P & C Light Trucks <sup>1</sup>	47.5	77.8	63.8
P & C Truck Tractors <sup>1</sup>	1.2	1.6	33.3
Other Single-Unit Trucks and Publicly-Owned Trucks	5.3	7.6	43.4
<b>Total</b>	<b>188.3</b>	<b>221.3</b>	<b>17.5</b>
Motorcycles	4.3	4.3	0.0

<sup>1</sup>Private and commercial.



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.

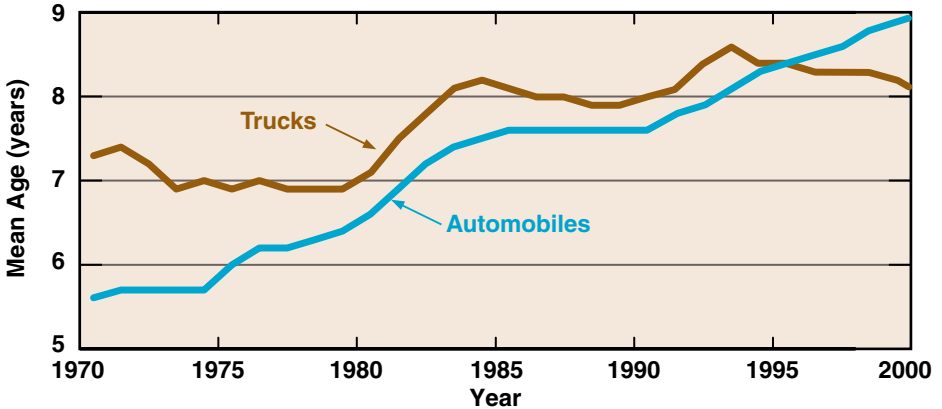
MARKET SHARE OF HOUSEHOLD VEHICLES



SOURCE: Federal Highway Administration, 1995 Nationwide Personal Transportation Survey.

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

Cents Per Mile <sup>1</sup>			
	Size	Cost <sup>2</sup>	Characteristics <sup>3</sup>
	Subcompact	32.2	4 cylinder Avg MPG = 32
	Compact	42.3	4 cylinder Avg MPG = 23
	Intermediate	46.9	6 cylinder Avg MPG = 20
	Full-Size Vehicle	51.1	6 cylinder Avg MPG = 19
	Compact Pickup	40.2	4 cylinder Avg MPG = 18
	Full-Size Pickup	47.7	8 cylinder Avg MPG = 13
	Compact Utility	45.6	4 cylinder Avg MPG = 15
	Intermediate Utility	51.4	6 cylinder Avg MPG = 15
	Full-size Utility	52.9	8 cylinder Avg MPG = 13
	Mini-Van	50.7	6 cylinder Avg MPG = 17
	Full-Size Van	52.0	6 cylinder Avg MPG = 13

<sup>1</sup>Total costs over 5 years, based on 70,000 miles.

<sup>2</sup>Includes depreciation, financing, insurance, registration fees, taxes, fuel maintenance, and repairs.

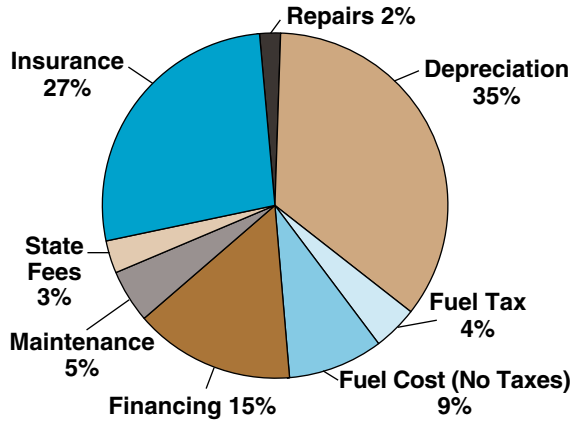
<sup>3</sup>Average MPG reflects city driving estimates (excluding highway driving).

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)**

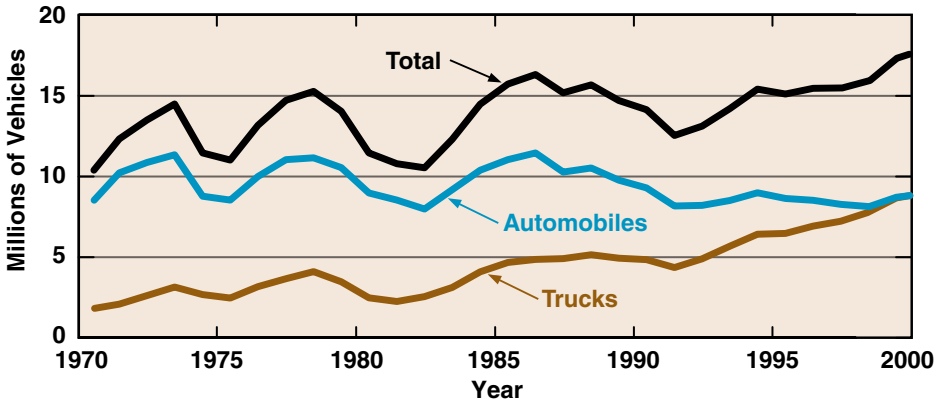
Repairs	0.9¢
Depreciation	16.4¢
Fuel Tax	1.9¢
Fuel Cost (No Taxes)	4.2¢
Financing	7.0¢
Maintenance	2.3¢
State Fees	1.4¢
Insurance	12.7¢



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 motor-fuel 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.

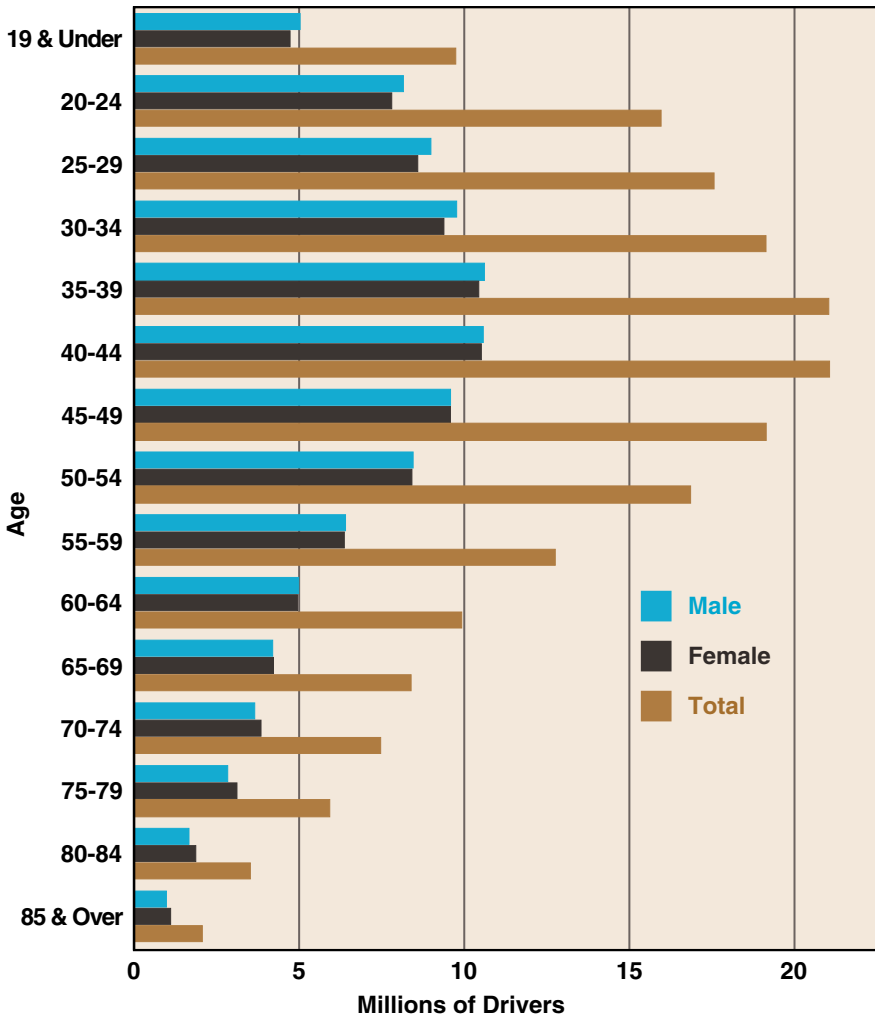
**MOTOR VEHICLE RETAIL SALES**



SOURCE: Ward's Communications, *Ward's Motor Vehicle 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.

## LICENSED DRIVERS BY AGE AND SEX

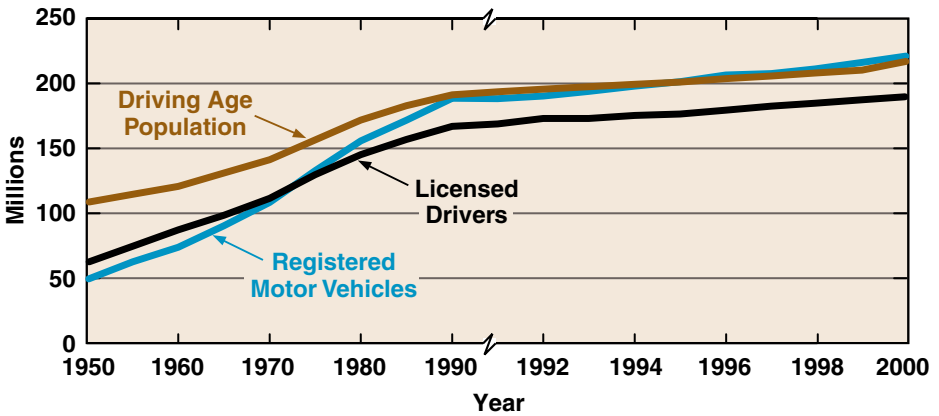


There were 190,625,023 licensed drivers in the United States in 2000. That is an increase of 23.73% since 1980 and a 12.39% increase over 1990. As the average age of licensed drivers shifts upward, we see that the 35-39 and 40-44 year old age groups contain the largest share of drivers.

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.

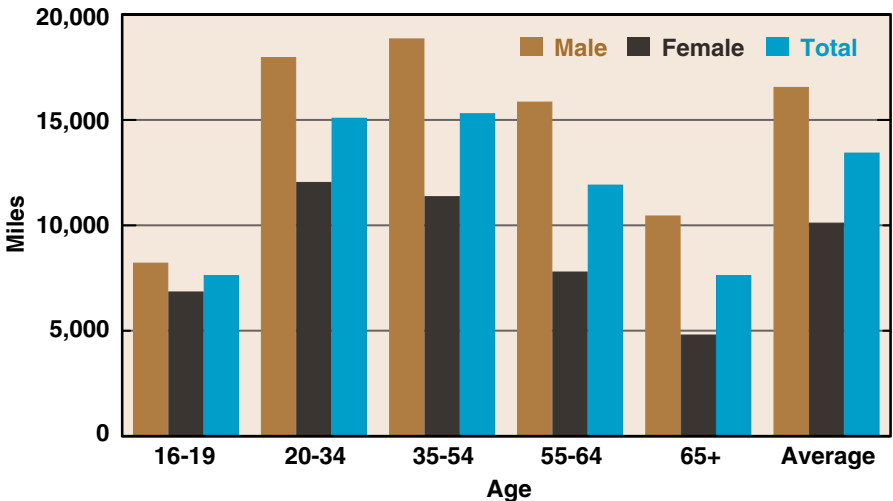
Female drivers increased by about 39% from 1980 to 2000, whereas the number of male drivers only increased by 24%.

LICENSED DRIVERS, POPULATION, AND MOTOR VEHICLES



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.

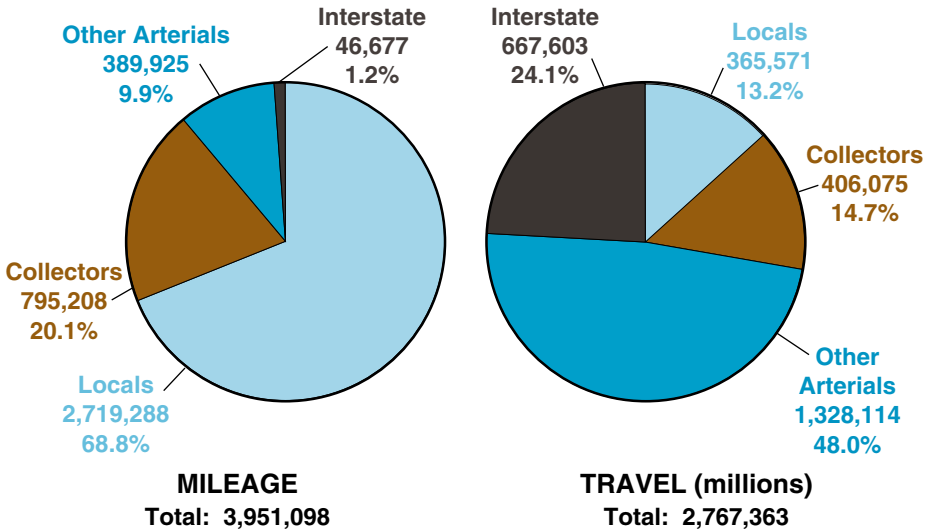
AVERAGE ANNUAL MILES PER DRIVER BY AGE GROUP



SOURCE: Federal Highway Administration, 1995 Nationwide Personal Transportation Survey.

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 System** — 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 Arterials** — 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.

**Locals** — The local roads and streets provide a high level of access to abutting land but limited mobility.

OWNERSHIP OF U.S. ROADS AND STREETS

Jurisdiction	Rural Mileage	%	Urban Mileage	%	Total Mileage	%
State	663,755	21.5	111,539	13.0	775,294	19.6
Local	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
<b>Total</b>	<b>3,091,748</b>	<b>100.0</b>	<b>859,364</b>	<b>100.0</b>	<b>3,951,112</b>	<b>100.0</b>

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	% Change 1990-2000	Urban	% Change 1990-2000	Total	% Change 1990-2000	% of Total Mileage
Interstate	33,150	-1.4	13,527	16.2	46,677	3.6	1.2
Other Freeways/ Expressways	–	–	9,195	18.9	9,195	18.9	0.2
Other Principal Arterial	99,013	18.0	53,554	2.6	152,567	12.4	3.9
Minor Arterial	137,862	-4.9	90,301	20.3	228,163	4.0	5.8
Major Collector	433,927	-0.8	–	–	433,927	-0.8	11.0
Minor Collector	272,485	-7.5	–	–	272,485	-7.5	6.9
Collector	–	–	88,796	12.8	88,796	12.8	2.2
Local	2,115,297	-1.0	603,991	15.4	2,719,288	2.6	68.8
<b>Total</b>	<b>3,091,734</b>	<b>-1.3</b>	<b>859,364</b>	<b>14.8</b>	<b>3,951,098</b>	<b>2.1</b>	<b>100.0</b>

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)

Functional System	Rural	% Change 1990-2000	Urban	% Change 1990-2000	Total	% Change 1990-2000	% of Total Travel
Interstate	270,315	34.5	397,288	41.3	667,603	39.4	24.1
Other Freeways/ Expressways	–	–	178,105	38.6	178,105	38.6	6.4
Other Principal Arterial	249,137	41.9	401,237	18.9	650,374	27.4	23.5
Minor Arterial	172,780	10.5	326,855	37.5	499,635	27.5	18.1
Major Collector	210,496	9.9	–	–	210,496	9.9	7.6
Minor Collector	58,571	16.3	–	–	58,571	16.3	2.1
Collector	–	–	137,008	27.5	137,008	27.5	5.0
Local	128,332	31.0	237,239	23.5	365,571	26.7	13.2
<b>Total</b>	<b>1,089,631</b>	<b>24.9</b>	<b>1,677,732</b>	<b>30.6</b>	<b>2,767,363</b>	<b>28.9</b>	<b>100.0</b>

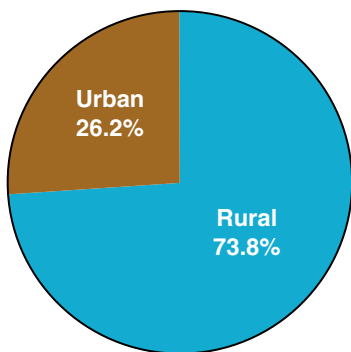
Since 1990, total miles has increased only 2.1%, while travel has increased 28.9%. The urban travel increase of 30.6% has outpaced the rural 24.9% increase due to the Nation’s continued growth in urbanization and expanded urban boundaries. The rural other principal arterial system had the greatest travel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

## NATIONAL HIGHWAY SYSTEM

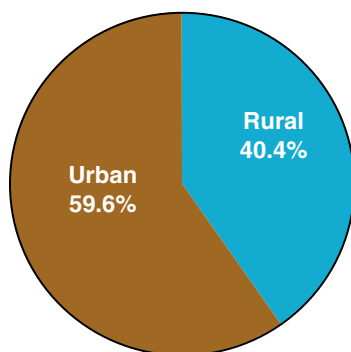
NHS Mileage			
	Rural	Urban	Total
Interstate	33,150	13,527	46,667
Other NHS	85,882	28,629	114,511
<b>Total NHS</b>	<b>119,032</b>	<b>42,156</b>	<b>161,188</b>
NHS Percent of Total Mileage			
	Rural	Urban	Total
Interstate	0.8	0.3	1.2
Other NHS	2.2	0.7	2.9
<b>Total NHS</b>	<b>3.0</b>	<b>1.1</b>	<b>4.1</b>
NHS Travel (millions)			
	Rural	Urban	Total
Interstate	270,315	397,288	667,603
Other NHS	224,340	333,335	557,675
<b>Total NHS</b>	<b>494,655</b>	<b>730,623</b>	<b>1,225,278</b>
NHS Percent of Total Travel			
	Rural	Urban	Total
Interstate	9.8	14.4	24.1
Other NHS	8.1	12.0	20.2
<b>Total NHS</b>	<b>17.9</b>	<b>26.4</b>	<b>44.3</b>

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.



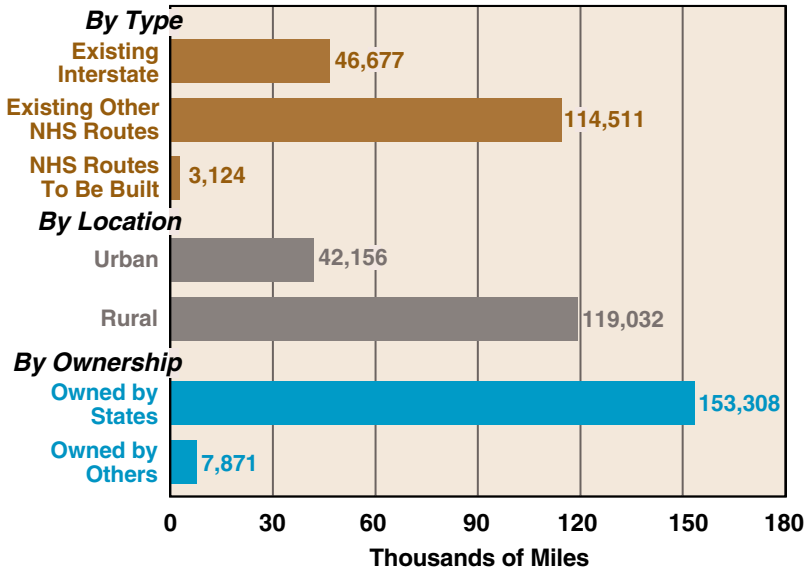
**NHS MILEAGE**



**NHS TRAVEL**



NATIONAL HIGHWAY SYSTEM



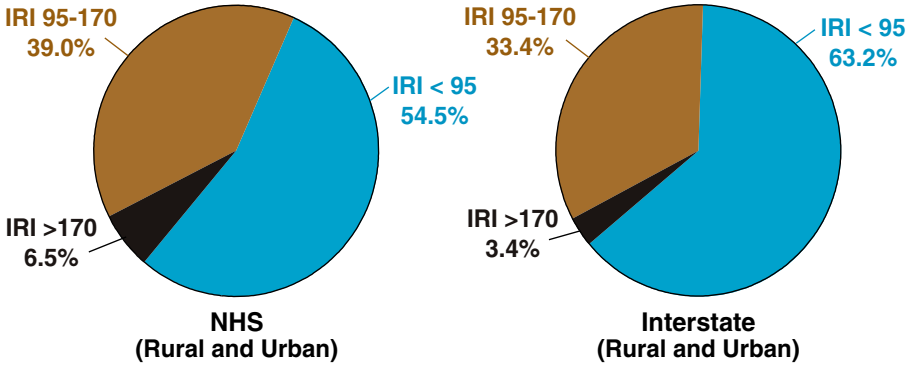
Of the 161,188 NHS miles, 29% is made up of the Interstate System (IS). The NHS encompasses all of the Strategic Highway Network (STRAHNET), a system of national defense roadways that includes the IS and approximately 15,000 miles of non-IS mileage.

INTERMODAL FACILITY CONNECTIONS

Facility Type	Number of Facilities	Associated Mileage
Airport	230	456
Intercity Bus	100	61
Ferry	59	293
Truck/Pipeline	63	120
Multipurpose	42	35
Port	278	531
Truck/Rail	211	360
Amtrak	71	72
Public Transit	389	335
<b>TOTALS</b>	<b>1,443</b>	<b>2,263</b>

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.

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 instrument-based rating system that has been used as an indicator of pavement performance as measured by rideability. Pavements with IRI<170 can be considered to have an acceptable ride quality, while those with an IRI< 95 can be considered to have a good or very good ride quality.

BRIDGE CONDITIONS

Conditions	NHS <sup>1</sup>		Other FA Highways <sup>2</sup>		Non-FA Highways <sup>3</sup>		Total Highways	
	No.	%	No.	%	No.	%	No.	%
Structurally Deficient	8,177	6.3	20,095	11.7	59,878	21.1	88,150	15.0
Functionally Obsolete	21,712	16.7	24,627	14.3	35,561	12.6	81,900	14.0
Non-Deficient or Obsolete	100,335	77.0	127,449	74.0	187,708	66.3	415,492	71.0
<b>Total Bridges in Inventory</b>	<b>130,224</b>	<b>100.0</b>	<b>172,171</b>	<b>100.0</b>	<b>283,147</b>	<b>100.0</b>	<b>585,542</b>	<b>100.0</b>

<sup>1</sup>Includes all Interstate and other principal arterials.  
<sup>2</sup>Includes all other highways except minor collectors and local roads and streets.  
<sup>3</sup>Includes rural minor collectors and local roads and streets.

NOTE: FA = Federal aid.  
 SOURCE: Federal Highway Administration, Office of Engineering, National Bridge 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.

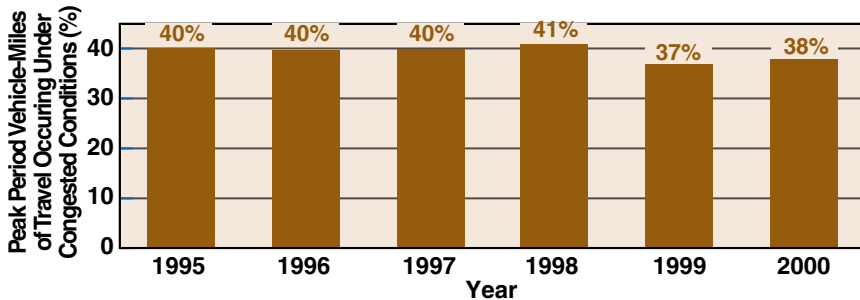
A structurally deficient bridge is closed or restricted to light vehicles only because of deteriorated structural components. Structurally deficient bridges are not necessarily unsafe. Strict observance of signs limiting traffic or speed on bridges will generally provide adequate safeguards for those 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.

# The National Highway System

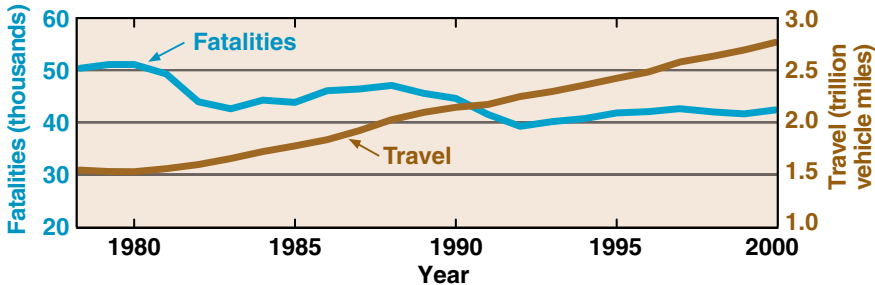


TRAVEL CONGESTION ON URBAN PRINCIPAL ARTERIAL ROADS



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.

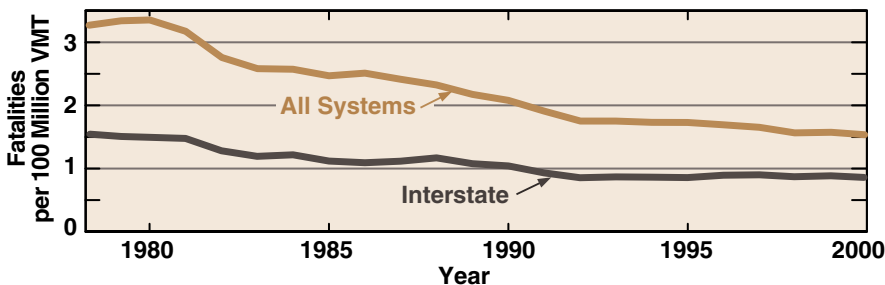
MOTOR-VEHICLE FATALITIES AND TRAVEL



SOURCE: National Highway Traffic Safety 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



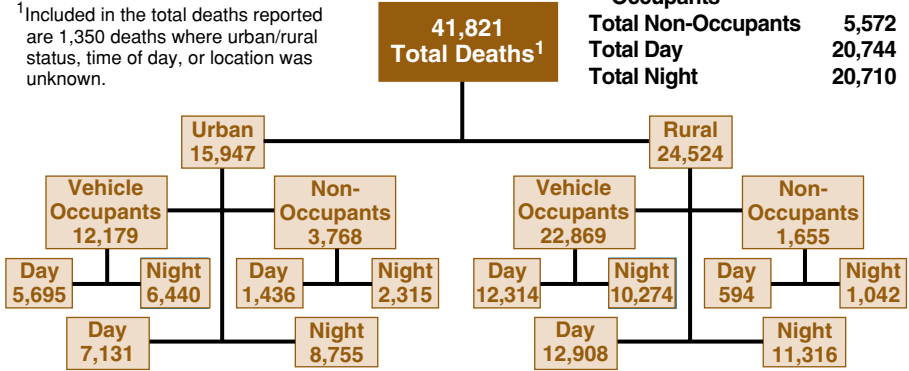
SOURCE: National Highway Traffic Safety Administration, *Fatality Analysis Reporting System*.

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.

PRINCIPAL CLASSES OF MOTOR-VEHICLE DEATHS

Total Vehicle Occupants	36,249
Total Non-Occupants	5,572
Total Day	20,744
Total Night	20,710

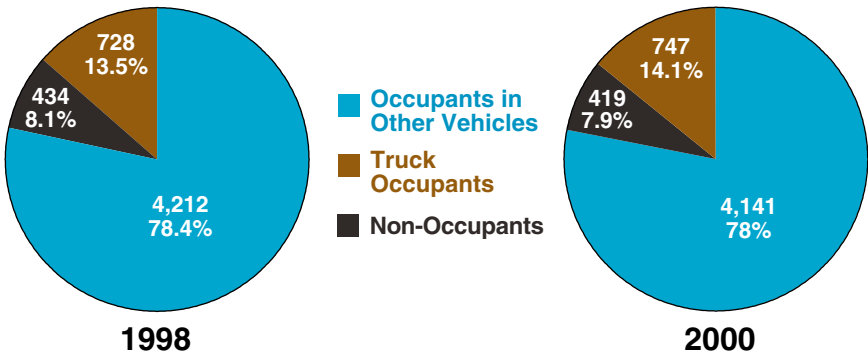
<sup>1</sup>Included in the total deaths reported are 1,350 deaths where urban/rural status, time of day, or location was unknown.



SOURCE: National 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<sup>1</sup>



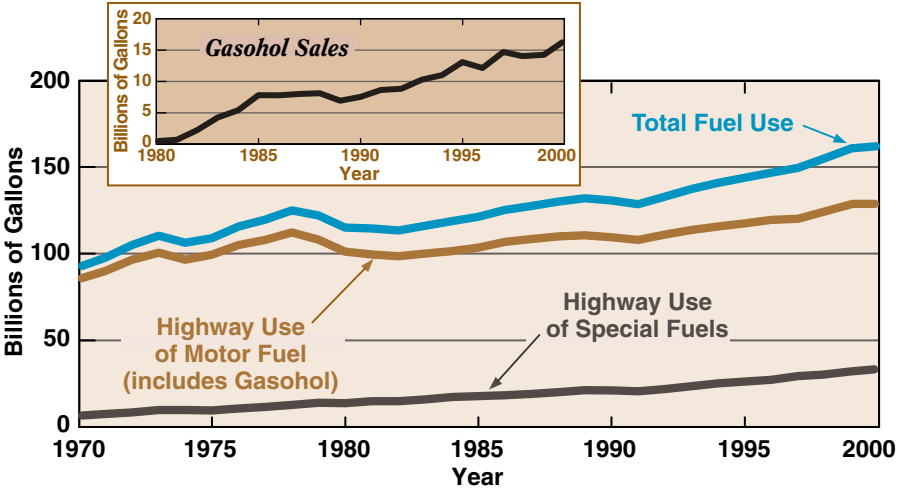
<sup>1</sup>Medium/Heavy Truck—Single-unit truck with gross vehicle weight greater than 10,000 lb., tractor-trailer combination, truck with cargo trailer(s), or truck-tractor pulling no trailer.

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.

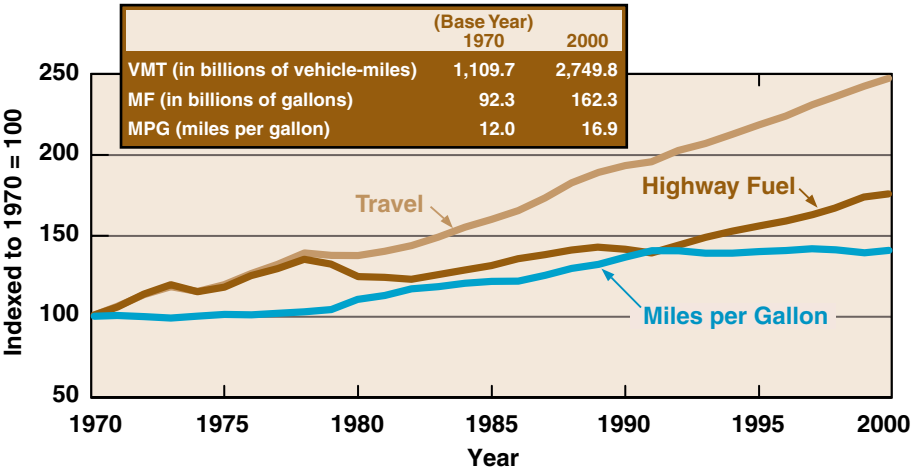
HIGHWAY FUEL USE



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.

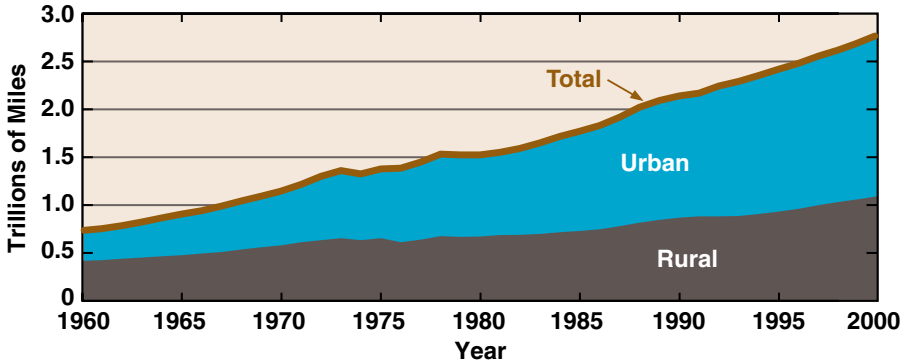
VEHICLE-MILES OF TRAVEL, HIGHWAY MOTOR-FUEL USE AND MILES PER GALLON OF FUEL FOR ALL VEHICLES



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.



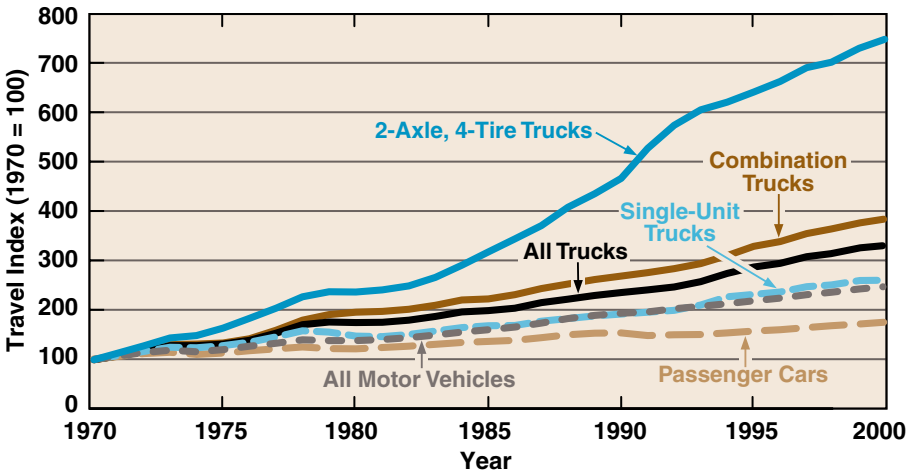
ANNUAL VEHICLE-MILES OF TRAVEL



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.

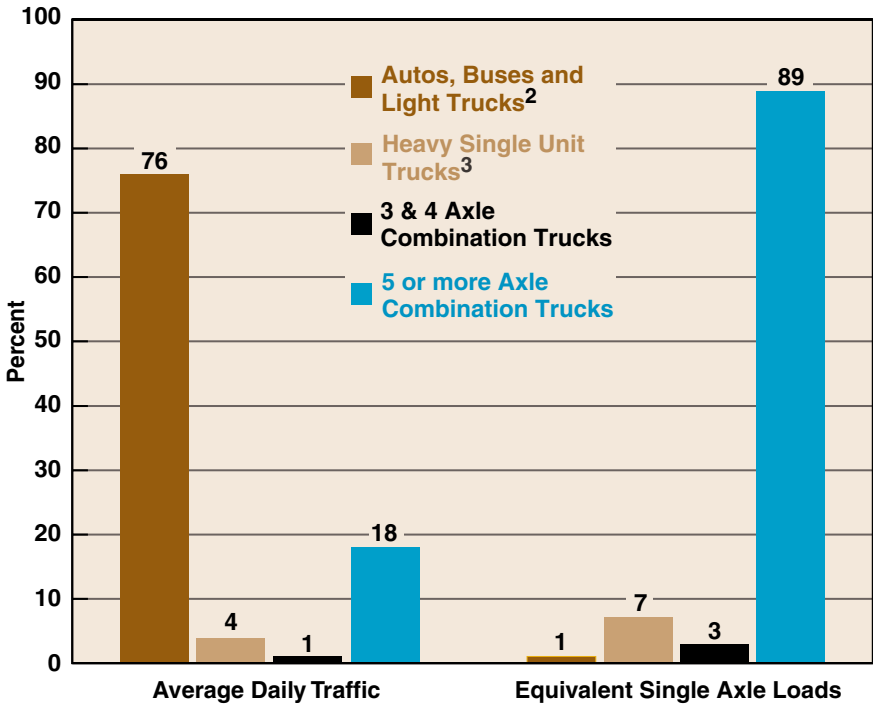
Annual travel on roads and streets in urban areas accounted for 1.7 trillion vehicle-miles in 2000 or 61% of total travel compared to 44% in 1960. Compared to the urban travel growth of 45% in the 1980's, rural travel grew 27%. Much of the urban travel growth can be attributed to expanding urban boundaries.

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<sup>1</sup> ON THE RURAL INTERSTATE SYSTEM AS A PERCENT OF TOTAL)**



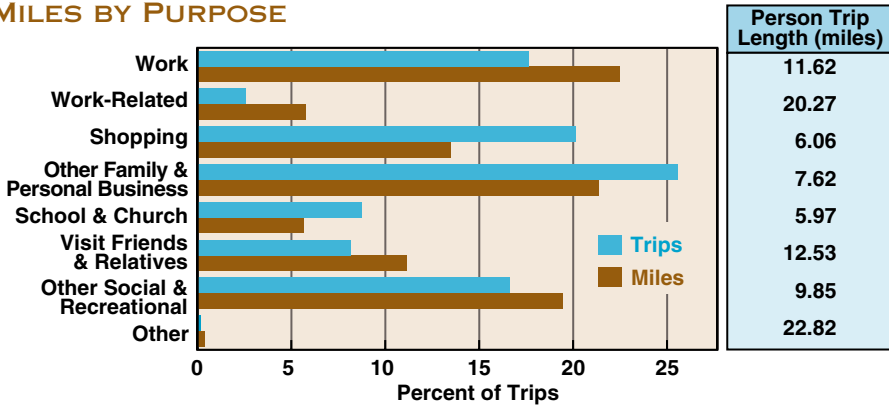
<sup>1</sup>Equivalent axle loads provide a means of measuring vehicle wear on pavements by relating them to an 80 kilonewton (18,000 pound) single axle load.

<sup>2</sup>All 2-axle, 4-tire trucks. Includes pickup trucks, vans, and other vehicles (such as campers, motor homes, etc.).

<sup>3</sup>All vehicles on a single frame having either 2 axles 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%.

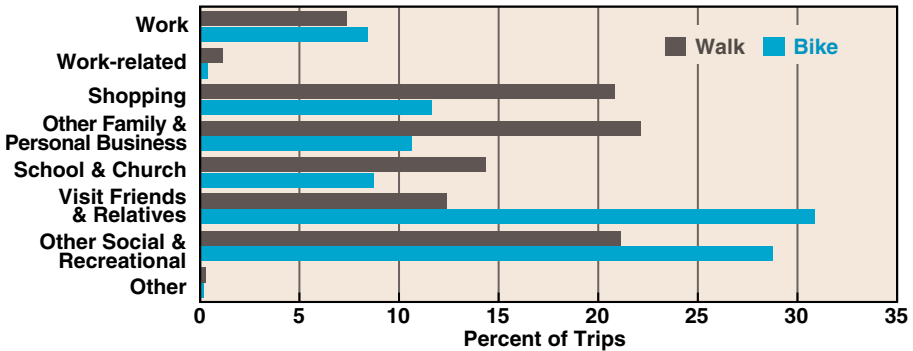
## DISTRIBUTION OF PERSON TRIPS AND PERSON MILES BY PURPOSE



SOURCE: Federal Highway Administration, 1995 Nationwide Personal Transportation 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, 1995 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.

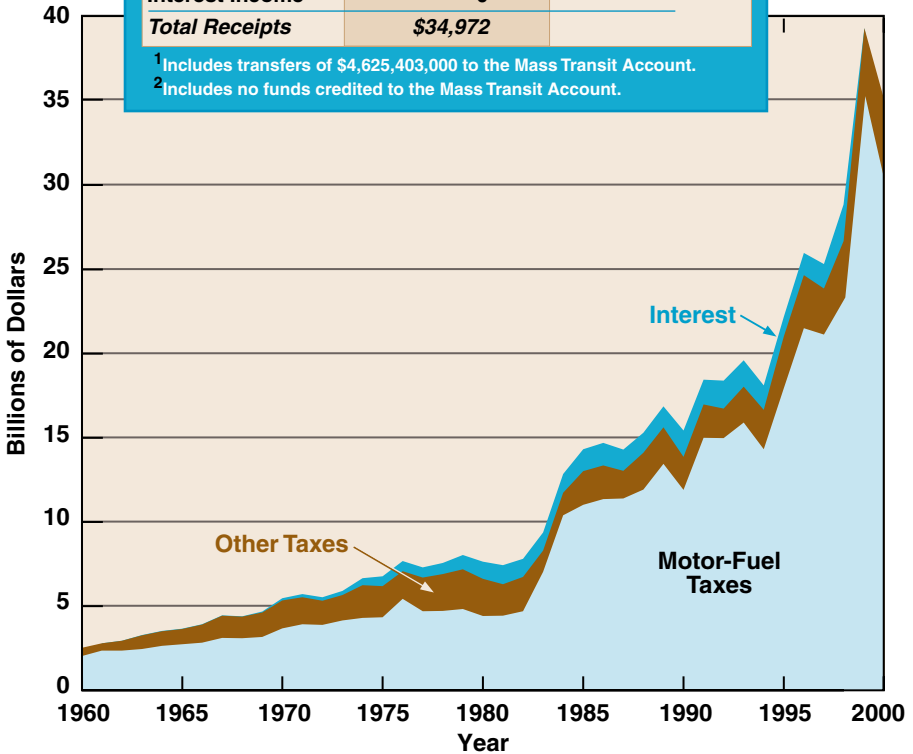
## FEDERAL HIGHWAY TRUST FUND RECEIPTS

Federal Highway Trust Fund Net Receipts – FY 2000

Source	Receipts (\$1,000,000)	Percent of Total
Motor Fuel	\$30,288 <sup>1</sup>	86.6
Gasoline	20,802	59.5
Gasohol	1,609	4.6
Diesel and Other	7,877	22.5
Trucks and Trailers	3,321	9.5
Heavy Vehicle Use	921	2.6
Tires	442	1.3
Total Tax Receipts	34,972	100.0
Interest Income	0 <sup>2</sup>	
<b>Total Receipts</b>	<b>\$34,972</b>	

<sup>1</sup>Includes transfers of \$4,625,403,000 to the Mass Transit Account.

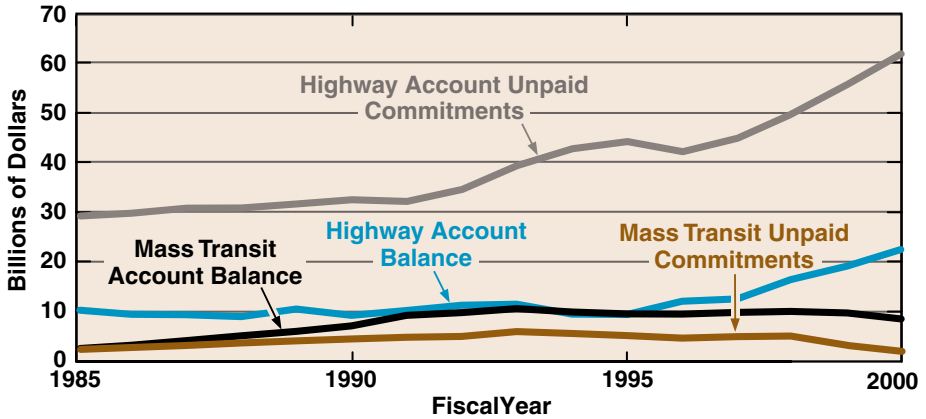
<sup>2</sup>Includes no funds credited to the Mass Transit Account.



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

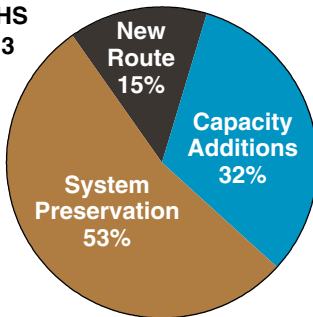


NOTE: The Highway Trust Fund was established July 1, 1956; the Mass Transit Account was established April 1, 1983.

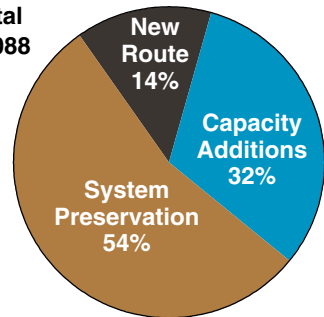
The balance in the Highway Trust Fund has grown from \$12.9 billion at the end of FY 1985 to \$31.1 billion at the end of FY 2000. At the end of FY 2000, the Highway Account held a balance of \$22.6 billion and had unpaid commitments of \$61.9 billion. Funds for highway projects are committed when the 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)

**2000 on NHS**  
\$7,944,313



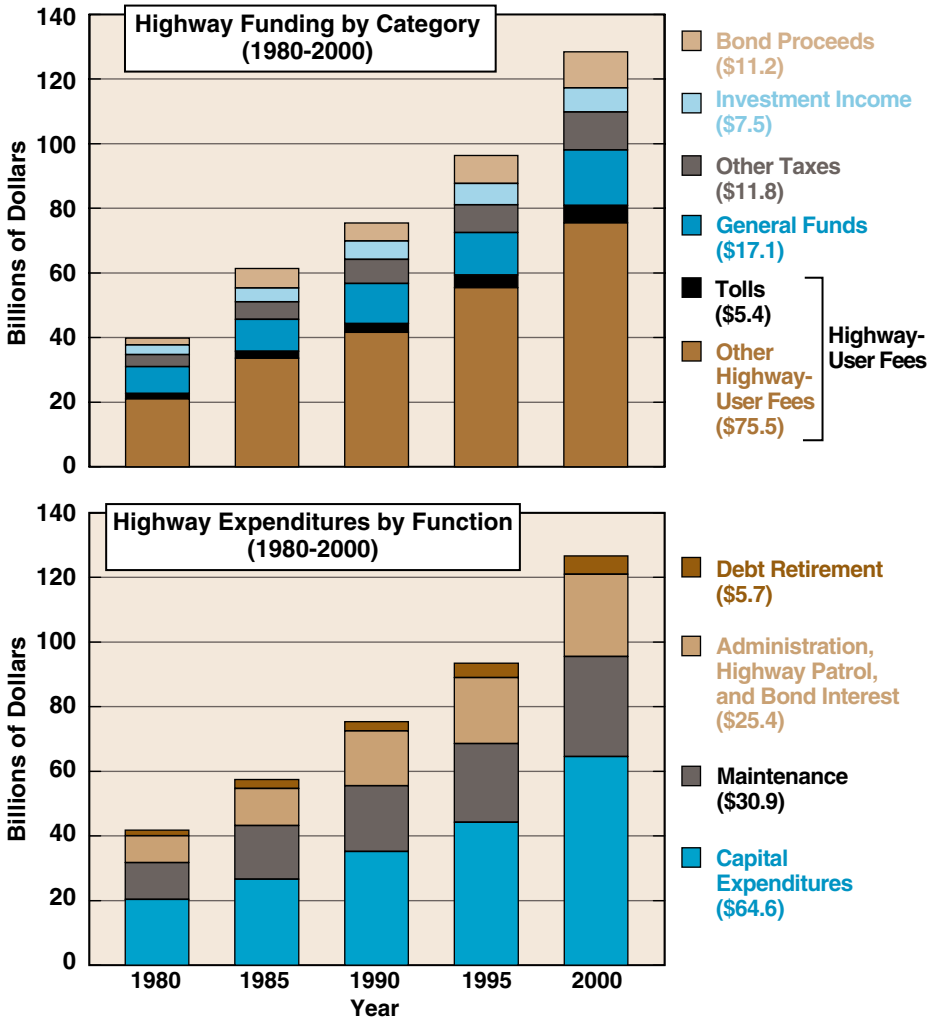
**2000 Total**  
\$16,193,088



NOTE: Capacity 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.

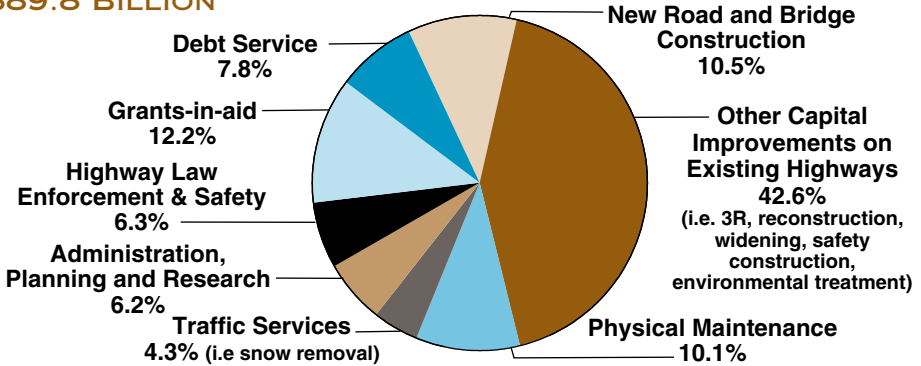
## HIGHWAY FUNDING BY CATEGORY & HIGHWAY EXPENDITURES BY FUNCTION



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.

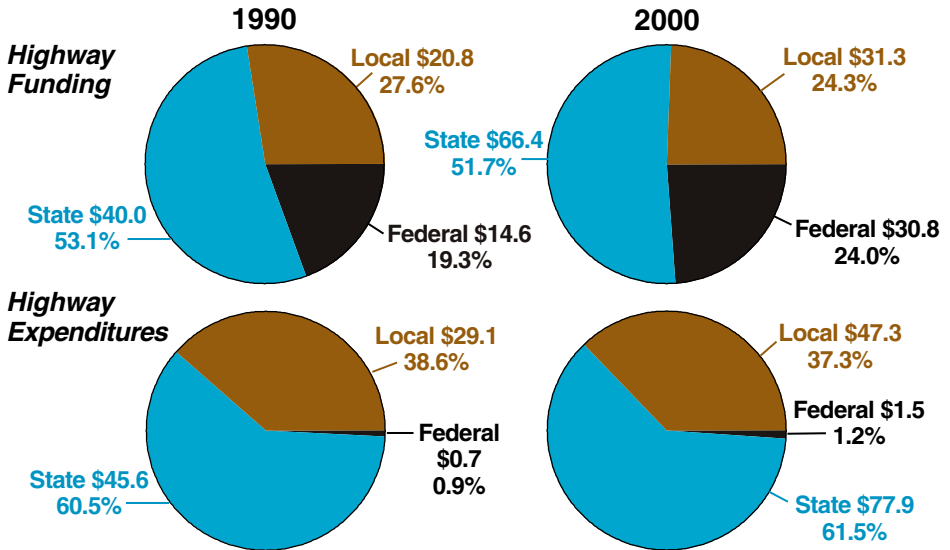
Capital expenditures currently account for 51.0% of highway expenditures compared to 48.6% in 1980; maintenance accounts for 24.4% compared to 27.4% in 1980. Expenditures for administration, highway patrol, and bond interest account for a slightly increased share of total expenditures — 20.1% in 2000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

## TOTAL STATE DISBURSEMENTS FOR HIGHWAYS IN 2000 — \$89.8 BILLION



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%).

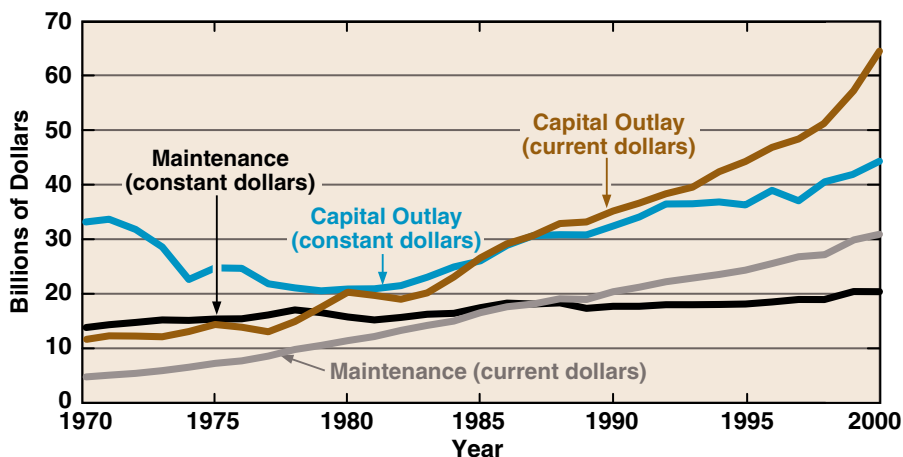
## HIGHWAY FUNDING AND EXPENDITURES BY GOVERNMENTAL UNIT (BILLIONS OF DOLLARS)



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<sup>1</sup>

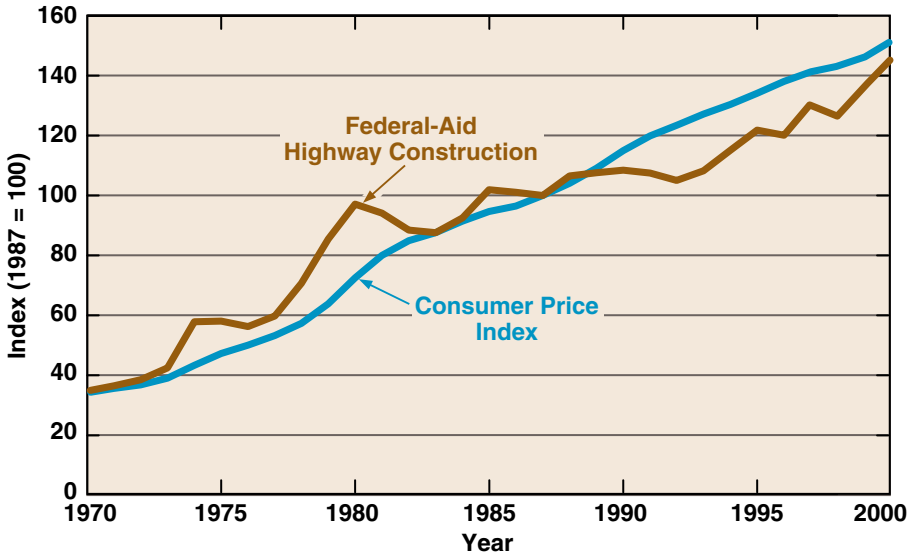
User Fee Type	Rate on October 1, 1997
<b>Motor Fuels</b>	
Gasoline	18.4¢ per gallon
Gasohol (10% blend)	13.0¢ per gallon
Diesel Fuel	24.4¢ per gallon
Liquefied Petroleum Gases	13.6¢ per gallon
<b>Tires</b>	0-40 pounds, no tax over 40 - 70 pounds, 15¢ per pound in excess of 40 over 70 - 90 pounds, \$4.50 plus 30¢ per pound in excess of 70 over 90 pounds, \$10.50 plus 50¢ per pound in excess of 90
<b>Truck and Trailer Sales</b>	12% of retailer's sales price for trucks over 33,000 pounds gross vehicle weight (GVW) and trailers over 26,000 pounds GVW
<b>Heavy Vehicle Use</b>	Annual Tax: Trucks 55,000 - 75,000 pounds GVW, \$100 plus \$22 for each 1,000 pounds (or fraction thereof) in excess of 55,000 pounds Trucks over 75,000 pounds GVW, \$550

<sup>1</sup> 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.



## 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<sup>1</sup> (IN MILLIONS OF DOLLARS)

Selected Programs	1998 <sup>2</sup>	1999 <sup>2</sup>	2000 <sup>2</sup>
Interstate Maintenance	3,294	3,759	3,795
National Highway System	3,989	4,607	4,651
Surface Transportation Program	4,654	5,377	5,428
Congestion Mitigation and Air Quality Improvement	1,163	1,311	1,324
Appalachian Development Highway System	-	443	443
Recreation Trails	30	39	49
Bridge Replacement and Rehabilitation	2,845	3,211	3,242
Metropolitan Planning	162	187	189
Revenue Aligned Budget Authority	-	-	1,358
Minimum Guarantee	5,386	6,387	6,719
<b>Total<sup>3</sup></b>	<b>\$21,523</b>	<b>\$25,321</b>	<b>\$27,198</b>

<sup>1</sup> Fiscal year starts October 1 and ends September 30.

<sup>2</sup> Apportioned pursuant to the Transportation Equity Act for the 21st Century (as amended by the TEA 21 Restoration Act) of 1998.

<sup>3</sup> Does not include funds from the following programs: emergency relief, highway-related safety, Federal lands highway programs, mandated projects, national magnetic levitation development, high-speed ground transportation development, and intelligent vehicle-highway system, among others. These funds are allocated 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.

## SELECTED STATISTICS BY STATE

State	Resident Population (thousands) (HS '00, Table DL-1C)	Driving-Age Population (thousands) (HS '00, Table DL-1C)	Highway Motor Fuel Use (thousands of gallons) (HS '00, Table MF-21)	Total Lane Miles (HS '00, Table HM-48)	Total Road and Street Mileage (HS '00, Table HM-20)	Annual Vehicle-Miles of Travel (millions) (HS '00, Table VM-2)	Total Highway Fatalities (HS '00, Table FH-10)	Fatalities (per 100 million VMT) (HS '00, Table FH-10)	State Motor Fuel Taxes and Other Related Receipts (HS '00, Table MF-1)	Total Highway Capital Outlay (thousands) (HS '00, Table SF-2)	Total Disbursements for Highways (thousands) (HS '00, Table SF-2)	Payments into the Federal HTF (thousands) (HS '00, Table FE-221)	Apportionments from the Federal HTF (thousands) (HS '00, Table FE-221)
Alabama	4,447	3,451	3,148,522	195,298	94,311	56,534	995	1.76	579,812	719,722	1,246,223	638,977	589,698
Alaska	626	458	338,750	25,991	12,823	4,613	103	2.23	27,817	321,612	501,359	65,940	378,674
Arizona	5,130	3,908	2,999,157	118,437	55,195	49,768	1,036	2.08	565,982	960,137	2,040,266	583,068	494,747
Arkansas	2,673	2,073	1,959,484	198,161	97,600	29,167	652	2.24	398,717	468,053	817,387	415,571	397,312
California	33,871	25,599	17,017,620	371,689	168,076	306,649	3,753	1.22	2,945,156	2,721,334	6,750,225	3,025,732	2,795,250
Colorado	4,301	3,322	2,450,177	176,993	85,409	41,771	681	1.63	521,721	730,129	1,391,910	423,763	367,548
Connecticut	3,405	2,651	1,697,878	44,474	20,845	30,756	342	1.11	545,671	568,931	1,304,378	312,507	439,532
Delaware	783	610	429,413	12,558	5,779	8,240	123	1.49	103,965	297,648	594,641	79,594	128,749
Dist. of Columbia	572	469	192,440	3,774	1,425	3,498	49	1.40	31,727	164,529	244,216	33,728	117,381
Florida	15,982	12,742	8,648,333	253,349	116,649	152,136	2,999	1.97	1,612,070	2,448,336	4,207,948	1,554,162	1,390,224
Georgia	8,186	6,251	6,030,954	241,087	114,727	105,010	1,541	1.47	431,243	1,106,272	1,567,212	1,189,533	1,023,963
Hawaii	1,211	949	417,929	9,255	4,281	8,543	131	1.53	68,872	148,304	272,268	69,351	154,425
Idaho	1,293	969	847,974	95,178	46,456	13,534	276	2.04	202,874	260,689	491,604	178,492	253,889
Illinois	12,419	9,530	6,293,151	288,879	138,372	102,866	1,418	1.38	1,231,728	1,836,253	3,446,580	1,053,743	986,434
Indiana	6,080	4,682	4,371,604	193,637	93,608	70,862	875	1.23	746,424	1,035,129	1,932,198	767,408	688,839
Iowa	2,926	2,281	1,993,887	232,920	113,377	29,433	445	1.51	394,458	696,081	1,493,639	353,281	345,026
Kansas	2,688	2,058	1,676,445	274,014	134,582	28,130	461	1.64	358,989	697,463	1,206,470	346,783	338,426
Kentucky	4,041	3,161	2,850,498	164,231	79,267	46,803	820	1.75	439,785	1,078,252	1,650,763	577,037	525,325
Louisiana	4,468	3,395	2,742,677	127,883	60,900	40,849	937	2.29	544,329	767,993	1,300,553	527,753	464,400
Maine	1,274	1,010	847,317	46,346	22,670	14,190	169	1.19	174,259	224,728	487,571	162,787	153,306
Maryland	5,296	4,085	2,889,534	67,017	30,494	50,174	588	1.17	643,009	594,511	1,599,413	541,915	476,674
Massachusetts	6,349	5,008	3,122,005	74,505	35,311	52,796	433	0.82	644,389	2,238,138	3,524,344	545,690	536,063
Michigan	9,938	7,628	5,822,391	256,155	121,979	97,792	1,382	1.41	1,047,898	2,136,479	2,747,958	1,074,219	961,800
Minnesota	4,919	3,783	3,154,032	271,176	132,250	52,601	625	1.19	595,997	697,358	1,692,476	403,760	439,011
Mississippi	2,844	2,160	2,035,655	151,701	73,498	35,536	949	2.67	397,597	697,252	1,039,192	428,679	365,747
Missouri	5,595	4,292	3,977,442	251,209	123,039	67,083	1,157	1.72	674,002	1,006,426	1,818,178	754,241	719,347
Montana	902	701	660,133	141,978	69,567	9,882	237	2.40	195,390	300,018	473,807	140,430	301,755
Nebraska	1,711	1,315	1,188,911	188,273	92,791	18,081	276	1.53	307,043	383,934	744,905	241,167	224,419
Nevada	1,998	1,538	1,188,724	79,050	37,854	17,639	323	1.83	305,124	424,280	650,984	215,455	228,039
New Hampshire	1,235	961	759,891	31,366	15,211	12,021	126	1.05	136,478	189,689	387,468	137,452	148,580
New Jersey	8,414	6,545	4,748,655	78,163	36,022	67,446	731	1.08	525,253	1,994,253	4,502,639	865,079	781,862
New Mexico	1,819	1,370	1,285,461	124,841	59,927	22,760	430	1.89	238,882	463,011	1,162,422	269,496	307,801
New York	18,976	14,797	6,516,320	239,035	112,783	129,057	1,458	1.13	1,406,054	2,582,541	5,306,825	1,249,954	1,485,648
North Carolina	8,049	6,291	5,088,090	209,335	99,813	89,504	1,472	1.64	1,054,849	1,464,209	2,621,330	918,638	825,844
North Dakota	642	502	483,722	175,349	86,609	7,217	86	1.19	102,201	180,072	384,538	101,377	194,296
Ohio	11,353	8,790	6,570,881	248,722	116,964	105,898	1,351	1.28	1,484,302	1,650,422	3,350,560	1,158,013	1,006,181
Oklahoma	3,450	2,666	2,478,132	232,710	112,634	43,355	652	1.50	414,272	809,152	1,417,329	500,974	446,540
Oregon	3,421	2,673	1,919,249	136,866	66,902	35,010	451	1.29	385,359	357,751	1,010,377	381,740	384,990
Pennsylvania	12,281	9,694	6,323,548	249,169	119,642	102,337	1,520	1.49	1,698,159	2,323,646	4,516,621	1,238,907	1,449,850
Rhode Island	1,048	827	450,802	12,812	6,052	8,359	80	0.96	134,571	129,527	255,637	82,095	180,896
South Carolina	4,012	3,115	2,831,976	136,123	64,921	45,538	1,065	2.34	467,948	502,049	970,218	554,376	483,066
South Dakota	754	577	562,591	169,060	83,471	8,432	173	2.05	116,489	346,269	465,690	101,194	211,222
Tennessee	5,689	4,446	3,759,136	183,640	87,419	65,732	1,306	1.99	777,581	836,144	1,439,811	759,820	685,545
Texas	20,851	15,618	13,252,841	639,853	301,035	220,064	3,769	1.71	2,700,214	3,421,427	5,664,524	2,573,239	2,199,108
Utah	2,233	1,599	1,333,773	87,435	41,852	22,597	373	1.65	314,163	691,200	1,072,340	249,715	283,695
Vermont	608	479	403,551	29,359	14,273	6,811	79	1.16	87,255	138,578	287,124	70,411	133,812
Virginia	7,078	5,529	4,575,296	152,328	70,393	74,801	930	1.24	774,161	1,270,665	2,678,129	867,264	775,292
Washington	5,894	4,553	3,180,398	167,211	80,209	53,330	632	1.19	725,356	704,342	1,871,259	588,415	544,878
West Virginia	1,808	1,455	1,091,359	76,671	37,277	19,242	410	2.13	295,148	673,882	1,170,434	220,408	329,354
Wisconsin	5,363	4,157	3,061,051	231,340	112,359	57,266	799	1.40	795,105	886,798	1,663,266	602,560	572,783
Wyoming	493	382	590,437	56,780	27,326	8,090	152	1.88	100,435	270,786	395,725	151,317	228,408
U.S. Total	281,399	217,105	162,260,196	8,223,386	3,936,229	2,749,803	41,821	1.52	31,470,283	47,616,404	89,832,934	30,347,210	29,945,654

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

## POPULATION, DRIVERS, VEHICLES, FUEL AND TRAVEL BY STATE

State	Total Registered Vehicles (HS '00, Table MV-1)	Total Licensed Drivers (HS '00, Table DL-22)	Licensed Drivers per 1,000 Driving-Age Population	Motor Vehicles per 1,000 Population	Motor Vehicles per Licensed Driver	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
Alabama	3,960,149	3,521,444	1,020	891	1.12	1.12	795	17.96	14,276	12,713	16,054
Alaska	594,399	465,256	1,016	950	1.28	1.05	570	13.62	7,761	7,369	9,915
Arizona	3,794,538	3,433,995	879	740	1.10	1.35	790	16.59	13,116	9,701	14,493
Arkansas	1,840,193	1,947,867	940	688	0.94	1.45	1065	14.89	15,850	10,912	14,974
California	27,697,923	21,243,939	830	818	1.30	1.22	614	18.02	11,071	9,053	14,435
Colorado	3,626,012	3,107,258	935	843	1.17	1.19	676	17.05	11,520	9,712	13,443
Connecticut	2,853,449	2,652,593	1,001	838	1.08	1.19	595	18.11	10,779	9,033	11,595
Delaware	630,446	556,688	913	805	1.13	1.24	681	19.19	13,070	10,524	14,802
Dist. of Columbia	242,081	348,216	742	423	0.70	2.36	795	18.18	14,450	6,115	10,045
Florida	11,781,010	12,853,428	1,009	737	0.92	1.36	734	17.59	12,914	9,519	11,836
Georgia	7,155,006	5,550,176	888	874	1.29	1.14	843	17.41	14,676	12,828	18,920
Hawaii	737,551	769,383	811	609	0.96	1.64	567	20.44	11,583	7,055	11,104
Idaho	1,177,700	883,546	912	911	1.33	1.10	720	15.96	11,492	10,467	15,318
Illinois	8,972,584	7,961,046	835	722	1.13	1.38	701	16.35	11,464	8,283	12,921
Indiana	5,570,942	3,976,241	849	916	1.40	1.09	785	16.21	12,720	11,655	17,821
Iowa	3,106,223	1,952,508	856	1,062	1.59	0.94	642	14.76	9,475	10,059	15,074
Kansas	2,296,135	1,908,117	927	854	1.20	1.17	730	16.78	12,251	10,465	14,742
Kentucky	2,826,403	2,694,469	852	699	1.05	1.43	1009	16.42	16,559	11,582	17,370
Louisiana	3,556,982	2,759,120	813	796	1.29	1.26	771	14.89	11,484	9,143	14,805
Maine	1,024,096	920,235	911	804	1.11	1.24	827	16.75	13,856	11,138	15,420
Maryland	3,847,538	3,382,451	828	726	1.14	1.38	751	17.36	13,041	9,474	14,834
Massachusetts	5,265,399	4,489,695	897	829	1.17	1.21	593	16.91	10,027	8,316	11,759
Michigan	8,435,721	6,925,246	908	849	1.22	1.18	690	16.80	11,593	9,840	14,121
Minnesota	4,629,940	2,940,789	777	941	1.57	1.06	681	16.68	11,361	10,693	17,887
Mississippi	2,289,411	2,007,746	930	805	1.14	1.24	889	17.46	15,522	12,495	17,699
Missouri	4,579,629	3,856,271	898	819	1.19	1.22	869	16.87	14,648	11,990	17,396
Montana	1,026,226	678,899	968	1,138	1.51	0.88	643	14.97	9,629	10,956	14,556
Nebraska	1,618,933	1,195,219	909	946	1.35	1.06	734	15.21	11,168	10,568	15,128
Nevada	1,219,725	1,370,643	891	610	0.89	1.64	975	14.84	14,461	8,828	12,869
New Hampshire	1,051,751	929,630	967	852	1.13	1.17	723	15.82	11,430	9,734	12,931
New Jersey	6,390,031	5,654,973	864	759	1.13	1.32	743	14.20	10,555	8,016	11,927
New Mexico	1,528,510	1,239,043	904	840	1.23	1.19	841	17.71	14,890	12,512	18,369
New York	10,234,531	10,871,344	735	539	0.94	1.85	637	19.81	12,610	6,801	11,871
North Carolina	6,222,503	5,690,494	905	773	1.09	1.29	818	17.59	14,384	11,120	15,729
North Dakota	693,860	458,944	914	1,081	1.51	0.93	697	14.92	10,401	11,241	15,725
Ohio	10,467,476	8,205,524	934	922	1.28	1.08	628	16.12	10,117	9,328	12,906
Oklahoma	3,014,491	2,295,036	861	874	1.31	1.14	822	17.50	14,382	12,567	18,891
Oregon	3,021,574	2,495,059	933	883	1.21	1.13	635	18.24	11,587	10,234	14,032
Pennsylvania	9,259,967	8,229,490	849	754	1.13	1.33	683	16.18	11,052	8,333	12,435
Rhode Island	759,570	654,035	791	725	1.16	1.38	593	18.54	11,005	7,976	12,781
South Carolina	3,094,729	2,842,553	913	771	1.09	1.30	915	16.08	14,715	11,350	16,020
South Dakota	792,509	543,817	942	1,051	1.46	0.95	710	14.99	10,640	11,183	15,505
Tennessee	4,819,799	4,251,228	956	847	1.13	1.18	780	17.49	13,638	11,554	15,462
Texas	14,070,096	13,462,023	862	675	1.05	1.48	942	16.61	15,641	10,554	16,347
Utah	1,627,606	1,463,366	915	729	1.11	1.37	819	16.94	13,884	10,120	15,442
Vermont	514,883	506,085	1,057	847	1.02	1.18	784	16.88	13,228	11,202	13,458
Virginia	6,046,127	4,836,993	875	854	1.25	1.17	757	16.35	12,372	10,568	15,464
Washington	5,115,866	4,154,501	912	868	1.23	1.15	622	16.77	10,424	9,048	12,837
West Virginia	1,441,735	1,347,207	926	797	1.07	1.25	757	17.63	13,346	10,643	14,283
Wisconsin	4,365,525	3,770,453	907	814	1.16	1.23	701	18.71	13,118	10,678	15,188
Wyoming	585,690	370,740	971	1,188	1.58	0.84	1008	13.70	13,813	16,410	21,821
U.S. Total	221,475,173	190,625,023	878	787	1.16	1.27	733	16.95	12,416	9,772	14,425

HS '00 = Highway Statistics, 2000.

## 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 Highway Mileage	Total Freeway/ Expressway 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
	State	State(s)											
New York-Northeastern NJ	NY	NJ	17,089	3,962	4,313	37,623	1,130	66.1	263,905	101,299	15.4	38.4	89,639
Los Angeles	CA		12,384	2,231	5,551	26,949	652	52.7	280,793	126,498	22.7	45.1	193,875
Chicago-Northwestern IN <sup>1</sup>	IL	IN	7,702	2,730	2,821	23,764	477	62.0	158,240	48,276	20.5	30.5	101,167
Philadelphia <sup>1</sup>	PA	NJ	4,068	1,347	3,020	13,417	347	85.4	77,005	24,483	18.9	31.8	70,457
San Francisco-Oakland	CA		4,022	1,203	3,343	9,316	330	82.0	90,277	47,982	22.4	53.1	145,461
Detroit	MI		3,836	1,304	2,942	13,808	283	73.8	92,359	31,125	24.1	33.7	109,882
Dallas-Fort Worth	TX		3,746	1,712	2,188	17,830	594	158.5	116,548	49,197	31.1	42.2	82,872
Washington	DC	MD, VA	3,617	999	3,621	10,329	306	84.6	82,959	34,533	22.9	41.6	112,852
Atlanta	GA		2,977	1,757	1,694	13,145	306	102.9	100,693	42,488	33.8	42.2	138,701
Boston	MA		2,917	1,138	2,563	10,148	211	72.3	59,361	22,890	20.3	38.6	108,468
San Diego	CA		2,653	733	3,619	5,965	246	92.8	62,809	33,745	23.7	53.7	137,029
Houston	TX		2,487	1,537	1,618	15,251	368	148.0	91,883	39,195	36.9	42.7	106,458
Minneapolis-St. Paul	MN		2,475	1,192	2,076	10,919	316	127.8	60,720	27,094	24.5	44.6	85,640
Miami-Hialeah	FL		2,270	353	6,431	5,607	120	53.1	43,577	13,584	19.2	31.2	112,782
Phoenix	AZ		2,138	1,054	2,028	10,232	163	76.4	58,405	19,424	27.3	33.3	118,882
Baltimore	MD		2,107	712	2,959	6,608	278	131.9	45,021	22,659	21.4	50.3	81,550
St. Louis	MO	IL	2,044	1,124	1,819	8,064	320	156.7	58,761	25,739	28.7	43.8	80,362
Seattle	WA		1,994	844	2,363	7,101	241	121.0	51,430	24,008	25.8	46.7	99,474
Denver	CO		1,993	720	2,768	7,007	209	104.6	43,997	16,904	22.1	38.4	81,063
Tampa-St Pete-Clearwater	FL		1,953	650	3,005	7,539	124	63.7	44,473	8,356	22.8	18.8	67,181
Cleveland	OH		1,783	838	2,128	5,530	227	127.3	37,800	17,284	21.2	45.7	76,169
San Jose	CA		1,626	365	4,455	4,111	126	77.4	38,343	16,529	23.6	43.1	131,322
Fort Lauderdale-Hollywood-Pompano Beach	FL		1,601	327	4,896	4,207	109	67.8	37,335	12,832	23.3	34.4	118,225
Pittsburgh	PA		1,569	1,086	1,445	8,441	283	180.5	35,632	11,128	22.7	31.2	39,295
Milwaukee	WI		1,532	518	2,958	5,095	111	72.8	31,888	9,701	20.8	30.4	87,013
Norfolk-VA Beach-Newport News	VA		1,507	952	1,583	5,512	173	114.8	34,588	11,269	23.0	32.6	65,150
Kansas City	MO	KS	1,422	1,036	1,373	7,545	374	263.3	41,187	19,307	29.0	46.9	51,566
Sacramento	CA		1,394	383	3,640	4,569	105	75.6	29,724	12,769	21.3	43.0	121,177
Riverside-San Bernardino	CA		1,340	514	2,607	4,735	139	103.9	32,876	16,601	24.5	50.5	119,245
Portland-Vancouver	OR	WA	1,338	469	2,853	5,615	137	102.4	31,517	12,595	23.6	40.0	91,900
San Juan	PR		1,303	274	4,755	2,811	66	50.6	17,415	6,187	13.4	35.5	93,821
Las Vegas	NV		1,256	270	4,652	2,963	77	61.3	24,128	6,848	19.2	28.4	88,954
Cincinnati	OH	KY	1,176	630	1,867	4,887	176	149.6	32,605	15,744	27.7	48.3	89,495
Orlando <sup>1</sup>	FL		1,160	395	2,937	3,610	156	134.9	32,288	9,532	27.8	29.5	60,915
San Antonio	TX		1,143	485	2,357	5,002	211	184.4	33,445	15,775	29.3	47.2	74,837
Buffalo-Niagara Falls	NY		1,112	564	1,972	3,985	139	124.7	21,448	6,365	19.3	29.7	45,900
Oklahoma City	OK		1,083	647	1,674	4,714	150	138.7	25,980	8,932	24.0	34.4	59,444
New Orleans	LA		1,065	270	3,944	3,290	75	70.3	15,414	5,613	14.5	36.4	74,954
West Palm Beach-Boca Raton-Delray Beach	FL		1,041	307	3,391	2,591	87	83.6	25,277	8,368	24.3	33.1	96,167
Columbus	OH		940	476	1,975	3,426	149	158.1	24,731	11,895	26.3	48.1	80,044
Memphis	TN	AR, MS	919	420	2,188	3,369	92	99.8	22,724	6,887	24.7	30.3	75,077
Indianapolis	IN		915	422	2,168	4,228	130	141.8	29,398	11,259	32.1	38.3	86,750
Providence-Pawtucket	RI	MA	907	515	1,761	4,399	120	131.8	20,446	8,465	22.5	41.4	70,833
Jacksonville	FL		869	508	1,711	3,664	156	180.0	24,553	9,836	28.3	40.1	62,896
Salt Lake City	UT		830	353	2,351	3,334	79	94.6	20,396	6,410	24.6	31.4	81,618
Louisville	KY	IN	823	384	2,143	3,763	137	166.9	22,794	10,040	27.7	44.0	73,103
Tulsa	OK		803	305	2,633	2,761	112	139.8	18,006	6,267	22.4	34.8	55,813

<sup>1</sup>Some urbanized area data are inconsistently reported; for example, the Pennsylvania portion of Wilmington, Delaware is reported with Philadelphia; Kissimmee, Florida is reported with Orlando; and the Illinois portions of Aurora, Danville, Elgin, Crystal Lake, Joliet 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 1990 Census data.







U.S. Department of Transportation  
**Federal Highway Administration**

Office of Highway Policy Information

Publication No. FHWA-PL-01-1012  
HPPI-40/10-01(20M)