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## **Public Transportation on the Move in Rural America**

by

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## Introduction

Public transportation offers mobility for residents of rural America, particularly people without cars, who tend to be lower-income. Overall usage of transit services in rural America is not high, with only about a half of one percent of nonmetro residents using it as their primary means of transportation to work (U.S. Bureau of the Census, 2000). However, in many smaller communities with both longer distances between built-up areas and low population densities, transit can help bridge the spatial divide between people and jobs, services, and training opportunities (fig. 1). In recent years, the importance of public transportation in rural areas has been demonstrated by the key role it has played in the implementation of welfare reform (Stommes, Brown, and Houston, 2002).

Federal programs for surface transportation -- public transportation, as well as highways and highway safety -- are up for reauthorization by Congress in 2004. Last authorized in 1998 under the Transportation Equity Act for the 21st Century (TEA-21), the legislation provided \$1.18 billion over 1998-2003 for rural public transportation, with an additional \$456 million available (in both rural and urban areas) for specialized transit needs such as transporting elderly residents and individuals with disabilities. Reauthorization represents an opportunity to examine issues of importance surrounding the public transportation needs of rural America.

## What is Rural Public Transportation?

Public transportation is available in approximately sixty percent of all rural counties nationwide, for a total of about 1,200 systems (Stommes, Brown, and Houston, 2002). About two-thirds of rural systems operate in single counties or are city/town in scope; only about one out of four rural transit providers operate in a multi-county area. About 60 percent of rural transit providers are public bodies, and roughly a third are nonprofit agencies; only five percent are private companies or tribal entities.

Many rural transit systems are funded under Section 5311 of the Federal Transit Act, a formula grant program that authorizes both capital and operating assistance grants to public transit systems in areas with populations

less than 50,000. Such “5311” transit systems are county-based and tend to be found in the more populated rural areas. Few are found in the most rural, isolated areas. These systems range in size from 1 to over 50 vehicles. According to a recent survey, from 1994 to 1999, the average fleet size in rural areas increased by 60 percent, with ridership increasing by 62 percent (Stommes and Brown, 2002).

Specialized transportation services for the elderly and persons with disabilities are available under the Section 5310 program. The program provides capital assistance (not operating expenses) to States, which, in turn, distribute the funding in both rural and urban areas to nonprofit organizations or lead agencies in coordinated transportation programs. There are approximately 3,700 “5310” systems throughout the country.

Human service agencies also often provide public transportation in rural communities. The role of these entities varies, with some agencies engaging in the purchase of vehicles and hiring of drivers, and others contracting with rural transit operators. It is difficult to measure the magnitude of these services since transportation costs are often bundled with the overall cost of providing service to the client.

Meeting the public transportation needs of rural residents often requires effective coordination of transit services among these different agencies and programs. Coordinating the many funding sources and reporting requirements unique to each federally funded program has given rise to the Federal Coordinating Council for Access and Mobility (CCAM), which brings together relevant Federal agencies dealing with public transportation (including the Department of Transportation and the Department of Health and Human Services). CCAM provides policy guidance on coordinating transit across different Federal programs.

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The Federal Government encourages development of new public transportation services and expansion of existing routes for low-income, transit dependent individuals seeking access to jobs through the Job Access and Reverse Commute (JARC) grant program (Stommes, Brown, and Houston, 2002). Created by Congress in 1998, JARC was established to move recipients of TANF to employment, training, and other support services. The program, which complements individualized transportation assistance provided by human service agencies, authorized \$750 million through 2003, with 20 percent of funding originally designated for rural, non-urbanized areas.

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## Transit and Rural Areas

Public transportation enhances local rural economic growth in many ways. For example, it can increase the local customer base for a range of services, including shopping malls, medical facilities, and other transportation services. Residents interested in attending community colleges or other local educational facilities may gain access to such training opportunities with transit service. And, rural locations with amenities may gain potential tourists who otherwise would not have visited such communities without transit. Especially in those communities whose residents commute to adjacent metropolitan areas, transit can reduce congestion, thereby enhancing the quality of life. Availability of public transportation may also increase the ability of human service agencies to serve individuals on public assistance and transport low-income residents to jobs, training opportunities, and other support services.

Rural transit is also cost efficient. A recent study estimated average benefit/cost ratios of rural transit as approximately 3.1 to 1 -- for every additional dollar spent on transit (typically by a transit agency), rural areas derive about 3.1 dollars in benefits (Burkhardt, Hedrick, and McGavock, 1998). Rural transit systems that significantly expanded access to employment facilities were found to have among the highest benefit/cost ratios, as were systems that fostered independent living and those that provided access to critical medical services (such as dialysis treatment).

The major arguments in favor of providing Federal or State aid to rural transit involve improving economic efficiency and reducing inequalities.

## Improving Economic Efficiency

In theory, Federal or State transit investments offset anticipated underinvestment by localities, human service agencies, and the private sector in local transit systems. This anticipated underinvestment partly results from a failure to consider non-local (external) benefits when making investments in public services, such as local transit systems. For example, when a transit system allows an unemployed individual to find and keep a job, this can save the Federal Government and the States significant costs by reducing payments for such programs as unemployment compensation, Food Stamps, Temporary Assistance for Needy Families (TANF), and/or Medicaid. And, when an elderly rural resident who is unable to drive uses transit to obtain health services, this promotes preventive health care for rural seniors, thereby keeping down overall health care costs.

In rural places with relatively high per capita transit capital and maintenance costs, such as in sparsely populated locations with large land areas that require lengthy routes for transit vehicles, local demand for transit may be insufficient to pay for transit system costs without Federal or State subsidies.

Economic efficiency is also enhanced when transit is used as a means to alleviate some of the problems associated with rapid nonmetro growth (Brown and Fazzone, 1998). First, nonmetro rapid-growth areas often suffer from labor shortages. Transit can provide businesses with an expanded supply of workers by providing transportation to underemployed or unemployed individuals who lack cars. Second, many rapid-growth places have attracted large numbers of retirees in recent years. Public transportation can offer elderly residents access to vital human services, such as health care, educational opportunities, and a wide range of recreational activities. It can also help alleviate many of the problems associated with overcrowding, such as traffic congestion, sprawl, pollution, and the deterioration of area roads, and it can help preserve the rural “sense of place.”

From 1990-2000, about one in six nonmetro counties had rapid population growth (growing at a rate that was at least double the national nonmetro rate of 10.3 percent during the 1990's) (U.S. Bureau of the Census, 2000). Many of these high-growth nonmetro counties -- which are largely located in the West, the Northeast, the Upper Midwest, and parts of the South -- have important recreation functions. In 2002, approximately one-third of the 365 fastest growing nonmetro counties were classified as having significant recreation functions (using the ERS recreation county typology) (Johnson and Beale, 2002). Recreation county types include Midwest Lake Second Homes (commonly found in Michigan and Minnesota), Coastal Ocean Resorts (Delmarva Peninsula and South Carolina), Ski Resorts (Colorado, Idaho, and Utah), Reservoir Lakes (mainly found in Missouri, Oklahoma, and Texas), and Casinos (Nevada and Colorado).

With high growth, some of these recreation-based nonmetro counties face labor shortages. Transit plays an important role by providing local recreation-based businesses with an expanded supply of low-skilled workers from surrounding counties. In addition to assisting businesses meet their labor demands, transit also helps workers find jobs. While such jobs may be low-wage in nature, they serve as an important source of income to those who otherwise would likely face limited employment alternatives.

Also, as many retirees have been drawn to these high-amenity areas, public transportation has played an important role by offering elderly residents access to human services such as health care, educational opportunities, and shopping. Although such communities often struggle with the negative side effects associated with rapid growth, a fast growing population also can help to reduce the typically higher per-capita costs associated with rural public transportation, making it more economically viable for such areas.

Some of these high-growth nonmetro recreation counties are among the highest users of public transportation in rural America. For example, in Colorado, Eagle County (home of Vail) and Summit County (where Breckenridge and Copper Mountain ski resorts are located) both had high rates of population growth during the 1990's and they rely relatively heavily on public transportation (with more than 5 percent of their workers using transit as a primary means of transportation to work). Other nonmetro counties with high growth and relatively high transit use are Dukes, Massachusetts (home of Martha's Vineyard); Worcester, Maryland (Ocean City); and Beaufort, South Carolina (Hilton Head Island).

The case of Eagle County, Colorado is illustrative. Located about 100 miles to the west of Denver, Eagle County is perhaps best known as the home of Vail and other popular ski resorts. Between 1990 – 2000, Eagle County's population grew 90 percent, the fifth fastest rate of growth among all nonmetro counties nationwide. In recent years, rapid growth from tourism has increased the local tax base and reduced unemployment. Median household income was more than 130 percent above the State median in 1999, the second highest ratio for any county in Colorado. While police and fire protection services and the school system are well-funded, rapid population growth has led to increased traffic congestion. Public transportation has been important in Eagle, with most demand coming from low-income workers and tourists. During the 1990's, the county increased its sales tax, partly to obtain more funding to expand transit. The town of Vail currently provides free year-round bus service throughout the local area – the largest free transportation service in the Nation.

As counties such as Eagle, and other high-amenity areas like it, have faced pressures from recreation-related growth in recent years, they have turned to transit as a means to alleviate some of their problems. Although they are among the wealthiest nonmetro counties in the Nation, and can afford public transportation systems on their own, local officials have recognized that transit is an important tool for making their local recreation-based

economies run more efficiently, bringing in workers, reducing congestion, and providing mobility options for residents.

### Reducing Inequalities

Another argument for providing Federal or State aid for rural public transportation is that transit can reduce social and economic inequalities by enhancing mobility for residents -- many of whom are poor, disabled, and/or elderly -- who lack access to cars. Furthermore, given the Federal commitment to welfare reform, it can be argued that the Federal Government should help the States and localities provide adequate transportation services to individuals who need assistance in finding jobs.

Compared to metro areas, nonmetro counties have higher levels of poverty, and have larger shares of disabled and elderly residents (U.S. Bureau of the Census, 2000) (fig. 2). In 1999, approximately 7.9 million people in nonmetro areas lived in poverty, representing about 14.6 percent of the rural population, compared to a metro poverty rate of 11.8 percent (26 million individuals). And, 11 million individuals (excluding those under 5 years old) in nonmetro areas were classified as disabled in 2000, accounting for 21.5 percent of rural America, compared to a disability rate of 18.8 percent in metro areas (38.8 million disabled individuals). Nonmetro areas had 7.8 million elderly residents (at least 65 years of age) in 2000, accounting for 13.8 percent of the nonmetro population, compared to an elderly rate of 11 percent for metro counties (25.6 million elderly metro residents). These individuals, in particular, potentially benefit from access to public transportation.

The highest concentrations of the rural poor are primarily in the South, the Southwest, the Upper Plains, and Alaska. The nonmetro disabled are clustered mainly in the South, with heavy concentrations in Appalachia (fig. 3). And, the highest concentrations of elderly residents in nonmetro areas are primarily in the Plains and parts of the Midwest, with significant clusters also located on the West Coast, the Southwest, the South, and the Northeast.

In areas suffering from high unemployment, vulnerable populations have a particular need for public transportation because their options for personal mobility may be severely limited. In the second quarter of 2003, the nonmetro seasonally adjusted unemployment rate was 5.9 percent, compared to 6.1 percent for metro



counties. The highest rates of nonmetro unemployment are in parts of the South, the Southwest, the Pacific Northwest, the Upper Great Lakes, the Upper Plains, the Northeast, and Alaska.

Census data reveal that the vehicle ownership rate is higher in rural America than in metro areas, with 92.7 percent of rural households having access to a car in 2000, compared to 88.9 percent for metro counties (U.S. Bureau of the Census, 2000). Still, more than 1.6 million rural households do not have access to a car. The proportion of rural households without access to automobiles is highest in the South, the Southwest, and parts of Alaska (fig. 4).

Previous research has found that nearly 40 percent of all rural counties are not served at all by transit services, while another 28 percent have only limited service (defined as having less than 25 trips taken each year per carless household) (Stommes, Brown, and Houston, 2002). And, while the vast majority of rural households owns a car, poor rural households are three times more likely than the non-poor to lack a vehicle (Brown and Stommes, 2004). For carless rural households, few good options for transportation exist, especially in more sparsely populated nonmetro areas, which typically have little transit service. Counties with smaller metropolitan populations and completely rural areas are often less likely to be served by a federally-assisted public transportation program. Hence, public transportation can help to bridge the mobility divide existing for these communities and the individuals that reside there, opening up access to employment, training, and social services.

Tunica County, Mississippi is a case in point. This rural Mississippi Delta county, which has a high concentration of poverty, many disabled individuals, many carless households, and high unemployment, is home to one of the largest casinos in the country. The local casino industry's development in the mid-1990's led to sharply increased local land prices and higher infrastructure costs, factors that raised the costs of housing there. Consequently, the casino industry found it difficult to hire sufficient numbers of workers in the local area, even though it is economically challenged. But with nearly 16 percent of the local population lacking access to a vehicle -- more than double the national nonmetro rate of non-car ownership -- the casino industry determined that transit could help to bring in workers from the local area as well as from surrounding counties up to 70 miles away. Additionally, community officials found that transit helped to reduce traffic congestion around casinos.

## Summary

This report explores the usage of public transportation services in nonmetro America. The discussion highlights that some rapid-growth nonmetro communities have been relatively heavy users of public transportation services, which tends to promote economic efficiency and growth, while mitigating the ill-effects of sprawl. Poorer nonmetro communities, and/or those with large concentrations of other transit-dependent individuals (the disabled, the elderly, carless individuals) and areas suffering from high levels of unemployment can also benefit from transit because it promotes economic well-being and reduces economic and social inequalities. However, most rural places do not have significant access to transit.

With public transportation programs up for reauthorization this year, rural areas have an important stake in the outcome of the legislative debate. Given the role that transit can play in bringing about economic efficiency and expanding social equity in the Nation's nonmetro areas, many of which are characterized by long distances and low population densities, reauthorization represents a unique opportunity to revisit the special transportation needs of rural communities.

## **References**

Brown, Dennis M., and Jon Fazzino. 1998. "How Rapid Nonmetro Growth Causes Problems in Rural Counties: The Case of Public Transportation," *Small Town*, Vol. 28, No. 4, pp. 16-23.

Brown, Dennis M., and Eileen S. Stommes. 2004. "Rural Governments Face Public Transportation Challenges and Opportunities," *Amber Waves*, Vol. 2, Issue 1, February.

(Web site: <http://www.ers.usda.gov/amberwaves/February04/Findings/RuralGovernments.htm>)

Burkhardt, Jon E., James L. Hedrick, and Adam T. McGavock. 1998. *Assessment of the Economic Impacts of Rural Public Transportation*, Transit Cooperative Research Program, Report 34, Transportation Research Board, National Research Council, National Academy Press, Washington, DC. (Web site: [http://trb.org/news/blurb\\_detail.asp?id=2583](http://trb.org/news/blurb_detail.asp?id=2583))

Deweese, Sarah. 1998. "The Drive to Work: Transportation Issues and Welfare Reform in Rural Areas," Information Brief, A Special Series on Welfare Reform in the South, Southern Rural Development Center, No. 5, November.

(Web site: <http://srdc.msstate.edu/publications/brief5.pdf> [PDF File])

Deweese, Sarah. 2000. "Transportation in Rural Communities: Strategies for Serving Welfare Participants and Low-Income Individuals," Rural Welfare Issue Brief, Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services, April.

Economic Research Service. U.S. Department of Agriculture. Rural Transportation briefing room. (Web site: <http://www.ers.usda.gov/Briefing/Transport/>)

Johnson, Kenneth M., and Calvin L. Beale. 2002. "Nonmetro Recreation Counties: Their Identification and Rapid Growth," *Rural America*, Vol. 17, No. 4, Winter: 12-19.

(Web site: <http://www.ers.usda.gov/publications/ruralamerica/ra174/ra174b.pdf> [PDF File])

Stommes, Eileen S., and Dennis M. Brown. 2002. "Transportation in Rural America: Issues for the 21st Century," *Rural America*, Vol. 16, No. 4, Winter: 2-10.

(Web site: <http://www.ers.usda.gov/publications/ruralamerica/ra164/ra164b.pdf> [PDF File])

Stommes, Eileen S., Dennis M. Brown, and Capree M. Houston. 2002. *Moving Rural Residents to Work: Lessons Learned from Implementation of Eight Job Access and Reverse Commute Projects*. Federal Transit Administration. December.

(Web site: [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3630.html](http://www.fta.dot.gov/funding/grants/grants_financing_3630.html))

U.S. Bureau of the Census. 2000. *Census of Population*.