CAPITOL RESEARCH

TRANSPORTATION

Rural Transportation Needs

In 2008 and 2009, the CSG Transportation Policy Task Force and CSG leaders approved a series of policy resolutions laying out the organization's goals and aspirations for the next federal surface transportation authorization bill. The previous legislation, known as SAFETEA-LU, officially expired in September 2009. Based on those resolutions, CSG supports an authorization bill that:

- *Is multi-modal, multi-year and adequately funded to meet the nation's continuing infrastructure needs;*
- *Provides short-term funding stability and long-term vision;*
- *Provides maximum flexibility to states; and*
- *Considers the needs of both urban and rural areas.*

This brief examines the transportation needs of rural America, how they may be different from those of urban America and what kinds of federal transportation policy considerations may be necessary to meet those needs.

Executive Summary

- Rural highways provide many benefits to the nation's transportation system, including serving as a bridge to other states, supporting the agriculture and energy industries, connecting economically challenged citizens in remote locations to employers, enabling the movement of people and freight, and providing access to America's tourist attractions.
- Rural areas face a looming highway capacity crisis in the years ahead unless significant investments are made. But rural areas need substantially different kinds of investments, tools to finance rural transportation projects and policy strategies than urban areas need.
- For many rural states, adequately funding roads and bridges is still the primary issue, much more than public transit, high speed rail and other transportation solutions that may make more sense in densely populated areas.
- Rural areas face several transportation challenges, including inadequate roads, a lack of access to the interstate system and even traffic congestion. Most interstates were planned 60 years ago and little new capacity has been added since then to reach rural communities. Many rural two-lane roads cannot safely carry the heavy trucks and commercial vehicles used to transport freight.
- According to the American Association of State Highway and Transportation Officials, commonly known as AASHTO, the nation's roads need new capacity to improve connectivity and mobility for rural America; improve access for travel, recreation and tourism; enhance and expand rural transit opportunities; provide connections for new and emerging population and commerce centers; and ensure reliable access to defense installations. There are several areas where the transportation needs and solutions may be different for rural America and it's important to contemplate those differences as changes to federal transportation policy are considered:

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Road safety also must be a key focus of efforts to improve rural roads. Fifty-six percent of highway deaths occur on rural roads.

- **Road Capacity Needs:** A 2010 AASHTO report said the nation needs to add 30,000 lane-miles to the interstate system to meet rural needs.
- **Congestion:** Some rural transportation advocates fear that federal programs and funding targeted toward reducing traffic congestion may exclude rural communities by focusing on transit and high-speed rail. Congestion in rural areas is different from that in urban areas, but it is no less significant. It is often related to crashes, stalled vehicles, tourism or special events. Rural congestion can significantly impact freight movement, manufacturing processes, competitiveness and productivity. A federal authorization bill should address congestion in all parts of the country and on all modes of transportation.
- **Livability:** A federal focus on creating livable communities also has some rural advocates concerned it will mean more money for big city transit projects and less for rural roads. But others believe that suggests an outdated mindset that public transit is too costly and inefficient for rural areas, so roads should be the sole transportation focus for those communities. Rural livability may mean different things in different parts of the country, but rural communities provide the blueprint for what many say they want in their own communities, including walkable and accessible town centers.
- **Road Safety:** Road safety also must be a key focus of efforts to improve rural roads. Fifty-six percent of highway deaths occur on rural roads. Efforts to create better roads can range from low-cost ones like road signs to moderate-cost ones like median barriers to higher-cost improvements such as reducing the angle of dangerous curves. But because many rural roads are not eligible for federal highway funding, efforts to improve safety can fall to local governments that aren't always equipped with either the necessary funding or the knowledge of road safety solutions. State governments will look to the next authorization for help in developing safety metrics that will allow them to pinpoint the areas where safety improvements are most needed. States and localities also can seek federal help in designing rural roads smarter with better engineering, appropriate speed limits, traffic calming measures such as roundabouts and intelligent transportation system technologies.
- **Connectivity and Mobility:** Rural states provide a vital link in keeping the agriculture, energy and freight industries moving around the country. But a lack of roads and rail, particularly in rural Western states, mean they don't always move as quickly or efficiently as they could. According to AASHTO, additional arterial roads are needed to make easier and faster connections. Rural road improvements are needed to relieve freight bottlenecks. Also needed is more investment in freight projects to facilitate truck to rail transfers at grain elevators and other locations. Ports in major cities are not the only important links in the nation's supply chain.
- **Public Transit:** According to AASHTO, federal funding for rural transit should more than double over the next six years. During that time, almost every transit vehicle (55,000 vehicles) in rural America will need to be replaced. Public transportation in rural communities may look a little different than it does in big cities, but it is no less important. The aging of the population in rural America has contributed to rising demand for transit. Rural transit often takes the form of on-demand service via small bus or van for non-emergency trips to the hospital, pharmacy or clinic, and trips to the grocery store. Due to the long distances and small numbers of people involved, rural transit can be an expensive proposition. Only 60 percent of rural counties nationwide have public transportation available and 28 percent of those have very limited service. Rural transportation advocates say they will seek flexibility from the federal government to use federal funding to pay for transit operating expenses. More coordination and cooperation is also needed among government agencies, community and faith-based groups, and private sector transportation providers to create a more seamless system of transit around the country.
- **Funding Transportation:** With the continuing erosion of the gas tax as the main revenue source to fund transportation improvements, some states and localities around the country are experimenting with alternative finance. But rural transportation advocates are concerned that some of the most commonly mentioned ones—tolling, congestion pricing, public-private partnerships and vehicle miles traveled charges—might not work for rural states and communities. Collection costs and the lack of traffic density in rural states make it unlikely that they would be able to raise significant funds from tolling unless tolls were set very high, in which case motorists would likely divert to other roads. For the same reasons, private companies would not be able to get a return on investment from funding toll road projects

in these areas as part of public-private partnerships. Charging motorists a fee for each mile they travel—rather than each gallon of gas they buy—would also be problematic for rural states because of the long distances residents must often travel. From a new federal authorization bill, rural states will seek proportionate funding growth, increased funding, greater flexibility on the use of federal funds and more programs like Build America Bonds, which stand to benefit both urban and rural areas.

Rural Transportation Needs

"Federal investment in South Dakota's highways is in the national interest," South Dakota Transportation Secretary Darin Bergquist told a U.S. Senate subcommittee in August 2009. "It is imperative that legislation reauthorizing the federal highway program continues to provide significant investments in highways in and across rural states, allowing us to continue to meet the demands being placed on our highway network, including from interstate travel."

Bergquist, who as a member of CSG's Transportation Policy Task Force helped draft a 2008 policy resolution on reauthorization, said his state's federal-aid highways provide many benefits including:

- Serving as a bridge for truck and personal traffic between other states, advancing interstate commerce and mobility;
- Supporting agricultural exports and serving the nation's ethanol production and energy industries, which are located largely in rural areas;
- Serving as a lifeline for remotely located and economically challenged citizens, such as those living on tribal reservations;
- Enabling people and freight to traverse the vast tracts of sparsely populated land that are a major characteristic of the Western United States; and
- Providing access to scenic wonders and facilitating tourism.[1]

South Dakota is not alone among rural states in being home to many transportation assets that benefit the entire nation. But as a number of recent reports have concluded, rural areas face a looming highway capacity crisis and other problems in the years ahead unless significant investments are made. Rural transportation advocates are quick to point out the kinds of investments, the tools to finance rural transportation projects and the policy strategies needed to avert that crisis are all substantially different from those needed in urban areas.

"While public transit and things such as high-speed rail may make sense for densely populated areas, in rural Oklahoma we are still focused on the fundamental need to more adequately fund roads and bridges," Oklahoma state Sen. Bryce Marlatt told a March, 2010, hearing of the U.S. Senate Environment and Public Works Committee, one of several panels with jurisdiction over authorization legislation. "As such, I respectfully urge this committee to consider the vast needs of rural America and to continue making the backbone and core of our nation's infrastructure—our existing roads and bridges—a top priority."[2]

"The unique transportation needs of small-town and rural Americans are clear: Longer distances between job opportunities, volatile energy prices and shifting demographics are all impacting the continued prosperity of these communities," John Robert Smith said at the same hearing. Smith is president of the Washington, D.C.-based nonprofit Reconnecting America and former mayor of Meridian, Miss. "While these are similar challenges facing metropolitan areas, many small towns and rural areas lack the financial resources, planning capacity or the authority to implement local priorities that may not always align with those at the state level. A bold new policy is needed to reform federal investments in the transportation system in a way that particularly benefits the residents of rural and small town areas by ensuring adequate investment to maintain existing infrastructure, facilitate economic growth and provide affordable mobility options."[3]

Many agree it will be important for Congress to recognize the unique transportation needs of rural America in crafting the next authorization of federal transportation programs. Those needs include increasing road capacity, alleviating congestion in rural communities, making those communities more livable, improving road safety, providing more mobility and connectivity, especially for freight transportation; and investing in public transit suitable for rural communities. It is also important to closely examine the various transportation funding mechanisms that have been touted at both the federal and state levels to determine their applicability to rural needs.

Road Capacity Needs in Rural America

Ensuring that rural areas stay connected must be a key focus for transportation in the years ahead, according to a 2010 report from the American Association of State Highway and Transportation Officials, commonly known as AASHTO. Many rural areas have inadequate roads to serve growing agricultural and energy sectors. Many small towns and emerging cities don't have immediate access to the interstate system. And, although congestion isn't necessarily something we equate with

rural communities, it is a growing concern, especially near popular rural tourist destinations.

Most interstates were planned 60 years ago and little new capacity has been added since then to reach residents of rural communities that have sprung up or grown during the ensuing years. Rural roads—many of the narrow, two-lane variety built in the 1960s and 1970s—cannot safely carry the heavy trucks and commercial vehicles common on the roads today.

The AASHTO report says the nation's roads need new capacity to:

- Improve connectivity and mobility for rural America;
- Improve access for the travel, recreation and tourism industries;
- Enhance and expand rural transit opportunities;
- Provide connections to new and emerging centers of population and commerce; and
- Assure reliable access to defense installations and critical industries for homeland security.[4]

According to AASHTO, 30,000 lane-miles should be added to the interstate system to meet rural needs. That would include:

- A 16,000 lane-mile expansion of the existing rural Interstate Highway System;
- An upgrade of rural National Highway System routes to interstates, in the process adding 2,000 lane-miles; and
- An upgrade to interstate standards of other National Highway System routes that can connect the existing interstate network to urbanized areas with a current or expected population greater than 50,000, in the process adding 12,000 lane-miles.

The transportation report lists numerous potential future interstates that have captured public support, some of which are just in the planning stages and others that are fairly far along in development. Some of these projects involve upgrading and connecting existing roads to form new interstates. Others would extend existing interstates into other states.

The list includes the long-in-the-works I-69, a seven-state, 2,600-mile corridor that would connect the lower Rio Grande Valley border towns of McAllen and Brownsville in Texas—a region without a connection to the interstate system—to points north all the way to the Canadian border.[5] The I-69 corridor is sometimes called the NAFTA Superhighway due to its potential to assist in trade with Canada and Mexico. Many rural communities along the route will also benefit from the project. But the proposed interstate project—really a series of smaller projects in various states—has been controversial throughout its history. As author Matt Dellinger writes in his book "Interstate 69: The Unfinished History of the Last Great American Highway," "I-69 is the best of highways. It is the worst of highways. It could be the last great Interstate built in America. Or it might never be finished at all."[6]

The new interstates also could include I-11, a proposed route that would link Phoenix and Las Vegas, two of America's fastest-growing cities, across a vast expanse of 295 miles that now takes seven hours to drive over existing roads.[7]

Congestion in Rural America

Some policymakers from rural states fear the next federal authorization may include a number of targeted initiatives and grant programs for which rural states would not be eligible. Take, for example, the issue of urban congestion, which is the target of several proposed initiatives supported by the Obama administration and former House Transportation and Infrastructure Committee Chairman James Oberstar, whose six-year, $500 billion transportation authorization bill, originally introduced in 2009, could become the template for the finished product.

The Obama administration has touted its livability initiative, which some fear would emphasize expanding public transit and high-speed rail to relieve urban congestion and in the process neglect needed improvements to rural roads. The administration also has emphasized funding major intermodal projects that would shift a portion of goods and people off roads and on to other forms of transportation.

Similarly, Oberstar's bill would create an Office of Livability within the Federal Highway Administration to reduce "the financial, environmental and quality of life impacts of traffic congestion." The bill also would establish a "metropolitan mobility and access" program to provide dedicated funding to help the nation's largest cities address congestion.

Rural lawmakers are concerned such programs focus too much on urban areas and aren't tailored to rural needs.

"The Oklahoma Panhandle doesn't have the same problems as New York City or San Francisco," said U.S. Senate Environment and Public Works Committee Ranking Member James Inhofe of Oklahoma at a March 2010 hearing.[8]

But, congestion is not a problem foreign to rural communities either.

"Congestion in rural areas looks different," said Tim Lomax, research engineer for the Texas Trans-

portation Institute, which issues the annual assessment of congestion known as the Urban Mobility Report, at the same Senate hearing in March 2010. "It's more often related to crashes, stalled vehicles, tourism or other special events. It's easy for metropolitan residents to dismiss, until they are stopped on the highway for two hours behind a serious crash."

Lomax also said rural congestion has an economic component that should not be overlooked.

"The effect on freight movement from rural congestion is a significant problem, and one that is not widely appreciated," he told Congress. "The goods that move on the long intercity corridors are often part of a just-in-time manufacturing process; they have 'somewhere to be' and an arrival time. Delays do not just mean driver time or fuel costs. They can mean a slowdown in an assembly process, or a requirement for a facility to devote more space for warehousing components rather than producing finished items. All of these affect competitiveness, productivity and the quality-of-life in small towns and rural regions."

The interconnectedness of the entire transportation system makes it imperative that transportation solutions not play favorites between urban and rural or between modes of transportation, Lomax and others say.

"We need to add roads and public transportation," he said. "We need to solve local problems of access to jobs, health care and education and solve national problems, such as port or intermodal terminal congestion that occur within a region."[9]

Livability in Rural America

Creating livable communities, including the transportation system to serve them, has been a key focus for the Obama administration since coming into office. In 2009, the U.S. departments of Transportation and Housing and Urban Development, along with the Environmental Protection Agency, formed a partnership called the Sustainable Communities Initiative. Its purpose is to coordinate federal transportation, environmental protection and housing investments and identify strategies to provide:

- More choices for affordable housing near employment opportunities;
- More transportation options to lower transportation costs, shorten travel times and improve the environment;
- Better coordination of transportation and land uses; and
- Safe, livable and healthy communities.[10]

One outgrowth of the partnership was the Federal Highway Administration's Livability Initiative. According to the highway administration, livability involves connecting the quality and location of transportation facilities to other issues such as affordable housing, quality schools and safe streets. But this can only be done, the department's website states, by addressing safety and capacity issues on all roads.[11]

Some leaders representing rural states have expressed concern about the administration's livability efforts, fearing it will mean more money for big city transit projects and less for rural roads. Others say such fears reflect outmoded thinking.

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"The strategy of building more roads to support quality of life—whether it works or not—has essentially been the only approach that today's leaders have ever experienced," Gary Toth, of the Project for Public Spaces and Hannah Twaddell of Renaissance Planning Group, wrote in an op-ed last year for the PBS project "Blueprint America." "We have come to believe that transit is too costly and inefficient to be useful in rural areas, brought on by the belief that there have been marvelous consequences to building new roads. Most of these apparent benefits are direct and easily understood during our daily lives."

Toth and Twaddell also write that many people may have a problem with the concept of rural livability because the rural experience is so very different in different parts of the country. A family farm in Nebraska would seem to have little in common with a small coastal village in Maine, for example.

"Since rural living encompasses a wide range of formats, our industry's tried and true 'one size fits all,' project-driven approach of building more roadway capacity just doesn't fit into rural America—not all of it anyway," they wrote. "Sometimes we will need to shrink roads and slow down traffic; sometimes we will need to widen them and speed up traffic. Sometimes we will need to invest in bus service and sometimes we will need to build new rail. One size will not fit all. A single-minded mission to channel most of rural transportation investment into bigger and faster highways to create 'accessibility' will be as damaging if not more so than building no new roads at all."[12]

U.S. Transportation Secretary Ray LaHood suggests the principles of livability are already indigenous to rural life.

"The livability Americans say they want comes to us from rural communities with town centers that are walkable and accessible to all ages and income groups," he wrote in a May 2010 blog post. "But rural communities also face special challenges that have threatened the kind of traditional community design that nourished livability. Past transportation policies have resulted in many Main Streets being bypassed by the interstate highway system—contributing to the decline of once-vibrant business centers. Many rural communities located close to cities have lost farmland and open space as urban areas spread outward."

LaHood said the administration is seeking "better coordination of housing and transportation to protect and safeguard open space and agricultural land in rural areas, preserve the traditional culture of rural town centers, and provide rural residents with transportation options that decrease their household costs." Transportation costs are often significantly higher for rural residents because they have long commutes to employment centers.[13]

James Townsend, president-elect of the Washington, D.C.-based National Association of Regional Councils, has suggested the way to make the principles of livability even more applicable to rural communities is by making it an even more government-wide endeavor, including adding the Department of Agriculture to the existing federal interagency partnership between the departments of Transportation and Housing and Urban Development, and the Environmental Protection Agency.[14]

Twenty-seven states have more than 75 percent of total roadway mileage designated as rural. Only eight states have less than 50 percent.

Road Safety in Rural America

When it comes to rural America, road safety has to be a prime consideration. According to the National Highway Traffic Safety Administration, although only 23 percent of Americans live in rural areas, 56 percent of highway deaths occur on rural roads.[15] Twenty-seven states have more than 75 percent of total roadway mileage designated as rural. Only eight states have less than 50 percent.[16]

A rural safety initiative of the U.S. Department of Transportation highlights options to help reduce highway fatalities and injuries on the nation's rural roads. Its efforts include programs to encourage safer drivers and better and smarter roads. States can focus efforts in these three areas to improve rural road safety.[17]

But as in many areas, officials from rural states say they are seeking flexibility in how they go about reaching the goals of improved road safety.

Safer Drivers: Ensuring safer travel in rural areas must begin with the drivers themselves, many safety advocates believe. The National Transportation Safety Board, known as the NTSB, reported in November 2010 that many rural states, especially those in the upper Midwest and West, lack many of their most wanted transportation safety improvements aimed at drivers.

Nineteen states have no seat belt enforcement law.[18] In 2010, Kansas became the 31st state to enact a primary seat belt law which allows police officers to stop and ticket the driver of any passenger car if either the driver or front seat passenger is observed not wearing a seat belt; all five U.S. territories and the District of Columbia, also have such a law. The measure is expected to not only save lives by encouraging more Kansans to buckle up, but also cut medical and other economic costs the state incurs by more than $70 million. It also makes the state eligible to receive $11 million in federal incentive funds.[19]

The transportation board also reported that 23 states lack sufficient progress in developing a successful program to deal with hard core drunken drivers, especially those who are repeat offenders.[20] The NTSB recommends 11 elements for an effective program, including statewide sobriety checkpoints and the use of ignition interlock devices.[21]

All but two states have laws on the books that require the installation of ignition interlock devices in the cars of some individuals convicted of drunken driving. Such devices require the driver to exhale into it and have their breath-alcohol concentration analyzed before the engine will start.[22] The reauthorization bill considered by a House Subcommittee in 2009 included a provision that would withhold some highway funding from a state if it does not have a law that requires the installation of ignition interlocks in the cars of first time drunken drivers. The National Highway Traffic Safety Administration in recent years also has provided grants to states aimed at increasing the use of ignition interlocks in rural areas. In applying for funding, state governments were charged with identifying problems, such as the

reluctance of courts in rural areas to require installation of interlocks.[23]

But South Dakota Transportation Secretary Darin Bergquist told a Senate Subcommittee in 2009 that ignition interlock devices don't always work well in cold climates, such as those experienced in the largely rural Dakotas. South Dakota and Alabama are the two states that currently don't require installation of the devices. South Dakota has instead experimented with another approach to dealing with convicted drunken drivers that requires them either to be tested twice a day to ensure zero alcohol consumption or to wear a continuous alcohol-sensing bracelet.

"States need to be able to choose the most effective methods to promote safety," Bergquist testified. "Top down mandates, funding restrictions and specifying the use of particular technologies is not an approach that provides incentives for state innovation and successful program outcomes."[24]

Better Roads: SAFETEA-LU, the federal highway bill that officially expired in 2009, provided $360 million for the High Risk Rural Roads Program, which earmarked federal funding for low-cost solutions that improve rural driving safety. Although the program was somewhat underutilized as states focused on other priorities, states still need funding to make needed improvements to rural roads.[25] Such improvements can range from low-cost ones like new road signs, rumble strips and new lighting to moderate-cost ones such as added turn lanes at intersections, median barriers and newly resurfaced pavements, all the way up to higher-cost improvements such as changing roadway alignments, reducing the angle of dangerous curves, lane widening, and adding shoulders and passing lanes.[26]

The problem is that between the local, state and federal governments, rural roads sometimes can fall through the cracks. The sheer number of rural roads, the relatively low volume of traffic they carry and the high cost of some of the most desirable improvements combine to make it difficult to pay for them. Many rural roads are not eligible for federal highway funding and are the responsibility of local governments, which may have limited resources. These local governments also may lack adequate information upon which to make informed decisions about the best road safety solutions.[27]

Fortunately, most states have programs to gather data on high accident locations and determine which safety improvements would be most useful. That allows them to spend their limited highway traffic safety money where it will have the most impact.[28] States will be looking to the next authorization for support of these programs and for the development of a performance-based transportation policy at the national level that relies to a great deal on safety metrics gathered at the state and local levels. The American Association of State Highway and Transportation Officials has recommended Congress provide $20 million annually to enhance the National Highway Traffic Safety Administration's State Data System,[29] which helps to identify traffic safety problems, develop and implement vehicle and driver countermeasures, and study crash avoidance issues.[30]

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Smarter Roads: Smarter design of rural roads is another key strategy to improve safety. Much more is known today about how to engineer roads for better safety than when many rural roads were first designed. Setting the appropriate speed limit on such roads has proved effective in reducing crashes. The National Highway Traffic Safety Administration and the Federal Highway Administration work with states and rural communities to determine how to set speed limits on rural arterial and connector roads based on engineering data.[31]

One road design feature that is becoming increasingly popular is the traffic roundabout, which was developed in the United Kingdom. While roundabouts keep traffic moving, their tight turns also force cars to slow down. The Insurance Institute for Highway Safety estimates that more than 2,000 roundabouts have been built in the U.S. since 1990. That number is expected to grow because nearly 30 states have programs to promote the use of roundabouts where roads are being built or re-engineered.[32] According to a 2007 study of 55 sites by the National Cooperative Highway Research Program, converting a traditional intersection to a roundabout led to a 35 percent drop in crashes and a 76 percent drop in fatal or serious injury crashes.[33]

Missouri, Tennessee and Utah are among the states borrowing another design innovation from Europe—the diverging diamond interchange or double crossover intersection. In traditional intersections, left-turning cars are more likely to collide with oncoming vehicles, especially when yielding to through traffic. The diamond allows left-turning traffic to go through the interchange faster and more safely by giving them uninterrupted access to the highway through their own ramp.[34]

Many states and localities are also working with

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Intelligent Transportation System technologies to improve rural road safety. These technologies include traveler information systems and traffic management technologies such as coordinated traffic signals to improve traffic flow. In rural communities, such technologies are used to provide motorists information on weather and road conditions via electronic road signs and online 511 services, deter large animals from dangerous roadways and improve the response times of first responders to traffic incidents.[35]

The U.S. Department of Transportation's Research and Innovative Technology Administration has in recent years funded partnerships with rural communities to test and expedite the deployment of Intelligent Transportation System technologies to reduce accidents on rural roads.[36] Many rural policymakers hope the next federal authorization bill will include a significant investment in research to develop and implement the next generation of crash avoidance and other technologies that will help make rural roads safer.

Connectivity and Mobility in Rural America

Rural states provide a vital link in keeping the nation's agriculture, energy sources and freight moving around the country. But a lack of roads and a lack of rail—particularly in rural Western states—mean those things don't always move as quickly or efficiently as they could.

Tens of thousands of rural rail branch lines have been abandoned nationwide in the past 30 years, which means many rural areas have had to rely more heavily on trucks to move goods.[37] States like Idaho, Montana, North Dakota, South Dakota and Wyoming typically have a much higher than average percentage of truck traffic using their highways that does not either originate or terminate in those states.[38] Within those Western states, the areas between interstates and major highways are often so vast that their ability to efficiently carry travelers and freight alike is significantly diminished. According to the state highway officials group, more arterial roads are needed to make easier and faster connections, which would be eligible for Federal Highway program funding.[39]

In some areas of the country, freight bottlenecks significantly impact the nation's economy.

Interstate 540 in Arkansas provides a vital link between cities like Fayetteville (home to the University of Arkansas), Bentonville (home to the headquarters of Wal-Mart Stores Inc.), Little Rock (the state capital), Lowell (home to J.B. Hunt Transport Services, one of the largest trucking companies in the country) and Springdale (home to Tyson Foods). To ensure the smooth flow of traffic, I-540 needs to be upgraded and expanded. A 2006 study said that due to traffic growth, 10 miles of the interstate should be widened to six lanes and 16 miles should be widened to eight lanes. Improvements to 14 interchanges also are needed to adequately accommodate future growth. The improvements are projected to cost $350 million.[40] And that's just one road in one fairly rural state—albeit one in the center of the country with some fairly significant players in the nation's commerce.

South Dakota, where agriculture is a major part of the state economy, relies heavily on its road network to deliver products to markets, particularly export markets. Export crops begin their journey from point of production to final destination on rural roads that are not a part of the National Highway System. The state is also fifth in the nation in ethanol production with nearly a billion gallons a year production capacity.

"Good roads throughout the state allow grain to be harvested and delivered to ethanol production facilities by truck," Bergquist, the South Dakota transportation secretary, told Congress last year. "These roads are paramount to the nation becoming energy independent and providing agricultural products to feed a hungry world."

But Northern, cold-weather states are at something of a disadvantage during part of the year. During the spring thaw, highway pavements are at their most vulnerable. The ground is waterlogged and can't support a fully-loaded 18-wheeler in many cases. So states like North and South Dakota have spring load restrictions to limit truck axle weights during that time of year. These restrictions, Bergquist said, slow down commerce and add greatly to the cost of doing business.

Investing in more projects that facilitate truck to rail transfers at grain elevators and other locations would help to speed up this commerce. Bergquist said he would like to see these projects be eligible for direct federal grant funding and broader formula funding programs.

"Freight bottlenecks in metropolitan areas and access to ports or other waterborne freight locations are not the only freight activities that should be eligible for funding," he said.[41]

Public Transit in Rural America

The 2010 American Association of State Highway and Transportation Officials report also said that in order to keep pace with rising demand for rural transit, federal funding for rural transit service should more than double over the next six years.[42] During that same six-year period, almost every transit vehicle—55,000 vehicles—in rural America will need to be replaced.[43]

Public transportation in rural communities may look different from that in big cities, but it is no less important to the lives of residents, serving as a vital link to jobs, health care facilities and other destinations. The aging of the population in many of these communities has contributed to rising demand for transit and makes it important that federal public transit funding programs continue to include funding for rural states. Almost one out of eight people age 65 and older live in rural areas. Congress nearly doubled the size of the rural transit program between 1998 and 2009 and AASHTO said it needs to more than double again over the next six years.[44]

"In rural areas, transit is usually provided via small bus and van service," noted South Dakota's Bergquist in his 2009 Congressional testimony. "Frequently, it is on-demand service for the elderly and disabled, such as non-emergency trips to the hospital, pharmacy or clinic, or trips to a grocery store. This is especially challenging in the very low population density states where the one-way trip to a medical facility for one of two riders can be 50 miles or more."[45]

The Federal Transit Administration's Section 5310 program is a discretionary capital assistance program established in 1975 to award grants to private nonprofit organizations to serve the transportation needs of the elderly and disabled. SAFETEA-LU authorized a seven-state pilot program that allows those states to use up to one-third of funds apportioned to them for operating expenses.[46] Bergquist would like to see that flexibility extended in the next authorization.

The National Association of Development Organizations reports that despite the fact that more than 1,200 transit operators provide service in rural areas, only 60 percent of all rural counties nationwide have public transportation available and 28 percent of those counties have only very limited service. In a report outlining recommendations for the next federal surface transportation authorization bill, association officials note that "a key issue remains the pressing need to promote and deploy solutions and incentives that aim to unify, coordinate and create a more seamless system of transit, preferably on a regional basis and across urban and rural boundaries."[47]

The Washington, D.C.-based coalition Transportation for America highlights Vermont and Connecticut as leaders in coordinating transit in rural areas. The Vermont Public Transit Authority, a private nonprofit corporation, contracts with nine community transportation agencies around the state to act as coordinating bodies and/or transportation providers in their areas. Among the services provided is non-emergency Medicaid transportation through a statewide brokerage operation. Transit providers also coordinate efforts to achieve cost efficiency so they can maintain their level of operations without additional funding.[48]

In Connecticut, the state department of transportation has provided funding for a transit service in the state's most rural county, Litchfield. The service provides a mix of fixed route transit, demand-responsive service and commuter options to employment sites.[49]

Funding Transportation in Rural America

The primary source of transportation funding for many years has been the gas tax. But that revenue source has been eroding as cars have become more fuel-efficient, as Americans drive less and as road construction costs have increased dramatically. Although the gas tax is expected to continue to be a primary revenue source for the foreseeable future, the search for other sources to supplement or replace it in the transportation funding equation has been underway for quite some time. But many rural transportation policy experts have serious concerns about whether some of those alternative revenue mechanisms—including tolling, congestion pricing, public-private partnerships and charging motorists for vehicle miles traveled—would be a good fit for rural states and communities.

In 2008, Jim Lynch, the director of the Montana Department of Transportation, testified before the National Surface Transportation Infrastructure Financing Commission, one of two federal panels assembled to ponder the future of the Highway Trust Fund and the nation's transportation system. Lynch told the commission that states like his lack the traffic density to make tolling a viable option.

"The collection costs per user would be much, much higher than is the case of toll facilities in densely populated states," he said. "Nor would it be theoretically sound … to try to raise money through tolls despite low traffic densities by attempting to set tolls at a high rate. That approach would simply divert traffic from high end roads to lower classification routes, especially given … that rural populations generally have below national average incomes."

Lynch said the lack of population density means Montana and other Western states contribute more per capita to the Highway Trust Fund than other states. While the national average is $109 per person, the per capita contribution for Montana is $156. For Wyoming, it is twice that much. Such states simply have fewer people per lane mile of road to support, maintain and preserve the transportation system. Montana has about 29 people per lane mile of federal-aid highway. The national average is 128 people per lane mile.

That lack of population, Lynch and others say, also means private companies would likely not be interested in engaging in public-private partnerships in rural areas since their return on investment would likely be low.

"We share the concern expressed by (then-U.S. House Transportation and Infrastructure Committee) Chairman Oberstar, as well as others, that public-private partnerships and tolling will not maintain or produce an interconnected, integrated or strong national surface transportation system," Lynch said.

Lynch and others also express concerns about what many see as the future of transportation finance—charging motorists a fee for every mile they travel rather than every gallon of gas they buy. Such a vehicle miles traveled—or VMT—system would help account for the expected growth in the years ahead of the number of fuel efficient cars on the road, including those that don't run on gasoline at all.

But Lynch said the long distances traveled in states like his would disadvantage citizens of those states. He points out that per capita VMT in Montana, Idaho, North Dakota, South Dakota and Wyoming exceeds the national average.

"So, we would be concerned about the impact of such a fee on our citizens," he said. "Given higher-than-average per capita VMT in our states, such a fee, particularly if set high, could hit our citizens quite hard. We believe any proposal for a future system that would be funded in significant part from VMT charges must be structured in combination with a funding distribution system so that citizens of states like ours are not asked to pay at a rate that would have them cover the full cost of the federal-aid roads within the borders of their state."[50]

A key concern about the adoption of VMT charges is that under some scenarios, owners of older vehicles would need to retrofit them with special equipment that allows the number of miles traveled to be transmitted so the driver could be charged. With large numbers of older vehicles in rural areas, that challenge would be magnified.

As the debate over future funding mechanisms continues, however, rural state officials want to make sure their states will continue to receive at least their share in federal funding for transportation in a new authorization bill.

Bergquist, the South Dakota transportation secretary, told Congress in 2009 legislation, "must provide at least proportionate funding growth for rural states like South Dakota, as well as increased funding."

Rural states also don't want to see new restrictions placed on the use of federal funds in a new authorization bill, Bergquist said.

He said rural states support a different approach that would distribute no less than 90 percent of highway program funds by formula to the states. They also support keeping the ratio between the highway and transit programs at 4-to-1, giving the highway program four times the funding as the transit program, before adjusting for transfers of funds from highways to transit—about $1 billion annually, he said.

"We support continuing such flexibility, which allows each state to better address its own needs," he said.

Bergquist also said he supports programs like the Build America Bonds program, which stand to benefit both urban and rural areas. Build America Bonds, created as part of the 2009 American Recovery and Reinvestment Act, are taxable municipal bonds that carry special tax credits and federal subsidies for either the bond issuer or the bond holder and can reduce borrowing costs.[51]

Conclusion

The next authorization of federal transportation programs provides a unique opportunity for Congress to address the transportation needs of both urban and rural America. Those needs are both great and diverse. Now more than ever, there can be no one-size-fits-all approach to transportation policy and funding. Just as rural states contribute in unique ways to the fabric of the nation's transportation system, their transportation needs are unique as well.

As the U.S. seeks to address issues of road capacity, congestion, livability, road safety, connectivity and mobility, public transit and transportation funding, the solutions in rural America will and must look different from those in urban America. But the goals are essentially the same: providing a 21st century transportation network that serves all citizens by:

- Ensuring access to jobs, health care, education and tourism;
- Moving freight in an efficient manner;
- Making travel safe and affordable;
- Enhancing travel mode choices; and
- Generally improving and facilitating our way of life.

Rural state officials are in the best position to make the case for rural needs and rural solutions and their voices should not go unheard in the authorization debate.

Sean Slone, CSG Transportation Policy Analyst
sslone@csg.org

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