

## Chapter 2

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### **System and Use Characteristics**

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## Summary

Exhibit 2-1 summarizes the key findings in this chapter, comparing system and use characteristics data in this report with the 1997 values shown in the 1999 Conditions and Performance Report. Some of the 1997 values have subsequently been revised, and this is reflected in the second column as appropriate. The third column contains comparable values based on 2000 data.

**Exhibit 2-1**

### Comparison of System and Use Characteristics with Those in the 1999 C&P Report

STATISTIC	1997 DATA		2000 DATA
	1999 REPORT	REVISED	
Percentage of Total Highway Miles Owned by Local Governments	75.3%	76.2%	77.4%
Percentage of Total Highway Miles Owned by State Governments	20.3%	19.5%	19.6%
Percentage of Total Highway Miles Owned by the Federal Government	4.3%		3.0%
Local Transit Operators in Urbanized Areas	542	565	614
Rural and Specialized Transit Service Providers	4,920		4,888
<hr/>			
Total Rural Highway Miles (population under 5,000)	3.11 million		3.09 million
Total Urban Highway Miles (population equal or above 5,000)	0.84 million		0.86 million
Total Highway Miles	3.95 million		3.95 million
Transit Route Miles (Rail)	8,602		9,221
Transit Route Miles (Non-Rail)	156,733		163,303
Total Transit Route Miles	165,335		172,524
<hr/>			
Total Rural Highway Lane Miles (population under 5,000)	6.37 million	6.38 million	6.32 million
Total Urban Highway Lane Miles (population equal or above 5,000)	1.89 million		1.93 million
Total Highway Lane Miles	8.26 million	8.27 million	8.25 million
Urban Transit Capacity-Equivalent Miles (Rail)	1.72 billion		1.87 billion
Urban Transit Capacity-Equivalent Miles (Non-Rail)	1.72 billion		1.90 billion
Urban Transit Capacity-Equivalent Miles (Total)	3.44 billion		3.77 billion
<hr/>			
Vehicle Miles Traveled on Rural Highways (population under 5,000)	1.00 trillion		1.09 trillion
Vehicle Miles Traveled on Urban Highways (population equal or above 5,000)	1.56 trillion		1.67 trillion
Vehicle Miles Traveled on All Highways	2.56 trillion		2.68 trillion
Transit Passenger Miles (Rail)	21.14 billion		24.60 billion
Transit Passenger Miles (Non-Rail)	19.04 billion		20.50 billion
Transit Passenger Miles (Total)	40.18 billion		45.10 billion

There were over 3.95 million miles of public roads in the United States in 2000, of which 3.09 million miles were in rural communities (rural communities are defined as those places with fewer than 5,000 residents, and urban communities are defined as those areas with 5,000 or more people). Local governments controlled over 77 percent of total highway miles in 2000; States controlled about 20 percent; and the Federal Government owned about 3 percent. Hence, the Nation's highway system is overwhelmingly *rural* and *local*.

In 2000, there were 172,524 transit route miles, of which 163,303 miles were non-rail. Both rail and non-rail systems have experienced growth over the past decade. The number of public transit operators in urbanized areas increased by 8.6 percent from 565 in 1997 to 614 in 2000. The number of rural and specialized transit providers decreased by 0.7 percent from 4,920 to 4,888 over this same period.

Total highway lane-mileage was 8.25 million in 2000. Lane-miles have grown at an average annual rate of about 0.2 percent since 1993, mostly in urban areas. Urban lane-mileage grew to more than 1.9 million by 2000, while rural lane-mileage shrank to 6.3 million. This shift is largely due to growth in metropolitan areas and the reclassification of some rural routes as urban.

Transit capacity-equivalent miles report the distance traveled by a transit vehicles in passenger-carrying revenue service as measured by vehicle revenue miles adjusted for the carrying capacity of each type of transit vehicle. Total urban transit-capacity equivalent mileage increased from 3.44 billion miles in 1997 to 3.77 billion miles in 2000, including 1.87 billion for rail and 1.90 billion for non-rail, following a 1990s trend of an almost even split between rail and non-rail modes.

The number of vehicle-miles traveled (VMT) between 1993 and 2000 grew by an average of 2.7 percent annually. About 1.1 trillion vehicle-miles traveled were on rural highways, and about 1.7 trillion were on urban roads. Traffic has increased in metropolitan areas, but it has also grown in rural communities where there is increased truck traffic and visits by tourists to recreation centers.

Urban transit passenger miles grew at an average annual rate of 2.1 percent between 1991 and 2000. Passenger mile growth on rail modes was considerably faster than on non-rail, increasing from 18.5 billion passenger miles in 1991 to 24.6 billion passenger miles in 2000, a 3.2 percent average annual increase. Non-rail passenger miles climbed from 18.9 billion in 1991 to 20.5 billion in 2000, an average annual increase of 0.9 percent.

# Highway and Bridge System and Use Characteristics

## System Characteristics

Highways and bridges are typically classified by either *ownership* or *purpose*, a distinction used in previous editions of the Conditions and Performance Report. Ownership can be determined by which jurisdiction has primary responsibility over a particular structure, while purpose and level of service are identified by the structure's function. This chapter presents highway miles by jurisdiction and system and use characteristics by functional classification. It also adds a new dimension by examining the deployment of Intelligent Transportation Systems on highways and bridges.

## Highways and Bridges by Ownership

Ownership is largely split among the Federal, State, and local governments. Roads and bridges owned by these governments are considered "public," while structures owned privately are commonly considered "nonpublic."

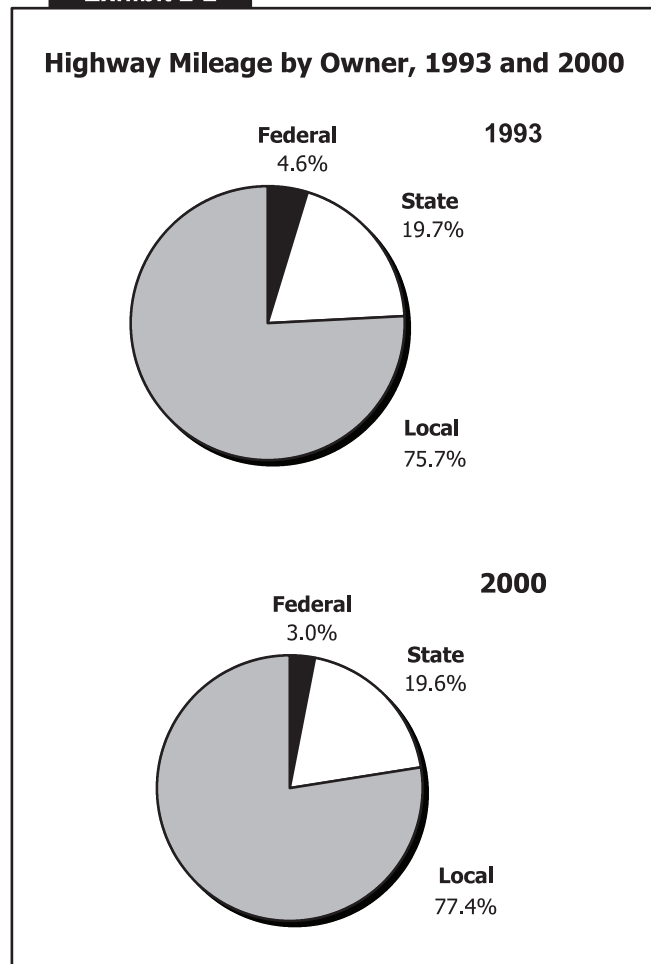
States own almost 20 percent of the Nation's road system. The Federal Government has control over about 3 percent of the network, primarily in National parks and forests and on Indian reservations.

Over 77 percent of American roads are locally owned, although some intergovernmental agreements may authorize States to construct and maintain locally-owned highways. About 1,050 counties in the United States have at least 1 mile of public roads owned by the Federal Government. Most of these counties are in the Western United States. Apache County, Arizona, has the highest percentage of Federal ownership (80 percent), followed by California's Siskiyou County and Montana's Lincoln County (70 percent each).

As Exhibit 2-2 demonstrates, the share of locally-owned roads has grown steadily over the past decade. The share of local public road mileage increased from 75.7 to 77.4 percent between 1993 and 2000. During that same period, the share of State-owned public road mileage declined slightly, from 19.7 to 19.6 percent.

The most dramatic change has been the decline in Federally-owned public road mileage. Between 1993 and 2000, the share of Federal road mileage plummeted from 4.6 to 3.0 percent. This is not a new trend. Federal road mileage reached a peak in 1984, when 7 percent of all public roads were

Exhibit 2-2



Source: Highway Performance Monitoring System.

owned by the Federal Government, and has steadily decreased over the past two decades. Much of the change has occurred as Federal land management agencies reclassified some of their mileage from public to non-public status.

Another trend is the increase in urban highway mileage. This is described in Exhibit 2-3, which shows that mileage in small urban areas grew by an average annual rate of 1 percent between 1993 and 2000. In larger urbanized areas with at least 50,000 residents, the growth rate was slightly smaller.

**Exhibit 2-3**

**Highway Mileage by Owner and by Size of Area,  
Selected Years 1993-2000**

	1993	1995	1997	1999	2000	ANNUAL RATE OF CHANGE 2000/1993
<b>Rural Areas (under 5,000 in population)</b>						
Federal	179,603	170,574	167,369	116,869	116,725	-6.0%
State	660,241	660,667	661,473	662,590	663,755	0.1%
Local	2,257,005	2,259,064	2,280,042	2,297,724	2,308,843	0.3%
<b>Subtotal Rural</b>	<b>3,096,849</b>	<b>3,090,305</b>	<b>3,108,884</b>	<b>3,077,183</b>	<b>3,089,323</b>	<b>0.0%</b>
<b>Small Urban Areas (5,000-49,999 in population)</b>						
Federal	355	494	482	460	458	3.7%
State	27,160	27,442	27,455	27,490	27,596	0.2%
Local	136,537	139,825	143,847	146,468	148,094	1.2%
<b>Subtotal Small Urban Areas</b>	<b>164,052</b>	<b>167,761</b>	<b>171,784</b>	<b>174,418</b>	<b>176,148</b>	<b>1.0%</b>
<b>Urbanized Areas (50,000 and over in population)</b>						
Federal	943	983	980	1,044	1,026	1.2%
State	80,747	83,016	83,429	83,811	83,943	0.6%
Local	566,121	574,319	587,427	593,484	597,836	0.8%
<b>Subtotal Urbanized Areas</b>	<b>647,811</b>	<b>658,318</b>	<b>671,836</b>	<b>678,339</b>	<b>682,805</b>	<b>0.8%</b>
<b>Total Highway Miles</b>						
Federal	180,901	172,051	168,831	118,373	118,209	-5.9%
State	768,148	771,125	772,357	773,891	775,294	0.1%
Local	2,959,663	2,973,208	3,011,316	3,037,676	3,054,773	0.5%
<b>Total</b>	<b>3,908,712</b>	<b>3,916,384</b>	<b>3,952,504</b>	<b>3,929,940</b>	<b>3,948,276</b>	<b>0.1%</b>
<b>Percent of Total Highway Miles</b>						
Federal	4.6%	4.4%	4.3%	3.0%	3.0%	
State	19.7%	19.7%	19.5%	19.7%	19.6%	
Local	75.7%	75.9%	76.2%	77.3%	77.4%	
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	

Source: Highway Performance Monitoring System.

**Q. If a government owns a highway, is it solely responsible for that facility?**

**A.** Not necessarily. Some roads owned by the Federal Government are maintained by State highway agencies. Additionally, the designation of a public road as a Federal-aid highway does not alter its ownership as a State or local road—it only means that its importance has made that road eligible for Federal-aid construction and rehabilitation funds.

Exhibits 2-4 and 2-5 describe highway bridges by owner. Most bridges in the United States are owned by State or local governments. Approximately 50.9 percent of all highway bridges are owned by counties and municipalities. A slightly smaller amount of all highway bridges, about 47.2 percent, are owned by State agencies. Only 1.4 percent of all bridges are owned by Federal agencies, mostly within the Department of the Interior, and 0.5 percent are owned privately or by other entities.

**Exhibit 2-4**

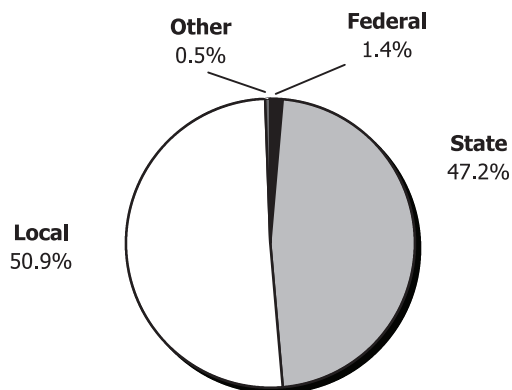
**Bridges by Owner, 1996, 1998, and 2000**

Owner	NUMBER OF BRIDGES		
	1996	1998	2000
Federal	6,171	7,448	8,221
State	273,198	273,897	277,106
Local	299,078	298,222	298,889
Private	2,378	2,278	2,299
Unknown/Unclassified	1,037	1,131	415
	<b>581,862</b>	<b>582,976</b>	<b>586,930</b>

Source: National Bridge Inventory.

**Exhibit 2-5**

**Highway Bridges by Owner, 2000**



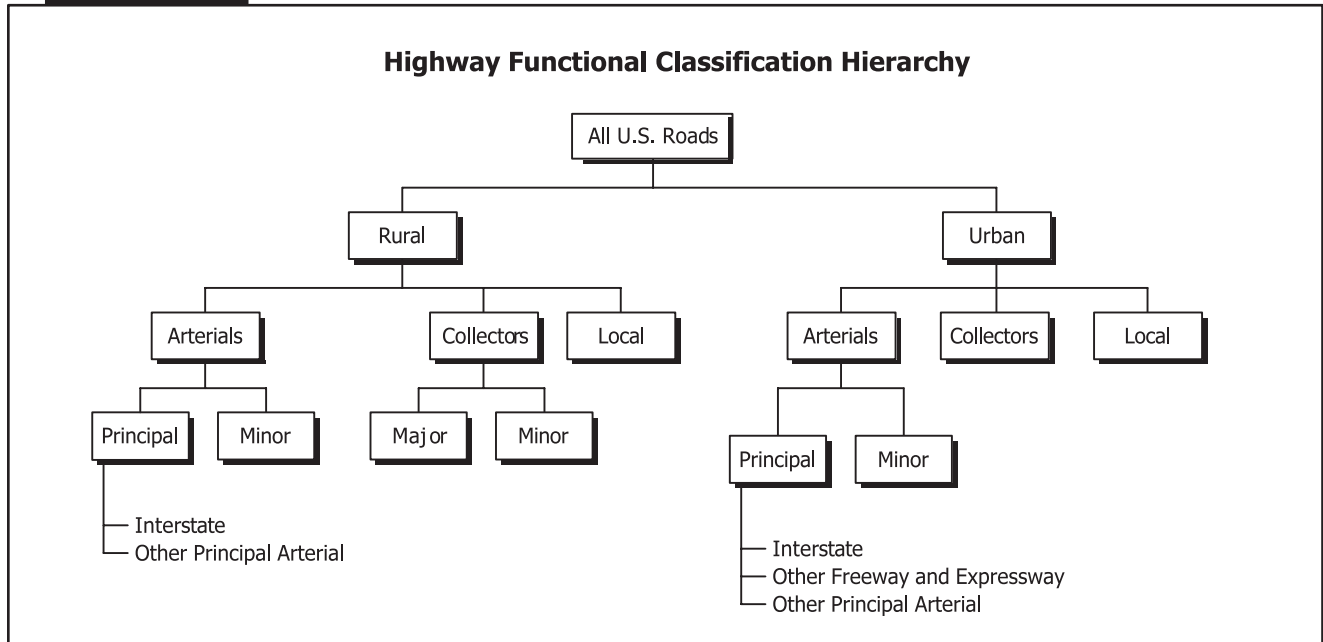
Source: National Bridge Inventory.

**Q. How many highway bridges are owned by railroads?**

**A.** According to the National Bridge Inventory, private railroad companies owned 1,076 highway bridges in 2000. This represents 46.8 percent of all privately-owned highway bridges in the United States.

**Highways and Bridges by Purpose**

Another way to classify roads is by purpose, which is commonly measured by functional classification. The HFCS is the basic organization used for most of this report. Exhibit 2-6 describes the hierarchy of the HFCS.

**Exhibit 2-6**

**Arterials** provide the highest level of mobility, at the highest speed, for long and uninterrupted travel. Arterials typically have higher design standards than other roads. They often include multiple lanes and have some degree of access control.

The rural arterial network provides interstate and intercounty service so that all developed areas are within a reasonable distance of an arterial highway. This network is broken down into principal and minor routes, of which principal roads are more significant. Virtually all urban areas with more than 50,000 people, and most urban areas with more than 25,000 people, are connected by rural principal arterial highways. These are typically interrupted only because of unusual geographic or traffic conditions (for example, connections to international borders, coastal cities, waterports, and airports). The rural principal arterial network is divided into two subsystems, Interstate highways and other principal arterials.

In 2000, the rural principal arterial system accounted for about 3.3 percent of total miles in the United States. This small portion of highways carried 47.0 percent of rural travel and 18.8 percent of total travel in the United States. The other element of the rural arterial system, minor arterials, represented 3.5 percent of total U.S. miles. Minor arterials carried 15.7 percent of rural travel and 6.2 percent of total travel in the United States.

Similarly, in urban areas, the arterial system is divided into principal and minor arterials. The urban principal arterial system is the most important group; it includes Interstate highways, other freeways and expressways, and other principal arterials. The urban principal arterial system serves major metropolitan centers, corridors with the highest traffic volume, and those with the longest trip lengths. It carries most trips entering and leaving metropolitan areas, and provides continuity for all rural arterials that intercept urban boundaries. In 2000, the urban principal arterial system accounted for 1.8 percent of total miles in the United States; however, this network carried 58.4 percent of urban travel and 35.5 percent of total travel in the United States.

Urban minor arterial roads provide service for trips of moderate length and at a lower level of mobility. They connect with urban principal arterial roads and collector routes. In 2000, the urban minor arterial network represented 2.3 percent of total U.S. mileage. This system carried 19.3 percent of urban travel and 11.7 percent of total travel in the United States.

**Collectors** provide a lower degree of mobility than arterials. They are designed for travel at lower speeds and for shorter distances. For the most part, collectors are two-lane roads that collect and distribute travel from the arterial system.

The rural collector system is stratified into two subsystems: major and minor collectors. Major collectors serve larger towns not accessed by higher order roads, and important industrial or agricultural centers that generate significant traffic but are not served by arterials. Rural major collectors accounted for 11 percent of total U.S. miles in 2000. They carried 19.2 percent of rural traffic and 7.6 percent of total travel in the United States.

Rural minor collectors are typically spaced at intervals, consistent with population density, to collect traffic from local roads and to insure that all small urban areas are served by a collector road. The rural minor collector system accounted for 6.9 percent of total U.S. mileage in 2000. These roads carried 5.3 percent of rural travel and 2.1 percent of total travel in the United States.

In urban areas, the collector system provides traffic circulation within residential neighborhoods and commercial and industrial areas. Unlike arterials, collector roads may penetrate residential communities, distributing traffic from the arterials to the ultimate destination for many motorists. Urban collectors also channel traffic from local streets onto the arterial system. In 2000, the urban collector network accounted for 2.2 percent of U.S. road mileage. It carried 8.1 percent of urban travel and 4.9 percent of total U.S. travel.

**Local roads** represent the largest element in the American public road network in terms of mileage. For rural and urban areas, all public road mileage below the collector system is considered local. Local roads provide basic access between residential and commercial properties, connecting with higher order highways. In 2000, rural local roads represented 53.5 percent of total U.S. road mileage. Local roads carried only 11.1 percent of rural travel and 4.6 percent of total travel in the United States. Urban local roads, meanwhile, accounted for 15.3 percent of total U.S. road mileage, 14.1 percent of urban travel, and 8.5 percent of total U.S. travel.

Exhibit 2-7 summarizes the *percentage* of highway miles, lane miles, and vehicle-miles traveled by functional system. The share of mileage on rural highways has decreased slightly since 1997, dropping from 78.7 to 78.2 percent, a trend described earlier in Exhibit 2-3. The share of lane-miles on rural highways also decreased slightly, from 77.1 to 76.6 percent; however, the share of vehicle-miles traveled in rural areas actually grew, from 39.1 percent in 1997 to 39.4 percent in 2000.

The share of urban mileage increased slightly between 1997 and 2000, but the share of urban vehicle-miles traveled decreased during that same period. The share of urban highway mileage grew from 21.3 to 21.8 percent, and urban lane mileage increased from 22.9 to 23.4 percent. Although rural mileage is shrinking, travel continues to grow in rural areas.



**Exhibit 2-7**

**Percentage of Highway Miles, Lane Miles, and Vehicle Miles  
Traveled by Functional System and by Size of Area, 2000**

<b>FUNCTIONAL SYSTEM</b>	<b>MILES</b>	<b>LANE-MILES</b>	<b>VEHICLE-MILES TRAVELED</b>
<b>Rural Areas (under 5,000 in population)</b>			
Interstate	0.8%	1.6%	9.8%
Other Principal Arterials	2.5%	3.1%	9.0%
Minor Arterial	3.5%	3.5%	6.2%
Major Collector	11.0%	10.6%	7.6%
Minor Collector	6.9%	6.6%	2.1%
Local	53.5%	51.3%	4.6%
<b>Subtotal Rural</b>	<b>78.2%</b>	<b>76.6%</b>	<b>39.4%</b>
<b>Small Urban Areas (5,000-49,999 in population)</b>			
Interstate	0.0%	0.1%	0.8%
Other Freeway and Expressway	0.0%	0.1%	0.4%
Other Principal Arterial	0.3%	0.5%	2.1%
Minor Arterial	0.5%	0.5%	1.6%
Collector	0.5%	0.5%	0.7%
Local	3.0%	2.9%	1.2%
<b>Subtotal Small Urban Area</b>	<b>4.5%</b>	<b>4.6%</b>	<b>6.7%</b>
<b>Urbanized Areas (50,000 and over in population)</b>			
Interstate	0.3%	0.8%	13.6%
Other Freeway and Expressway	0.2%	0.5%	6.1%
Other Principal Arterial	1.0%	1.8%	12.4%
Minor Arterial	1.8%	2.2%	10.3%
Collector	1.7%	1.8%	4.2%
Local	12.3%	11.7%	7.4%
<b>Subtotal Urbanized Areas</b>	<b>17.3%</b>	<b>18.8%</b>	<b>53.9%</b>
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: Highway Performance Monitoring System.

Exhibit 2-8 offers some insight into total public road length in the United States. In 2000, there were over 3.9 million route miles in the United States. About 78.2 percent of this mileage was in rural communities, or 3.1 million route miles. The remaining 21.7 percent of route mileage, or 859,368 miles, was in urban communities. Overall route mileage increased by an average annual rate of about 0.1 percent between 1993 and 2000. Mileage decreased by 0.1 percent in rural America and increased by 1.8 percent in metropolitan communities.

**Exhibit 2-8**

**Highway Route Miles by Functional System and by Size of Area,  
Selected Years 1993-2000**

<b>FUNCTIONAL SYSTEM</b>	<b>1993</b>	<b>1995</b>	<b>1997</b>	<b>1999</b>	<b>2000</b>	<b>ANNUAL RATE OF CHANGE 2000/1993</b>
<b>Rural Areas</b>						
<b>(under 5,000 in population)</b>						
Interstate	32,795	32,703	32,919	33,077	33,152	0.2%
Other Principal Arterial	97,127	98,039	98,358	98,936	99,015	0.3%
Minor Arterial	137,752	137,440	137,791	137,746	137,862	0.0%
Major Collector	432,993	432,492	433,500	433,733	433,927	0.0%
Minor Collector	282,853	274,750	273,043	272,346	272,488	-0.5%
Local	2,123,619	2,125,054	2,141,111	2,103,009	2,115,299	-0.1%
<b>Subtotal Rural</b>	<b>3,107,139</b>	<b>3,100,478</b>	<b>3,116,722</b>	<b>3,078,847</b>	<b>3,091,743</b>	<b>-0.1%</b>
<b>Small Urban Areas</b>						
<b>(5,000-49,999 in population)</b>						
Interstate	1,694	1,731	1,744	1,777	1,794	0.8%
Other Freeway and Expressway	1,261	1,282	1,253	1,226	1,219	-0.5%
Other Principal Arterial	12,570	12,432	12,477	12,470	12,473	-0.1%
Minor Arterial	19,200	19,538	19,635	19,760	19,800	0.4%
Collector	20,973	21,301	21,338	21,436	21,535	0.4%
Local	108,440	111,566	115,420	117,768	119,342	1.4%
<b>Subtotal Small Urban Areas</b>	<b>164,138</b>	<b>167,850</b>	<b>171,867</b>	<b>174,437</b>	<b>176,163</b>	<b>1.0%</b>
<b>Urbanized Areas</b>						
<b>(50,000 and over in population)</b>						
Interstate	11,313	11,569	11,651	11,709	11,729	0.5%
Other Freeway and Expressway	7,656	7,740	7,864	7,957	7,977	0.6%
Other Principal Arterial	40,434	40,622	40,993	40,973	41,084	0.2%
Minor Arterial	68,099	69,475	70,050	70,187	70,502	0.5%
Collector	64,407	66,623	67,312	67,166	67,263	0.6%
Local	456,134	462,537	474,044	480,741	484,650	0.9%
<b>Subtotal Urbanized Areas</b>	<b>648,043</b>	<b>658,566</b>	<b>671,914</b>	<b>678,733</b>	<b>683,205</b>	<b>0.8%</b>
<b>Total Highway Route Miles</b>	<b>3,919,320</b>	<b>3,926,894</b>	<b>3,960,503</b>	<b>3,932,017</b>	<b>3,951,111</b>	<b>0.1%</b>

Source: Highway Performance Monitoring System.

Exhibit 2-9 describes the number of highway lane-miles by functional system. In 2000, there were 8.3 million lane-miles in the United States. Lane-miles have grown at an average annual rate of about 0.2 percent since 1993, mostly in urban areas. In small urban areas with between 5,000 and 50,000 residents, for example, lane mileage grew by about 1.0 percent annually between 1993 and 2000, while rural lane mileage dropped by about 0.1 percent annually during that same period.

**Highway Lane Miles by Functional System and by Size of Area,  
Selected Years 1993-2000**

<b>FUNCTIONAL SYSTEM</b>	<b>1993</b>	<b>1995</b>	<b>1997</b>	<b>1999</b>	<b>2000</b>	<b>ANNUAL RATE OF CHANGE 2000/1993</b>
<b>Rural Areas</b>						
<b>(under 5,000 in population)</b>						
Interstate	132,559	132,346	133,573	134,611	135,000	0.3%
Other Principal Arterial	240,714	245,164	248,921	252,692	253,192	0.7%
Minor Arterial	286,860	288,222	288,872	287,474	287,605	0.0%
Major Collector	873,988	872,767	875,393	872,205	872,647	0.0%
Minor Collector	565,705	549,500	546,085	544,692	544,976	-0.5%
Local	4,247,239	4,250,107	4,282,222	4,206,017	4,230,598	-0.1%
<b>Subtotal Rural</b>	<b>6,347,065</b>	<b>6,338,106</b>	<b>6,375,066</b>	<b>6,297,691</b>	<b>6,324,018</b>	<b>-0.1%</b>
<b>Small Urban Areas</b>						
<b>(5,000-49,999 in population)</b>						
Interstate	7,141	7,269	7,365	7,526	7,626	0.9%
Other Freeway and Expressway	4,741	4,828	4,747	4,656	4,627	-0.3%
Other Principal Arterial	36,768	37,135	37,618	37,654	37,702	0.4%
Minor Arterial	42,937	44,390	44,982	44,776	45,208	0.7%
Collector	43,491	43,755	44,216	43,980	44,525	0.3%
Local	216,881	223,132	230,839	235,536	238,684	1.4%
<b>Subtotal Small Urban Areas</b>	<b>351,959</b>	<b>360,509</b>	<b>369,767</b>	<b>374,128</b>	<b>378,372</b>	<b>1.0%</b>
<b>Urbanized Areas</b>						
<b>(50,000 and over in population)</b>						
Interstate	62,754	64,865	65,603	66,507	66,507	0.8%
Other Freeway and Expressway	34,864	35,705	36,655	37,113	37,113	0.9%
Other Principal Arterial	130,769	143,572	146,585	148,077	148,077	1.8%
Minor Arterial	176,130	183,595	185,273	180,434	180,434	0.3%
Collector	136,305	143,517	145,927	143,620	143,620	0.7%
Local	912,267	925,073	948,087	961,484	961,484	0.8%
<b>Subtotal Urbanized Areas</b>	<b>1,453,089</b>	<b>1,496,327</b>	<b>1,528,130</b>	<b>1,537,235</b>	<b>1,537,235</b>	<b>0.8%</b>
<b>Total Highway Lane Miles</b>	<b>8,152,113</b>	<b>8,194,942</b>	<b>8,272,963</b>	<b>8,209,054</b>	<b>8,254,658</b>	<b>0.2%</b>

Source: Highway Performance Monitoring System.

**Q. Is the increase in urban lane mileage entirely due to new construction?**

**A.** No. While some of the additional lane miles are attributable to new road construction and the widening of existing roads, a significant percentage is attributable to functional reclassification. As rural communities have grown above 5,000 in population, their existing roads have been reclassified as small urban mileage. The same situation has occurred as small urban areas have grown above 50,000 in population; their mileage has been reclassified as urbanized. While the current data available do not facilitate quantifying the share of urban mileage growth attributable to functional reclassification, this would be a promising area for future research.

**Exhibit 2-10****Bridges by Functional System, 1996, 1998, and 2000**

FUNCTIONAL SYSTEM	NUMBER OF BRIDGES		
	1996	1998	2000
<b>Rural</b>			
Interstate	28,638	27,530	27,797
Other Arterial	72,970	73,324	74,796
Collector	144,246	143,140	143,357
Local	211,059	210,670	209,415
<b>Subtotal Rural</b>	<b>456,913</b>	<b>454,664</b>	<b>455,365</b>
<b>Urban</b>			
Interstate	26,596	27,480	27,882
Other Arterial	59,064	60,901	63,177
Collector	14,848	14,962	15,038
Local	24,441	24,969	25,684
<b>Subtotal Urban</b>	<b>124,949</b>	<b>128,312</b>	<b>131,781</b>
<b>Total</b>	<b>581,862</b>	<b>582,976</b>	<b>587,146</b>

Source: National Bridge Inventory.

**Exhibit 2-11****Percentage of Deck Area by Functional System, 1996, 1998, and 2000**

FUNCTIONAL SYSTEM	1996	1998	2000
<b>Rural</b>			
Interstate	8.8%	8.4%	8.2%
Other Arterial	15.2%	15.4%	15.7%
Collector	14.2%	13.9%	13.5%
Local	10.7%	10.7%	10.3%
<b>Subtotal Rural</b>	<b>48.9%</b>	<b>48.3%</b>	<b>47.6%</b>
<b>Urban</b>			
Interstate	19.1%	19.5%	19.4%
Other Arterial	25.4%	25.7%	26.6%
Collector	3.1%	3.0%	2.8%
Local	3.5%	3.6%	3.6%
<b>Subtotal Urban</b>	<b>51.1%</b>	<b>51.7%</b>	<b>52.4%</b>
<b>Bridge Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: National Bridge Inventory.

Exhibit 2-10 describes the number of highway bridges by functional classification. Of the 587,146 highway bridges in the United States in 2000, 77.6 percent were in rural communities and 22.4 percent were in urban areas. The number of urban bridges—and those on arterial systems—grew steadily from 1996 to 2000. It is presumed that the number of urban bridges grew because of the reclassification of highways (and associated bridges) from a rural to urban designation.

Information presented on bridge composition up to this point has examined ownership and functional classification by “counting” the number of bridges. Examining structures by numbers gives all bridges in the network equal priority.

Thus, a small local bridge is counted the same way as either New York’s George Washington Bridge or San Francisco’s Golden Gate Bridge. That is why it may be desirable to consider the size of the structure, which is done using bridge deck area.

Exhibit 2-11 shows that despite the higher percentage of bridges in rural areas, more deck area is actually in urban communities (52.4 percent). Urban bridges tend to be larger and longer than rural bridges.

### **Intelligent Transportation System Characteristics**

All of the previous exhibits represent a traditional look at the highway system—its mileage, ownership, functional classification, and use. This edition of the C&P report introduces a new measurement: the extent of ITS on the highway network. ITS use advanced technology to improve

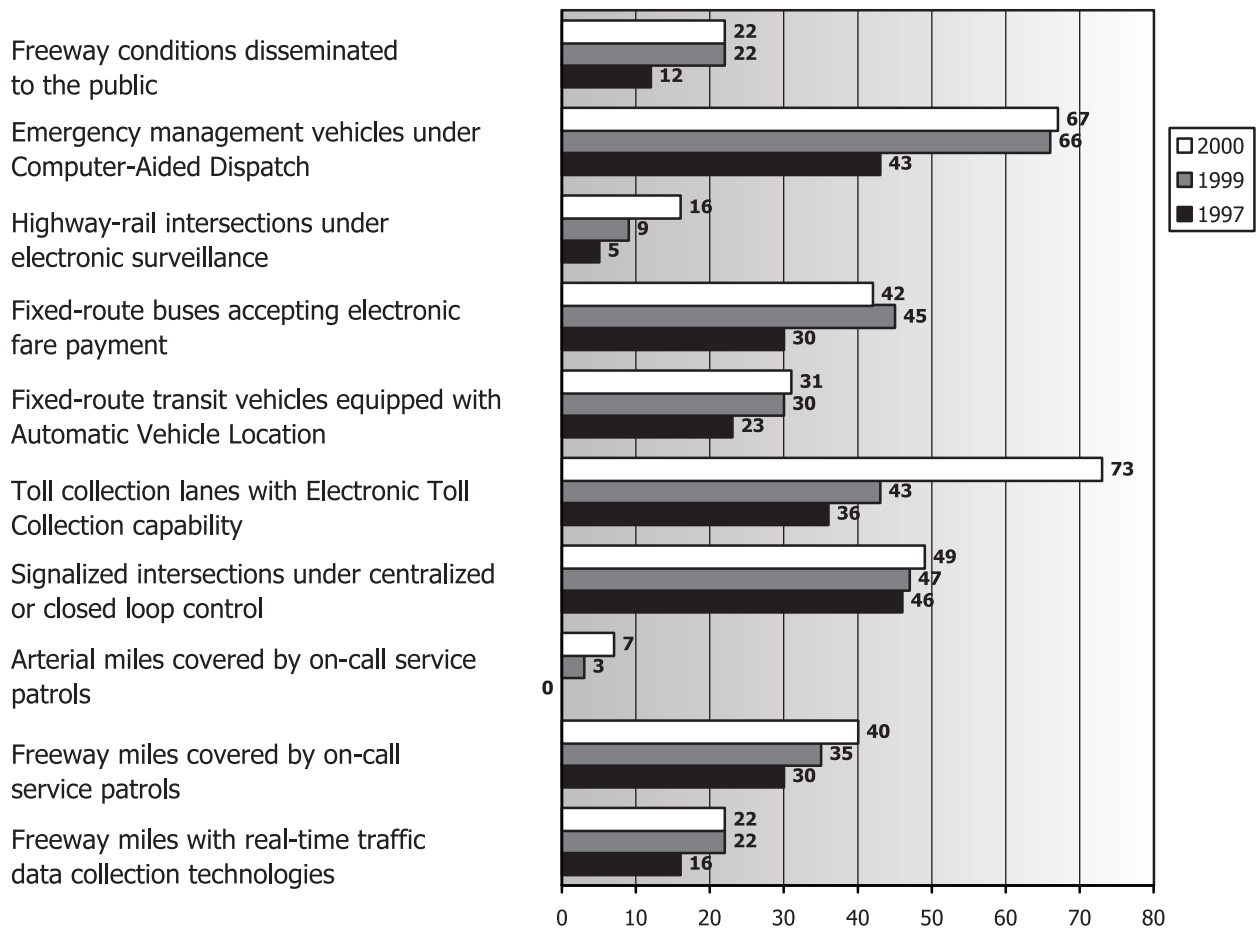
highway safety and efficiency. The deployment of ITS for national security, operations, and freight management is described more fully in subsequent chapters.

Exhibit 2-12 describes the deployment of ITS devices in 75 metropolitan regions, based on a survey by the FHWA Intelligent Transportation Systems Joint Program Office. More regions are using electronic tolling

than any other ITS device (73 percent in 2000), followed by computer-aided emergency management vehicles (67 percent). While Intelligent Transportation Systems continue to grow in acceptance and use, the number of arterial miles covered by on-call service patrols remains low at 7 percent in 2000.

**Exhibit 2-12**

**Deployment of Intelligent Transportation Systems (ITS) in 75 Metropolitan Areas, 1997, 1999, and 2000**



Source: "Tracking the Deployment of the Integrated Metropolitan Intelligent Transportation Systems Infrastructure in the United States," July 2001.

### Use Characteristics

This section describes highway infrastructure use, which is typically defined by vehicle miles traveled (VMT). During the 1990s, Americans traveled at record levels, a phenomenon prompted by the booming economy, population growth, and other socioeconomic factors. VMT grew by an average annual rate of 2.7 percent between 1993 and 2000, and by the end of that period, Americans were traveling more than 2.7 trillion vehicle miles annually. About 1.1 trillion miles were on rural highways, and about 1.7 trillion were on urban roads. Exhibit 2-13 describes these statistics.

While highway mileage is mostly rural, a majority of highway travel (61 percent) occurred in urban areas in 2000. Since 1997, however, rural travel has grown at a faster average annual rate (2.8 percent) than urban

**Exhibit 2-13**

**Vehicle Miles (VMT) and Passenger Miles of Travel (PMT), 1993-2000  
(Millions of Miles)**

<b>FUNCTIONAL SYSTEM</b>	<b>1993</b>	<b>1995</b>	<b>1997</b>	<b>1999</b>	<b>2000</b>	<b>ANNUAL RATE OF CHANGE 2000/1993</b>
<b>Rural (under 5,000 in population)</b>						
Interstate	209,470	224,705	241,451	261,485	270,314	3.7%
Other Principal Arterial	203,149	215,988	229,133	244,469	249,138	3.0%
Minor Arterial	148,023	156,253	164,129	170,149	172,780	2.2%
Major Collector	185,611	194,420	202,588	207,721	210,498	1.8%
Minor Collector	48,579	50,386	52,538	58,140	58,571	2.7%
Local	102,948	105,819	111,959	125,939	128,331	3.2%
<b>Subtotal Rural</b>	<b>897,779</b>	<b>947,571</b>	<b>1,001,798</b>	<b>1,067,904</b>	<b>1,089,632</b>	<b>2.8%</b>
<b>Small Urban Area (5,000-49,999 in population)</b>						
Interstate	16,297	17,310	18,393	20,485	21,138	3.8%
Other Freeway and Expressway	8,353	8,854	9,251	9,583	9,892	2.4%
Other Principal Arterial	51,088	53,202	55,359	57,351	58,147	1.9%
Minor Arterial	36,464	39,270	40,845	42,407	43,005	2.4%
Collector	17,282	18,710	19,749	20,135	20,412	2.4%
Local	25,919	27,970	28,309	32,907	33,277	3.6%
<b>Subtotal Small Urban Area</b>	<b>155,403</b>	<b>165,317</b>	<b>171,906</b>	<b>182,868</b>	<b>185,871</b>	<b>2.6%</b>
<b>Urbanized Areas (50,000 and over in population)</b>						
Interstate	303,324	327,329	346,376	366,390	376,153	3.1%
Other Freeway and Expressway	132,344	141,980	151,231	162,839	168,214	3.5%
Other Principal Arterial	298,558	313,676	332,448	337,904	343,088	2.0%
Minor Arterial	236,815	251,470	263,296	273,955	283,854	2.6%
Collector	96,102	104,453	111,874	113,053	116,596	2.8%
Local	175,917	179,392	176,268	203,136	203,960	2.1%
<b>Subtotal Urbanized Areas</b>	<b>1,243,060</b>	<b>1,318,300</b>	<b>1,381,495</b>	<b>1,457,278</b>	<b>1,491,864</b>	<b>2.6%</b>
<b>Total Highway Vehicle Miles</b>	<b>2,296,243</b>	<b>2,431,188</b>	<b>2,555,198</b>	<b>2,708,050</b>	<b>2,767,367</b>	<b>2.7%</b>
<b>Total Passenger Miles Traveled</b>	<b>3,858,920</b>	<b>3,868,070</b>	<b>4,089,366</b>	<b>4,304,270</b>	<b>4,394,703</b>	<b>1.9%</b>

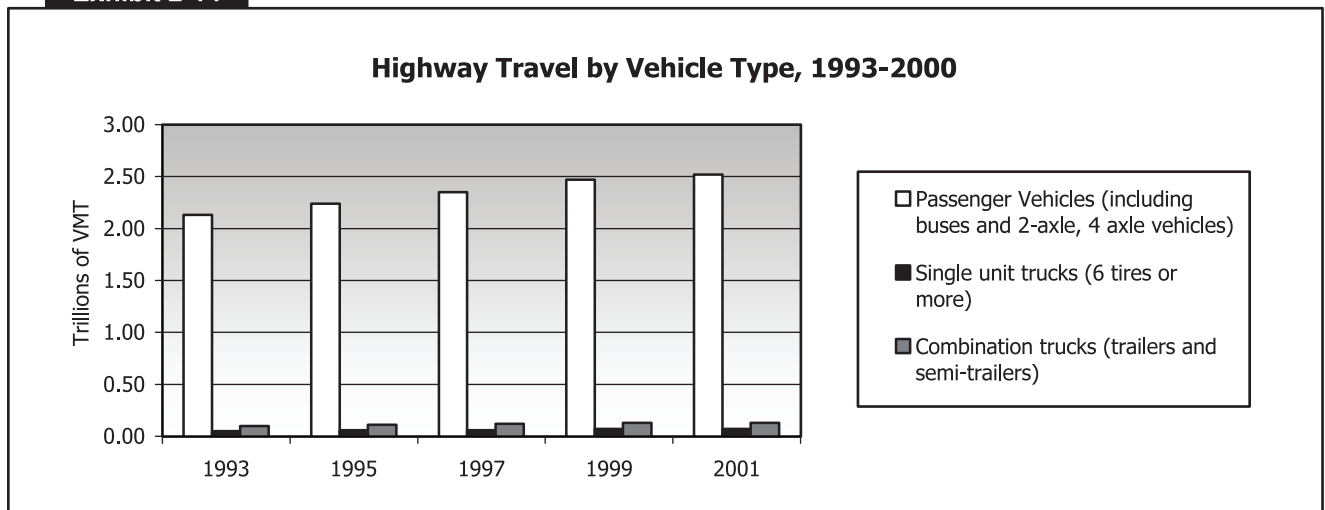
Source: Highway Performance Monitoring System.

travel (2.6 percent). This is a change since the last C&P report, when urban travel growth rates were higher over the preceding decade.

Exhibits 2-14 and 2-15 expand on the information in Exhibit 2-13. They describe highway travel by functional classification and vehicle type. Three types of vehicles are identified: passenger vehicles (PV), including buses and 2-axle, 4-tire models; single-unit trucks (SU) having 6 or more tires; and combination trucks (Combo), including trailers and semi-trailers.

As Exhibits 2-14 and 2-15 show, travel grew the fastest on rural and urban interstates, particularly among combination trucks. Between 1993 and 2000, for example, combination truck traffic grew by 4.4 percent on rural interstates and 5.5 per year on urban interstates. Overall, passenger vehicle travel grew by an average annual rate of 2.4 percent between 1993 and 2002. Single-unit truck travel grew by 3.2 percent per year, and combination truck travel grew by 3.9 percent per year.

**Exhibit 2-14**



Source: Highway Statistics Summary to 1995, Table VM-201; Highway Statistics Table VM-1, various years.

**Exhibit 2-15**

### Highway Travel by System and Vehicle Type, 1993-2000 (Millions of VMT)

FUNCTIONAL SYSTEM						ANNUAL RATE OF CHANGE
VEHICLE TYPE	1993	1995	1997	1999	2000	2000/1993
<b>Rural Interstate</b>						
PV	169,500	180,031	188,969	207,046	214,175	3.4%
SU	5,982	6,708	7,667	8,073	8,260	4.7%
Combo	32,826	36,644	41,642	42,976	44,377	4.4%
<b>Other Arterials</b>						
PV	314,469	331,539	349,555	369,592	375,973	2.6%
SU	11,374	12,980	13,668	13,978	13,643	2.6%
Combo	23,724	24,076	25,467	26,713	28,003	2.4%
<b>Other Rural</b>						
PV	304,389	315,687	338,590	359,785	365,170	2.6%
SU	12,505	12,948	13,671	13,965	13,759	1.4%
Combo	11,936	12,676	12,447	12,236	12,589	0.8%
<b>Total Rural</b>						
PV	788,358	827,257	877,114	936,423	955,318	2.8%
SU	29,861	32,636	35,006	36,016	35,662	2.6%
Combo	68,486	73,396	79,556	81,925	84,969	3.1%
<b>Urban Interstate</b>						
PV	294,703	315,888	330,668	348,531	358,906	2.9%
SU	6,513	7,148	7,906	8,494	8,719	4.3%
Combo	16,183	18,492	20,641	23,792	23,472	5.5%
<b>Other Urban</b>						
PV	1,053,429	1,101,516	1,144,334	1,185,168	1,211,708	2.0%
SU	20,398	22,923	23,933	25,794	26,202	3.6%
Combo	18,446	23,567	24,303	26,667	26,767	5.5%
<b>Total Urban</b>						
PV	1,348,132	1,417,404	1,475,002	1,533,699	1,570,614	2.2%
SU	26,911	30,071	31,839	34,288	34,921	3.8%
Combo	34,629	42,059	44,944	50,459	50,239	5.5%
<b>Total</b>						
PV	2,136,490	2,244,661	2,352,116	2,470,122	2,525,932	2.4%
SU	56,772	62,707	66,845	70,304	70,583	3.2%
Combo	103,115	115,455	124,500	132,384	135,208	3.9%

PV=Passenger Vehicles (including buses and 2-axle, 4-tire vehicles,  
 SU=Single Unit Trucks (6 tires or more),  
 Combo=Combination Trucks (trailers and semi-trailers).

Source: Highway Statistics, Summary to 1995, Table VM-201; Highway Statistics, various years, Table VM-1.



# U.S. Transit System Characteristics

## Transit Services and Jurisdiction

Since the 1960s, the ownership and operation of most transit systems in the United States have been transferred from private to public hands. This transformation occurred with the large influx of Federal funding following the passage of the Urban Mass Transportation Act of 1964, which specified that Federal transit aid funds were to be given to local or metropolitan-level public agencies and not to private firms or state governments. The Act also required local governments to contribute local matching funds for the provision of transit services in order to receive Federal aid.

Before 1960, the Federal Government had not focused on transit issues. But by the end of the 1950s it was becoming clear to all levels of government that developing and sustaining public transportation services was an important national and local concern. Studies undertaken by state and local governments in major cities, including Chicago, Philadelphia, San Francisco, and Washington, highlighted the need for creating or improving transit facilities and programs.

Transit operations have increasingly become the subject of State initiatives in the form of financial support and performance oversight, as well as outright ownership and operation of services. Five states—Maryland, Delaware, New Jersey, Connecticut, and Rhode Island—own and operate transit services while five more States—Pennsylvania, California, Illinois, Minnesota, Texas, and Washington—have created initiatives for dedicated transit funding. This trend toward State involvement is likely to increase as a result of the planning provisions mandated by the Clean Air Act Amendment of 1990 (CAAA), the Intermodal Surface Transportation Equity Act of 1991 (ISTEA), and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21).

As many local governments have come to understand the regional nature of transportation problems, metropolitan planning organizations have assumed more responsibility for formulating transit policy. Regional planning allows local officials to consider the effects of the transportation system on other characteristics of the urban environment, including land use, the location and creation of employment, and accessibility, i.e., the ease with which local residents and visitors can reach locations for business, medical, educational, and recreational purposes.

While most transit use continues to occur in major metropolitan areas, it is becoming increasingly important in small urban areas and rural areas. In 2000, there were 614 local public transit operators serving 408 both large and small urbanized areas, 1,215 operators serving rural areas, and 3,673 providers of specialized service to the elderly and disabled in both urban and rural areas.

## Urban Transit Systems

The urban transit system continues to grow in the United States. In 2000, urban transit systems operated 106,395 vehicles, of which 82,545 were in urbanized areas of more than 1 million people. Rail operators controlled 10,572 miles of track and served 2,825 stations. There were also 759 maintenance facilities in urban areas for transit vehicles in use compared with 729 in 1997. Between 1997 and 2000, the number of urban transit vehicles increased by 2.6 percent, track mileage grew by 6.6 percent, the number of stations increased by 5.4 percent, and the number of urban maintenance facilities grew by 4.1 percent.

*[See Exhibit 2-16].*

**Urban Mass Transit Active Fleet and Infrastructure, 2000**

	URBANIZED AREAS OVER 1 MILLION	URBANIZED AREAS UNDER 1 MILLION	TOTAL
<b>Vehicles</b>			
Buses	45,017	20,418	65,435
Heavy Rail	10,260	0	10,260
Light Rail	1,273	65	1,338
Self-Propelled Commuter Rail	2,461	5	2,466
Commuter Rail Trailers	2,712	31	2,743
Commuter Rail Locomotives	565	11	576
Vans	10,596	5,638	16,234
Other (including Ferryboats)	5,361	1,982	7,343
Rural Service Vehicles (*)	0	19,185	19,185
Special Service Vehicles (**)	4,300	24,364	28,664
<b>Total Active Vehicles</b>	<b>82,545</b>	<b>71,699</b>	<b>154,244</b>
<b>Infrastructure</b>			
Track Mileage			
Heavy Rail	2,178	0	2,178
Commuter Rail	7,081	283	7,365
Light Rail	949	52	1,001
Other Rail	23	6	29
<b>Total Track Mileage</b>	<b>10,232</b>	<b>341</b>	<b>10,572</b>
Stations			
Heavy Rail	1,009	0	1,009
Commuter Rail	1,134	17	1,151
Light Rail	556	59	615
Other Rail	40	10	50
<b>Total Transit Rail Stations</b>	<b>2,739</b>	<b>86</b>	<b>2,825</b>
Maintenance Facilities (***)			
Heavy Rail	53	0	53
Commuter Rail	62	0	62
Light Rail	26	4	30
Ferryboat	6	1	7
Buses	272	221	493
Demand Response	44	66	110
Other Rail	3	1	4
Rural Transit (*)	0	510	510
<b>Total Maintenance Facilities</b>	<b>466</b>	<b>803</b>	<b>1,269</b>

(\*) Status of Report on Public Transportation in Rural American 2000.

(\*\*) FTA, Fiscal Year Trends Report on the Use of Section 5310 Elderly and Persons with Disabilities Program Funds.

(\*\*\*) Includes owned and leased facilities; directly operated service only.

Source: National Transit Database (NTD.)

## Coverage of Transit Systems (Urban Route Miles)

The coverage of the U.S. transit network may be analyzed by examining the historical trend of urban transit directional route miles. Directional route mileage measures the distance covered by a transit route independent of the number of vehicles that serve that route, i.e., when routes overlap, the mileage is counted separately for each route. Directional route miles are counted for vehicles traveling in a particular direction. This accounts for such transit route features as one-way loops. Routes may be along fixed guideways (as in the case of rail modes) or separated bus guideways, or may share city streets with other vehicles (as with most bus routes).

Transit directional rail route miles (route miles) increased consistently between 1991 and 2000 at an average annual rate of 3.1 percent, raising their share of total transit route miles from 4.5 to 5.3 percent. This increase reflects the “New Start” rail systems and extensions that have become operational during this period.

Non-rail route miles grew at a 1.0 percent average annual rate between 1991 and 2000, but declined slightly

### Q. What is the role of Ferry Boats?

A. Ferries in the United States operate in 43 states and territories, including Puerto Rico and the Virgin Islands. Though found most often in major metropolitan areas like Seattle and New York City, ferry operations also serve smaller urban and rural areas, often providing island communities their only surface transportation link. The Alaskan ferry system—the Alaskan Marine Highway—is the only surface transportation serving communities along Alaska’s Southeast coast and along the Aleutian Island chain.

**Exhibit 2-17**

Urban Transit Route Miles, 1991-2000							ANNUAL RATE OF CHANGE 2000/1991
	1991	1993	1995	1997	1999	2000	
Rail	7,003	7,334	8,206	8,602	9,170	9,221	3.1%
Non-Rail	149,332	158,779	158,076	156,733	163,911	163,303	1.0%
<b>Total</b>	<b>156,335</b>	<b>166,113</b>	<b>166,282</b>	<b>165,335</b>	<b>173,081</b>	<b>172,524</b>	<b>1.1%</b>
Percent Rail	4.5%	4.4%	4.9%	5.2%	5.3%	5.3%	

Source: National Transit Database.

(0.4 percent) between 1999 and 2000, primarily as a result of a decline in motor bus route miles. This decline contributed to a 0.3 percent decline in total transit route miles between 1999 and 2000, but, on average, total transit route miles grew at an average of 1.1 percent annually between 1991 and 2000. [See Exhibit 2-17].

## System Capacity

Capacity-equivalent vehicle revenue miles (VRM) is the distance traveled by a transit vehicle in passenger-carrying revenue service, adjusted by the carrying capacity of the type of transit vehicle, with the capacity of a

motor bus representing the baseline. For example, if a commuter rail vehicle has a seating capacity of 2.2 times the capacity of an average motor bus, each commuter rail vehicle VRM is multiplied by 2.2 to calculate commuter rail capacity-equivalent VRMs. In 2000, transit operators supplied 3.77 billion capacity-equivalent miles of service in the United States. Of this total, slightly less than half was provided by rail modes and slightly more than half by non-rail modes. Between 1991 and 2000, capacity-equivalent VRM provided by

**Exhibit 2-18**

**Transit Capacity  
Urban Transit Capacity-Equivalent Vehicle Revenue Miles, 1991-2000  
(Millions)**

	1991	1993	1995	1997	1999	2000	ANNUAL RATE OF CHANGE 2000/1991
Rail	1,558	1,564	1,646	1,722	1,811	1,866	2.0%
Non-Rail	1,619	1,659	1,689	1,718	1,856	1,905	1.8%
<b>Total</b>	<b>3,178</b>	<b>3,223</b>	<b>3,335</b>	<b>3,440</b>	<b>3,668</b>	<b>3,771</b>	<b>1.9%</b>
Percent Rail	49.0%	48.5%	49.4%	50.0%	49.4%	49.5%	

Source: National Transit Database.

rail increased at an average annual rate of 2.0 percent compared with a 1.8 percent average annual increase by non-rail modes. Since 1997, however, capacity-equivalent VRM provided by non-rail modes have increased slightly more rapidly than those provided by rail, at a 3.5 percent average annual rate compared to a 2.7 percent for rail. [See Exhibit 2-18].

## Passenger Travel

Passenger miles traveled (PMT), or the total number of miles traveled by passengers in transit vehicles, increased at an average annual rate of 2.1 percent between 1991 and 2000. [See Exhibit 2-19]. Passenger travel growth on rail modes was more than three times higher than on non-rail modes (3.2 percent versus 0.9

**Exhibit 2-19**

**Urban Transit Passenger Miles, 1991-2000  
(Millions)**

	1991	1993	1995	1997	1999	2000	ANNUAL RATE OF CHANGE 2000/1991
Rail	18,551	17,867	19,682	21,138	22,875	24,603	3.2%
Non-Rail	18,921	18,353	18,289	19,042	20,404	20,498	0.9%
<b>Total</b>	<b>37,472</b>	<b>36,220</b>	<b>37,971</b>	<b>40,180</b>	<b>43,279</b>	<b>45,100</b>	<b>2.1%</b>
Percent Rail	49.5%	49.3%	51.8%	52.6%	52.9%	54.6%	

Source: National Transit Database.

percent on an average annual basis). In 2000, PMT on rail was 24.6 billion and accounted for nearly 55 percent of total PMT while, as noted above, rail accounts for only 5 percent of urban transit route miles. Passenger miles traveled have grown rapidly since 1993, following a decline between 1989-93. This rapid growth was fueled principally by significant increases in rail PMT while the change in travel on non-rail modes has been erratic. This difference again reflects the recent expansion of rail transit in the United States.

## Vehicle Occupancy

Vehicle occupancy is calculated as passenger miles traveled divided by capacity-equivalent VRM. This measure relates the level of transit service consumed by passengers to the level transit service provided by transit operators. In 2000, vehicle occupancy was 12.0 passengers per capacity-equivalent vehicle for all transit services, 13.2 passengers for rail modes, and 10.8 passengers for nonrail modes. Although vehicle occupancy reached a new high in 2000, it has remained relatively constant over the past decade. The high level of occupancy reached in 2000 resulted from an increase in the occupancy of rail vehicles; the number of passengers per capacity equivalent non-rail vehicle declined slightly. [See Exhibit 2-20].

**Exhibit 2-20**

**Vehicle Occupancy**  
**Passengers per Capacity-Equivalent Transit Vehicle,**  
**1991-2000**

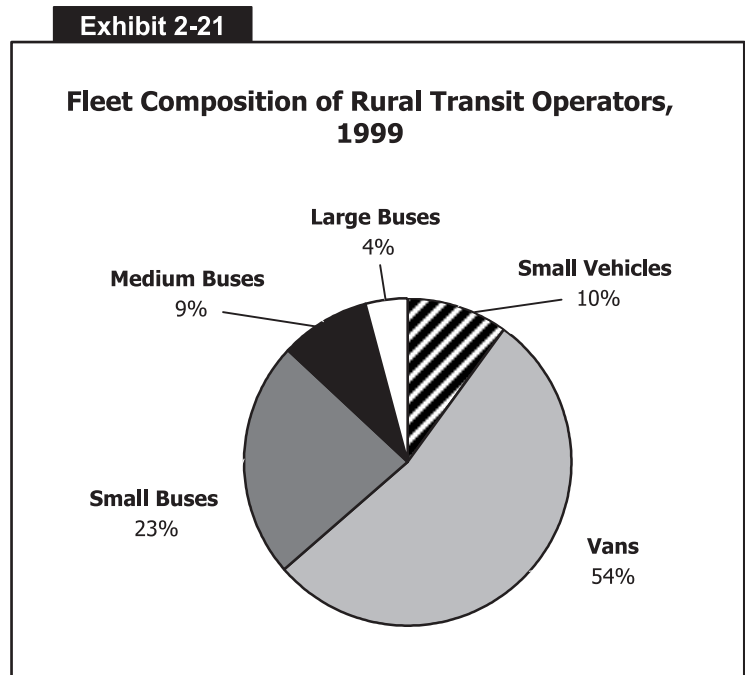
	1991	1993	1995	1997	1999	2000
Rail	11.9	11.4	12.0	12.3	12.6	13.2
Non-Rail	11.7	11.1	10.8	11.1	11.0	10.8
<b>Total</b>	<b>11.8</b>	<b>11.2</b>	<b>11.4</b>	<b>11.7</b>	<b>11.8</b>	<b>12.0</b>

Source: National Transit Database.

## Rural Transit Systems

Data on rural transit operators is available from surveys conducted by the Community Transportation Association of America and funded by the Federal Transit Administration (FTA). Rural operators are defined as those providing service outside urbanized areas or to areas with populations of less than 50,000. Two surveys were conducted in 1997 and 2000 with a total of 158 rural transit operators responding. Data collected from June 1997 to June 1999 have been combined for the purposes of this analysis. [See Exhibit 2-21].

In 1997, there were 1,215 rural transit operators. While the number of rural transit providers remained relatively constant, fleet sizes expanded dramatically between 1994 and 1999. The 108 providers that responded had an average fleet size of 17.5 vehicles compared with an average fleet



Source: Community Transportation Association of America, Status of Rural Public Transportation - 2000, April 2001.

size of 11 vehicles in 1994—an increase of almost 50 percent. Correspondingly, the median fleet size in the most recent survey increased to 9 vehicles, compared with a median size of 6 vehicles in 1994.

The majority of rural transit operators' vehicles are small buses (16 to 24 passengers) and vans (8 to 15 passengers). According to the recent survey, vehicle fleets of rural transit operators are comprised principally of vans, which account for 54 percent of a rural fleet on average, and small buses, which account for 23 percent on average. Small vehicles (fewer than 8 passengers) accounted for an average of 10 percent of rural fleets, medium buses (25 to 35 passengers) for 9 percent and large buses (more than 35 passengers) for a mere 4 percent.

## Transit System Characteristics for Americans with Disabilities and the Elderly

The Americans with Disabilities Act (ADA) is intended to ensure that persons with disabilities have access to public transportation vehicles and facilities. Since its passage in 1990, transit operators have been working towards upgrading their regular vehicles fleets to accommodate the disabled. In 2000, 74 percent of all rail vehicles and 73 percent of all non-rail vehicles were ADA compliant. Forty-seven percent of commuter rail vehicles (excluding commuter rail locomotives), 89 percent of heavy rail vehicles, and 83 percent of motor bus vehicles were ADA compliant.

In addition to the services provided by urban transit operators, there are about 3,673 private and non-profit agencies that receive FTA Section 5310 funding for the provision of “special” public transportation services to persons with disabilities and the elderly. These providers include religious organizations, senior citizen centers, rehabilitation centers, the American Red Cross, nursing homes, community action centers, sheltered workshops and coordinated human services transportation providers. These providers operate vehicles ranging from large buses to station wagons. Vans account for approximately 75 percent of the “special service” national fleet, small buses for 13 percent, and large buses and automobiles for 12 percent.

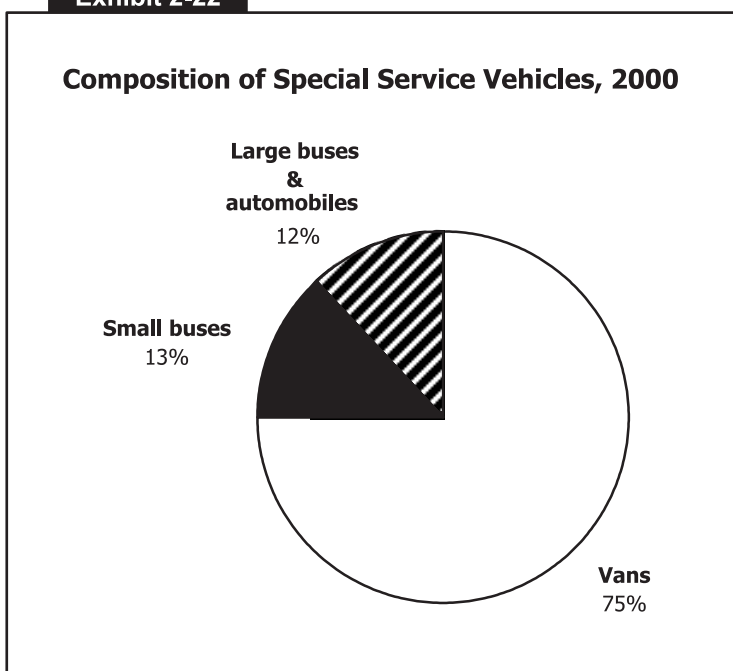
Approximately 75 percent of the vehicles purchased in FY 2000 were wheelchair accessible, about the same as in the past few years. [See Exhibits 2-22 and 2-23].

Under the ADA, FTA was given responsibility for identifying “key rail stations” and facilitating the accessibility of these stations to disabled persons.

In 2000, there were 689 key rail stations. Key rail stations are identified on the basis of the following criteria:

- The number of passengers boarding at the key station exceeds the average number of passengers boarding on the

Exhibit 2-22



Source: FTA, Fiscal Year 2000 Trends Report on the Use of Section 5310 Elderly and Person's with Disabilities Program Fund.

rail system as a whole by at least fifteen percent.

- The station is a major point where passengers shift to other transit modes.
- The station is at the end of a rail line, unless it is close to another accessible station.
- The station serves a “major” center of activities, including employment or government centers, institutions of higher education, and major health facilities.

The number of key rail stations that are ADA accessible is increasing. In 2000, 52 of 689 key rail stations were ADA accessible. By comparison, in 1994, 13 of 700 key rail stations were accessible and, in 1997, 29 were accessible of a total of 689.

### Exhibit 2-23

#### Urban Transit Operators' ADA Vehicle Fleets, 2000

	ACTIVE VEHICLES	ADA COMPLIANT VEHICLES	ADA AS A PERCENTAGE OF ACTIVE
<b>Rail</b>			
Automated Guideway	49	49	100%
Commuter Rail (*)	5,209	2,468	47%
Heavy Rail	10,260	9,125	89%
Inclined Plane	8	6	75%
Light Rail	1,338	869	65%
Monorail	8	8	100%
<b>Total Rail</b>	<b>16,872</b>	<b>12,525</b>	<b>74%</b>
<b>Non-Rail</b>			
Cable Car	55	15	27%
Ferry Boat	98	79	81%
Motor Bus	65,435	54,624	83%
Trolley Bus	894	595	67%
Other	22,465	9,752	43%
<b>Total Non-Rail</b>	<b>88,947</b>	<b>65,065</b>	<b>73%</b>
<b>Total</b>	<b>105,819</b>	<b>77,590</b>	<b>73%</b>

(\*) Excludes Commuter Rail Locomotives

Source: National Transit Database

