

THE SOCIAL IMPACTS OF THE INTERSTATE HIGHWAY SYSTEM

What Are the Repercussions?

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Interstate highways have had broad social effects on the United States. The Interstates have not only altered how the nation travels, and how much, but also have changed the structure of communities and regions and the choices that residents are able to make on where to live, work, shop, and play.

For many, the social impacts of the Interstates have been positive: increased access, mobility, and options for individuals, households, and firms. For others, however—especially for those not able to own or drive a car—the Interstates have decreased access and mobility by undermining the viability of alternative modes of transport. Similarly, some communities have developed because of the Interstates, but others never have recovered from Interstate construction and are subjected to Interstate-related noise and emissions.

The Interstate Highway System also has had profound impacts on American institutions. The Interstate program helped create highway departments with a strong set of norms, values, and beliefs that continue to guide organizational missions, day-to-day activities, and views of the department's role in society. In turn, the program has led to changes in government organization, sometimes to counteract the dominant focus on highway building. The redistribution of power and authority from independent highway commissions to governors and legislators and from state highway departments to metropolitan planning organizations is an example of institutional change sparked by the Interstate program and its impacts.

Dominant Technology

The social impacts have been wide-ranging because the Interstate Highway System is a dominant technology. Except during peak periods of use in urban areas, Interstates offer speed and ease of travel substantially better than those available with other modes. The Interstates, however, require mass ownership and operation of mass-produced, affordable automobiles on the operator side of the system.

The Interstate, together with privately owned vehicles, quickly displaced or reduced the role of earlier technologies such as passenger and freight rail systems. In smaller cities and those that have developed with the automobile, the Interstates have displaced transit. In older, denser cities, transit continues to play a major role but often has failed in the suburbs.

As massive works of engineering, the Interstates also have dominated the landscape. Highways are cultural icons and landmarks, but their meaning has varied—in some cases, the roads were a “technological sublime” and a form of engineering as art, but in other cases, the road was a “monster” that ripped through urban fabric or through natural landscapes, wreaking havoc.

Facilitator of Changes

Interstate highways have played a major role in the suburbanization of the United States, but they were not the first transportation technology to do this, nor was transportation the only factor in suburbanization. Residential suburbanization followed the outward deployment of rail and streetcar technologies, and the trend accelerated with increased ownership of mass-produced automobiles.

Other contributors to suburbanization included the local government practice of zoning industries out of the cities and in the urban fringe; industrial production practices and technologies that favored single-floor layouts, requiring large amounts of land; housing policies and practices that favored home ownership and suburban locations—such as redlining or withholding home loans in the inner city and older suburbs, tax deductions for mortgage interest, and mass production of housing on greenfield tracts; de jure and de facto segregation by race and income; and the modernist idea that new is improved. Retail and service employment followed the population shifts outward, often attracted by the lower cost of land and by a business environment that was less regulated.

The Interstates facilitated these moves but the same shifts occurred along other, lower-design primary roads as well, supporting the conclusion that many

centripetal forces were operating. Big-box retail and other new forms of doing business that depend on easy access to a large market area require automobiles but can work with less-than-Interstate facilities.

Standards and Professional Life

The Interstate Highway System was a massive endeavor that occupied many years of transportation professionals' careers, from the 1950s through the 1970s and beyond. To get the job done, highway departments established rigid chains of command and sharp hierarchies—a military model of organization.

In addition, the program imposed uniform, federally established design standards nationwide, to minimize conflicts and to produce a homogeneous flow with an emphasis on speed, safety, and efficiency as primary values. Road design was by the book. Civil engineering programs began to have trouble attracting the best students, in part because the work was seen as routine, with less room for creativity and innovation than other fields could offer.

New Forms of Organization

Only a few observers—such as Lewis Mumford and Daniel P. Moynihan—predicted conflicts when the Interstates reached the city. The standard Interstate design did not fit all urban areas, and freeway revolts erupted in San Francisco, Boston, New Orleans, Memphis, Washington, Baltimore, Los Angeles, Sacramento, Phoenix, and many other cities.

The freeway revolts led to organizational change. By the early 1960s, Congress required that highway projects in metropolitan areas be approved through a process involving local elected officials. Several state legislatures dismantled independent highway commissions and gave more authority to appointed secretaries of transportation who could be pulled back from unpopular projects.

The image of the Interstate highway program and programs such as urban renewal as a “federal bulldozer,” disregarding social and environmental effects, helped produce additional legislation that required environmental impact assessment and an increased role in decision making for local elected officials and community residents. Highway departments began to add—sometimes uneasily—new units that addressed community and environmental factors, and regional agencies evolved into metropolitan planning organizations.

Legacies and Evolving Impacts

The Interstate Highway System remains the dominant transportation system in the United States, although the growth in international trade suggests that ports and airports are the new driving engines

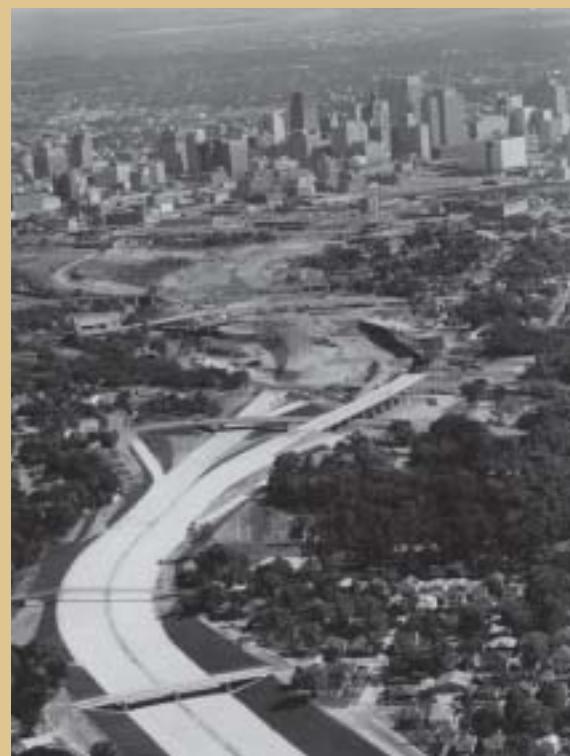
of the economy. The Interstates are the major commuting corridors, the main routes for intercity travel and intercity freight, and the major links to ports and airports nationwide. Their many roles in shaping American social and cultural arrangements continue to unfold. Their impacts remain major considerations for planners.

The Interstate highways are facing problems. The facilities are old, and funds for maintenance and reconstruction are not easy to find. The highways continue to have negative effects as well as positive ones, dividing communities and exposing nearby populations to noise and emissions. Some bypassed communities have benefited from traffic relief, but others have suffered as land uses along former major arteries have lost markets. Congestion on urban Interstates has pushed traffic back to some of these arterials during peak periods, creating a new set of challenges and perhaps opportunities.

The legacy of the freeway revolts of the 1960s and 1970s can be found in social justice and environmental organizations in many cities. Regional planning agencies have continued to gain in authority in most areas and have taken over part of the decision making from state highway departments.

Highway departments also are changing. Most now plan for high-occupancy vehicle lanes as well as automobile lanes, and the tight grip of uniform standards is beginning to loosen with context-sensitive design guidelines. Megaprojects that include something for everyone and attempt to mitigate or compensate for every possible adverse impact can be seen as another legacy of the freeway revolts.

All of these changes can be viewed as social consequences of the Interstate Highway System. The system has changed the way that the nation lives, works, and plays; has had a long-lasting imprint on the civil engineering profession; has spawned new organizations; and has shaped the nation's landscapes and points of reference. Even after 50 years, the effects of the Interstate Highway System continue to unfold.



Construction of I-45 approaches central Houston, Texas, circa 1961.

SOURCE: TEXAS DOT ARCHIVE LIBRARY