

OUR NATION'S HIGHWAYS

Selected Facts and Figures

The information in this publication provides a condensed overview of facts and figures about our Nation's highways. It is considered to be of interest to the average citizen. Except where noted, the Federal Highway Administration is the source of the data provided by the States. Unless otherwise stated, we have used 1993 data. For more detailed data on many of the subjects covered, refer to the publication *Highway Statistics*, published annually by the Office of Highway Information Management, Federal Highway Administration.

Cover: Oak Creek Canyon, Arizona

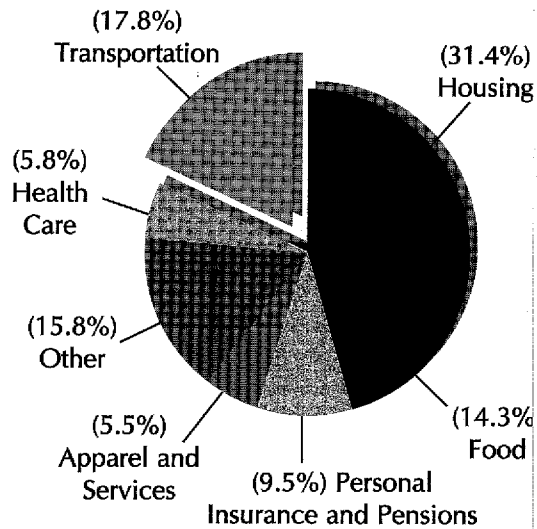
Photo by Rick Harroun

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The Vehicle Fleet	10	The cost-per-mile for operating an intermediate-size vehicle in 1993 was 39.5 cents.
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Transportation Expenditures at the Household Level

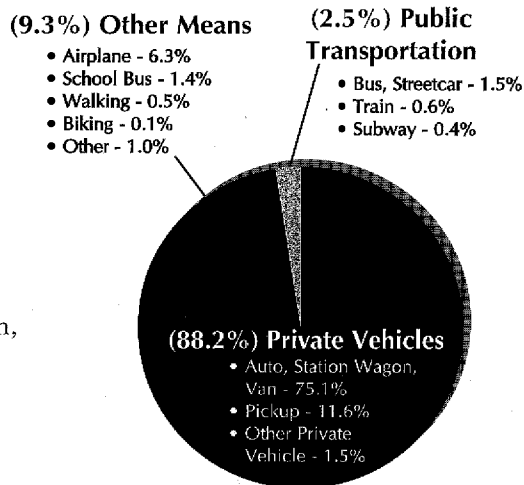
After housing (31.4 percent), transportation (17.8 percent) accounts for the largest single household expenditure, and 60.4 percent of transportation expenditures at the household level are for personal vehicles, gas, and oil.



Source: U.S. Bureau of Labor Statistics, *Consumer Expenditures Survey: Results from 1993*.

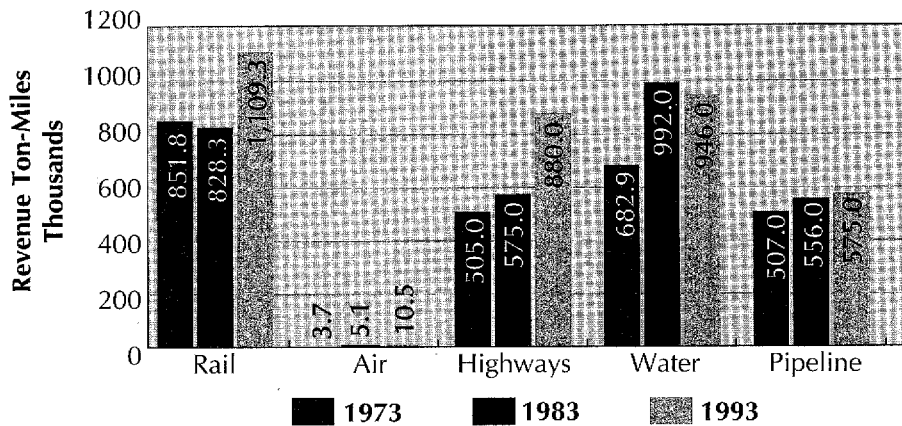
Person-Miles of Travel by Mode of Transportation

The personal motor vehicle (automobile, light truck, van, and motorcycle) is the predominant form of personal transportation. Privately owned vehicles are used for 88.2 percent of all personal travel. When school bus (1.4%) and bus/streetcar (1.5%) are added to the *Private Vehicle* portion, we find that over 90 percent of personal transportation is served by highways.



Source: Federal Highway Administration, *Nationwide Personal Transportation Survey, 1990*.

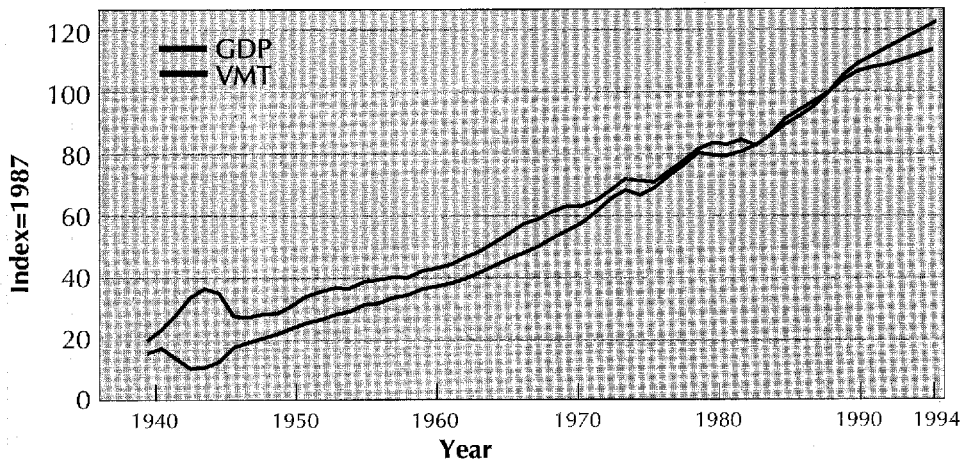
Freight Transportation by Mode



In 1993, the Nation's highway system carried 25 percent of the total revenue ton-miles of freight compared to 19.4 percent in 1983 and 19.8 percent in 1973.

Source: U.S. Department of Transportation, *National Transportation Statistics: Annual Report 1995*.

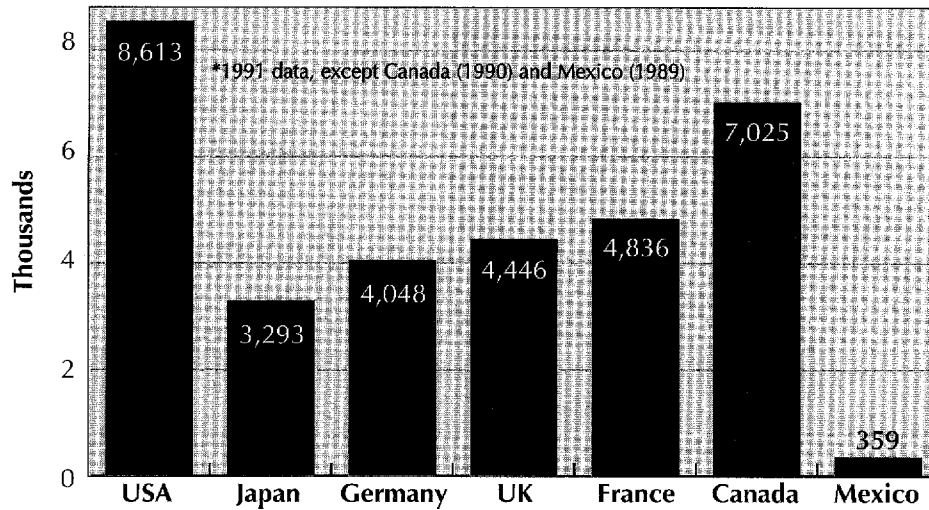
Gross Domestic Product and Travel Relationship



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 (with the exception of the World War II period), including the period of energy disruptions during the 1970's.

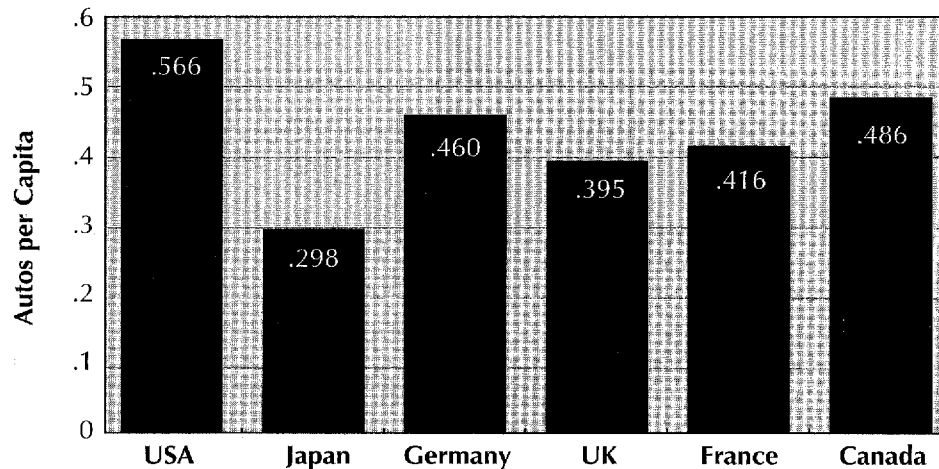
Annual Vehicle-Miles of Travel per Capita



Highway travel by Americans, expressed as vehicle-miles of travel (VMT) per capita, far exceeds highway travel by citizens of other major countries. In 1991, VMT per capita in the United States reached 8,613, a 27 percent increase compared to 1981.

Source: Central Intelligence Agency, *World Fact Book 1991*; *World Road Statistics, 1992*; *International Road Federation, 1992*; Federal Highway Administration, *Highway Statistics 1992*.

Automobiles per Capita—1991

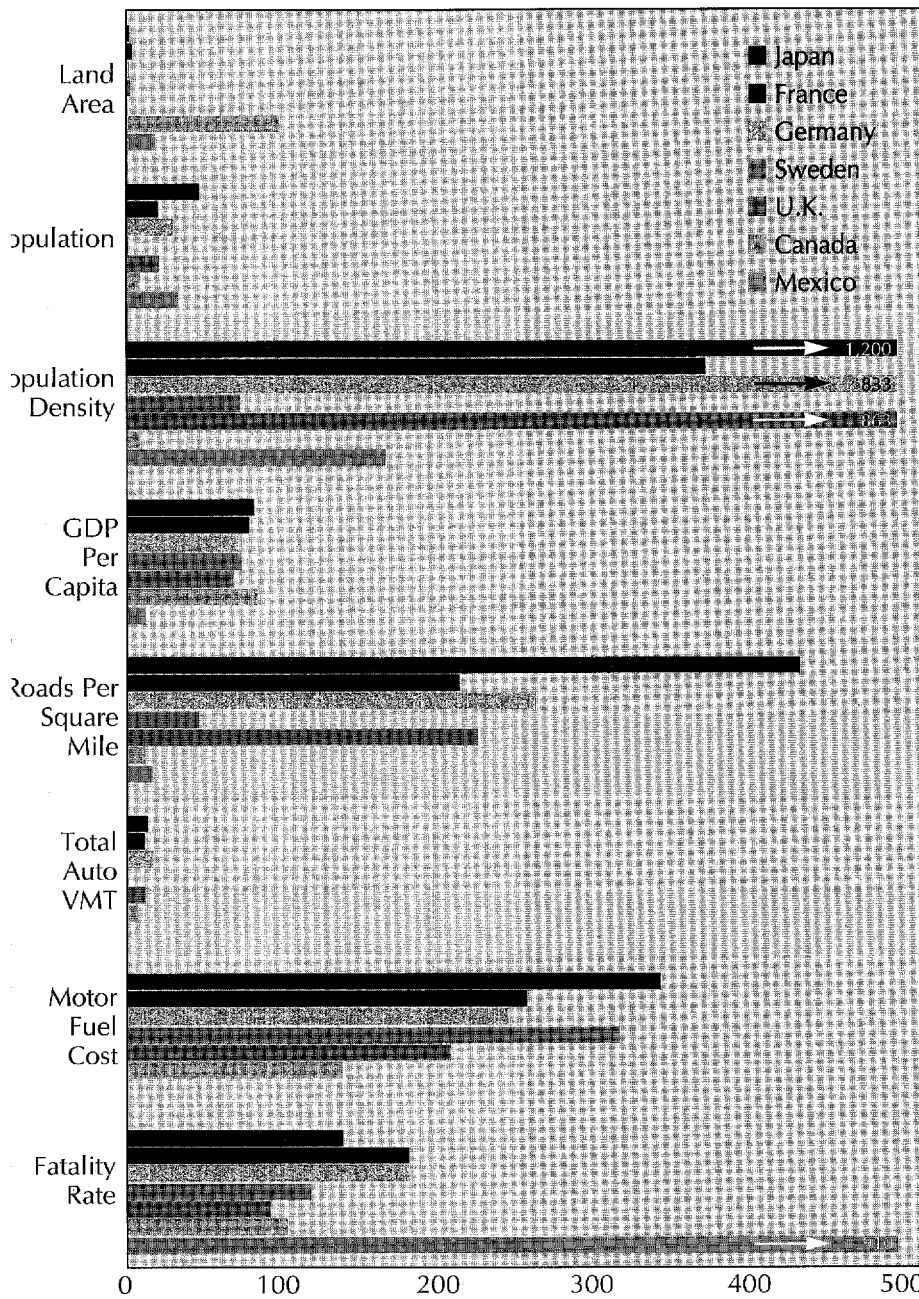


The United States had the highest number of automobiles per capita in 1991—Canada follows with the newly unified Germany close behind.

Source: U.S. Department of Energy, *Transportation Energy Data Book: Edition 14, May 1994*, and; Central Intelligence Agency, *The World Fact Book 1991*. Information on Germany provided by Federal Republic of Germany.

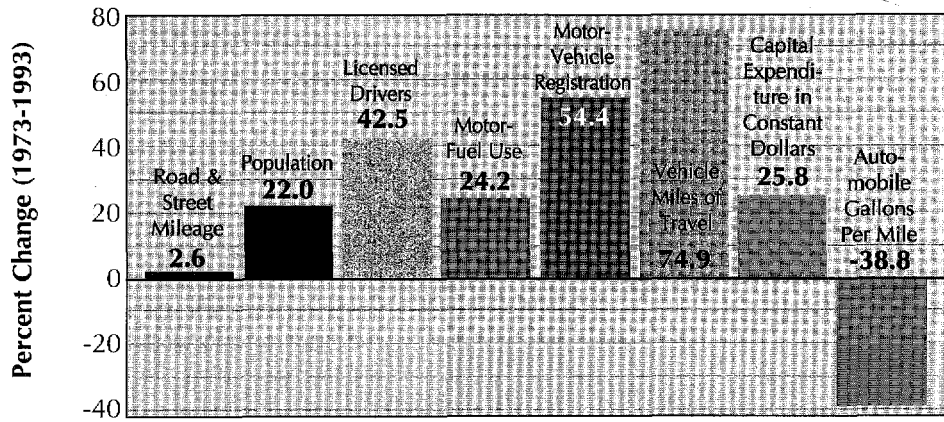
4 Our Nation's Highways

International Comparisons of Key Variables—1991
(Indexed on United States = 100)



Source: Central Intelligence Agency, *World Fact Book, 1991 and 1992*; International Road Federation, *World Road Statistics, 1992*; Energy Information Administration, *International Energy Annual, 1992*; Federal Highway Administration, *Highway Statistics 1991*. Information on Germany provided by Federal Republic of Germany.

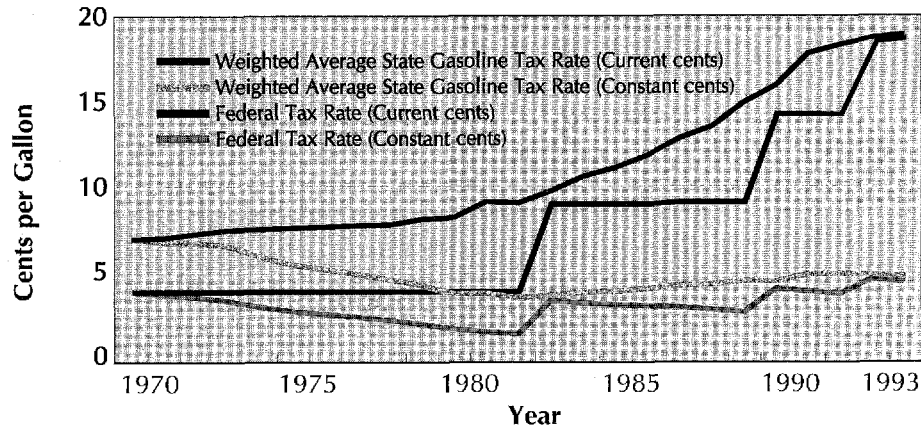
Highway Indicators



While road and street mileage have only increased 2.6 percent since 1973, the number of vehicles using those roads and streets has increased 54 percent and vehicle miles of travel increased by 75 percent.

While vehicle-miles of travel (VMT) has increased by 74.6 percent since 1973, the gallons of motor fuel used per personal passenger vehicle has decreased by 38.8 percent.

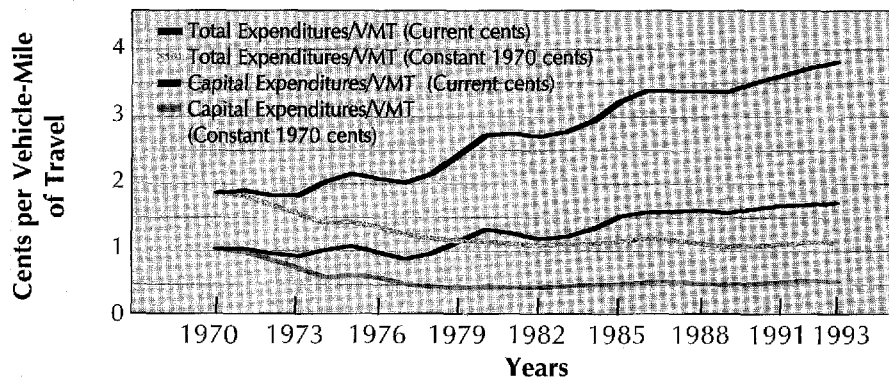
Federal and State Gasoline Tax Rates



Despite significant increases in State motor-fuel tax rates during the 1980's, the weighted average gasoline tax rate expressed in constant 1970 cents actually decreased by 30 percent from 7.02 cents per gallon in 1970 to 4.95 cents per gallon in 1993. Over the same 1970 to 1993 period, the Federal gasoline tax rate

expressed in constant 1970 cents increased by 24 percent, from 4.00 cents per gallon to 4.94 cents per gallon as the rate increased from 4.00 cents per gallon to 18.4 cents per gallon (including 6.8 cents for deficit reduction). Preliminary 1994 data show that State tax rates increased, but did not keep pace with inflation.

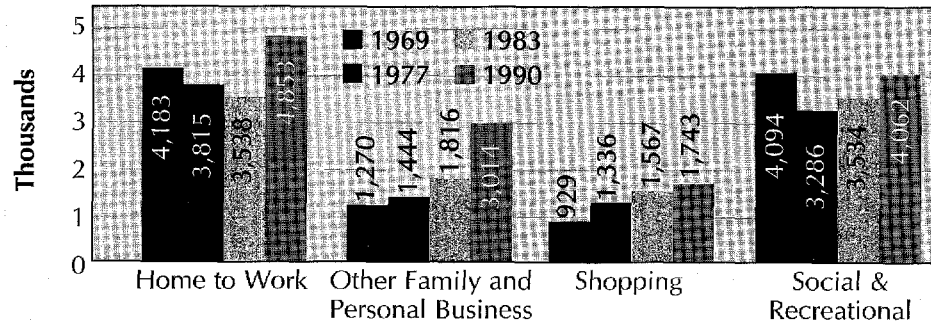
Highway Expenditures per Vehicle-Mile of Travel



In 1993, highway capital expenditures, were 1.73 cents per vehicle-mile of travel (VMT) as compared to 1.04 cents per VMT in 1970—a 66 percent increase. After accounting for inflation, however, 1993 capital expenditures were only .56 cents per VMT, a 46.0 percent decrease from 1970's capital expenditures. In 1993, total highway expenditures were 3.82 cents per VMT as com-

pared to 1.88 cents per VMT in 1970—a 103 percent increase. After adjusting for inflation, total highway expenditures were only 1.12 cents per VMT, a 40.0 percent decrease from 1970's total highway expenditures. In effect, 1993's highway expenditures by all units of government, with inflation removed, were only about 60 percent of what they were 23 years ago for each vehicle-mile of travel.

Annual Household-Based Motor-Vehicle Travel for Selected Purposes



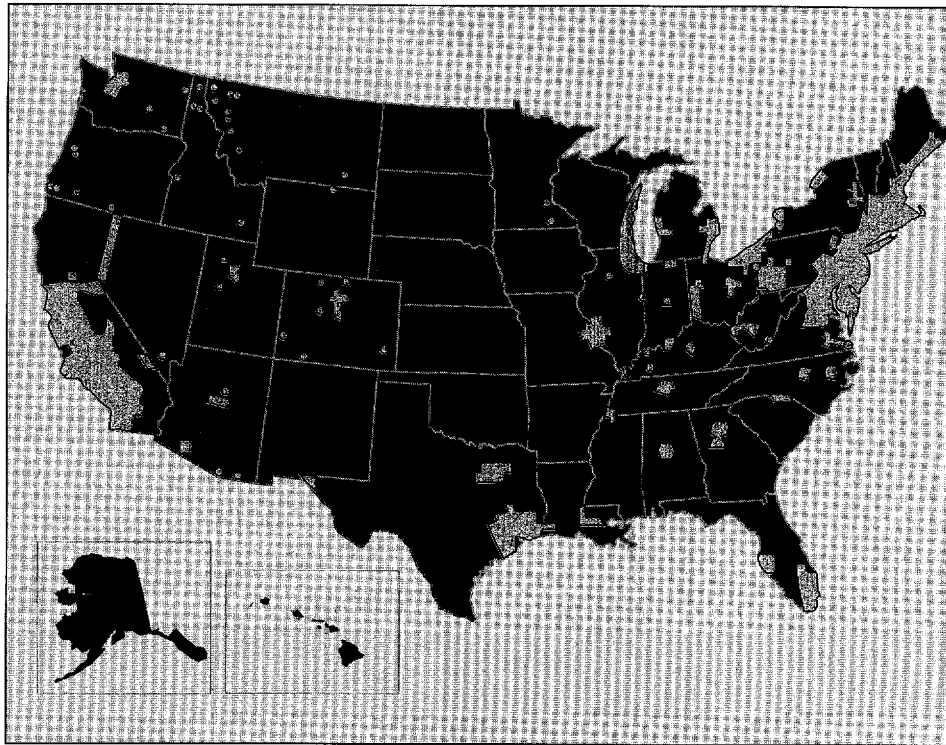
The recent growth in household-based vehicle travel has primarily been for commuting and for other family and personal business, which includes purchase of services and giving others a ride. In 1990, the average household traveled almost 5,000 miles for

commuting to work and slightly over 3,000 miles for other family and personal business. These two purposes account for over one half of annual household travel. There were only slight increases in travel per household for shopping and social/recreational purposes.

Source: Federal Highway Administration, *Nationwide Personal Transportation Surveys (1969, 1977, 1983, 1990)*.

Air Quality

Ozone, CO & PM-10 Nonattainment Areas



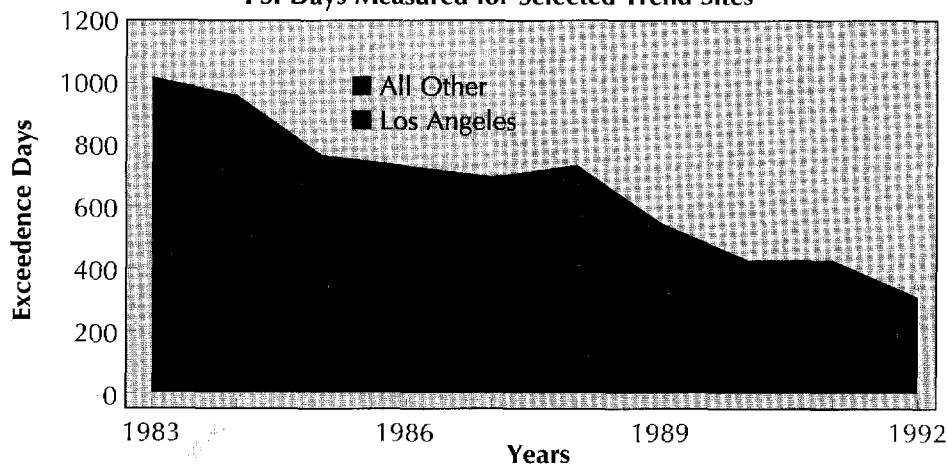
■ Areas in Nonattainment for Ozone, CO, or PM-10

In 1990, the Clean Air Act Amendments (CAAA) set standards for pollutants which States, cities, and towns must either meet or actively work to meet—or face sanctions. The map displays areas designated by EPA as being in nonattainment of the National Ambient Air Quality Standard (NAAQS) for at least one of certain pollutants: ozone, carbon monoxide (CO), or suspended particulate matter (PM-10). More than one fifth of the Nation's population lives in nonattainment areas.

Source: Office of Program Development, Federal Highway Administration, *Transportation Air Quality Fact Book, 1994* (using 1994 Environmental Protection Agency data).

Air Quality Trends

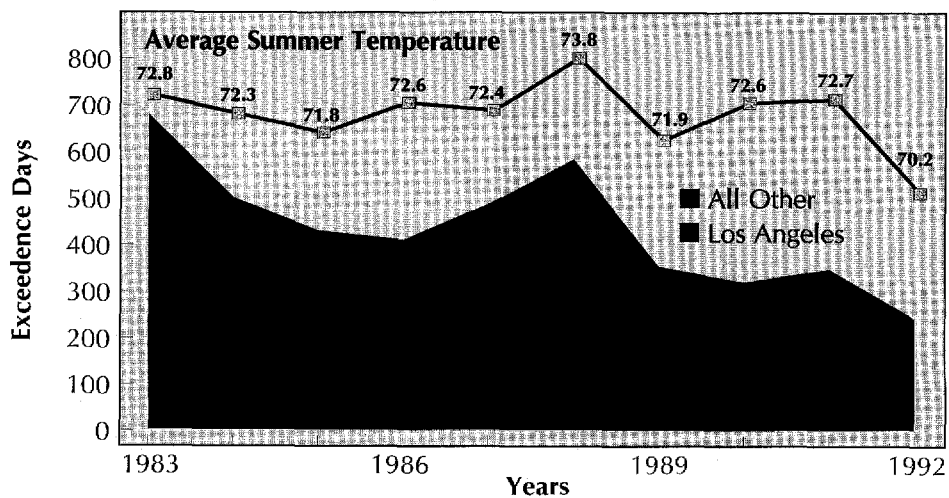
PSI Days Measured for Selected Trend Sites



The Pollutant Standards Index (PSI) is a composite calculation of PM-10, sulfur dioxide, CO, O₃, and nitrogen dioxide used to determine when an area exceeds the NAAQS.

Each day in exceedence is a day in which any part of the trend site violated the NAAQS. Los Angeles had 194 days in exceedence in 1983 and 183 in 1992.

PSI Days Measured for Ozone



There is a separate PSI for ozone. The number of days that the trend sites have been in exceedence for ozone has been declining since 1983. Los Angeles had 154 days in exceedence in 1983 and 142

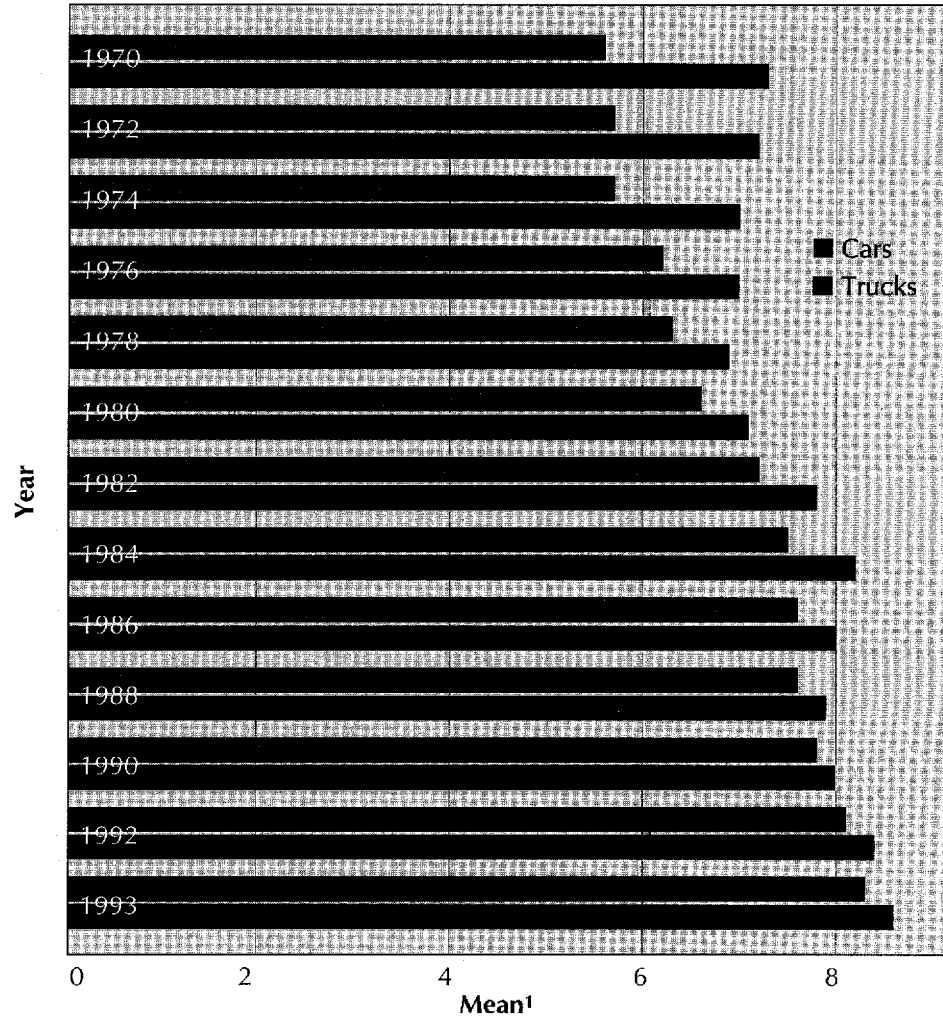
in 1992. While the number of days in exceedence has fluctuated somewhat (in part due to fluctuation in average summer temperature), the overall trend has been declining.

Source: Office of Program Development, Federal Highway Administration, *Transportation Air Quality Fact Book, 1994* (using 1994 Environmental Protection Agency data).

Average Age of Cars and Trucks in Use (as of July 1, 1993)

As you can see by the chart below, Americans are keeping their cars and trucks longer than ever before. The average age of a passenger car in use in 1993 was 8.3 years compared to 5.6 in 1970.

The same trend holds true with truck use (though not as dramatic a difference)—the average age of a truck in 1993 was 8.6 compared to 7.3 in 1970.



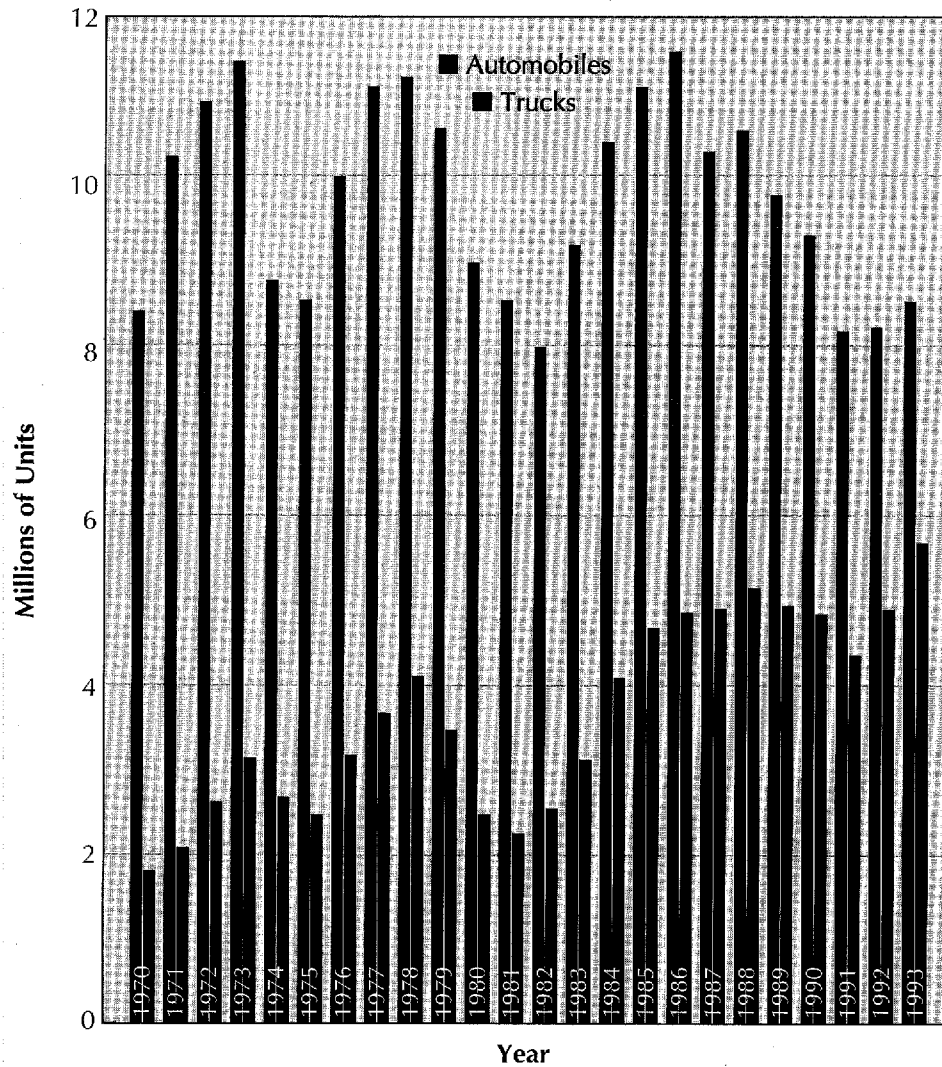
¹Mean—The sum of the products of units multiplied by age; divided by the total units (units in years).

Source: American Automobile Manufacturers Association, *AAMA Motor-Vehicle Facts and Figures '94* (compiled from R.L. Polk and Co. data).

Motor-Vehicle Retail Sales

Total motor-vehicle retail sales are steadily increasing again—14,199,000 units for 1993. The all-time high was set in 1986—16,322,000 units. Retail sales of automobiles accounted for 60 percent of total sales in 1993

compared to 78.3 percent in 1973. This decrease reflects the growing popularity of light trucks as personal vehicles. Retail sales of trucks for 1993 (5,618,000 units) have surpassed their 1988 record.

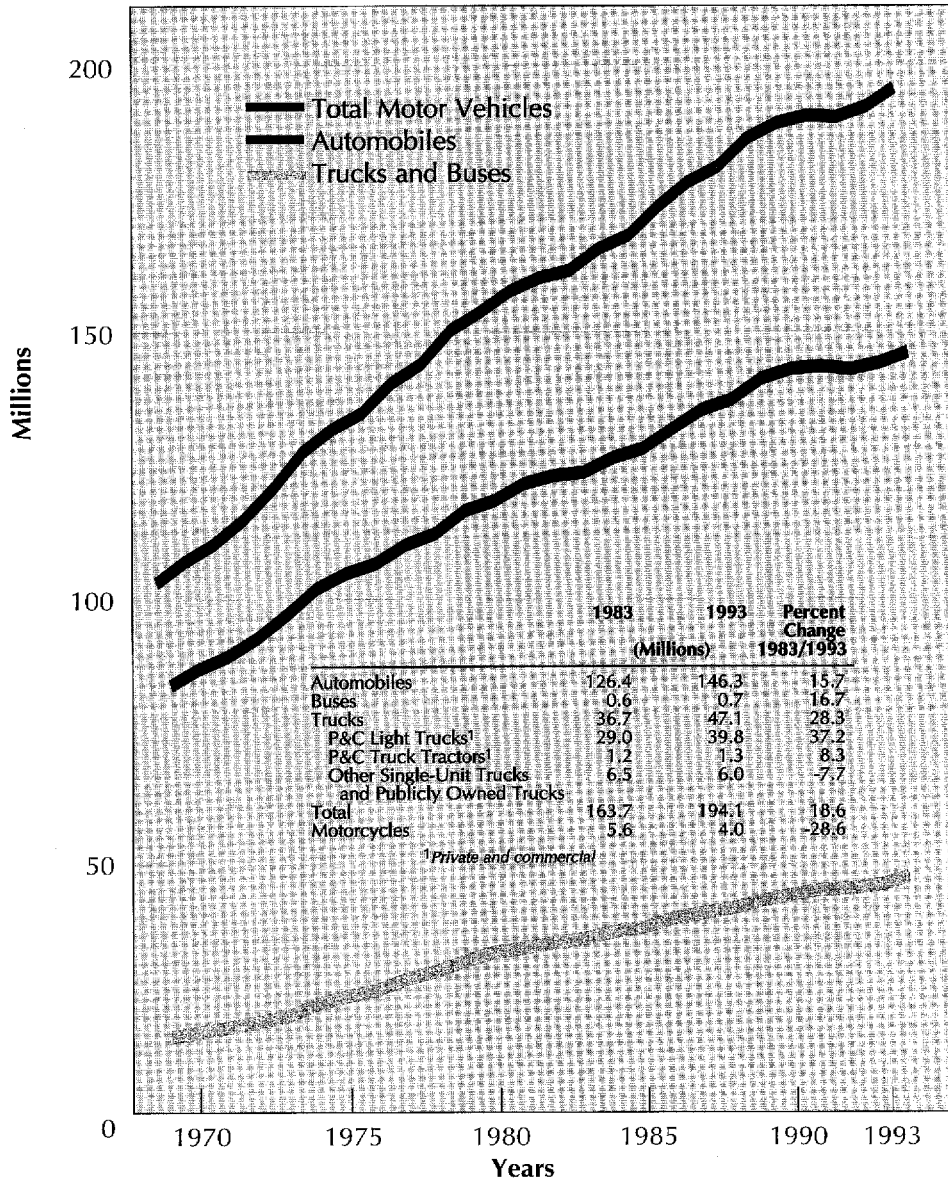


Source: American Automobile Manufacturers Association, AAMA Motor-Vehicle Facts and Figures '94.

Motor-Vehicle Registration

The number of registered motor vehicles continues to increase steadily. Automobile registrations have increased 15.7 percent (20.0 million) since 1983 while truck registrations have increased

28.3 percent (10.4 million). Light single-unit trucks have seen a phenomenal growth in popularity since 1983 and now account for 20.5 percent of total registered motor vehicles.



Cost of Owning and Operating Automobiles, Vans, and Light Trucks—1994

Cents Per Mile¹

Size	Cost ²	Characteristics
Subcompact	33.9	4 cylinder Avg MPG:28
Compact	36.5	4 cylinder Avg MPG:24
Intermediate	39.5	6 cylinder Avg MPG:20
Full-size Car	47.0	6 cylinder Avg MPG:18
Compact Pickup	32.7	4 cylinder Avg MPG:19
Full-size Pickup	35.9	8 cylinder Avg MPG:14
Minivan	40.3	6 cylinder Avg MPG:17
Full-size Van	43.6	6 cylinder Avg MPG:12

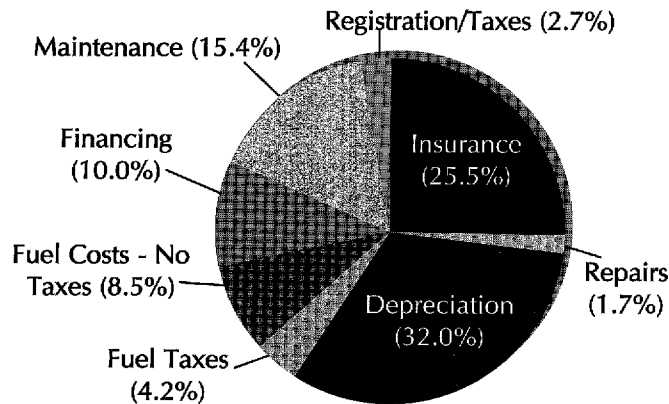
¹ Includes depreciation, financing, insurance, registration fees, taxes, fuel, maintenance, and repairs.

² Total costs over five years, based on 70,000 miles.

Source: Federal Highway Administration estimates based on the 1994 editions of *The Complete Small Truck Guide* and *The Complete Car Cost Guide*, from Intellichoice, Inc., and sales figures from *Automotive News*.

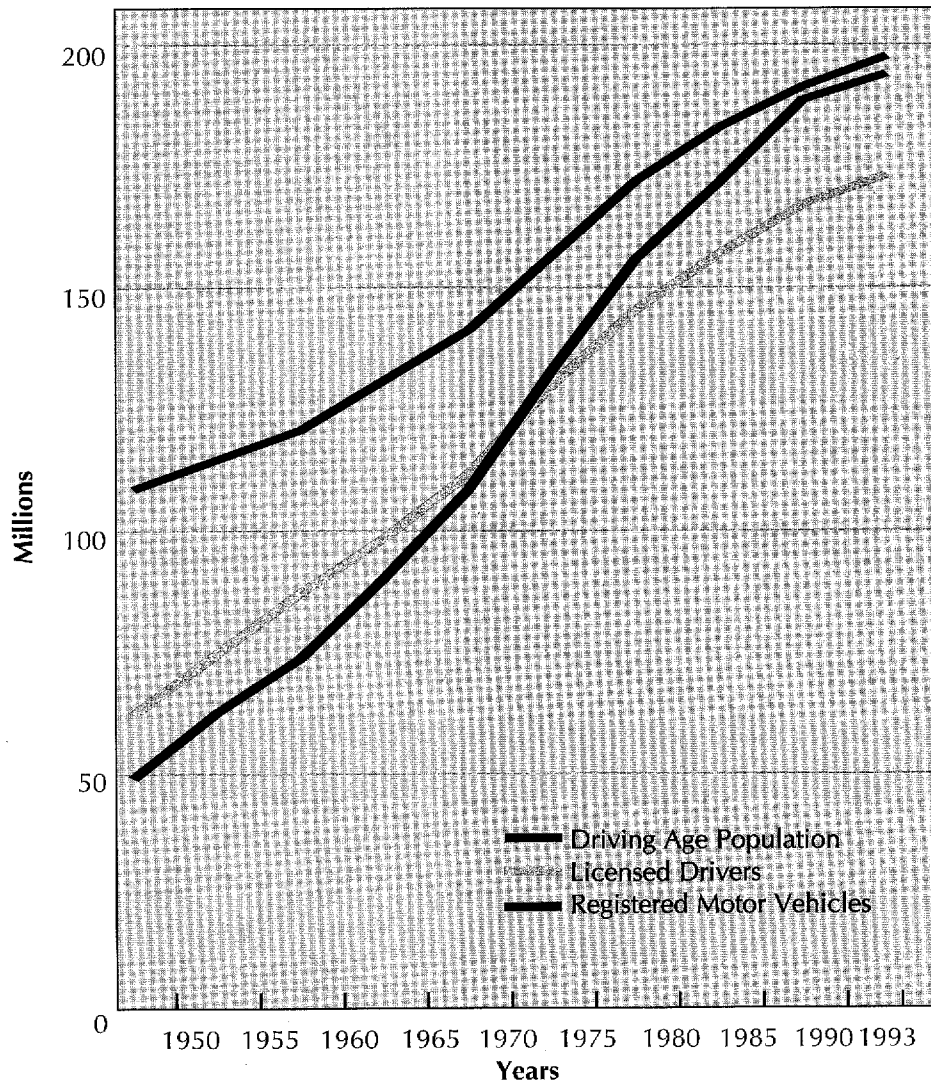
Ownership and Operating Costs by Category—Intermediate Size Vehicle (Based on Average Cost of 39.5 Cents Per Mile)

The Federal Highway Administration estimates that combined Federal and State motor-fuel taxes currently account for only 4.2 percent of the cost per mile of owning and operating an automobile compared to 6.7 percent in 1970.



Source: Federal Highway Administration estimates based on the 1994 editions of *The Complete Small Truck Guide* and *The Complete Car Cost Guide*, from Intellichoice, Inc., and sales figures from *Automotive News*.

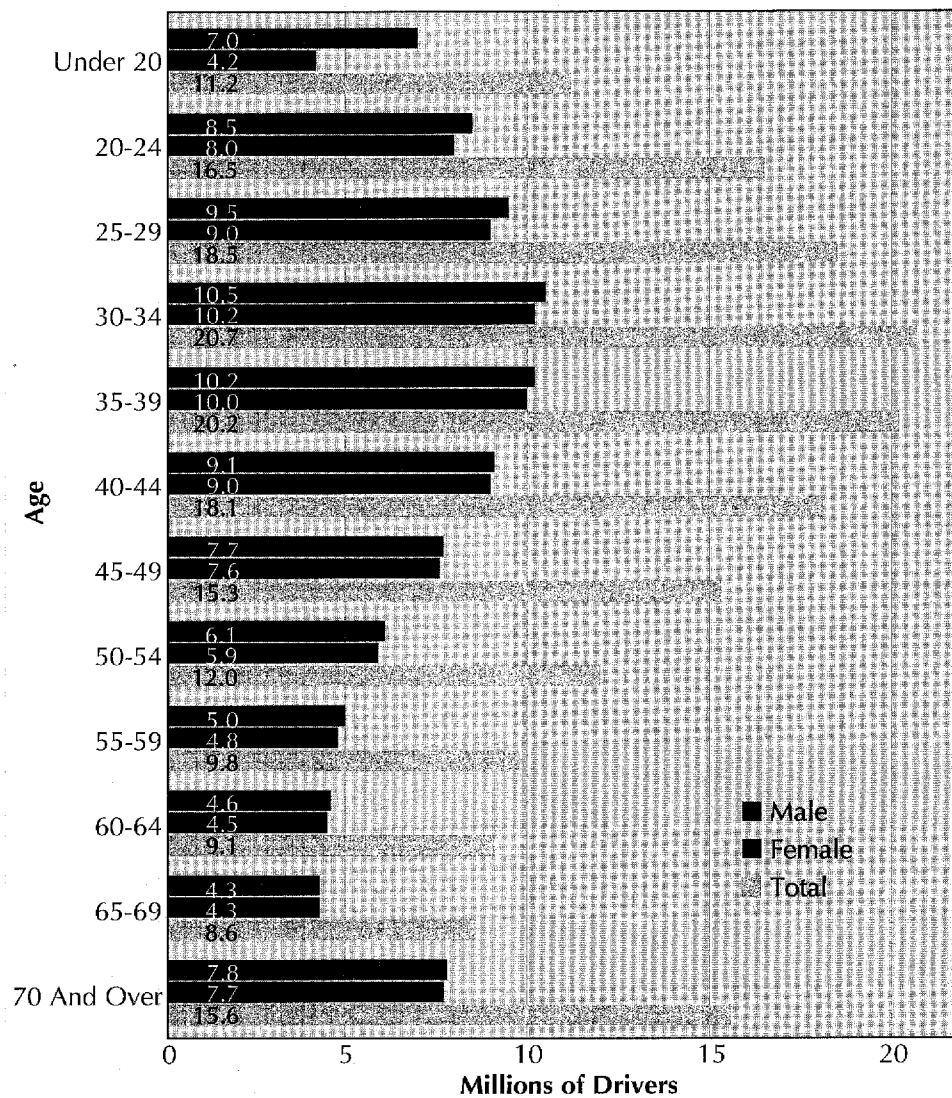
Licensed Drivers, Population, and Motor Vehicles



In 1950, 57 percent of the driving age population were licensed to drive a motor vehicle. By 1993, 87.6 percent of the driving age population were licensed drivers. There were 1.26

licensed drivers for every registered motor vehicle in 1950. In 1970 the ratio was about one to one, and by 1993 it had fallen to 0.89, or 1.2 vehicles per licensed driver.

Licensed Drivers by Age and Sex



There were 173,149,313 licensed drivers in the United States in 1993. Although the 30-34 age group contains the largest percentage of licensed drivers, the average age of licensed drivers is shifting upward as the average population ages and as older drivers continue to hold licenses. Drivers age 60 and older continue to increase and

now represent 33.2 percent of total licensed drivers compared with 14.6 percent in 1973 and 16.9 percent in 1983. Forty-nine percent (85,155,864) of the 173 million licensed drivers were women. The number of female drivers has increased 56.5 percent since 1973 compared with a 31.1 percent increase in male drivers.

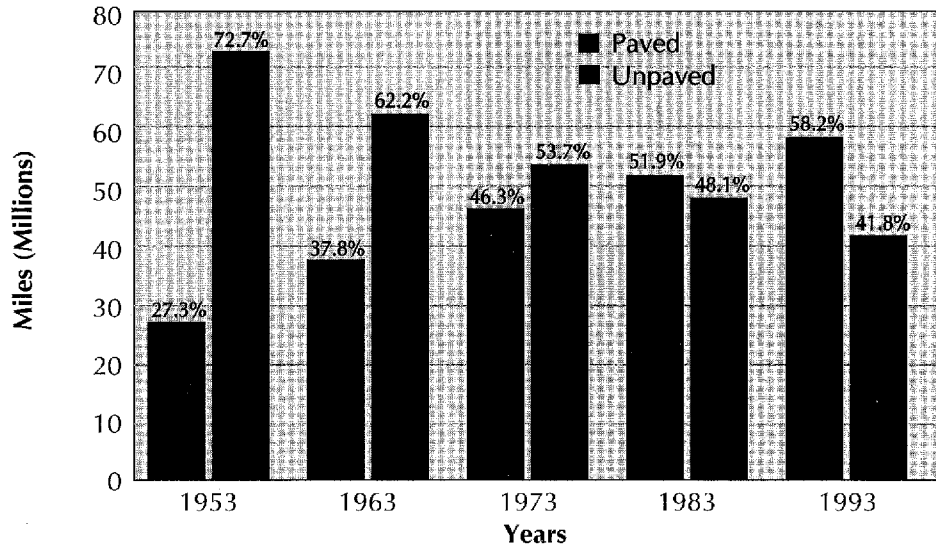
Jurisdictional Control of U.S. Roads and Streets

Jurisdiction	Rural Mileage	Percent	Urban Mileage	Percent	Total Mileage	Percent
State	692,414	22.3	107,058	13.3	799,472	20.5
Local	2,229,668	71.9	694,728	86.5	2,924,396	74.9
Federal	179,561	5.8	1,292	0.2	180,853	4.6
Total	3,101,643	100.0	803,078	100.0	3,904,721	100.0

The vast majority (74.9 percent) of the Nation's roadways are under the jurisdiction of local governments (town, city, county). Only 4.6 percent are under the jurisdiction of the Federal Government, which includes roads in national forests and parks and on other Federal lands and Indian

reservations. The rest of the roadways (representing 20.5 percent of the total 3,904,721 miles and including the entire Interstate System) are controlled and maintained by the State governments. It is estimated that these State roads carry 64 percent of the Nation's highway travel.

Road and Street Mileage by Surface Type



Currently, about 58.2 percent of all roads and streets are paved, compared with about 27.3 percent in 1953. The total paved mileage has increased 147 percent since 1953, but the total

road and street mileage has increased by only 16 percent. Essentially all of the unpaved mileage is on lightly travelled rural roads.

Functional Systems Mileage and Travel

Mileage—1993							
Functional System	Percent Change 1983 to 1993		Percent Change 1983 to 1993		Total	Percent Change 1983 to 1993	
	Rural	Urban	Rural	Urban		Percent of Total Mileage	
Interstate	32,652	-0.4	12,878	25.8	45,530	5.8	1.2
Other Freeways/ Expressways	—	—	8,857	26.1	8,857	26.1	0.2
Other Principal Arterial	96,201	18.4	52,835	11.6	149,036	15.9	3.8
Minor Arterial	137,928	-6.5	85,822	24.2	223,750	-3.3	5.7
Major Collector	432,675	-0.3	—	—	432,675	-0.3	11.1
Minor Collector	282,361	-5.9	—	—	282,361	-5.9	7.2
Collector	—	—	85,378	17.7	85,378	17.7	2.2
Local	2,119,826	-4.6	557,308	22.2	2,677,134	-0.1	68.6
Total	3,101,643	-3.6	803,078	21.2	3,904,721	0.6	100.0

Roads and streets are grouped into functional classes according to the type of service they provide, and to some extent, on how much traffic the facility carries. 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. Except for the other principal arterial system, the rural systems actually decreased in mileage due to the expansion of urban boundaries and functional reclassification.

Annual Vehicle-Miles of Travel—1993 (Millions)							
Functional System	Percent Change 1983 to 1993		Percent Change 1983 to 1993		Total	Percent Change 1983 to 1993	
	Rural	Urban	Rural	Urban		Percent of Total Travel	
Interstate	208,021	43.2	315,837	64.7	523,858	56.0	22.8
Other Freeways/ Expressways	—	—	142,322	63.0	142,322	63.0	6.2
Other Principal Arterial	201,031	43.5	356,315	38.7	557,346	41.0	24.3
Minor Arterial	147,723	10.8	275,665	46.0	423,388	31.5	18.4
Major Collector	178,149	13.5	—	—	178,149	13.6	7.8
Minor Collector	48,846	11.7	—	—	48,846	11.5	2.1
Collector	—	—	121,214	39.6	121,214	24.7	5.3
Local	103,176	27.0	198,286	41.7	301,462	35.7	13.1
Total	886,946	26.6	1,409,639	48.6	2,296,585	39.3	100.0

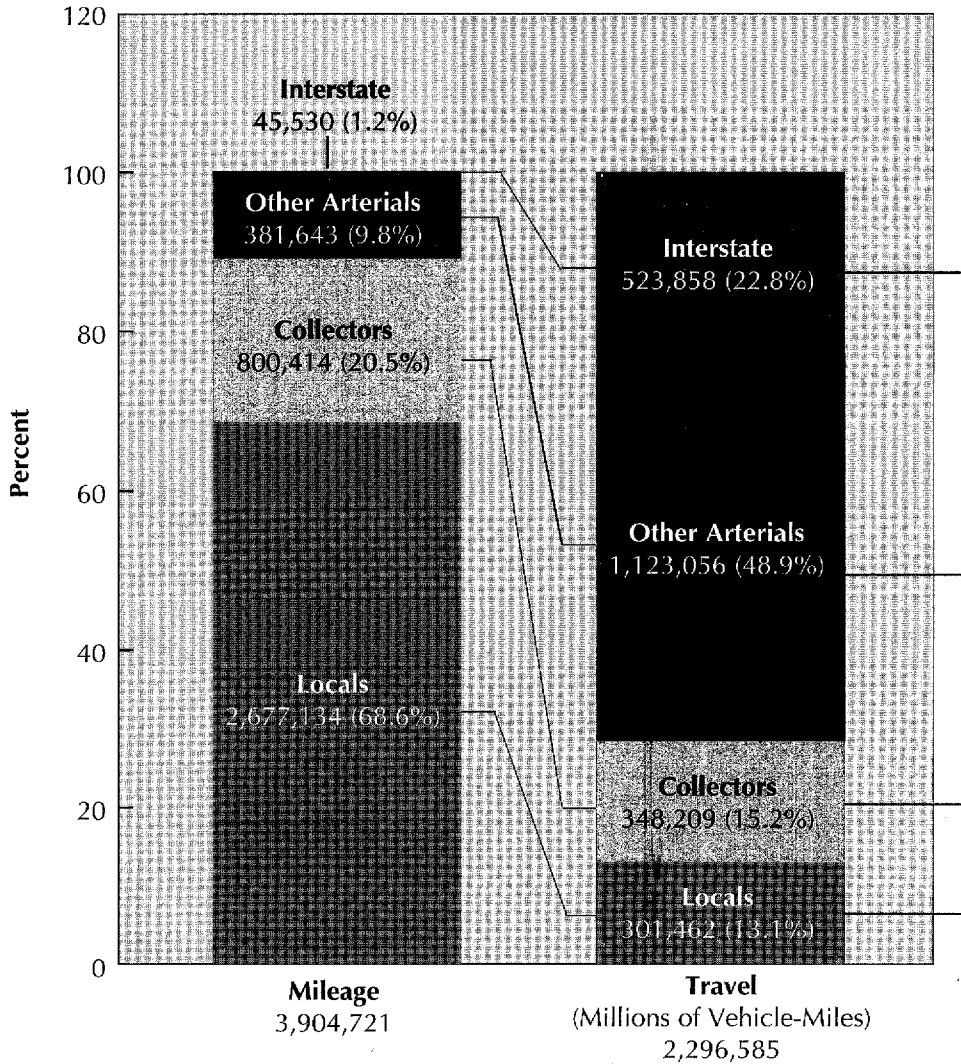
Total mileage has increased only 0.6 percent since 1983, while travel has increased 39.3 percent during the same time period. The urban travel increase of 48.6 percent has outpaced the rural 26.6 percent increase due to the Nation's continued growth in

urbanization and expanding urban boundaries, which involves the transfer of heavily travelled rural facilities to urban. The urban Interstate System has had the greatest travel growth (65.2 percent) during the 1983 to 1993 time period.

Total Road Mileage and Travel by Functional System—1993

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 11.0 percent of the Nation's total road and street mileage but carries 71.7 percent of total travel.

The Interstate System accounts for only 1.2 percent of the Nation's total miles of roadway; however, 22.8 percent of total travel occurs on this system. Conversely, local functional system roads account for 68.6 percent of the Nation's total road and street mileage but serve only 13.1 percent of total travel.

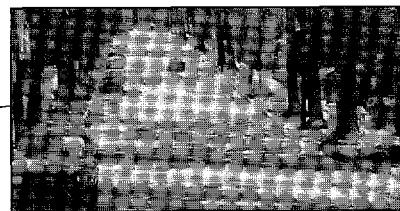
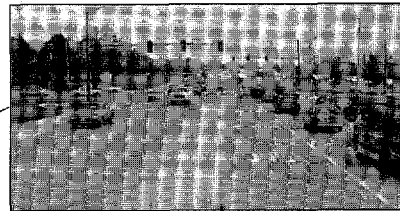
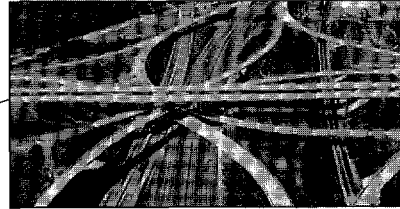


Functional Classification

Arterial (including Interstate and other freeways)—The highest classification of roads and streets. Arterials provide the highest level of mobility, at the highest speed, for a long uninterrupted distance.

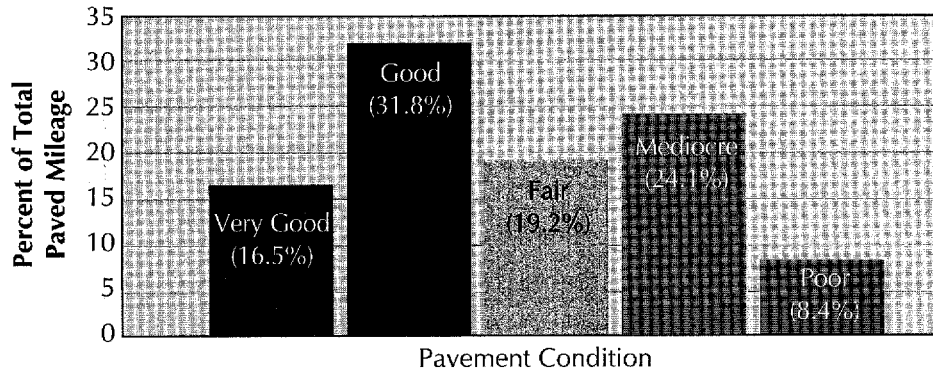
Collector—Provides a lower level of mobility than arterials at lower speeds and for a shorter distance. Collectors connect local roads with arterials and provide some access to abutting land.

Local—The lowest classification of roads and streets. Local roads provide a high level of access to abutting land but limited mobility.

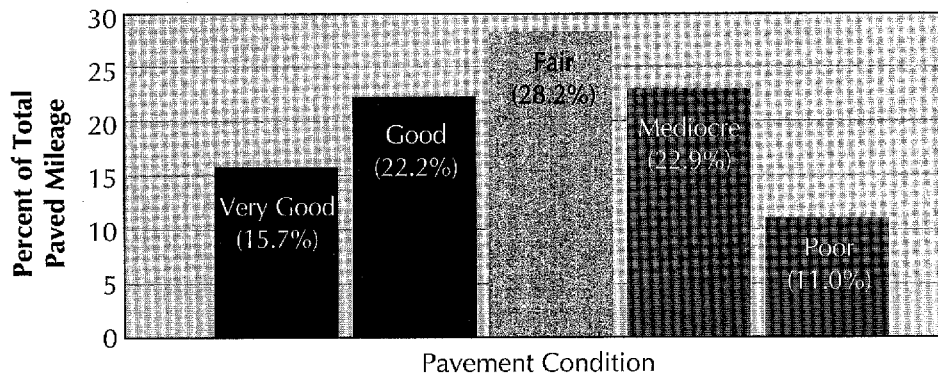


Pavement Conditions of Interstate and Other Arterials

Interstate (Rural and Urban)—1993



Other Arterials (Rural and Urban)—1993



The descriptive words used in the charts can be defined as follows:

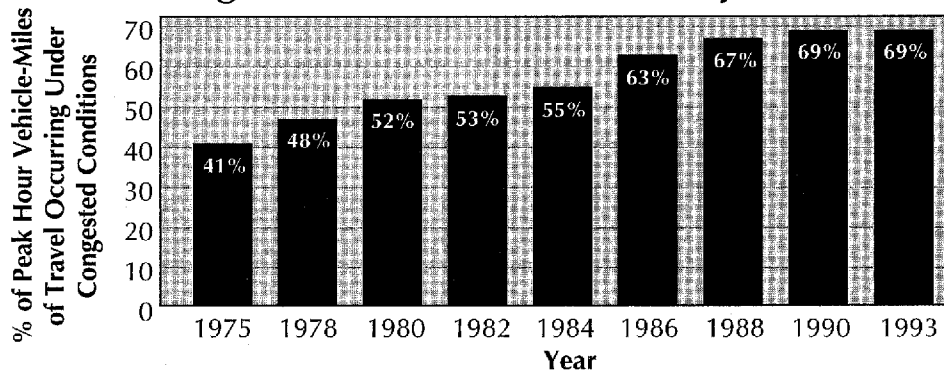
- Very Good — New or almost new pavement; will not require improvement for some time
- Good — In decent condition; will not require improvement in the near future
- Fair — Will likely need improvement in the near future, but depends on traffic use
- Mediocre — Needs near-term improvement to preserve usability
- Poor — Needs immediate improvement to restore serviceability

The preservation of the Nation's highways is a priority at all levels of government. Although pavement conditions and trends vary significantly among the States, average conditions on the Nation's arterial systems appear to have stabilized or perhaps even improved in the latter years. This has diminished a continuous downward trend in physical conditions that was evident in the 1970's and early 1980's. This is due primarily to increased attention and fiscal resources assigned

to the preservation of pavement during the mid to late 1980's.

For 1993, a combination of Pavement Serviceability Rating (PSR), a subjective rating system, and International Roughness Index (IRI), an objective instrument-based rating system, has been used. In the future, only the objective IRI will be used to denote pavement condition as these data become fully reported.

Travel Congestion on Urban Interstate System



Travel congestion on the urban Interstate System is steadily increasing, but at a slower pace in recent years. In 1993, 69 percent of the peak-hour travel on this system occurred under congested conditions, while only 52 percent of the travel occurred under these congested conditions in 1980. Note however, that the peak is now much longer than 1 hour (both AM and PM). The measure

of congestion used in this analysis is called 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). A V/SF ratio value of greater than or equal to 0.80 was used here to indicate congestion.

Bridge Conditions (as of December 31, 1994)

	National Highway System ¹		Other Federal-Aid Highways ²		Non-Federal-Aid Highways ³		Total Highways	
Structurally Deficient	9,915	7.8%	27,121	14.2%	73,440	26.3%	107,476	18.7%
Functionally Obsolete	22,705	17.9%	29,038	13.5%	34,038	12.2%	79,781	13.9%
All Other Bridges	94,290	74.3%	122,885	72.3%	171,556	61.5%	388,731	67.5%
Total Bridges in Inventory	126,910	100.0%	170,044	100.0%	279,034	100.0%	575,988	100.0%

Source: Federal Highway Administration, Office of Program Development.

¹ Includes all Interstate and other principal arterials.

² Includes all other highways except minor collectors and local roads and streets.

³ Includes rural minor collectors and local roads and streets.

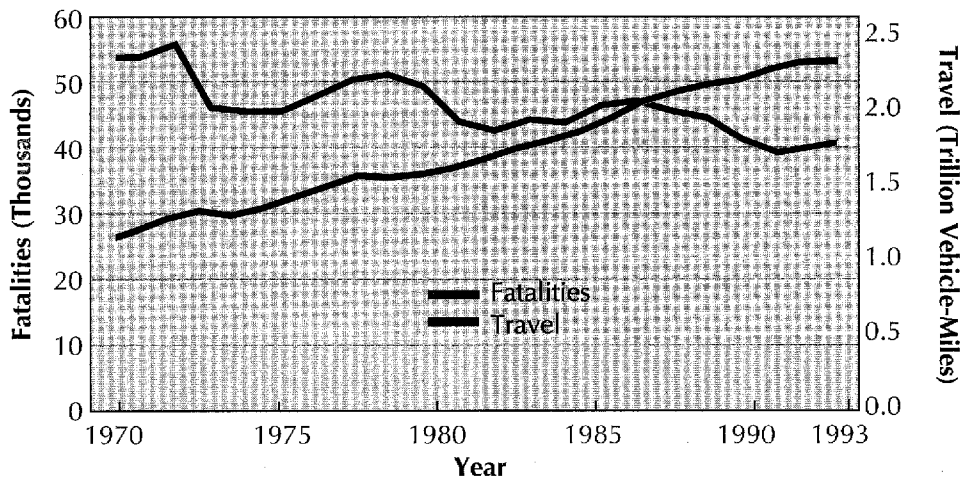
Thirty-three percent of the Nation's estimated 575,988 bridges are structurally deficient or functionally obsolete. Twenty-six percent of the 126,910 bridges on the National Highway System (Interstate and all other principal arterials) are structurally deficient or functionally obsolete.

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.

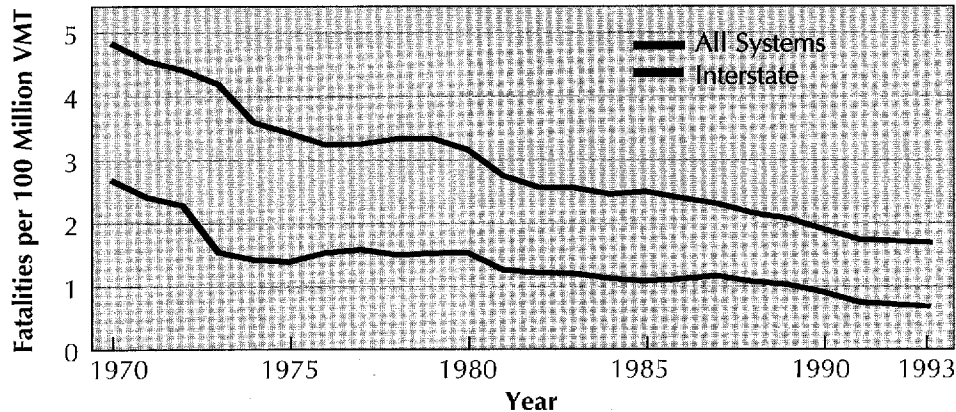
Motor-Vehicle Fatalities and Travel



After a series of declines during the mid 1970's and early 1980's, the number of fatalities increased from 1986 to 1988, and then started to decline again. In 1993 there were

40,115 fatalities; 3,916 (or 10 percent) occurred on the Interstate System. An estimated 43.6 percent of highway fatalities in 1993 were alcohol related.

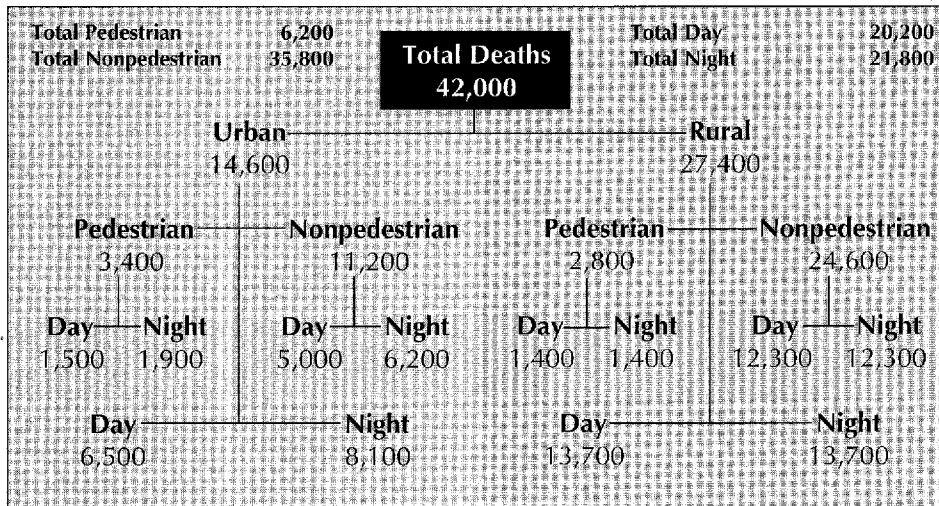
Fatality (Interstate and Total) Rates



The fatality rate—fatalities per 100 million vehicle-miles of travel (VMT)—on all highway systems continues to decline. In 1993, the fatality rate reached 1.75, a 64 percent decrease from 1970. The decrease in the fatality rate

occurred despite a 107 percent increase in highway travel and a 79 percent increase in motor vehicle registrations during the 1970 to 1993 time period. The fatality rate (.75) on the Interstate System is less than half the rate on all highway systems.

Principal Classes of Motor-Vehicle Deaths



Almost two out of three deaths in 1993 occurred in places classified as rural. In urban areas, nearly one fourth of the victims were pedestrians; in rural

areas, the victims were mostly occupants of motor vehicles. More than one half of all deaths occurred in night accidents.

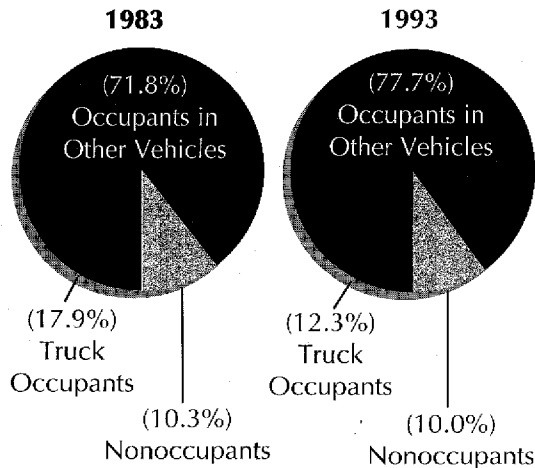
Source: National Safety Council estimates; *Accident Facts, 1994 Edition*.

Fatalities Involving Medium/Heavy Trucks¹

There were 4,849 fatalities in accidents involving medium and heavy trucks in 1993. Occupants in other vehicles accounted for 3,845 or 78 percent of the fatalities involving medium and heavy trucks.

There were 543 fewer fatalities involving medium and heavy trucks from 1983 to 1993. Occupants in other vehicles showed a decrease of 96 of the fatalities involving medium and heavy trucks while the nonoccupant fatalities decreased by 75 over that same period of time.

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



Source: National Highway Traffic Safety Administration, *Fatal Accident Reporting System*.

Proposed National Highway System—1993 (Presently Open to Traffic)

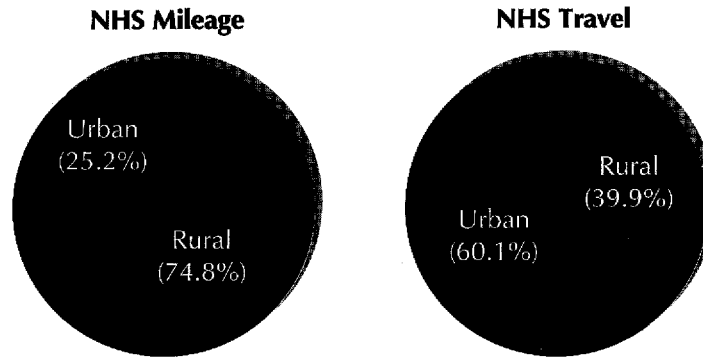
NHS Mileage			
	Rural	Urban	Total
Interstate	32,731	13,018	45,749
Other NHS	84,063	26,279	110,342
Total NHS	116,794	39,297	156,091
NHS Percent of Total Mileage			
	Rural	Urban	Total
Interstate	0.8	0.3	1.2
Other NHS	2.1	0.7	2.8
Total NHS	3.0	1.0	4.0
NHS Travel (millions)			
	Rural	Urban	Total
Interstate	209,370	320,256	529,626
Other NHS	181,918	269,618	451,536
Total NHS	391,288	589,874	981,162
NHS Percent of Total Travel			
	Rural	Urban	Total
Interstate	9.1	13.9	22.9
Other NHS	7.9	11.7	19.5
Total NHS	16.9	25.5	42.5

A proposed National Highway System (NHS) was submitted to Congress in December 1993 as required by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. These data also include Puerto Rico.

The proposed NHS represents only about 4 percent of the Nation's total

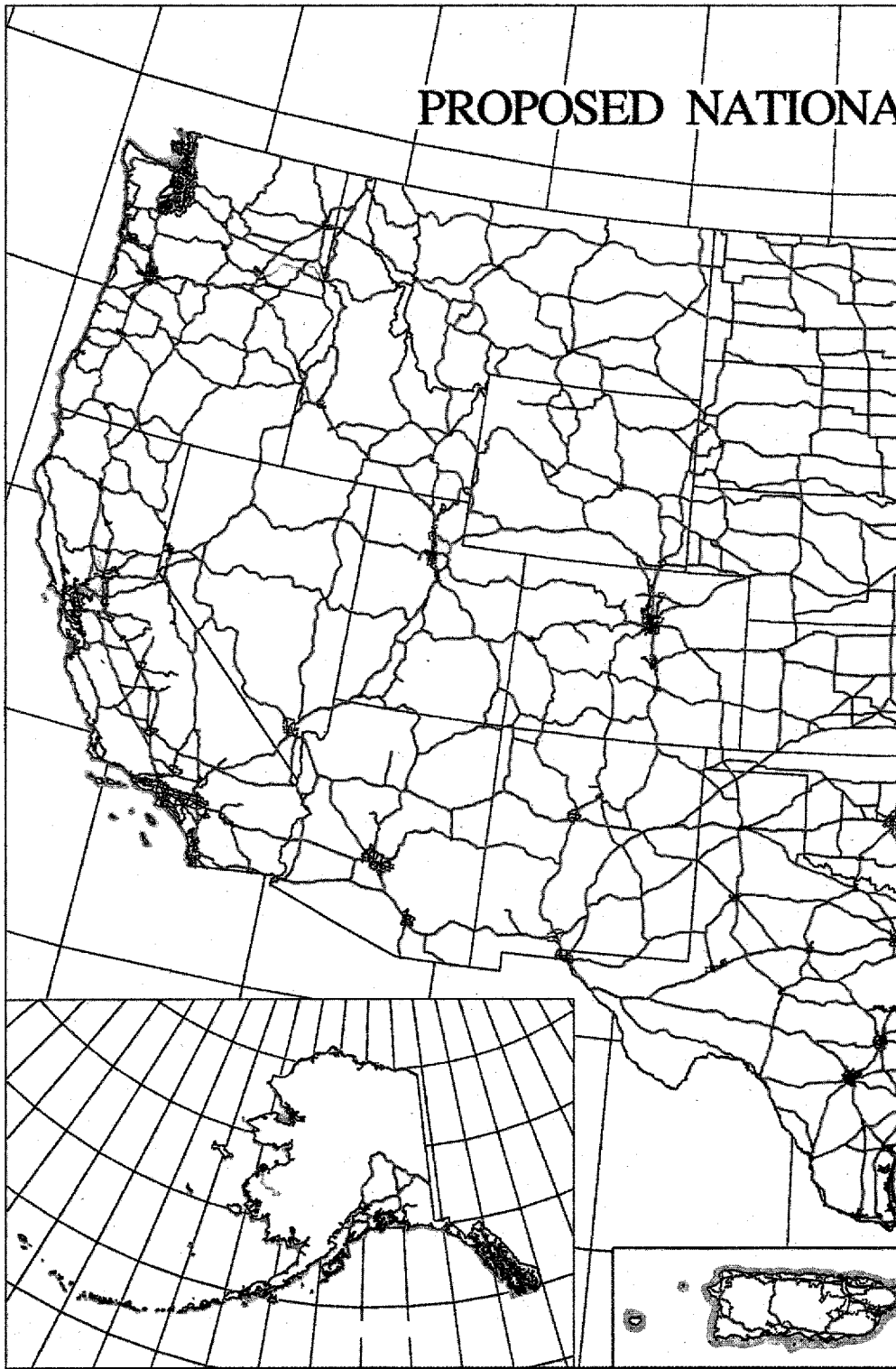
public road mileage but carries over 42 percent of the travel.

Although there is about three times as much NHS mileage in rural than there is in urban, the NHS percentages of the total U.S. mileage in rural and urban, respectively, are nearly equal.

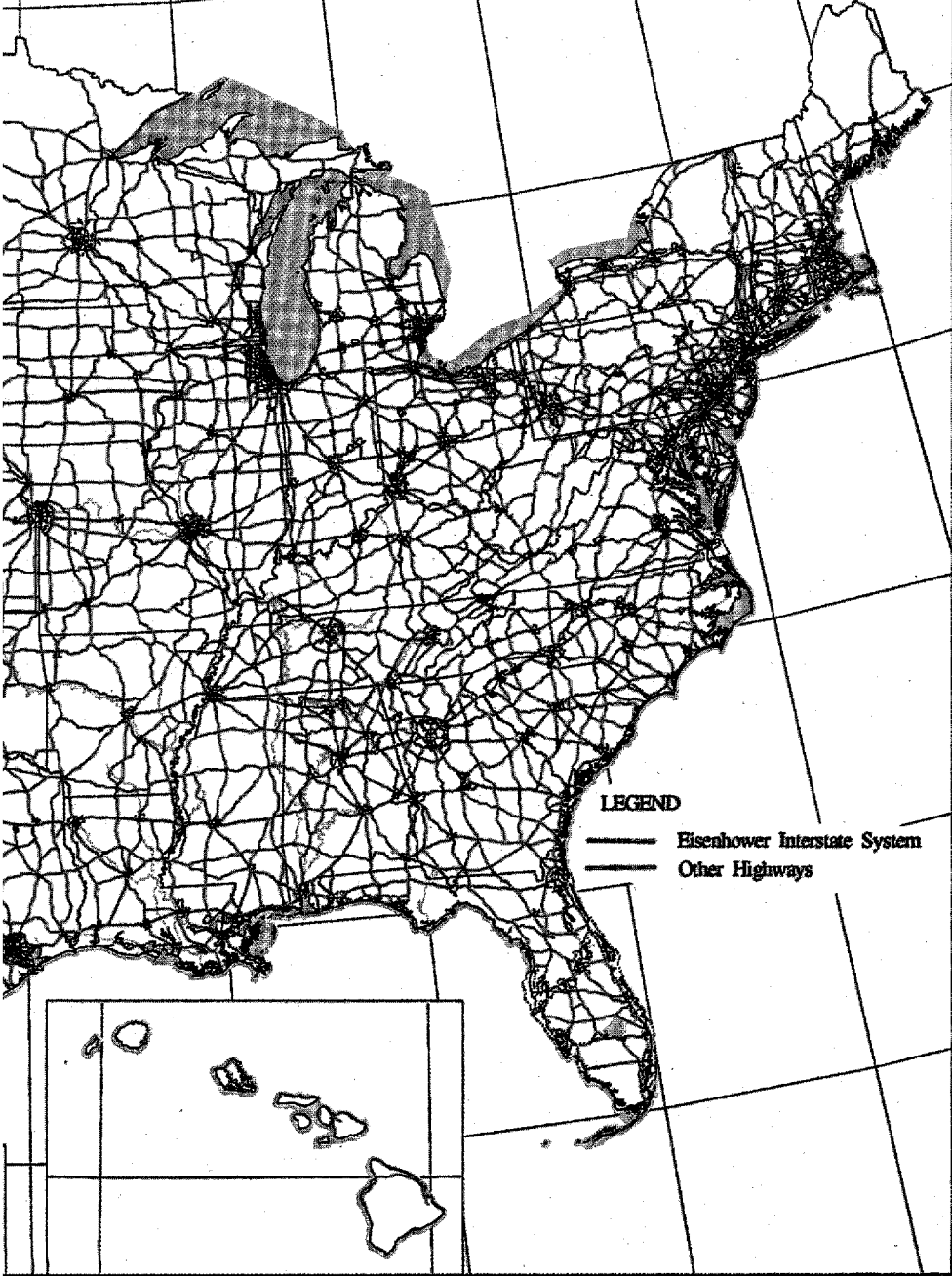


A majority of the travel on the proposed NHS takes place in urban areas even though more mileage exists in the rural areas.

PROPOSED NATIONAL

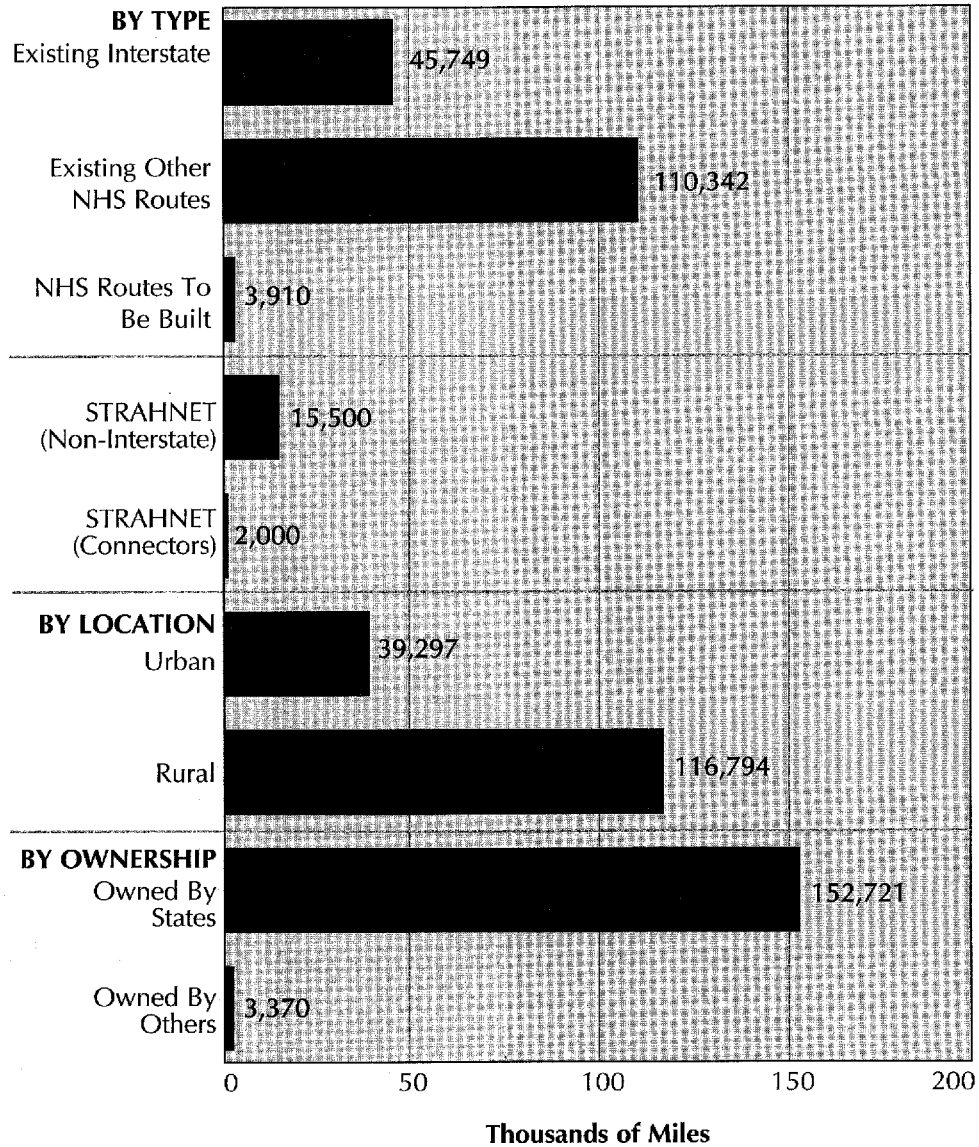


HIGHWAY SYSTEM





Proposed National Highway System (NHS)



Of the proposed NHS (approximately 160,001 miles) 27.5 percent is made up of the Interstate System (IS) and non-Interstate routes. The NHS

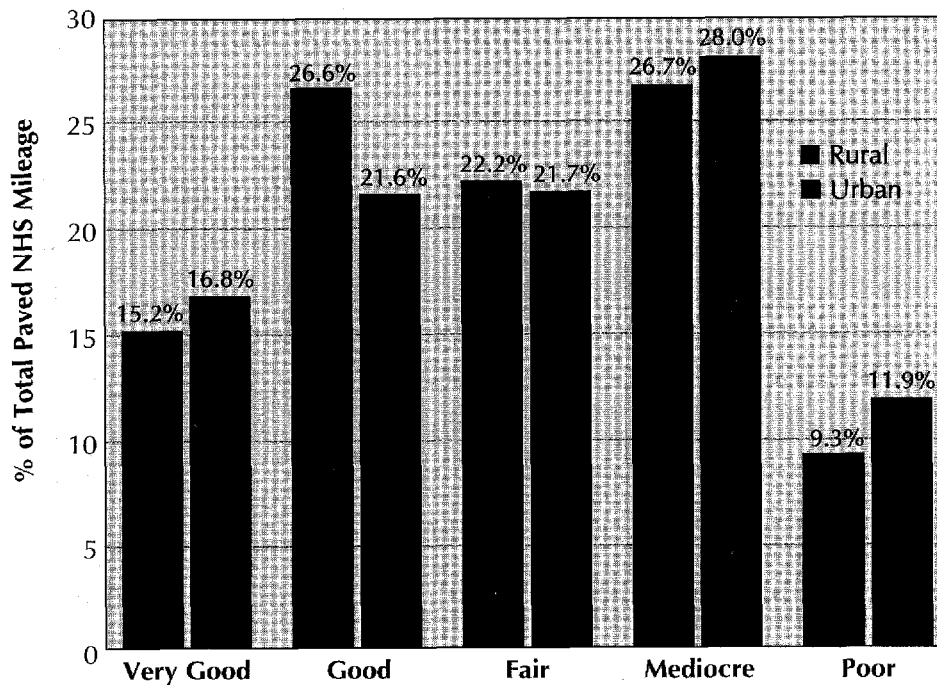
encompasses all of the Strategic Highway Network (STRAHNET) (about one fourth of which is on the IS), and other highways.

Existing Traffic Lanes and Access Control for the NHS (Rural and Urban Miles)

Category	Interstate*	Other NHS	Total NHS	% in Category
<= 3 lanes (including one-way streets)	1,079	70,104	71,183	45.6
>= 4 lanes (undivided)	2,107	8,435	10,542	6.8
>= 4 lanes (divided—no access control)	155	13,644	13,799	8.8
>= 4 lanes (divided—partial access control)	195	8,054	8,249	5.3
>= 4 lanes (divided—full access control)	42,213	10,105	52,318	33.5
Total	45,749	110,342	156,091	100.0

*Includes Alaska and Puerto Rico (Section 139 (c)), which accounts for much of the non-freeway and less than 4-lane mileage.

NHS Pavement Condition



The descriptive words used in the charts can be defined as follows:

- Very Good — New or almost new pavement; will not require improvement for some time
- Good — In decent condition; will not require improvement in the near future
- Fair — Will likely need improvement in the near future, but depends on traffic use
- Mediocre — Needs near-term improvement to preserve usability
- Poor — Needs immediate improvement to restore serviceability

Intermodal Facility Connections

Ports

The 104 ports handle about 72 percent of total U.S. waterborne cargo tonnage.

Amtrak Stations

Of 321 Amtrak stations, each station handled at least a combined total of 20,000 entrainments and detrainments over the most recent 3-year reporting period.

Rail/Truck Facilities

Of 191 rail/truck facilities, each handles more than 5,000 annual origins and/or destinations of railroad

cars and relies heavily on the rail/truck intermodal connection.

Public Transit Systems

Since the NHS connects to all urban areas with populations above 25,000, access is provided to the 319 public transit systems serving over 99 percent of all transit riders.

Airports

The 143 airports handle about 96 percent of total annual domestic enplanements as well as similarly large amounts of civilian airborne cargo.

Other Characteristics

The FHWA estimates that the proposed NHS contains the following number of bridges,

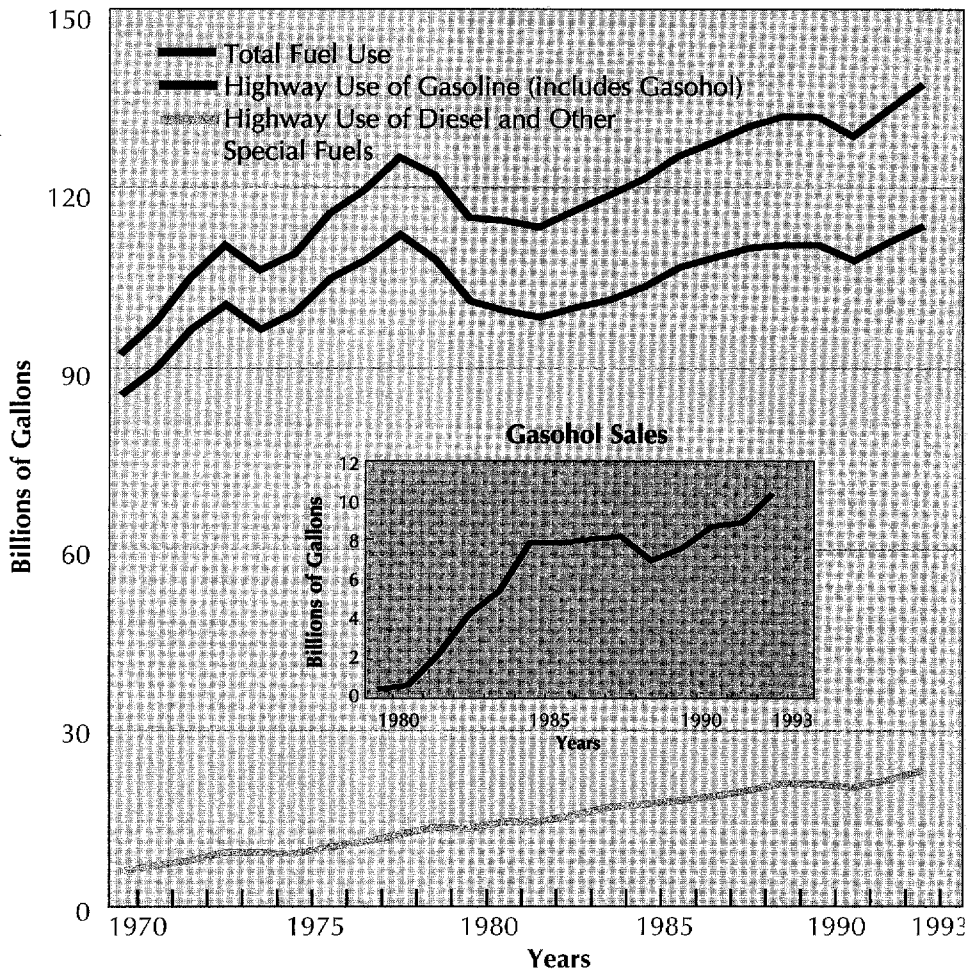
railroad crossings, major border crossings with Canada and Mexico, and full access control mileage.

Characteristics	Number	Mileage
Bridges	126,910	
Railroad Crossings ¹	4,500	
Border Crossings		
Canada	32	
Mexico	21	
Full Access Control		
Interstate ²		42,213
Other		10,105

¹ The number of railroad crossings is an estimate based on State-by-State computations assuming the ratio of railroad crossings per mile of NHS is similar to the ratio of railroad crossings per mile of principal arterial.

² The Interstate mileage does not include some mileage subject to full access control—notably designated Interstate mileage in Alaska and Puerto Rico.

Highway Motor Fuel Use (Billions of Gallons)



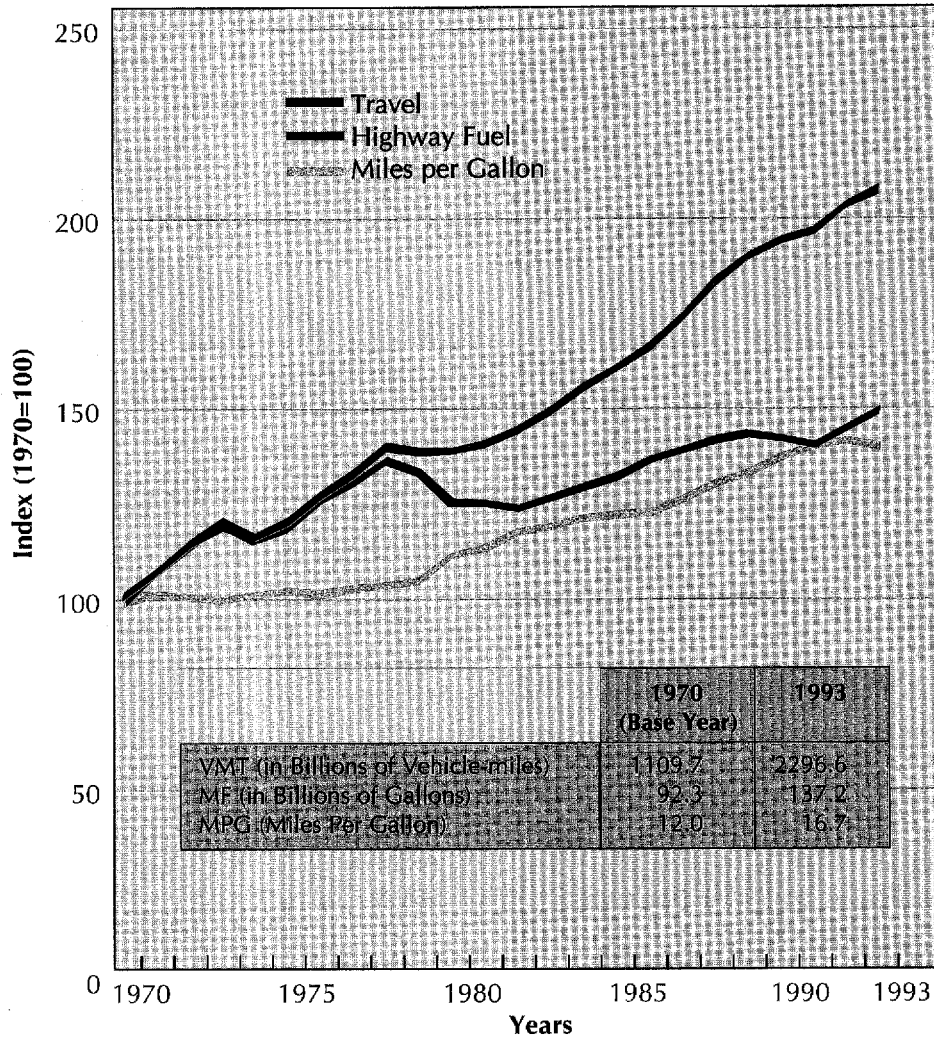
After a drop during the economic slump in 1991, highway fuel consumption is once again rising – reaching 137.2 billion gallons for 1993. Despite improved automotive fuel economy, highway use of gasoline increased through most of the 1980's as the population and number of automobiles increased.

Highway consumption of diesel fuel, used predominantly by trucks, was more greatly impacted by the economic recession, dropping almost 3 percent

between 1990 and 1991. Reported diesel fuel consumption has rebounded due to an improved economy and greater enforcement of fuel tax laws.

Gasohol was originally defined to be a blend of 90 percent gasoline and 10 percent fuel alcohol. This definition was expanded in 1993 to include blends varying from 5.7 to 10 percent alcohol. The lower-alcohol blends are often used as "clean air fuel" to reduce carbon monoxide emissions.

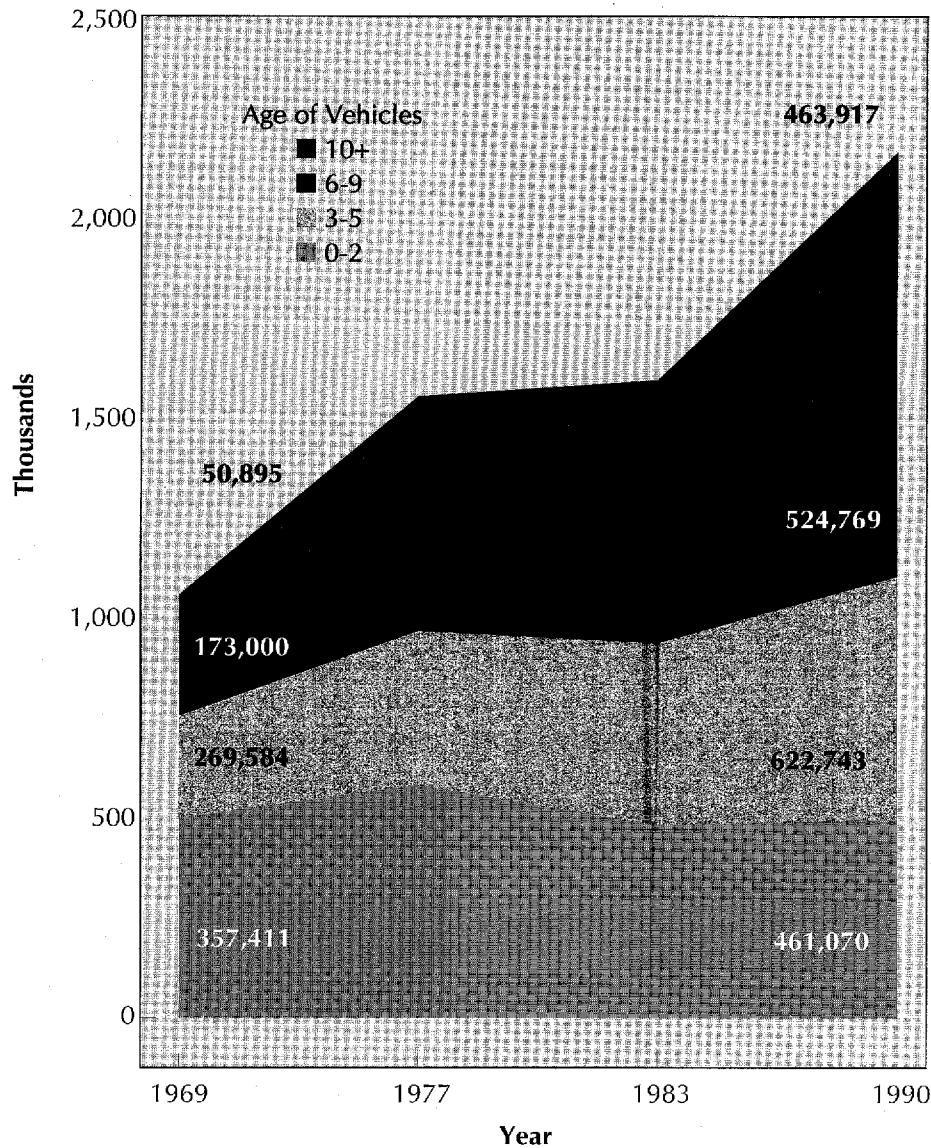
Vehicle-Miles of Travel, Highway Fuel Use, and Miles per Gallon of Fuel for All Vehicles



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 16.7 in 1993, a 39 percent increase. In spite of the increase in vehicle-miles of travel (107 percent), we only had a 49 percent increase in fuel use due to fuel efficiency.

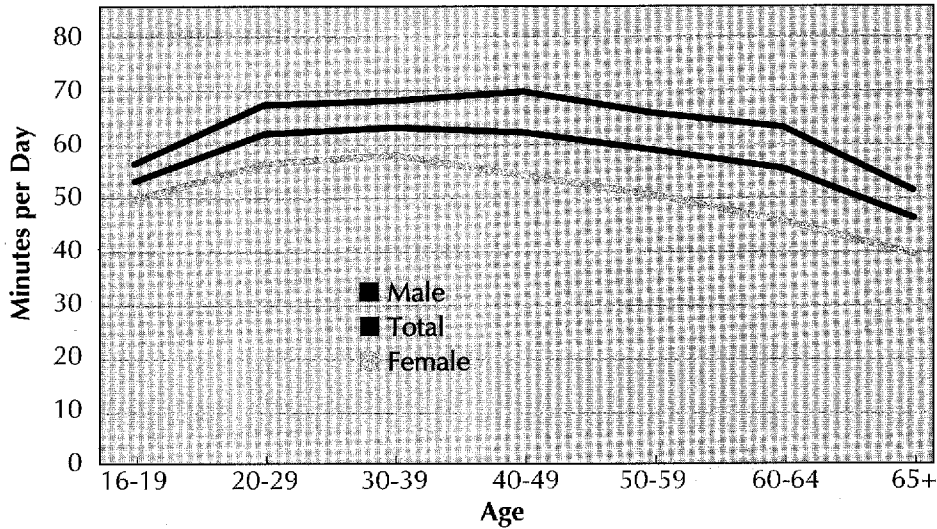
Increasing Use of Older Vehicles



Not only are Americans keeping their cars longer, they are using older cars for a much larger portion of travel than in the past. In 1969, travel by cars 10 years old and older only accounted for 6 percent of total vehicle miles. By 1990, that portion grew to 22 percent.

Source: Federal Highway Administration, *Nationwide Personal Transportation Surveys, 1969, 1977, 1983, 1990.*

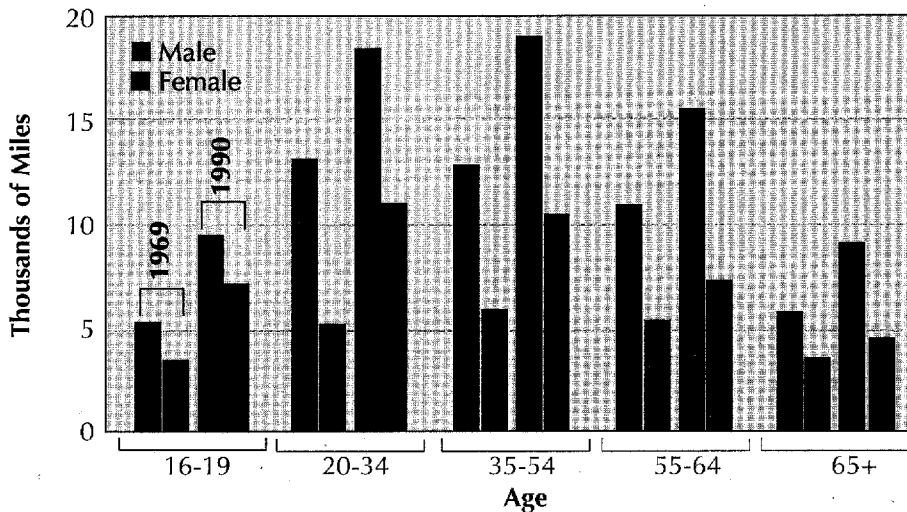
Time Average American Spends in Car



The average driver spends 1 hour in his or her car each day, including weekends. Within each age group, men spend 10-15 minutes more in their cars than women.

Source: Federal Highway Administration, 1990 Nationwide Personal Transportation Survey.

Average Annual Miles per Driver by Age Groups



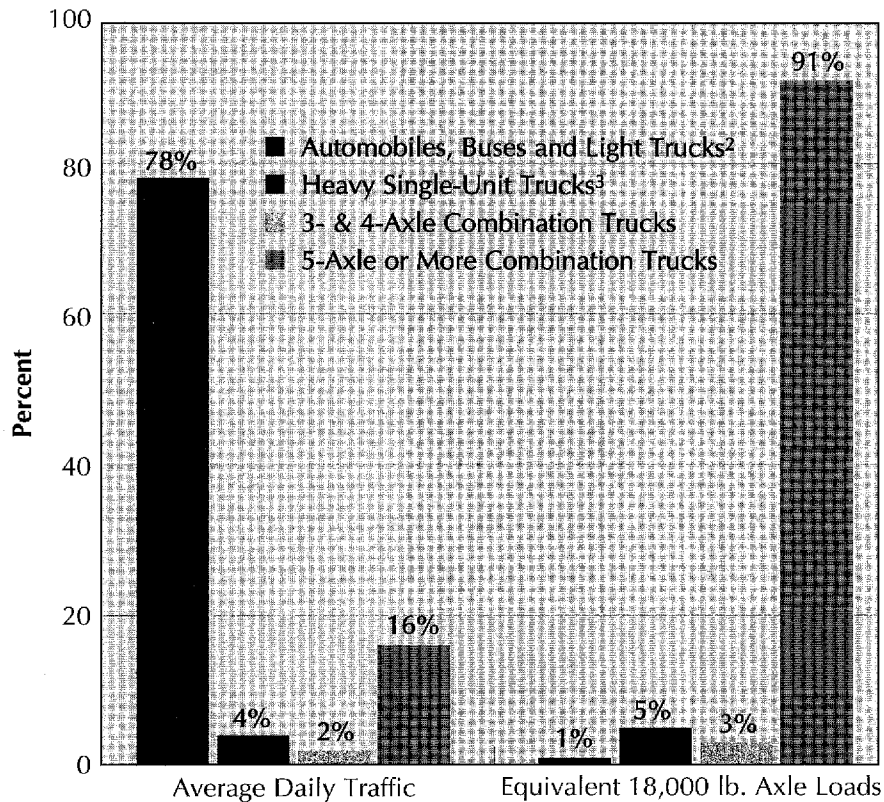
A significant increase in the average miles driven by men and women in all age groups was noted in the 1990 Nationwide Personal

Transportation Survey compared to results for earlier surveys. This increase was particularly prominent in driving by women.

Source: Federal Highway Administration, Nationwide Personal Transportation Surveys, 1969, 1990.

Rural Interstate Travel by Vehicle Type

Distribution of Average Daily Traffic and Loadings
On the Rural Interstate System as a Percent of Total¹
(By Vehicle Type)



¹Equivalent axle loads provide a means of measuring vehicle wear on pavements by relating them to an 18,000 pound single-axle load.

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

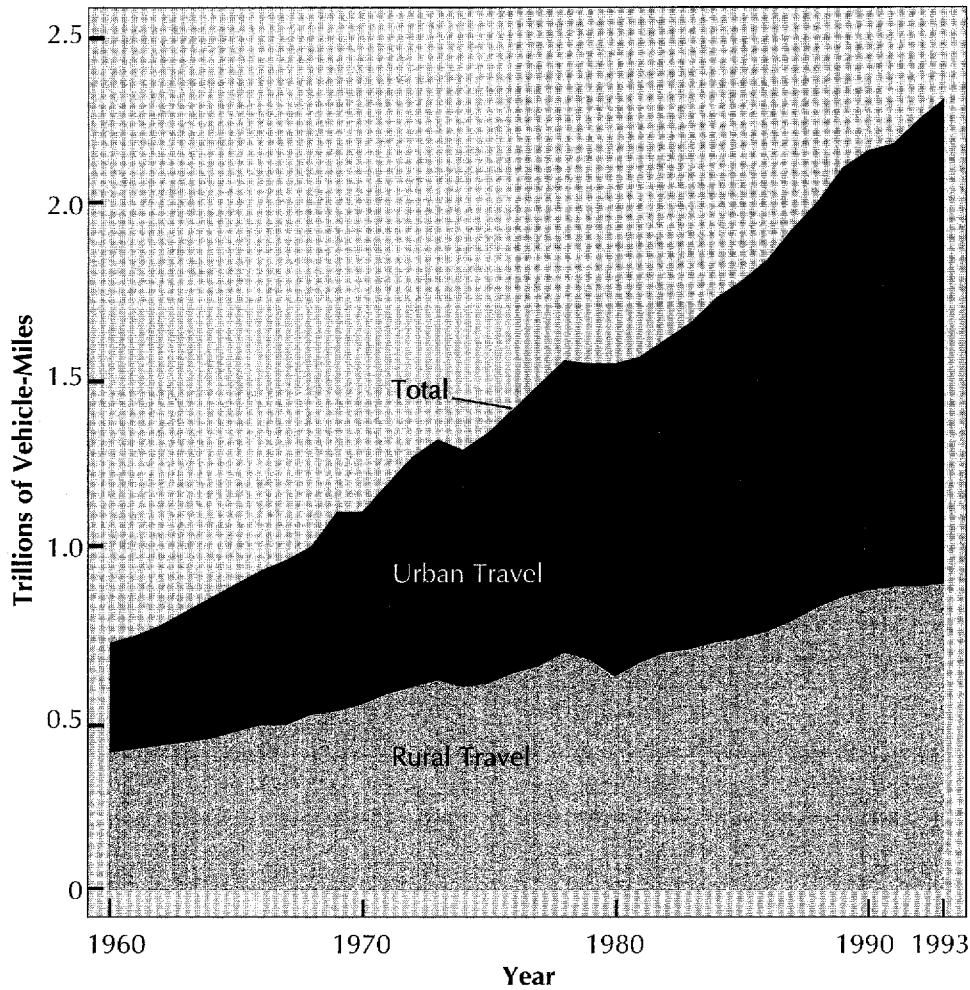
³All vehicles on a single frame that have either 2 axles and 6 tires or 3 or more axles (including camping and recreational vehicles and motor homes).

On rural Interstate routes in 1993, combination trucks with 5 or more axles accounted for 16 percent of average daily traffic volumes but 91 percent of equivalent axle loads.¹ All other vehicles accounted for

84 percent of traffic volumes but only 9 percent of traffic loads. From 1983 to 1993, traffic axle volumes on rural Interstate routes increased by 45 percent and equivalent axle loads increased by 61 percent.

Source: *Highway Statistics 1993* (from data collected at truck weigh sites).

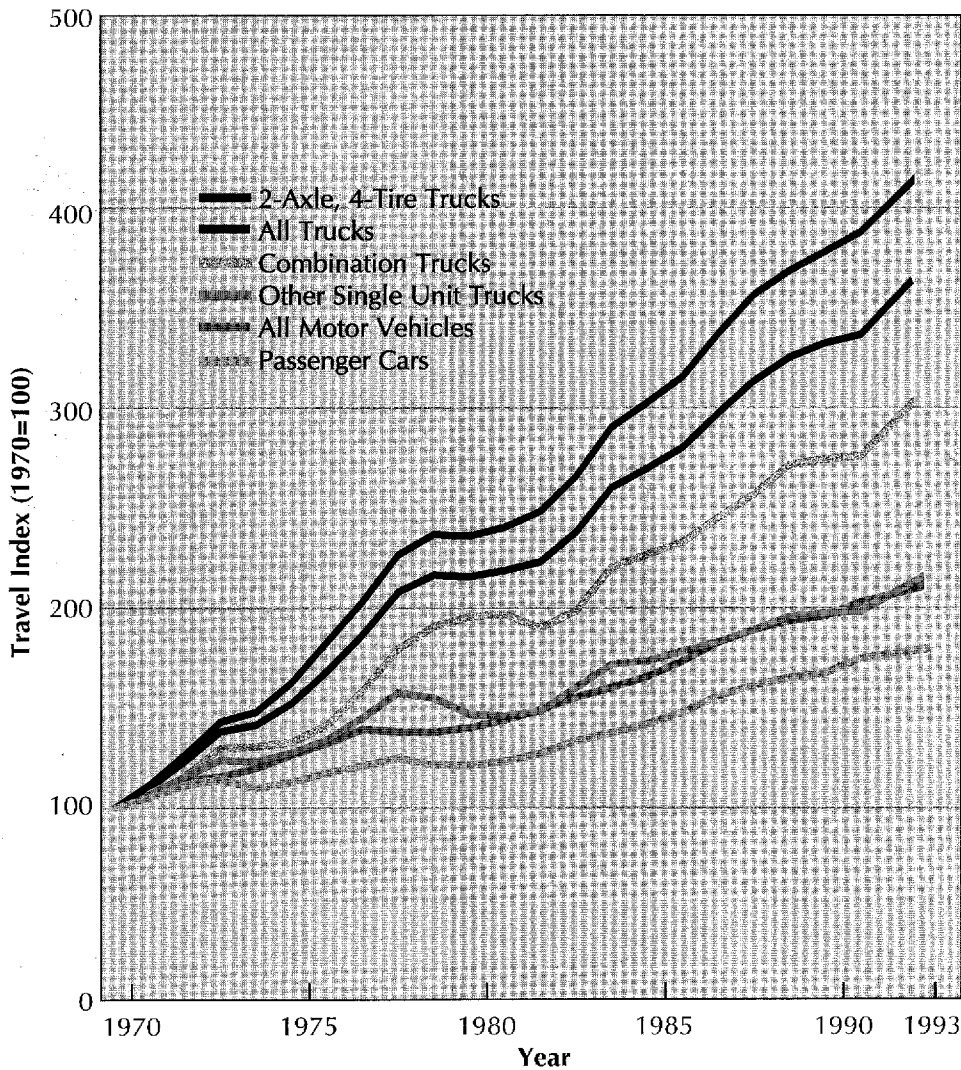
Annual Vehicle-Miles of Travel



Annual travel on the Nation's highways reached an estimated 2.3 trillion vehicle-miles in 1993, or about three times the level reported in 1960. Travel grew about 54 percent during the 1960's, another 38 percent in the 1970's, and another 40 percent in the 1980's. Annual travel on roads and streets in urban areas

accounted for 1.4 trillion vehicle-miles in 1993 or 61 percent of total travel, compared to 44 percent in 1960. Compared to the urban travel growth of 49 percent in the 1980's, rural travel grew at a level of 28 percent. Much of the urban travel growth can be attributed to expanding urban boundaries.

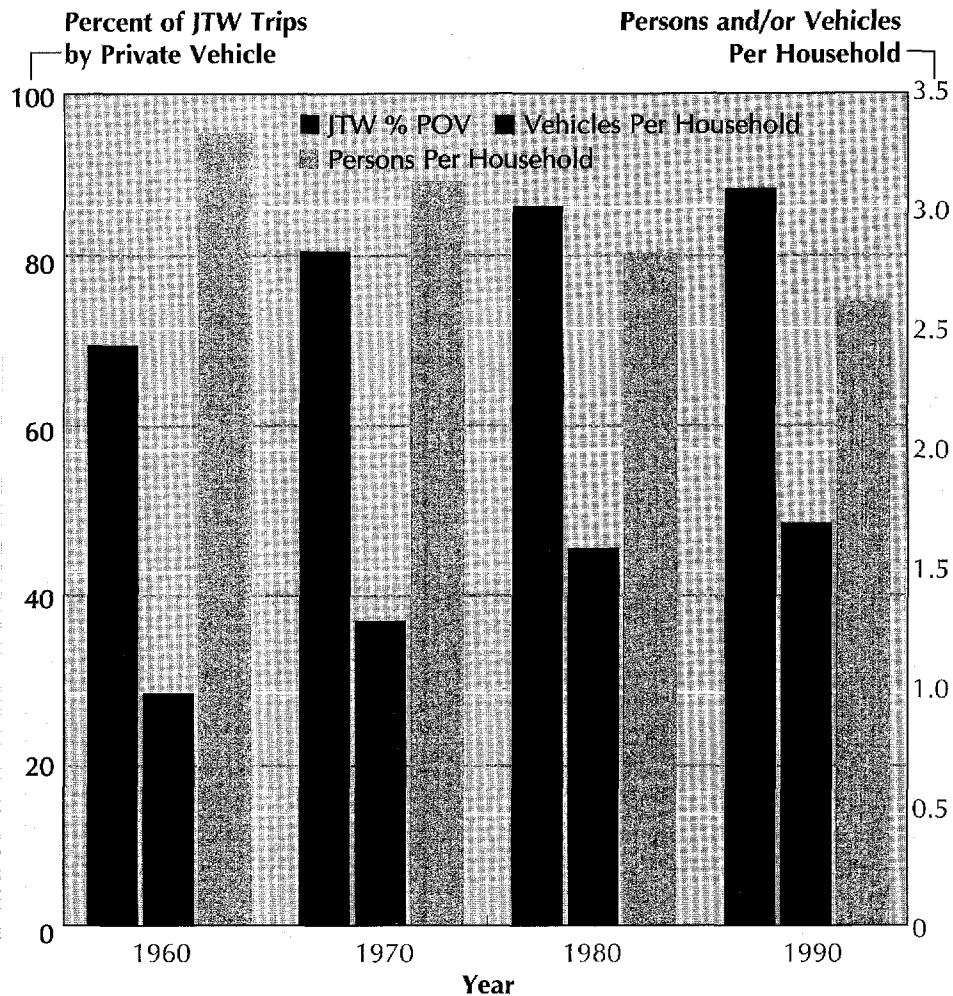
Travel by Vehicle Type



Travel by all motor vehicles has increased by 107 percent compared to 1970. All truck travel has increased over 250 percent since 1970. This includes travel by combination trucks which is up over 190 percent and now accounts for 4.5 percent of total annual vehicle-miles of travel versus 3.2 percent in 1970. Travel by 2-axle, 4-tire trucks has

increased over 300 percent compared to 1970 and now represents 21.6 percent of total travel compared to 11.1 percent in 1970. Although travel by passenger cars has increased 77.2 percent compared to 1970, the percentage of annual travel by passenger cars in relation to travel by all vehicles has decreased from 82.6 percent in 1970 to 70.7 percent in 1993.

Journey to Work Comparisons (JTW) National Total

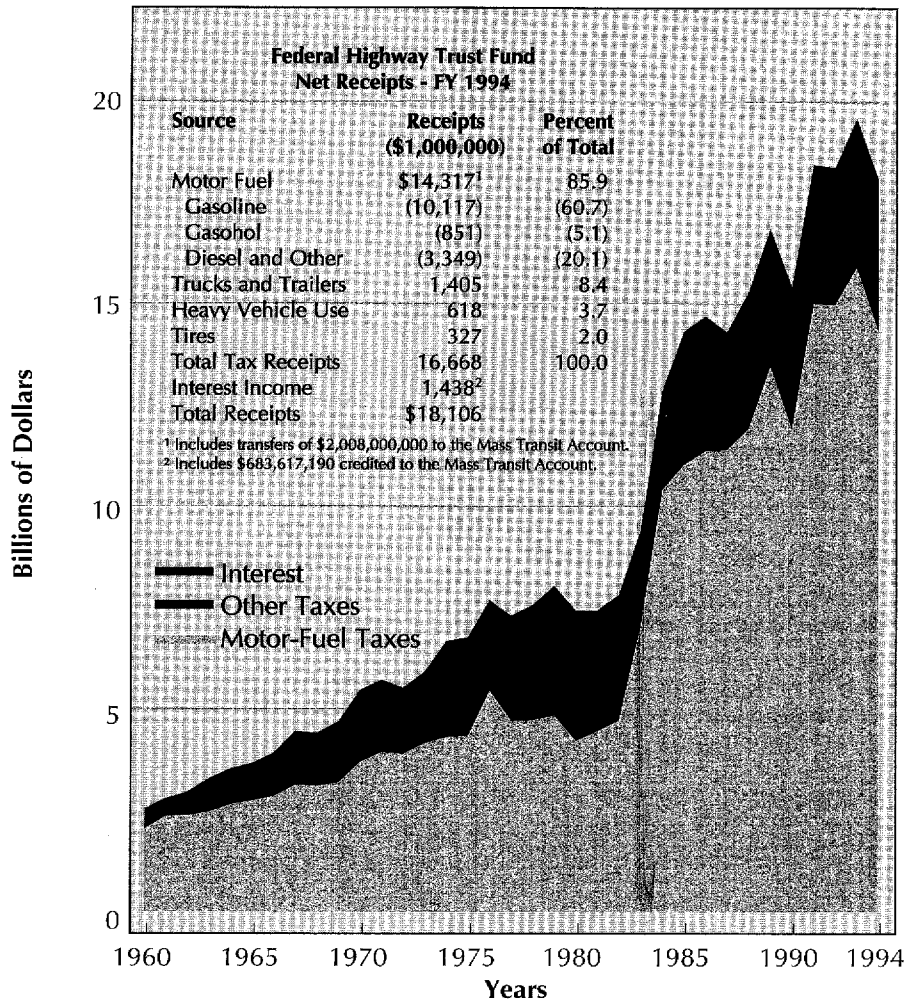


Since 1960, average household size has decreased significantly while average vehicle availability per household increased dramatically. These trends continued between 1980 and 1990, although at slower rates. By 1990, average household

size was 2.6 persons, and average vehicle availability was 1.7 vehicles per household. The overall increase in vehicle availability per adult parallels the general increase in workers who use a private vehicle for their journey to work.

Source: *Journey-to-Work Trends in The United States and Its Major Metropolitan Areas, 1960-1990.*

Federal Highway Trust Fund (HTF) Receipts

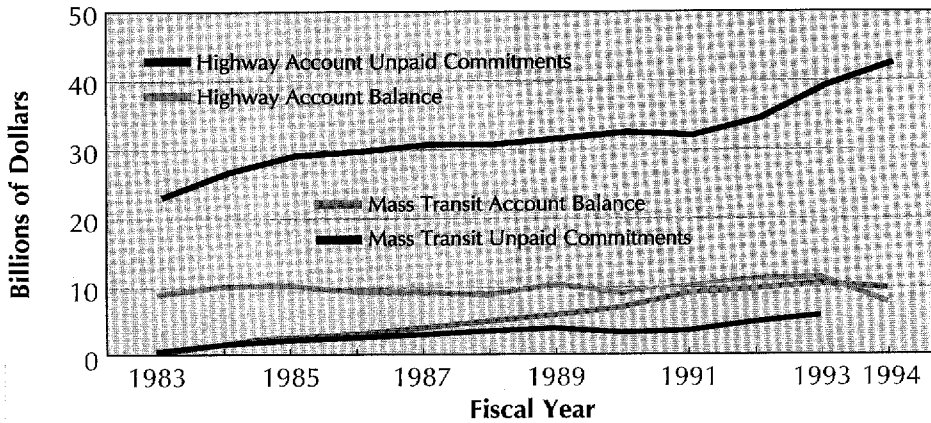


Most receipts from the Federal taxation of motor fuel, along with a number of other highway-related taxes, are deposited in the Federal Highway Trust Fund. The Trust Fund is made up of two accounts—highway and mass transit—and is dedicated for the funding of Federal surface transportation programs. In 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 \$14,317 billion in Fiscal Year 1994, or 85.9 percent of all Trust Fund tax receipts. Other taxes accounted for \$2.350 billion. The balance in the Trust Fund earned interest income of \$1.438 billion.

Federal Highway Trust Fund Balance and Commitments

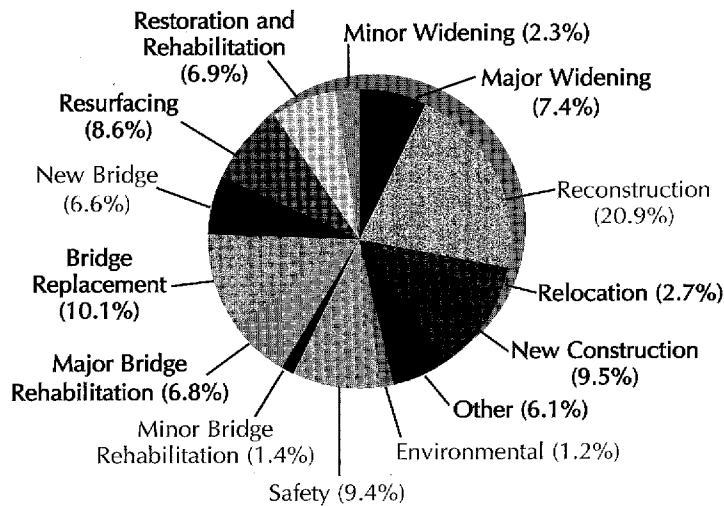


The balance in the Highway Trust Fund grew from \$9.581 billion at the end of Fiscal Year (FY) 1983 to \$17.871 billion at the end of FY 1994. At the end of FY 1994, the Highway Account held a balance of \$7.927 billion and had unpaid commitments of \$42.623 billion. Funds for highway

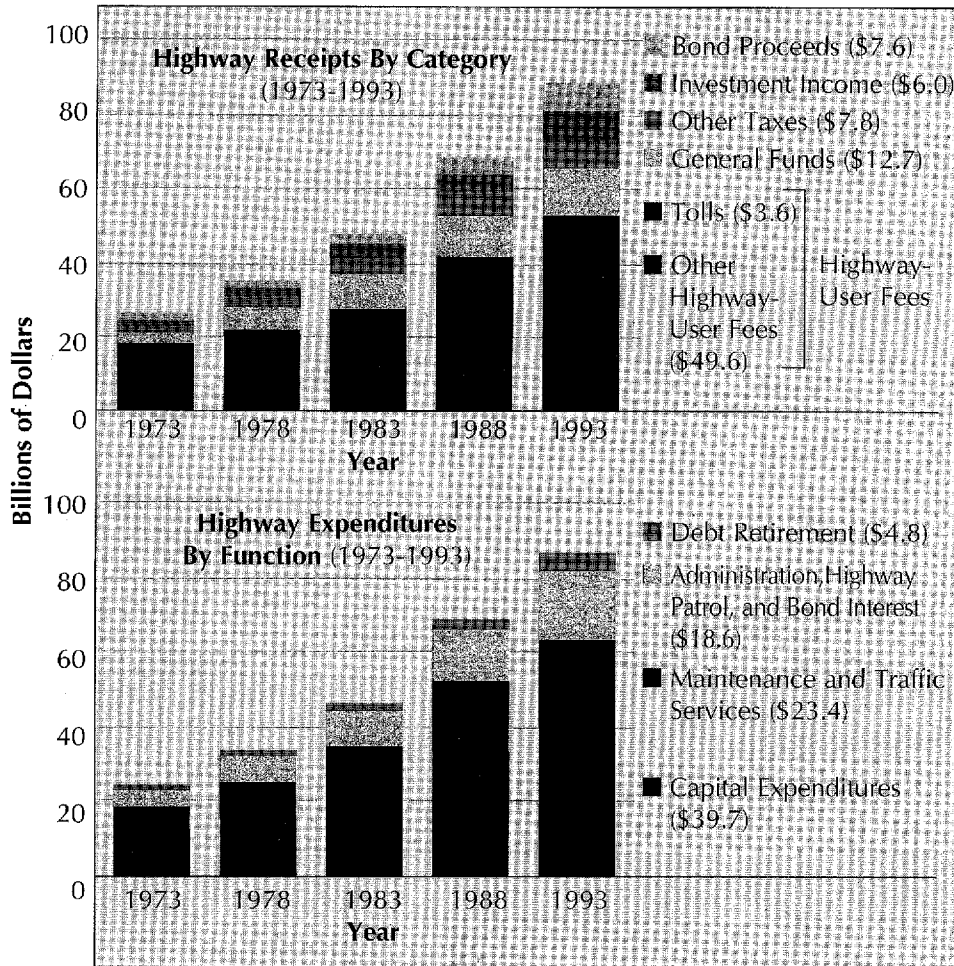
projects are committed when the project is initiated and are paid out as the project progresses. Because construction projects are long term in nature, the highway-user tax revenues can be committed to projects in advance of actual tax collection.

Federal-Aid Highway Obligations by Type of Improvement—1989-1993

Obligations of Federal-aid highway funds totaled \$80.1 billion for the 5-year period 1989 through 1993—an average of \$16.0 billion per year. Reconstruction work represents the largest portion of obligations during this period.



Highway Receipts by Category Highway Expenditures by Function



Total receipts for highways by all units of government reached \$87.3 billion in 1993—a 227 percent increase compared to 1973. Highway-user fees, which make up the largest share of receipts, account for 72 percent compared to 85.6 percent in 1973. General fund appropriations make up a growing share of highway receipts and now account for 17.2 percent of the total compared to 13.8 percent in 1973.

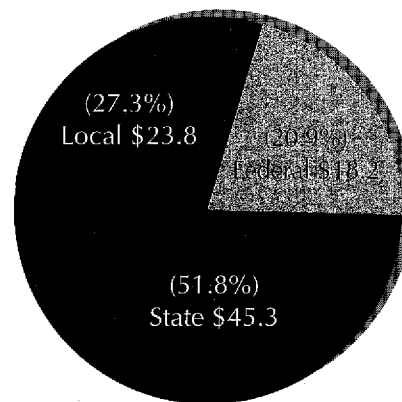
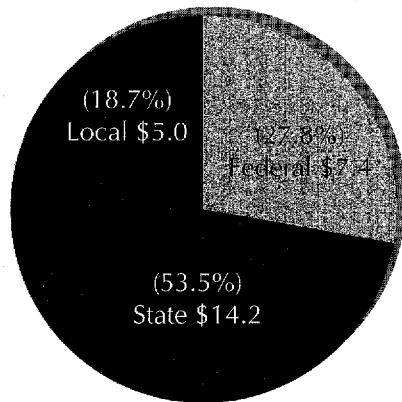
Capital expenditures currently account for 53.1 percent of highway expenditures compared to 58.4 percent in 1973; maintenance accounts for 31.2 percent compared to 28.6 percent in 1973. Expenditures for administration, highway patrol, and bond interest also account for an increasing share of total expenditures—24.9 percent in 1993 versus 22.4 percent in 1973.

Highway Receipts and Expenditures by Governmental Unit

1973

Highway Receipts (Billions of Dollars)

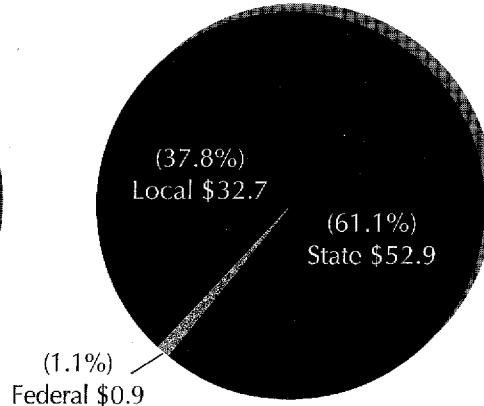
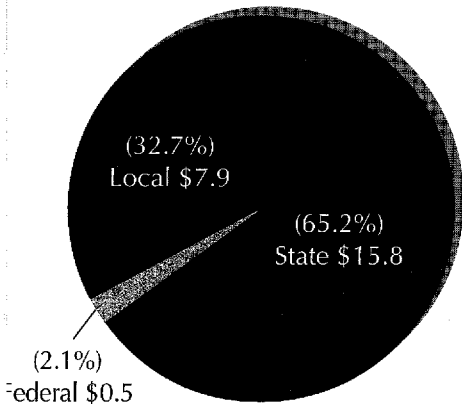
1993



1973

Highway Expenditures (Billions of Dollars)

1993

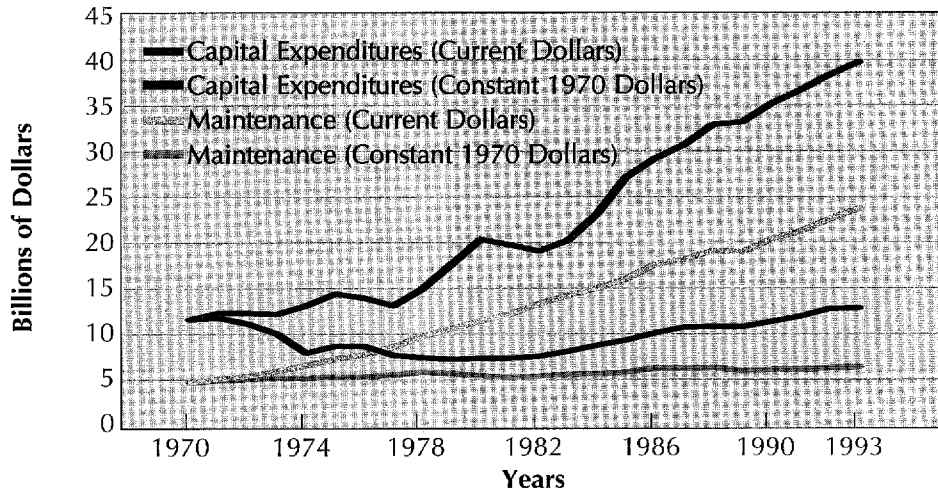


Note: Expenditures by the Federal Government only reflect direct expenditures by Federal agencies. Federal transfers are included with amounts shown for State and local governments.

State governments account for the largest shares of highway receipts and expenditures, but the shares attributed to local units of government have increased significantly since 1973. Local governments now account for 27.3 percent of total receipts and 37.8 percent of total expenditures compared to

18.7 percent and 32.7 percent, respectively, in 1973. Receipts collected by the Federal Government for highways have increased over 145 percent compared to 1973; however, the relative share of total receipts has decreased from 27.8 percent in 1973 to 20.9 percent in 1993.

Highway Capital Expenditures and Maintenance Expenditures by All Units of Government¹

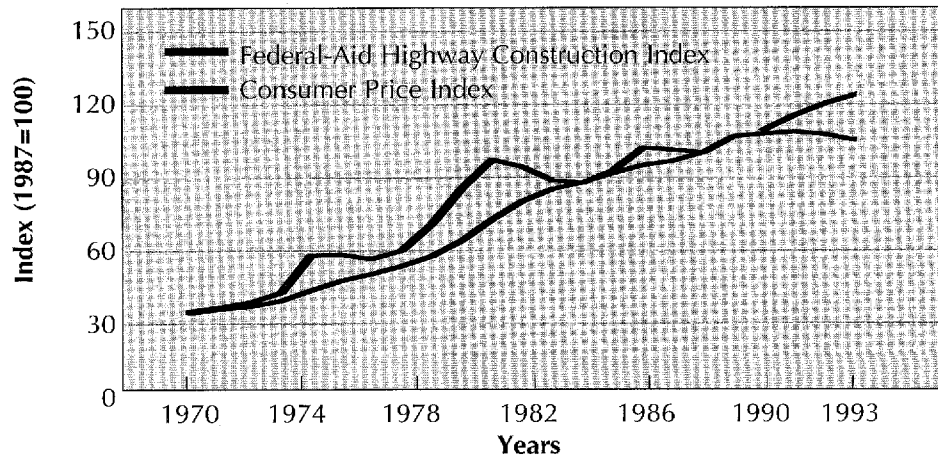


Highway capital expenditures increased 243 percent from 1970 to 1993. Adjusted for inflation, 1993 capital expenditures (expressed in constant 1970 dollars) were only 10 percent above the 1970 level. Expenditures for highway

maintenance in 1993 increased 403 percent compared to 1970. After accounting for inflation, 1993 maintenance expenditures were only 35 percent above the 1970 level.

¹ Capital Expenditures include construction, engineering, and right-of-way.

Highway Construction Price Trends And Consumer Price Index



Federal Highway—User Fees¹

User Fee Type	Rate on January 1, 1995
Motor Fuels ²	
Gasoline	18.4 cents per gallon
Gasohol	
Made with Ethanol	13.0 cents per gallon
Made with Methanol	12.4 cents per gallon
Diesel Fuel	24.4 cents per gallon
Liquefied Petroleum Gases	18.3 cents per gallon
Tires	0–40 pounds, no tax
	Over 40–70 pounds, 15 cents per pound in excess of 40 pounds
	Over 70–90 pounds, \$4.50 plus 30 cents per pound in excess of 70 pounds
	Over 90 pounds, \$10.50 plus 50 cents per pound in excess of 90 pounds
Truck and Trailer Sales	12 percent of retailer's sales price for trucks over 33,000 pounds gross vehicle weight (GVW) and trailers over 26,000 pounds GVW
Heavy Vehicle Use	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

¹ See table FE-101 in *Highway Statistics 1993* for a more complete description of Federal Highway-User Fees.

² Motor-fuel tax rates shown include 0.1 cent per gallon dedicated to the Leaking Underground Storage Tank Trust Fund (except liquefied petroleum gases) and 6.8 cents dedicated for reduction of the national debt. Effective October 1, 1995, the deficit reduction amount will be 4.3 cents and the Highway Trust Fund amount will be reduced by 2.5 cents.

Highway Trust Fund Authorizations¹ for FY 1995, 1996, and 1997² (in Millions of Dollars)

Selected Programs	FY 1995	FY 1996	FY 1997
Interstate Construction ³	\$ 1,800	\$ 0	\$ 0
Interstate Maintenance	2,914	2,914	2,914
Interstate Substitute (Highway)	240	0	0
Reimbursement for Non-Federally Aided Interstate Segments	0	2,000	2,000
National Highway System	3,639	3,640	3,640
Surface Transportation Program	4,096	4,097	4,097
Congestion Mitigation/Air Quality Improvement	1,028	1,029	1,029
Bridge Replacement and Rehabilitation	2,762	2,763	2,763
Federal Lands Highways	445	447	447
Equity Adjustments ⁴	2,055	2,055	2,056
Scenic Byways	14	14	14
Emergency Relief	100	100	100
Highway Safety (FHWA and NHTSA)	249	249	249
Motor Carrier Programs	83	85	90
High Speed Ground Transportation	105	130	130
Intelligent Vehicle Highway Systems	113	113	113
Other Research Programs	27	32	37
Demonstration Projects	1,101	1,101	1,101
Other Programs, Projects, and Studies	30	30	31
Total	20,801	20,799	20,811

¹ Authorized by the Intermodal Surface Transportation Efficiency Act of 1991. Includes only those programs funded by the Highway Account of the Federal Highway Trust Fund.

² Fiscal year starts October 1 and ends September 30.

³ Interstate construction funds are made available 1 year in advance of the year for which they are authorized.

⁴ Some of the equity adjustments were estimated. Actual amounts are determined annually.

1993 Highway Statistics

State	Resident Population (Thousands)	Driving-Age Population (Thousands)	Highway Motor Fuel Use (Thousands of Gallons)	Total Lane Miles	Total Road and Street Mileage
Alabama	4,187	3,233	2,753,078	190,904	92,209
Alaska	599	427	358,697	27,951	13,849
Arizona	3,936	2,971	2,227,009	119,557	59,769
Arkansas	2,424	1,862	1,696,635	156,692	77,192
California	21,211	13,401	13,816,060	375,266	169,201
Colorado	3,566	2,722	1,850,579	163,035	78,721
Connecticut	3,277	2,579	1,519,167	113,314	20,337
Delaware	700	542	399,897	11,983	5,544
Dist. of Col.	578	474	195,869	2,033	1,107
Florida	13,679	10,823	7,187,669	242,525	112,808
Georgia	6,917	5,268	4,914,204	226,974	110,879
Hawaii	1,172	902	398,690	8,821	4,106
Idaho	1,091	805	682,259	109,477	58,835
Illinois	11,697	8,945	5,584,681	286,136	136,965
Indiana	5,713	4,407	3,593,604	188,688	92,374
Iowa	2,814	2,161	1,672,772	230,379	112,708
Kansas	2,730	1,938	1,490,074	207,777	133,236
Kentucky	3,789	2,930	2,515,092	150,253	72,632
Louisiana	4,205	3,186	2,111,174	25,084	39,599
Maine	1,239	966	714,966	46,005	22,510
Maryland	4,963	3,841	2,425,326	64,319	29,313
Massachusetts	6,012	4,755	2,630,750	64,948	30,563
Michigan	9,478	7,237	5,190,578	247,196	117,699
Minnesota	4,517	3,413	2,477,209	266,350	129,959
Mississippi	2,643	1,971	1,576,026	149,359	72,834
Missouri	5,234	4,014	3,418,019	249,572	121,787
Montana	839	658	500,996	182,376	69,768
Nebraska	1,607	1,215	994,577	187,467	92,702
Nevada	1,389	1,069	857,074	94,089	45,728
New Hampshire	1,125	869	574,645	30,745	14,938
New Jersey	7,879	6,177	3,405,625	75,918	35,097
New Mexico	1,616	1,186	1,082,576	126,119	60,812
New York	18,197	14,189	9,372,524	238,905	111,062
North Carolina	6,945	5,423	4,070,310	200,631	96,028
North Dakota	633	482	441,538	175,806	86,727
Ohio	11,091	8,536	5,794,443	239,426	113,823
Oklahoma	3,220	2,453	2,115,750	231,697	112,467
Oregon	3,032	2,335	1,745,074	195,688	96,036
Pennsylvania	12,048	9,280	5,713,271	244,099	117,038
Rhode Island	1,000	788	411,463	12,760	6,057
South Carolina	3,643	2,794	2,294,440	34,128	64,158
South Dakota	715	529	496,063	168,758	83,305
Tennessee	5,099	3,920	3,196,901	273,349	135,037
Texas	18,031	13,372	10,344,113	621,761	294,142
Utah	1,860	1,268	926,431	107,449	40,508
Vermont	576	447	367,366	29,149	14,166
Virginia	6,491	5,116	3,722,407	196,896	98,429
Washington	5,235	4,002	2,751,904	163,163	79,428
West Virginia	1,820	1,422	1,037,864	71,782	35,085
Wisconsin	5,038	3,838	2,662,299	227,731	110,978
Wyoming	470	327	271,945	22,401	12,642
U.S. TOTAL	257,908	197,663	137,224,288	8,129,182	3,904,721

¹All units of government, 1992 data. Fiscal Year (October 1—September 30).

42 Selected Statistics By State

Annual Vehicle-Miles of Travel (Millions)	Total Highway Fatalities	Fatalities per 100 Million VMT	Total Highway Capital Expenditure ¹ (Thousands)	Total Disbursements for Highways ¹ (Thousands)	Payments into the Federal HTF (Thousands)	Apportionments from the HTF ² (Thousands)
42,337	1,042	2.20	\$416,331	\$1,012,173	\$512,990	\$225,297
3,918	118	3.01	278,830	540,965	35,863	215,828
89,150	801	2.05	712,556	1,539,117	261,698	297,970
23,995	583	2.43	398,933	731,651	220,635	271,576
266,808	4,161	1.56	3,805,421	8,117,071	825,249	2,090,709
32,718	539	1.71	569,374	1,191,132	199,178	255,736
27,001	542	1.22	761,625	1,416,360	175,897	362,982
6,895	111	1.61	211,893	435,185	46,981	78,756
5,485	57	1.64	106,218	223,663	22,058	107,181
120,467	2,635	2.19	2,122,527	3,858,336	813,525	831,913
78,426	1,394	1.78	824,112	1,999,078	568,207	346,229
8,074	134	1.66	340,470	507,140	43,899	310,330
11,481	227	1.99	160,967	354,742	77,452	142,516
89,693	1,392	1.55	1,951,325	3,575,480	590,277	768,241
50,461	889	1.47	783,594	1,504,733	410,024	514,583
25,118	459	1.83	626,514	1,283,217	181,798	246,229
24,115	428	1.77	463,280	1,386,152	177,665	224,158
39,598	871	2.20	843,304	1,551,390	299,223	334,750
16,351	879	2.42	805,561	1,727,135	257,717	301,292
12,182	185	1.52	159,716	460,363	86,846	124,017
43,311	665	1.54	758,581	1,390,256	290,748	313,881
46,684	475	1.02	1,013,800	2,215,600	298,555	1,080,720
85,686	1,408	1.64	823,570	2,093,685	538,336	585,649
42,214	538	1.27	1,277,489	2,330,679	253,805	397,099
26,864	616	1.03	458,716	1,066,160	110,860	240,828
54,821	947	1.73	665,227	1,431,033	422,031	445,612
8,707	195	2.24	257,939	374,508	73,922	190,255
14,777	254	1.72	471,209	779,266	113,871	160,658
11,629	263	2.26	101,684	334,311	191,605	156,599
10,342	121	1.17	124,509	458,366	64,203	89,658
59,726	788	1.32	1,351,290	1,447,733	417,408	501,277
18,945	431	2.28	290,551	494,496	131,864	197,793
12,240	1,781	1.59	2,392,535	6,734,933	752,688	1,015,240
69,493	1,389	2.00	910,251	1,737,314	481,233	491,946
10,198	69	1.45	130,672	281,568	58,922	121,722
96,992	1,482	1.53	1,082,150	2,757,034	622,462	677,122
85,529	671	1.89	438,031	1,019,538	208,632	286,711
28,352	524	1.85	547,884	1,020,498	205,573	246,949
90,706	1,529	1.69	1,348,797	3,869,656	697,668	916,227
7,227	74	1.02	140,363	253,490	46,597	121,211
16,125	846	2.34	364,123	705,163	274,308	227,616
7,413	140	1.89	230,278	390,401	55,441	122,052
52,312	1,171	2.25	725,725	1,307,832	384,861	372,528
167,611	3,037	1.81	2,282,889	5,621,892	1,223,679	1,196,548
17,056	303	1.78	256,810	464,660	119,942	151,427
5,976	110	1.84	124,090	258,385	43,587	81,674
69,371	878	1.37	861,340	2,117,901	442,070	444,053
46,135	661	1.43	837,708	1,882,329	304,217	464,431
16,778	429	2.56	370,762	720,983	109,816	224,708
49,167	714	1.45	1,011,475	2,150,450	320,367	358,348
6,270	120	1.77	173,635	211,308	68,584	140,182
2,296,585	40,115	1.75	\$38,305,633	\$83,102,868	\$16,046,324	\$20,186,800

¹Includes allocations.

1993 Relationships— Population, Drivers, Vehicles, Fuel, and Travel¹

State	Total Registered Vehicles	Total Licensed Drivers	Licensed Drivers per 1,000 Driving-Age Population	Registered Motor Vehicles per 1,000 Population	Licensed Drivers per Motor Vehicle
Alabama	3,390,365	3,008,575	951	810	0.89
Alaska	489,004	437,696	1,026	816	0.90
Arizona	2,891,589	2,623,586	893	745	0.84
Arkansas	1,527,625	1,750,765	940	630	1.15
California	22,823,712	20,123,881	860	731	0.88
Colorado	3,032,088	2,591,011	952	850	0.85
Connecticut	2,594,369	2,180,314	845	792	0.94
Delaware	554,550	506,274	933	792	0.91
Dist. of Col.	263,637	361,066	752	456	1.57
Florida	10,169,556	10,762,041	994	743	1.06
Georgia	5,632,425	4,613,295	876	814	0.82
Hawaii	763,491	734,381	814	652	0.96
Idaho	1,023,179	770,403	857	490	0.73
Illinois	8,070,464	7,462,158	834	690	0.92
Indiana	4,670,301	3,700,766	800	608	0.83
Iowa	2,738,147	1,899,430	679	973	0.69
Kansas	1,922,229	1,774,036	823	760	0.82
Kentucky	2,629,130	2,468,992	843	694	0.94
Louisiana	3,166,155	2,576,701	809	737	0.91
Maine	1,027,942	905,533	937	829	0.88
Maryland	3,559,558	3,274,392	852	717	0.92
Massachusetts	3,837,497	4,161,137	875	638	1.08
Michigan	7,398,558	6,527,400	802	781	0.88
Minnesota	3,716,103	2,637,458	773	823	0.71
Mississippi	1,999,639	1,640,300	822	732	0.83
Missouri	4,065,686	3,472,140	865	777	0.85
Montana	939,220	530,744	898	1,119	0.57
Nebraska	1,439,026	1,141,134	940	895	0.79
Nevada	937,227	976,214	913	1,675	0.74
New Hampshire	958,741	868,560	1,000	852	0.91
New Jersey	5,640,875	5,458,840	884	716	0.97
New Mexico	1,420,653	1,148,230	968	879	0.81
New York	10,162,501	10,326,635	728	558	1.02
North Carolina	5,364,571	4,724,661	871	772	0.88
North Dakota	661,831	437,942	909	1,382	0.66
Ohio	9,278,973	7,634,742	894	837	0.82
Oklahoma	2,771,353	2,336,410	951	858	0.84
Oregon	2,624,127	2,373,138	1,016	866	0.90
Pennsylvania	8,282,066	8,054,636	810	607	0.97
Rhode Island	695,310	674,901	857	695	0.97
South Carolina	2,683,711	2,430,511	870	737	0.91
South Dakota	807,684	506,558	958	1,129	0.63
Tennessee	4,263,848	3,542,531	802	674	0.71
Texas	13,118,321	11,876,268	888	728	0.91
Utah	1,334,784	1,189,593	958	716	0.89
Vermont	483,222	430,538	964	839	0.89
Virginia	3,402,735	4,579,666	1,041	833	0.85
Washington	4,412,998	3,698,920	924	840	0.84
West Virginia	1,345,395	1,302,086	903	730	0.97
Wisconsin	3,814,695	3,502,341	912	757	0.92
Wyoming	557,616	350,074	1,046	1,286	0.63
U.S. TOTAL	194,063,482	173,149,313	876	752	0.89

¹ Vehicle relationships exclude motorcycles.

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
1.23	812	17.19	13,962	11,106	15,734
1.23	734	10.92	8,012	6,539	8,951
1.36	786	17.22	13,536	9,946	14,922
1.59	1,111	14.14	15,707	9,897	13,705
1.37	649	17.98	11,622	8,530	11,339
1.18	610	17.68	10,791	9,175	12,628
1.26	586	17.77	10,908	8,139	12,384
1.26	721	17.24	12,434	9,846	13,619
1.19	743	17.79	13,219	10,025	9,652
1.35	707	16.76	11,846	8,807	11,194
1.23	874	16.96	13,924	11,336	17,000
1.53	522	20.25	10,575	6,891	10,994
1.07	674	16.71	11,221	10,446	14,662
1.45	692	16.06	11,114	7,668	12,020
1.22	769	16.82	12,946	10,583	15,949
1.03	611	15.02	9,173	8,926	13,224
1.32	778	16.18	12,546	9,529	15,593
1.44	957	15.74	15,061	10,451	16,038
1.36	731	15.71	11,481	9,463	13,108
1.21	696	17.04	11,851	9,829	13,453
1.39	681	17.86	12,768	8,723	13,227
1.57	686	17.75	12,165	7,765	11,219
1.18	699	16.67	11,381	8,691	10,927
1.22	667	17.04	11,360	9,345	16,006
1.32	838	16.03	12,471	10,153	14,577
1.29	841	16.04	13,484	10,474	15,789
1.09	619	14.99	9,270	10,373	16,405
1.12	691	14.86	10,269	9,194	12,949
1.48	914	13.58	12,402	8,369	11,900
1.17	599	18.00	10,787	9,190	11,907
1.40	606	17.54	10,588	7,586	10,941
1.14	762	17.50	13,335	11,720	16,499
1.76	627	17.61	11,045	6,168	10,868
1.29	759	17.07	12,954	10,006	14,709
0.96	666	18.95	9,394	9,699	14,061
1.20	624	16.74	10,453	8,745	12,704
1.17	763	16.81	12,829	10,905	15,207
1.16	665	16.25	10,804	9,351	11,947
1.45	690	15.88	10,952	7,529	11,261
1.44	592	17.56	10,394	7,227	10,708
1.36	853	15.74	13,481	9,917	14,863
0.89	614	14.94	9,178	10,362	14,634
1.03	644	16.30	10,898	10,320	13,716
1.37	789	16.20	12,777	9,295	14,113
1.39	734	17.42	12,778	9,121	14,339
1.19	760	16.27	12,367	10,381	13,880
1.20	686	17.24	11,867	9,687	13,012
1.19	624	16.76	10,454	8,779	12,473
1.35	771	16.17	12,471	9,218	12,888
1.32	698	18.47	12,889	9,759	14,038
0.89	610	19.23	12,140	14,397	19,339
1.33	707	16.74	11,834	8,905	13,264

Selected Statistics By State 45

Areas with Population Above 500,000

Urbanized Area	Location		Estimated Urbanized Population (1,000)	Federal-Aid Urbanized Land Area (Sq. Miles)	Persons per Square Mile	Total Highway Mileage
	Prime State	Other State(s)				
NEW YORK-NORTHEASTERN NY	NY	NJ	16,112	4,014	4,013	36,560
LOS ANGELES	CA		11,954	2,231	5,358	25,783
CHICAGO-NORTHWESTERN ILL	IL	IN	7,703	2,736	2,812	23,306
PHILADELPHIA	PA	NJ	4,524	1,495	3,026	13,039
DETROIT	MI	IN	3,917	1,297	3,015	12,872
SAN FRANCISCO-OAKLAND	CA		3,832	1,203	3,185	9,317
WASHINGTON	DC	MD VA	3,320	926	3,585	6,782
DALLAS-FORT WORTH	TX		3,198	1,712	1,867	17,360
HOUSTON	TX		2,902	1,386	2,094	15,221
BOSTON	MA		2,843	1,156	2,459	8,647
SAN DIEGO	CA		2,451	733	3,345	5,004
ATLANTA	GA		2,322	1,757	1,321	11,952
MINNEAPOLIS-ST. PAUL	MN		2,102	1,142	1,837	10,035
BALTIMORE	MD		2,107	712	2,959	6,309
PHOENIX	AZ		2,079	1,034	1,965	9,628
ST. LOUIS	MO	IL	1,966	872	2,254	8,192
MIAMI-FT. LAUDERDALE	FL		1,928	354	5,461	5,229
SEATTLE	WA		1,879	844	2,226	8,867
PITTSBURGH	PA		1,768	1,112	1,589	8,086
TAMPA-ST. PETERS-CLEARWATER	FL		1,756	650	2,701	7,494
CLEVELAND	OH		1,677	638	2,630	5,852
DENVER	CO		1,594	720	2,213	6,378
SAN JOSE	CA		1,526	265	5,761	3,740
RIVERSIDE-SAN BERNARDINO	CA		1,323	383	3,454	4,845
KANSAS CITY	MO	KS	1,291	841	1,533	7,263
FORT LAUDERDALE-HOLLYWOOD-POMPANO BEACH	FL		1,299	327	3,972	4,216
PORTLAND-VANCOUVER	OR	WA	1,272	450	2,837	3,372
MILWAUKEE	WI		1,226	512	2,394	4,899
CINCINNATI	OH	KY	1,223	630	1,941	4,951
SACRAMENTO	CA		1,204	383	3,144	3,835
SAN ANTONIO	TX		1,129	483	2,337	5,123
BUFFALO-NIAGARA FALLS	NY		1,069	564	1,895	3,681
NEW ORLEANS	LA		1,040	383	2,715	3,257
NORFOLK-PORTSMOUTH	VA		964	809	1,191	3,598
OKLAHOMA CITY	OK		959	211	4,540	4,164
ORLANDO	FL		955	395	2,417	3,575
COLUMBUS	OH		945	476	1,985	3,214
INDIANAPOLIS	IN		915	422	2,168	3,967
PROVIDENCE-PAWTUCKET	RI	MA	904	419	2,157	4,290
MEMPHIS	TN	AR, MS	860	407	2,113	3,208
LAS VEGAS	NV		855	231	3,699	3,066
WEST PALM BEACH-BOCA RATON-DELRAY BEACH	FL		845	307	2,752	2,592
SALT LAKE CITY	UT		805	359	2,240	2,785
LOUISVILLE	KY	IN	792	384	2,062	3,371
JACKSONVILLE	FL		773	508	1,521	3,661
BIRMINGHAM	AL		727	609	1,193	4,398
TULSA	OK		709	395	1,794	2,983
HONOLULU	HI		686	185	3,708	894
ROCHESTER	NY		620	359	1,727	2,505
DAYTON	OH		613	369	1,661	2,659
HARTFORD-MIDDLETOWN	CT		605	351	1,724	2,524
NASHVILLE	TN		595	571	1,042	2,946
SPRINGFIELD	MA	CT	588	399	1,473	2,484
RICHMOND	VA		583	281	2,074	2,388
TACOMA	WA		565	317	1,782	2,272
EL PASO	TX	NM	563	218	2,582	2,046
AUSTIN	TX		562	314	1,789	2,287
OMAHA	NE	IA	544	222	2,450	2,425
AKRON	OH		528	156	3,383	2,551
FRESNO	CA		519	168	3,089	2,054
CHARLOTTE	NC		515	299	1,723	2,899
OXNARD-VENTURA	CA		510	190	2,684	1,570

* Annual average daily traffic.

1. Some urbanized area data have not been reported; for example, Wilmington in Pennsylvania is with Philadelphia, El Paso in New Mexico is not reported, Kissimmee in Florida is with Orlando, other anomalies may exist. Chicago in Illinois includes Crystal Lake, Joliet and Round Lake Beach.

2. 1992 data used for Hawaii, Ohio, and Virginia (1993 data not available).

Total Freeway/Expressway Mileage	Total Freeway Miles Per Urbanized Population	Total Daily Highway Vehicle-Miles (1,000)	Total Daily Freeway Vehicle-Miles (1,000)	Daily Rail Passenger Miles (1,000)	Daily Vehicle-Miles per Capita	Average AADT* Total	% of Travel Served by Freeways	Average AADT on Freeways
1,162	72.1	273,996	86,875	29,138	19.5	10,400	37.1	74,471
637	53.3	254,846	113,961	322	21.3	9,864	44.7	178,902
476	61.8	142,183	40,965	6,109	18.1	6,049	26.6	38,260
352	78.0	73,424	20,211	2,433	16.2	5,631	27.5	57,254
280	70.9	35,744	29,537		21.2	9,861	34.4	105,480
341	89.0	78,916	41,269	3,115	20.6	8,434	52.2	121,023
298	89.8	70,267	28,039	2,811	21.2	10,001	39.9	194,990
552	172.6	78,658	35,831		24.6	4,531	45.5	64,911
482	135.8	74,866	32,842		25.8	4,919	43.8	70,639
214	75.3	53,890	20,241	2,610	19.0	6,232	37.5	94,584
231	91.3	52,696	27,468	3,181	20.8	8,772	52.1	118,900
294	126.6	78,303	30,703	916	33.7	6,551	39.2	104,431
304	143.9	48,410	20,639		21.9	4,792	42.6	67,891
265	125.8	40,107	18,028	521	19.0	6,357	44.9	68,030
213	154.5	48,393	10,463		21.3	5,026	21.6	92,592
295	150.1	51,794	21,809		26.3	6,323	42.1	73,228
98	108.8	36,208	9,894	301	18.8	5,013	27.3	100,379
246	130.9	44,842	20,878	1	23.9	6,530	46.5	84,869
281	188.9	44,070	9,345	36	19.3	4,293	37.4	44,356
92	52.4	35,604	5,823		20.3	4,751	16.3	63,293
231	137.7	34,931	14,155	198	20.8	6,292	30.5	61,277
204	128.0	34,712	13,287		21.8	5,442	38.2	65,132
176	115.3	33,018	16,354	121	21.3	8,820	50.3	94,350
135	102.0	28,280	13,691		21.4	5,837	48.4	101,414
159	273.0	33,587	15,004		25.5	4,116	44.7	41,793
103	79.3	28,368	8,995		21.8	6,729	31.7	87,330
137	107.3	26,049	10,315	113	20.9	4,849	39.5	75,291
85	69.3	30,501	6,722		24.9	6,227	22.0	79,082
162	102.5	28,346	12,091		23.0	5,662	42.9	74,537
110	91.4	24,807	10,283	91	20.6	6,469	41.4	93,481
217	106.9	26,078	11,337		23.0	5,090	43.4	53,729
141	131.9	20,428	5,500	53	19.1	5,550	26.9	39,007
69	66.3	16,540	4,849	28	15.9	5,075	29.1	50,275
116	120.3	20,138	5,872		20.9	5,597	29.1	50,620
142	153.3	21,486	7,723		22.4	4,981	35.9	52,377
87	91.1	22,173	5,027		23.2	6,202	22.5	57,781
141	149.2	21,215	9,462		22.4	6,601	44.6	67,106
130	142.1	24,769	9,790		27.1	6,244	39.5	75,307
118	130.5	17,797	6,588		18.1	4,148	38.9	55,768
85	98.8	19,197	5,154		22.3	5,984	26.8	60,635
52	161.6	12,297	2,633		15.0	6,249	20.3	50,630
77	91.1	16,260	5,526		19.2	6,273	33.9	71,766
80	98.2	16,797	6,063		20.6	6,031	36.0	73,767
135	170.5	21,953	8,042		27.7	6,512	36.6	59,570
111	143.6	18,880	5,991		24.9	5,153	31.7	53,922
125	171.9	19,938	6,752		27.4	4,533	33.8	54,016
142	188.0	14,366	5,265		20.3	4,813	36.6	42,008
71	103.5	11,497	5,551		16.8	12,860	48.2	78,183
101	162.9	13,394	4,896		21.6	5,347	36.5	48,475
81	132.1	14,264	4,364		23.3	5,364	30.5	53,876
105	173.6	14,516	7,023	14	24.0	5,751	48.3	66,303
137	230.3	18,191	7,812		30.6	6,175	42.9	57,021
72	191.0	11,534	3,572		19.6	4,651	30.9	46,354
95	163.0	15,093	5,128		25.9	6,320	33.9	53,978
54	95.6	12,180	4,748		21.6	5,360	38.9	87,223
51	90.6	10,471	3,255		18.6	5,118	31.0	63,823
99	176.2	14,945	6,420		26.1	5,287	42.9	64,348
53	97.4	10,087	2,454		18.5	4,160	24.3	46,301
87	169.8	11,813	4,231		22.4	4,630	35.8	48,502
29	55.9	9,088	1,710		17.5	4,425	18.8	58,965
66	128.7	11,760	3,668		22.3	5,128	31.2	53,573
59	115.7	10,602	5,388		20.8	6,753	50.8	91,322

Source: All data, except rail, reported by States through the Highway Performance Monitoring System. Numbers may differ from subsequently published 1993 Census data. Rail data obtained from Federal Transit Administration and is the sum of Light Rail, Heavy Rail and Commuter Rail data.

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Publication Listing

The following Office of Highway Information Management publications may be obtained by contacting the Federal Highway Administration, R&T Report Center, FAX number (703) 285-2919, phone number (703) 285-2144. If you have questions concerning the contents of any of these reports, please call (202) 366-0180.

1. Highway Statistics Summary to 1985, HPM-10/4/87
2. Highway Statistics (Annual)
3. Selected Highway Statistics and Charts (Annual)
4. Highway Taxes and Fees, How They Are Collected and Distributed (Biennial)
5. Traffic Monitoring Guide, FHWA PL 95-031
6. 1990 Nationwide Personal Transportation Survey Reports:
 - 6.1 Databook Volume 1, FHWA PL 94-010A
 - 6.2 Databook Volume 2, FHWA PL 94-010B
 - 6.3 Urban Travel Patterns, FHWA PL 94-018
 - 6.4 Travel Mode Special Reports, FHWA PL 94-019
 - 6.5 Demographic Special Reports, FHWA PL 95-032
 - 6.6 Special Reports on Trip and Vehicle Attributes (DRAFT), FHWA PL 94-021
 - 6.7 Summary of Travel Trends, FHWA PL 92-027
 - 6.8 Travel Behavior Issues in the 90's, FHWA PL 93-012
7. Driver License Administration Requirements and Fees (Biennial)
8. Driver Licenses (Annual)
9. Journey-to-Work Trends in the United States and its Major Metropolitan Areas 1960-1990, FHWA PL 94-012.
10. New Perspectives in Commuting, (1992), FHWA PL 92-026
11. Cost of Owning and Operating Vehicles and Vans—1991, FHWA PL 92-019

These reports may be obtained from the Office of Highway Information Management, Federal Highway Administration, FAX number (202) 366-7742, phone number (202) 366-0180.

1. Monthly Motor Fuel Reported by States (Monthly)
2. Toll Facilities in the United States
3. Traffic Volume Trends (Monthly)
4. The Highway Performance Monitoring System (Brochure), FHWA PL 94-031
5. Bulletin—Highway Funding 1992-1995, FHWA





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