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Rural transportation has undergone significant changes over the last 15 years. The booming economy of the mid- to late 1990s, partly driven by expanded trade, has placed strains on the domestic transportation infrastructure. Deregulation and expanded State and local responsibilities for surface transportation have affected all areas of rural transportation—highways, passenger service (including public transportation, intercity bus, passenger rail, and passenger air), trucking, inland waterways, and rail freight. The recent recession and heightened security concerns have disrupted air transportation and necessitated costly security provisions.

Although deregulation has lowered prices for passengers nationwide, its effect on rural America has been mixed. Increased Federal funding and greater State/local control over those funds improved rural roads and expanded public transportation in rural America. Under current legislation, \$217.9 billion was authorized for all Federal surface transportation programs (highways, highway safety, and public transportation) between 1998 and 2003, a 40.3-percent increase over the prior 6-year period. Additional funding for rural public transportation services is available from various Federal agencies, with the Federal Coordinating Council for Access and Mobility working to coordinate services. Even so, in remote nonmetro areas, air service quality has declined in recent years, with fewer flights and reduced jet service. And cutbacks in bus service have reduced the number of rural communities served by intercity bus.

Rural population with scheduled transportation, 2004







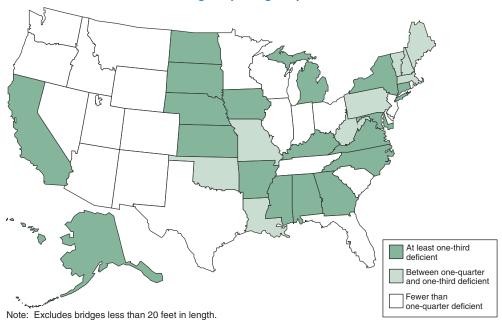
C J. Norman Reid

Rural Roads and Bridges Improve in Quality

The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) largely devolved Federal highway planning to the States, which, along with local governments, own the vast majority (97 percent in 2002) of roads. The 1998 Transportation Equity Act for the 21st Century (TEA-21) reinforced many of the State and local transportation roles laid out under ISTEA. Under ISTEA and TEA-21, largely led by a booming national economy, traffic increased sharply. Aided by increased Federal highway funding, the quality of rural roads and bridges also generally improved.

- The quality of roads in rural America generally increased during the 1990s, with interstate highways improving the most. The share of rural interstates (as measured by miles) rated by the U.S. Department of Transportation (DOT) in poor or mediocre condition decreased from 35 percent in 1993 to 12.3 percent in 2002.
- Rural traffic grew by 29.8 percent (as measured by vehicle miles traveled) from 1990 to 2002. During this time, the national road network increased in length by only about 2.6 percent, indicating that travel demand is generally growing faster than the supply of highways, especially in rapidly growing exurban areas.
- Overall, rural roads are in better condition than those in urban areas. While less than 14 percent of rural roads (as measured by miles) were in poor or mediocre condition in 2002, some 29 percent of urban roads were so classified.
- During the 1990s, rural bridges also improved in quality. In 1993, 32.8 percent of the 456,000 rural roadway bridges in the Nation were rated by DOT as deficient, compared with just 26 percent in 2003.
- States with the largest percentages of deficient rural bridges are mostly clustered in and around the Mississippi River and its tributaries and in parts of the East Coast, where the bridge infrastructure is among the oldest in the Nation.

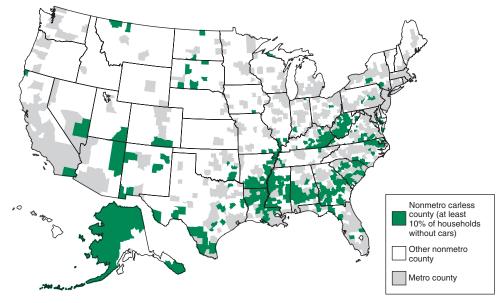
Percent of deficient nonmetro highway bridges by State, 2001



Car Ownership Rates Are Higher in Rural Than in Urban Areas

- Overall, 92.7 percent of rural households had access to a car in 2000, compared with 88.9 percent of urban households. However, a larger proportion of rural counties are characterized by a high rate of "carlessness" (at least double the average rate of carlessness) than urban counties.
- More than 1.6 million rural households do not have cars, with the proportion of carless households highest in the South, Appalachia, the Southwest, and Alaska.
- Highly carless rural communities are characterized by persistent poverty and have high concentrations of Black, Hispanic, or Native American residents. Nationwide, over 90 percent of individuals on public assistance do not have a car.
- Rural residents without access to cars are particularly dependent on public transportation, especially in high poverty areas.

Nonmetro counties with high proportions of carless households, 2000





Rural America Has Gaps in Passenger Transportation Network

During the 1990s, helped by increased Federal funding provided under TEA-21, rural public transportation services grew, with nonmetro providers offering 62 percent more passenger trips, 93 percent more miles traveled, and 60 percent more vehicles (vans and buses) available. Still, less than 10 percent of Federal funding for public transportation goes to rural areas.

- Public transportation is available in 60 percent of rural counties, with 28 percent of about 1,200 systems offering only limited service (less than 25 trips taken each year per carless household). With many Federal programs for the disadvantaged contingent on public transportation, rural areas without transit may be at a disadvantage in addressing the mobility needs of the elderly, handicapped, and poor.
- About two-thirds of rural systems operate in single counties or are city/town in scope; only one out of four rural transit providers operates in a multi-county area. About 60 percent of rural providers are public agencies, and roughly a third are nonprofit groups; less than 5 percent are private companies or tribal entities.

- Recognizing the particular need for public transportation in poor places, the Job Access and Reverse Commute (JARC) grant program was implemented in 1998 to encourage development of new transit services and expand existing routes for low-income individuals seeking access to jobs. From 1998 to 2003, \$750 million was authorized for JARC, with \$150 million allocated for rural areas.
- In 2000, 62 percent of rural public transportation users were female, 31 percent were elderly, and 23 percent were disabled.
- In recent years, local governments and nonprofit agencies have developed strategies to address the limited mobility options for low-income individuals in rural areas. One popular approach has been the "Wheels to Work" program, which offers low-income individuals the opportunity to purchase cars through attractive auto loan financing options.

Rural Intercity Bus Service Is Widespread Despite Cutbacks

- The number of rural communities served by long-distance bus service declined sharply in the years following deregulation in 1982. The intercity bus industry currently serves about 4,300 locations, down from over 15,000 prior to deregulation, with many of the service discontinuations concentrated in rural communities. Still, 89 percent of the rural population is served by long-distance bus service, the dominant mode of scheduled intercity passenger transportation for most rural residents.
- States with the least rural access to bus service (as measured by the number of rural residents residing within the coverage area) are mainly in the Great Plains.
- Under TEA-21, the Federal Government requires that each State spend at least 15 percent of its annual nonmetro public transportation funding to support rural long-distance bus service.



Rural Rail and Air Service Face Challenges

 Although the national rail network (run by Amtrak and supplemented by the Alaska Railroad) stretches across 47 States, the majority of rural residents (almost 6 in 10) live outside of its service area. Of those rural residents with any type of scheduled passenger

service, fewer than 1 percent have access to only rail (no bus or air service).

- During the 1990s, with financial concerns mounting at Amtrak, further cutbacks were made in the Nation's passenger rail network. Currently, fewer than 200 nonmetro places are served by passenger rail service.
- Following September 11, 2001, the airline passenger industry suffered a downturn, with smaller communities especially hard hit. Overall service (as measured by the number of flights) to small, non-hub airports dropped 19 percent between 2000 and 2003, with the Northeast and Midwest suffering the largest declines as service fell by about a third. Rural air service declines were the smallest in the West (falling 9 percent).

 Following airline deregulation in 1978, the Federal Government has supported passenger air service to some smaller and more isolated communities through

the Essential Air Service (EAS) program, which provides subsidies directly to airlines and to selected rural communities. EAS currently serves about 135 rural destinations, mostly in the West (including communities in Alaska).



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States with the lowest coverage of rural long-distance bus service, 2004

State	Rural population	Number of rural residents with bus service	Percent of rural residents with bus service
North Dakota	343,379	169,161	49.3
Nebraska	685,274	404,462	59.0
South Dakota	481,959	288,663	59.9
Montana	506,692	333,314	65.8
Wyoming	259,459	181,837	70.1
Kentucky	2,191,907	1,544,441	70.5
lowa	1,548,051	1,166,380	75.3
Kansas	1,066,777	804,784	75.4

Note: Alaska and Hawaii not included.



Booming Economy, Deregulation, and Expanded Trade Drive Freight Traffic

Deregulation in the rail freight and trucking industries, combined with the Nation's vibrant economy, led to sharply increased freight traffic throughout the country during the 1990s. Rail, trucking, and waterways have all been affected, creating additional strains on the Nation's transportation infrastructure.

- Between 1990 and 2001, freight transport on the Nation's major railroads increased by nearly 45 percent. At the same time, national rail system mileage decreased by 18 percent—largely the result of rail industry consolidations. Consequently, rail capacity has been severely strained in recent years, most notably during a series of high-profile rail disruptions in the late 1990s, such as the service slowdowns resulting from the 1996 Union Pacific-Southern Pacific merger. Agriculture was among those industries most hurt by rail disruptions.
- Trucking industry deregulation in 1980, combined with the strong economy of the 1990s, increased freight demands on the Nation's road network. Between 1990 and 2001, freight shipments moved by intercity trucks increased 43 percent.
- International trade is also behind increased freight shipments. U.S. agricultural exports to Mexico reached a record high of \$7.3 billion by 2002, a doubling in value since passage of the 1994 North American Free Trade Agreement (NAFTA). Growth in north-south highway traffic has created additional strains on the Nation's road network.
- Changing transportation demands have affected the U.S. inland waterway system, a low-cost, efficient network of 26,000 miles of navigable inland rivers and coastal waterways, 275 locks, and over 9,100 commercial waterway facilities (piers, wharves, and docks).
- In recent years, agricultural producers and barge operators have voiced concerns about the poor state of the locks and dams on the Upper Mississippi and Illinois River systems. These systems were mostly constructed between 1930 and 1950. Upgrading this infrastructure will be costly, and no consensus currently exists on how these costs will be met or how environmental concerns can be addressed.

What is Rural?

Data reported in this publication are based on the metropolitan and nonmetropolitan definitions provided by the Office of Management and Budget (OMB) in 1993. Metropolitan areas contain: (1) core counties with one or more central cities of at least 50,000 residents or with a Census Bureau-defined urbanized area (and a total metro area population of 100,000 or more), and (2) fringe counties that are economically associated with core counties. Nonmetropolitan counties are located outside the boundaries of metro areas and have no cities with 50,000 or more residents. In 2003, OMB released new metropolitan and nonmetropolitan definitions based on the 2000 Census, but most data sources used in this report have not yet incorporated these definitions. The terms "rural" and "urban" are used interchangeably with nonmetropolitan and metropolitan.

Data sources

This report draws upon the research of the Food and Rural Economics Division of ERS. Data on individual modes of transportation come from the U.S. Department of Transportation's Bureau of Transportation Statistics and the Federal Transit Administration. The 2000 Census of Population provides information on the rate of rural car ownership.

ERS website and contact person

ERS research on rural America is designed to meet the information needs of the Administration, Congress, policy officials, and others interested in rural issues. Rural research and policy analysis at ERS focuses on the socioeconomic well-being of low-income households, the effectiveness of Federal assistance programs in rural areas, and the factors influencing the rural infrastructure, agribusiness, and industrial base of rural areas. General information about rural America can be found at: www.ers.usda.gov/Emphases/Rural.

More detailed information about transportation in rural America can be found in the Rural Transportation briefing room www.ers.usda.gov/Briefing/Transport/

Other ERS briefing rooms of interest include:

Measuring Rurality

http://www.ers.usda.gov/Briefing/rurality/

Race and Ethnicity in Rural America

http://www.ers.usda.gov/Briefing/RaceAndEthnic/

Rural Income, Poverty, and Welfare

http://www.ers.usda.gov/Briefing/IncomePovertyWelfare/

Rural Industry

http://www.ers.usda.gov/Briefing/Industry/

Rural Labor and Education

http://www.ers.usda.gov/Briefing/LaborAndEducation/

Rural Population and Migration

http://www.ers.usda.gov/Briefing/Population/

For more information, contact Dennis Brown at dennisb@ers.usda.gov or 202-694-5338.

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