

# 100th Anniversary Series PART III

# The Interstate Highway System

By Bill Boynton  
NHDOT Public Information Officer



For those of us in the transportation industry, we recognize that the Interstate Highway System forms the backbone of the transportation network in the United States.

As the United States Interstate Highway System nears its fiftieth anniversary (in 2006), and in celebration of the 100th Anniversary of the New Hampshire Good Roads Association, it is appropriate to include the Interstate Highway System in New Hampshire as our fourth feature in our 100th Anniversary series. How have roads like I-93, I-89 and I-95 changed all of our lives?

## The inspirational “spark”

We must go back over 85 years to fully understand how the Interstate Highway System in the United States came about.

In 1919, it took Lt. Col. Dwight Eisenhower 62 days to take an 81-vehicle convoy from Washington DC to San Francisco, California. The convoy averaged only 50 miles per day. In some stretches, the road was little more than gravel or dirt. Also along the way, 88 bridges were identified as “unable to bear the load.”

While deficient highway and bridge conditions were being addressed in a variety of ways by individual states during this time period

(see the article about New Hampshire’s “Trunk Line Road System” in the January/February 2004 issue of *New Hampshire Highways*), a national solution to reliable interstate travel didn’t come until much later.

During World War II, as the Supreme Commander of Allied Forces in Europe, General Eisenhower was stunned by the speed and ease with which the German forces (and their equipment) could move across Germany. His assessment, as a soldier, was that the German autobahn (the modern highway system created during the Third Reich) enabled Germany to extend the war in Europe for two years!

Eisenhower returned home after WWII convinced that the United States needed a system of modern highways like the autobahn – both for military use in times of war, and for civilians in peacetime.

## A European model

Within six years after the completion of the first Cologne-Bonn autobahn in 1932, Germany added 3,000 kilometers (1,860 miles) of super highway to its road network. Although Hitler has often been given credit for the autobahn, the real precursors were the Avus experimental highway in Berlin (built between 1913 and 1921) and Italy’s 130-kilometer autostrada tollway between Milan and the northern Italian lakes (completed in 1923).

Although Germany’s depressed economy and hyperinflation of the 1920s prevented plans for new autobahns from being built during that decade, many miles of roadway were built during the time of the Third Reich. Hitler saw the construction of autobahns primarily as a military advantage. However, highway construction as a job-creation program in the 1930s was also recognized by the German government as beneficial.

## The birth of the US Interstate Highway System

In his 1967 book, *At Ease: Stories I Tell to Friends*, Eisenhower wrote, “After seeing the autobahns of modern Germany and knowing the asset these highways were to the Germans, I decided, as President, to put an emphasis on this kind of road building. This was one thing I felt deeply about, and I made a personal



Between 1932 and 1938 Germany added 1,860 miles of autobahn to its road network. Shown here on a section of the Cologne-Bonn autobahn in 1938 is another German engineering accomplishment: the Volkswagon. Photo © Bettmann/Corbis

and absolute decision to see that the nation would benefit by it.”

The Interstate Highway System was launched on June 28, 1956 when President Eisenhower signed legislation authorizing funding and the start of construction.

The result: A 45,430-mile highway system, costing over \$130 billion to build. It has been aptly referred to as “the greatest public works project in history.” The multiple-lane divided highways that make up the Interstate Highway System have also proven to be a safer, quicker, and more efficient means of moving people and goods than conventional two-lane roads.

## How “the Interstate” has changed our lives

The creation of the Interstate Highway System has dramatically changed the way we go about our daily lives. The proximity of an

“Interstate” impacts where we live, where we work, where we shop, and what we do in our spare time.

The Interstate Highway System is also one of the key reasons why we love our cars so much. With a car, coupled with the construction of the Interstate Highway System, Americans began to enjoy unprecedented freedom of movement. With the construction of the Interstate Highway System, we were able to go where we want to go – and to get there faster.

Because of Interstate 93 in New Hampshire, for example, Boston area residents now think nothing of hopping into their cars for a day trip to the White Mountains.

## Bringing a diverse nation together

While initially inspired by military concerns, the creation of the Interstate Highway System also facilitated



Interstate 89 under construction in the 1960s. Photo shows construction of northbound lanes near current Exit 5.

loaded (see related feature story on pages 8-13). Maintenance is one issue. Expansion is another. There are simply too many vehicles now using the Interstate Highway System in the United States to keep up with the maintenance and expansion issues necessary to keep the Interstate Highway System safe.

Road travel on our national Interstate Highway System has more than quadrupled since the system's inception in 1956. While there have been many improvements over the years, traffic congestion (and associated safety issues) remains a problem in New Hampshire and across the country. Thirty-seven percent of America's major urban Interstate highways are now rated as "severely congested." New Hampshire's I-93 is one of them.

Vehicle travel on our national Interstate highways has increased by 157 percent since 1970. The nation's total population has grown by 38 percent during the same time period. New road construction has increased by only 6 percent over the same time period. You can do the math.

The great American economic engine that the Interstate Highway System helped to create in the 1960s, 1970s, and 1980s is now more or less "biting its tail." Current congestion throughout the national Interstate Highway System is wasting resources and stifling economic development.

**Funding: Repair and maintenance are essential**

The Interstate highways and bridges that we travel every day are showing the effects of their age. Nearly 33 percent of the pavement on Interstate highways across the country is in poor or mediocre condition. Twenty-seven percent of bridges in the national Interstate Highway System are structurally deficient or functionally obsolete.

The Federal Highway Trust Fund was established by the Federal Aid

Highway Act and the Highway Revenue Act in 1956 to provide necessary revenue to build and improve the Interstate Highway System.

Where does the money come from? From 1998-2002, motorists generated approximately \$142.5 billion (the gasoline tax) in revenue for the Federal Highway Trust Fund.

What does it cost to repair and maintain America's Interstate Highway System? The current cost of making essential repairs and improvements to the Interstate Highway System is currently about \$59 billion annually. This estimated amount is just to repair and maintain the roadways and bridges that make up the Interstate Highway System today.

**Can you leave your car at home?**

New federal laws are now placing greater emphasis on developing a so-called intermodal transportation system that will link the nation's highways, waterways, rail and air systems to ensure continued economic growth.

Are you prepared to shed your dependence on the automobile? Perhaps someday we'll all be flying around like the Jetsons. But for the foreseeable future, the Interstate Highway System will continue to provide the backbone of our transportation needs.

**A summary of the Interstate Highway System in New Hampshire**

- Construction of the first Interstate segment in New Hampshire, I-93, began in December 1956, in Concord.
- Two sections of Interstate highway are opened in 1963 from Salem to Manchester and Bow to Tilton.
- In 1965 a section of Interstate 93 from US 3 in Tilton to NH Routes 25 and 3A in Plymouth are opened, providing tourists easier



Construction of I-93 in Tilton in May 1963.

access to the Lakes Region and the White Mountains.

- Fourteen miles of multilane highway were opened in Nashua and on Interstate 89 in the Warner-New London area in November 1967. A total of 39 miles of modern highway was completed in 1967 for a total of \$19 million.
- The last section of I-89 is finished in 1968 connecting I-93 in Bow to I-91 in White River Junction, Vermont.
- Construction begins in 1984 on the final section of I-93 from Littleton to the Vermont state line.
- In 1988, the last remaining section of I-93 through Franconia Notch is formally dedicated.
- New Hampshire's Interstate Highway System was completed in December 1988 with the construction of a portion of I-393 in Concord and Pembroke.
- There are 224 miles of Interstate highways joining urban and rural areas in the state and linking the state to Maine, Massachusetts and Vermont.
- Total expenditures for construction of New Hampshire's Interstate Highway System amounted to \$478 million in actual dollars.

- Vehicle travel on New Hampshire's Interstate Highway System increased by 67 percent from 1984 to 1994.
- New Hampshire's Interstate routes support 21 percent of motor vehicle travel while comprising just 1.5 percent of all the state's public road mileage.
- The average motorist in New Hampshire travels about 2,540 miles each year on the Interstate Highway System.

**How to learn more and get involved**

To learn more about the Interstate Highway System in the United States and to contact national leadership, see the US Department of Transportation website at [www.fhwa.gov/hep10/nhs](http://www.fhwa.gov/hep10/nhs).

For more information about the Interstate Highway System in New Hampshire, see the NHDOT website at [www.nh.gov/dot](http://www.nh.gov/dot). To call, write, or e-mail your elected officials, reference the January/February issue of New Hampshire Highways, or call the Good Roads office at 603-224-1823.

important and valuable cultural transformations. Interstates have unified our nation physically, economically, and culturally. The Interstate Highway System now links 90 percent of all American cities with populations greater than 50,000.

According to the University of North Carolina Professor David Hartgen, what was initially sold to the American people as a defense measure soon became an "economic weapon that created the first far-flung commercial society."

Like it or not, the "Interstate" has profoundly changed the entire look of our nation's cities and suburbs. Many businesses have shifted from "Main Street" to malls or commercial strips along Interstate highways. The success of many businesses is the direct result of the mobility and accessibility provided by the Interstate Highway System.

Social patterns have also shifted dramatically over the past 50 years, and the construction of the Interstate Highway System is one of the key factors impacting this cultural shift. Initially, the construction of the Interstate Highway System made



Construction of I-93 in Franconia Notch begins in June 1965.

"the suburbs" possible. As the Interstate Highway System became fully established in the 1960s, 1970s and 1980s, increasing numbers of people were (and still are) willing to drive much greater distances to work in order to enjoy a more affordable (or rural) lifestyle. For many, whether they fully appreciate it or not, it is the Interstate Highway System that makes this choice possible.

**A national highway system in crisis**

As the Interstate Highway System approaches its 50th Anniversary, it is clear that this visionary initiative is, today, a victim of its own success.

The Interstate Highway System across the country is currently over-