The Adobe Tower

by Jerry Hall and Loretta Hall

The Interstate's Impacts on American Life

Life in America has changed drastically since the Interstate Highway System was envisioned, planned, and built. Since 1956, when the System began to take shape, the US population has almost doubled. At the same time, all of the following have increased by factors of 4.5–5: gross domestic product (GDP, adjusted for inflation), motor vehicle registrations, and annual vehicle-miles of travel (VMT). In 2007, the Interstate System carried 110 billion vehicle-miles more traffic than all US highways did in 1956.

The Interstate System has played an important role in either causing or facilitating many of the economic and lifestyle changes of the past 50 years. For example, a few companies had tried franchising during the early 20th century, but that business model began to flourish in the late 1950s. Increased cross-country traffic concentrated on Interstate routes stimulated the franchising of fast-food and lodging establishments. Freeway commuting routes from outlying communities to center cities encouraged the growth of suburbs, which were already popular (by 1950, half of the country's population lived in suburbs). And while peak-period congestion is familiar to those commuters, off-peak congestion is now a real phenomenon as more motorists use the Interstates for shopping and social/recreational trips.

On one hand, the Interstate System facilitated the growth of cities. In 1956, 13 percent of the planned system was considered urban; today that figure is 29 percent. On the other hand, the system vitalized rural areas by increasing long-distance travel and stimulating business development at interchanges. Some small communities withered and died when they were bypassed by Interstate highways, but eventually many companies moved their operations out of cities to less expensive rural locations with Interstate access. The author of *The Roads that Built America* asserts that the massive effort of building the Interstate in the South created labor shortages that made racial integration in the workplace a practical necessity.

Automobile travel has changed as well. The Interstate is significantly safer, with a fatality rate of 0.8 per 100 million vehicle-miles, while the rate on all roads is 1.46. By comparison, the national highway fatality rate in 1956 was 6.05. The Interstates have reduced intercity travel time by 20–40 percent, and some urban corridors have seen travel times decrease by as much as 60 percent. Today, 24 percent of all highway travel is on the Interstate System, although it represents only 1.1 percent of the country's public road mileage. James Scheiner's 1967 study on the Interstate System's effects found that when an Interstate route was constructed between two cities separated by 100–200 miles, a significant number of travelers chose to travel by automobile or bus rather than fly between the two cities. Scheiner found that short-haul air travel was growing only half as fast as air travel in general.

One of the most dramatic effects of the Interstate System is the efficiency of freight transportation. From its beginning, the System's wider lanes, thicker pavements, and controlled access made truck travel faster. The invention of shipping containers (also in 1956) further increased trucking efficiency. By 1980, the government had deregulated the trucking industry,

and the Interstate System was nearly 95 percent complete. Over the following 20 years, the cost of moving freight dropped from 16 percent of the GDP to 9 percent. Today, operating costs for tractor-trailers are 17 percent lower on the Interstates than on other highways, and the System's travel time reliability has been credited with making "just in time" delivery a reality. The Interstates carry 41 percent of all truck-miles of travel, including 50 percent of the large commercial truck travel. Trucks carry 67 percent of all domestic freight, by weight, and more than 80 percent of US communities receive all of their goods and commodities by truck.

Two other freight-related phenomena have flourished with help from the Interstate System. In the mid-1970s, government regulations allowed United Parcel Service (UPS) and Federal Express (FedEx) to begin head-to-head competition with the US Postal Service for parcel delivery. Together, those two companies now operate 158,000 vehicles and handle 19 million packages a day, most of which are transported on Interstate highways for part of their journey. Also, Internet shopping is gaining momentum. In 2006, the \$107 billion of consumer online purchases represented a 22 percent increase over the previous year. A 2008 Nielsen survey revealed that 94 percent of Americans with Internet access shop online. The convenience of shopping at home and having products delivered to the door reduces travel for consumers, but it keeps those UPS and FedEx trucks and vans putting along.

In February 2000, Seppo Sillan, then-acting director of FHWA's Office of Program Administration, responded eloquently to a question about how the Interstate System has impacted the United States. In part, he wrote:

The Interstate System has been called the "conveyor belt" of our society because virtually every product in every American home, from your toothbrush to your favorite CD, has traveled on an Interstate highway at some point. . . . The Interstate System is a 20th century civil engineering achievement so visionary in purpose, so immense in challenge, so integral to modern society that it has enriched America beyond the imagination of President Eisenhower and the other leaders who made it possible."

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This is the fifteenth (and final) installment in a series of articles tracing the development of the Interstate Highway System. The original Western District presentation paper and all of the columns are available at http://www.unm.edu/~jerome/Interstate.htm. Thanks for reading.