

# 1 HIGHWAY INFRASTRUCTURE

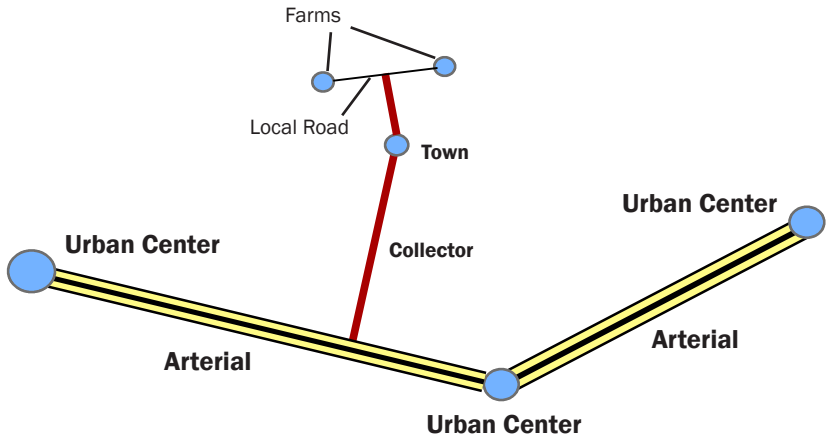
**“In large measure, America’s history is a history of her transportation.” So said President Lyndon B. Johnson in 1966, during the signing ceremony for the legislation creating the U.S. Department of Transportation. Since the introduction of the interstate system to Congress in 1939, the Nation has devoted significant resources to the creation of a roadway system that connects every population center. With the interstate system acting as the system’s backbone, we have enjoyed freedom of travel and efficiency of commerce as never before.**

THE FUNCTIONAL CLASSIFICATION schema developed by the Federal Highway Administration classifies roadways by their function within the State’s network of public roads. The three basic categories of functional classification are local roads, collectors, and arterials. Local roads serve homes, businesses, farms, and small communities, and provide access to collector roadways. Collectors channel traffic from the local roads to the arterials, which provide safe, reliable, and efficient travel between larger towns and major cities.

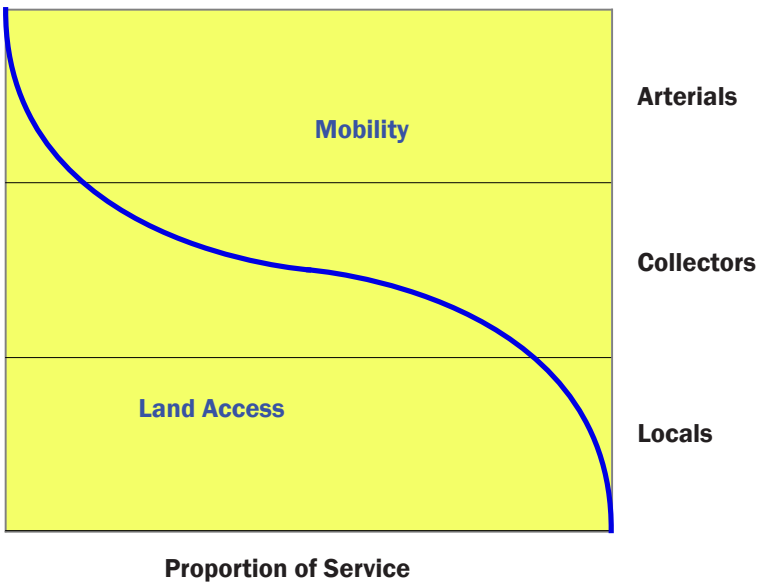
The key purposes of all roadways are to provide access and mobility. Local roads chiefly provide access, while mobility is the primary function of arterials. Figures 1 and 2 illustrate the relationships between classes of roadways and their relative functions.

Data Source: Figures 1-1 and 1-2 are redrawn from Figure II-1 and II-4 of FHWA Functional Classification Guidelines, 1989, Office of Planning, Federal Highway Administration, U.S. Department of Transportation ([www.fhwa.dot.gov/planning/fcsec2\\_1.htm](http://www.fhwa.dot.gov/planning/fcsec2_1.htm)).

**Figure 1-1. Hierarchy of Our Highway System**



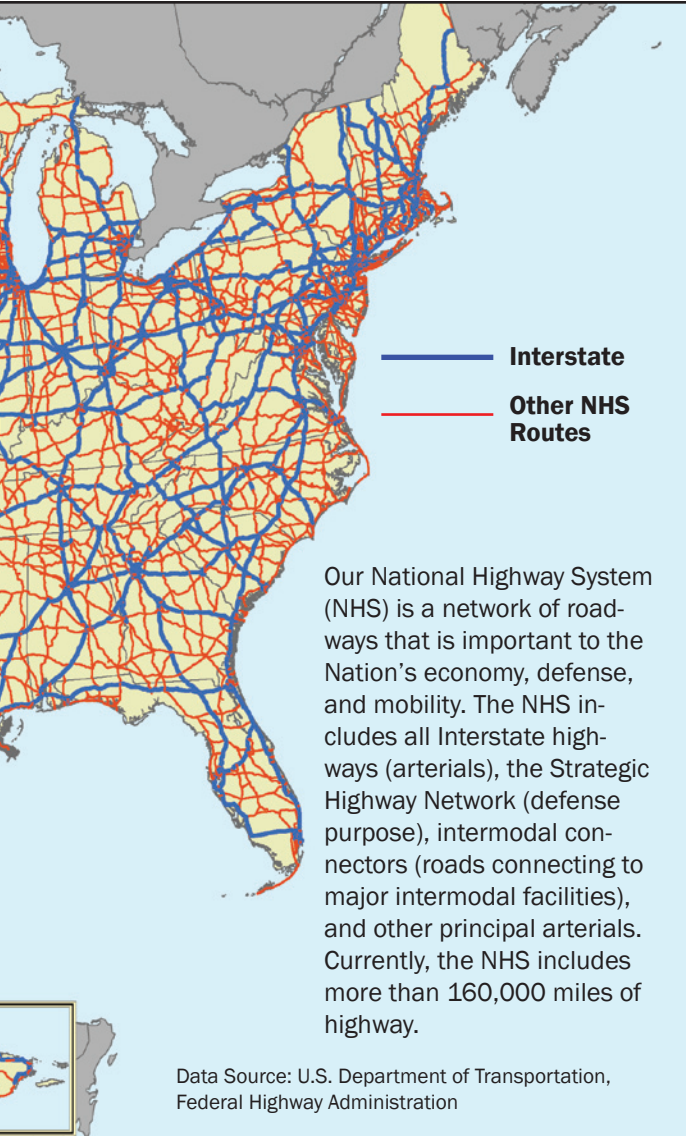
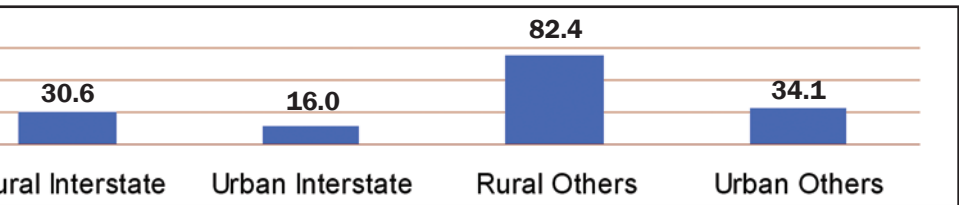
**Figure 1- 2. Access and Mobility**



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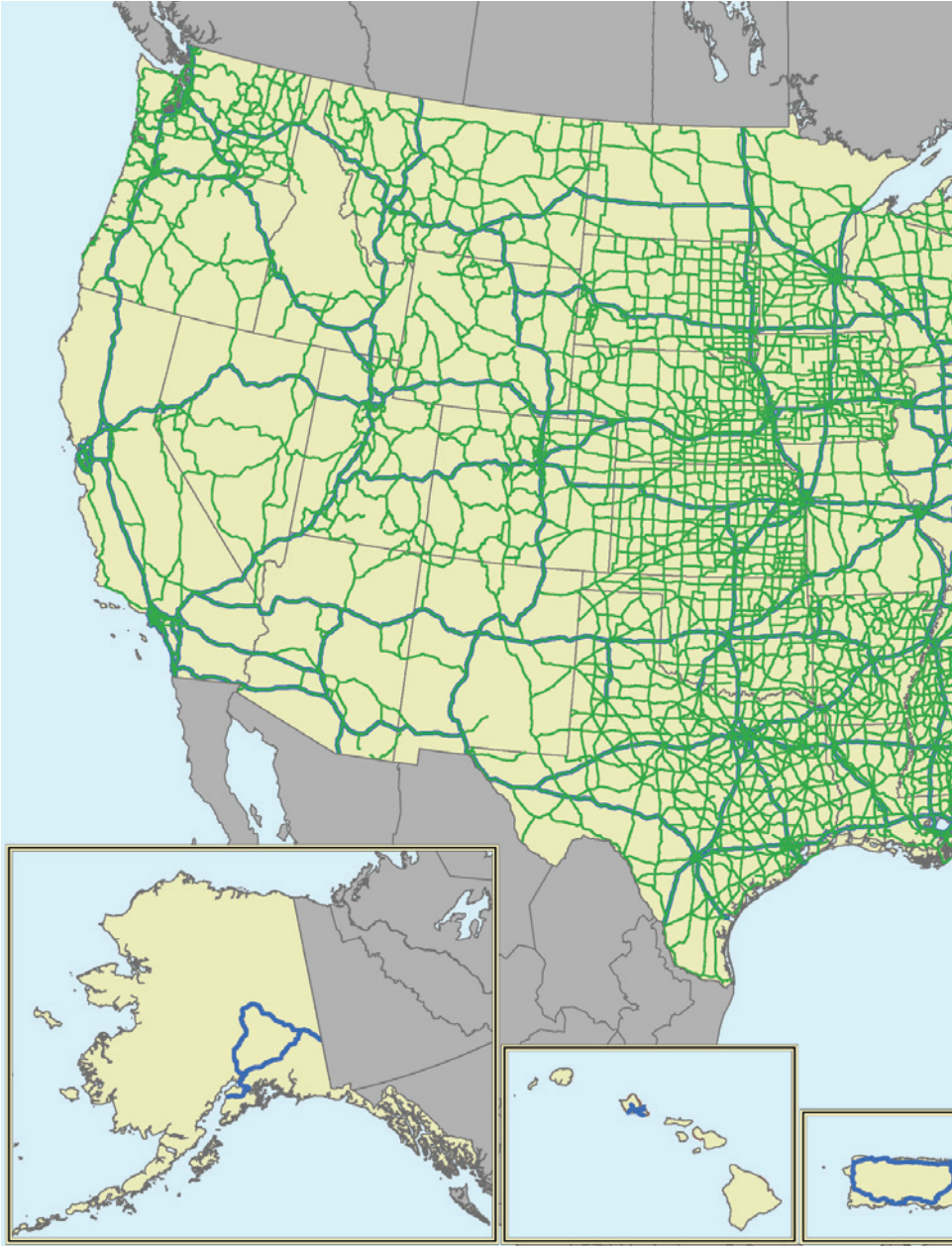
Figure 1-3. The National Highway System

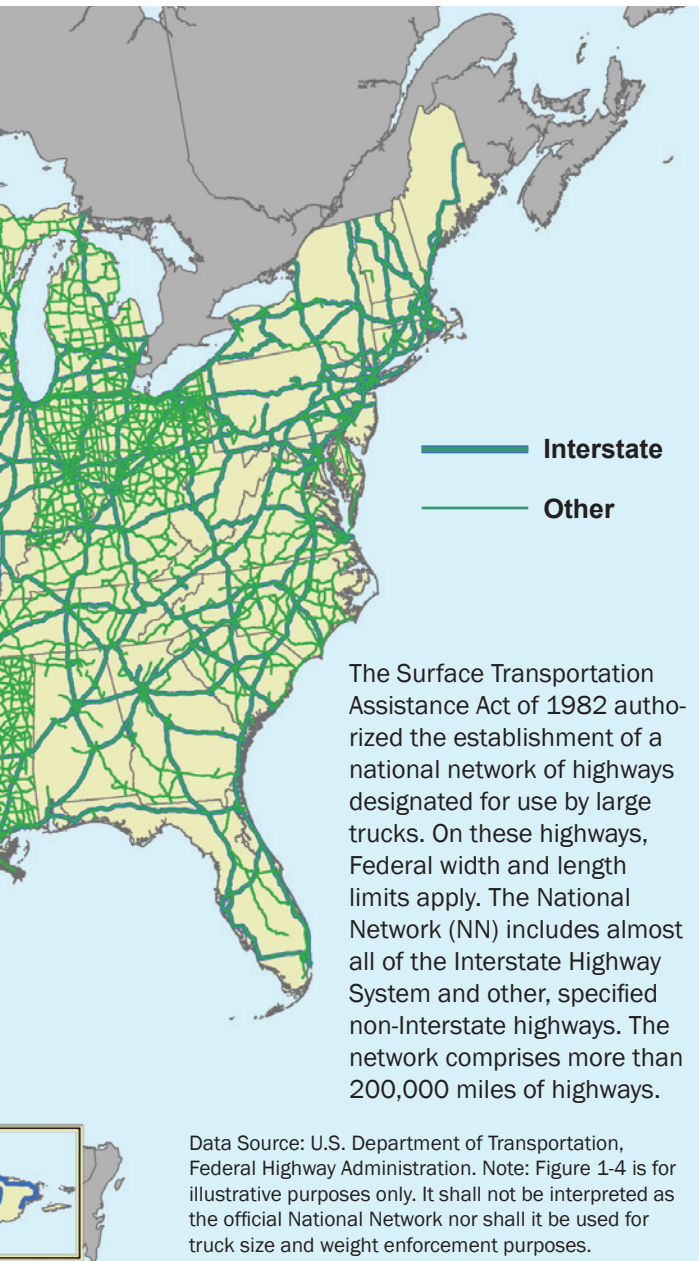




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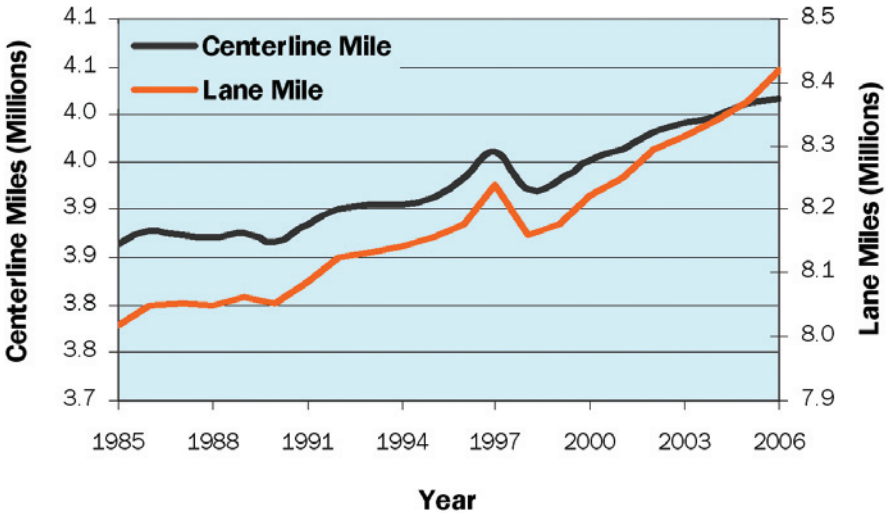
Figure 1-4. National Truck Network





# HIGHWAY INFRASTRUCTURE

**Figure 1-5. Public Road Measured in Centerline Length and Lane Length (Miles)**

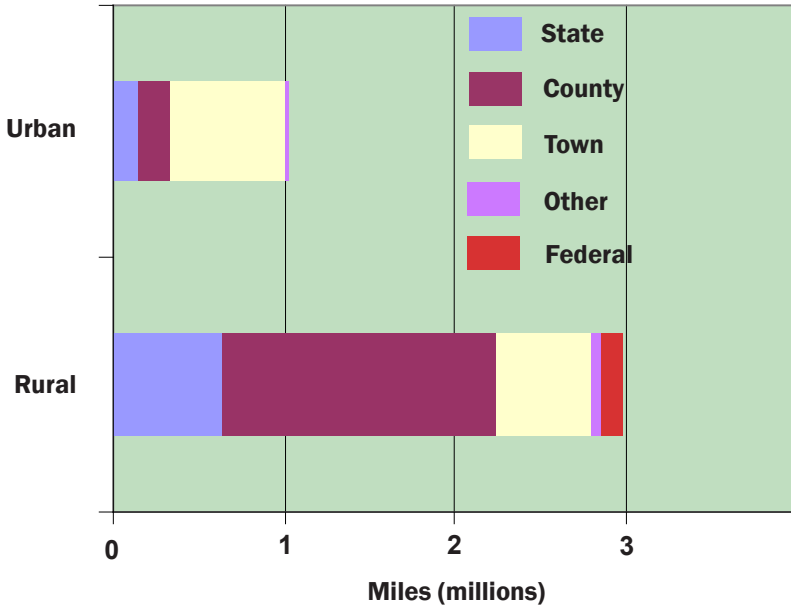


BY THE LATE 1980s, the U.S. highway network was near completion. Now, virtually all population centers are linked by paved roadways. Although there has been little construction of new roads and highways since 1980, the number of lane miles has been increasing as highways are widened with additional lanes to carry more vehicles. That is to say, for the most part, that we are adding capacity to existing highways rather than building new ones.

**Note:** After 1998, forest development roads ceased being treated as public roads. This is why Figure 1-5 (above) indicates significant drops in both centerline and lane mileage in 1999.

Data Source: U.S. Department of Transportation, Federal Highway Administration, Office of Highway Policy Information, Highway Statistics

**Figure 1-6. Public Road Ownership, 2006**



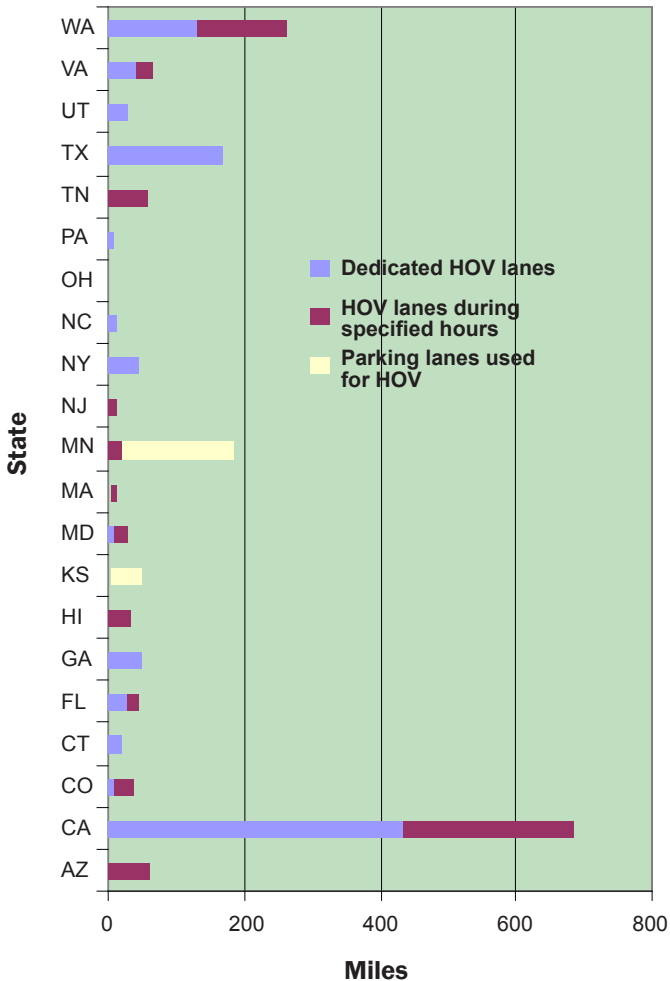
NOT SURPRISINGLY, THE majority of public roads (about 76 percent) are owned by local governments. The approximately 3 percent of roadways owned by the Federal government are located mainly in national parks and forests, military garrisons, and Indian reservations. State governments own the remaining 21 percent of public roads, including most of the interstate highways.

Data Source: U.S. Department of Transportation, Federal Highway Administration, Office of Highway Policy Information, Highway Statistics



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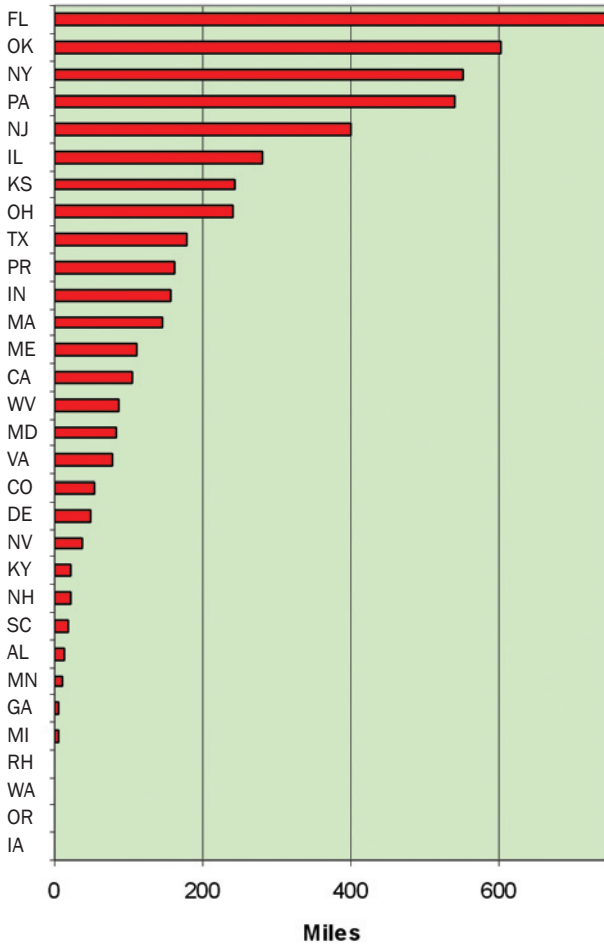
**Figure 1-7.  
High  
Occupancy  
Vehicle  
Facilities by  
Type and  
State, 2006**



BY REDUCING TRAVEL time and increasing reliability, high occupancy vehicle (HOV) lanes increase the number of people who can move through a congested corridor. While carpoolers, vanpoolers, and bus patrons benefit directly from a time-saving standpoint, we all share the benefits of cleaner air and lower energy use that are linked to HOV operations.

Data Source: U.S. Department of Transportation, Federal Highway Administration, Office of Highway Policy Information, Highway Performance Monitoring System

**Figure 1-8. Toll Road Centerline Miles, 2006**



A TOLL HIGHWAY is a road that drivers pay fees to use. Toll roads may also be known as turnpikes or toll ways. The fees collected are used to repay money borrowed for construction of the road. As the debt is repaid, the toll is also used for ongoing operations and maintenance.

Data Source: U.S. Department of Transportation, Federal Highway Administration, Office of Highway Policy Information, Highway Performance Monitoring System