On September 7 – 9, 2016, a group of 11 individuals representing regional planning and development organizations (RDOs), regional transportation planning organizations (often called RTPOs or RPOs) and similar agencies, and state departments of transportation (DOTs) convened in Denver, Colorado for a peer learning exchange event on regional transportation planning in rural areas. During the first phase of the event, the small group met on its own to discuss rural transportation and their own planning-related tasks. During the second phase of the event, the small group of peer exchange attendees joined the event Moving Rural America: National Working Summit on Transportation in Rural America, which brought together a multidisciplinary group of over 100 individuals to discuss how transportation safety relates to economic development and mobility in rural areas. The first phase was organized by the National Association of Development Organizations (NADO) Research Foundation, with support from the Federal Highway Administration (FHWA). The National Working Summit was hosted by the National Center for Rural Road Safety; the NADO Research Foundation served as part of the center’s working group to support the development of the summit. This event summary paper summarizes themes of interest to RTPOs from both phases of the event, with a particular focus on the first small group portion of the peer exchange.

RTPOs are multijurisdictional organizations that perform transportation planning tasks in rural regions. Typically, they have a policy board or committee made up of local officials and other transportation interests to make decisions about a region’s transportation priorities. Most RTPOs operate under contract to their state DOT to perform regional tasks in support of statewide planning, including developing regional, rural transportation plans; identifying local priority requests for funding; conducting public involvement; consulting with local officials; and providing assistance to local governments on transportation and related planning issues. Much diversity exists in the make-up and tasks of RTPOs, but some kind of regional-level transportation work occurs in over 30 states.¹ This variety is reflected in the discussion that occurred during the peer exchange, as participants reflected on their organizations’ work within the context of the regions they serve.

RDOs are multijurisdictional agencies that provide regional economic development, planning, and other services to local governments and residents. They may be known locally by many different names, such as councils of governments, development districts, and regional planning commissions. RDOs often house and staff RTPOs, metropolitan planning organizations (MPOs), or both metropolitan and rural transportation programs. However, many RDOs do not engage directly in transportation planning, but still have an interest in transportation to support a vibrant economy and meet mobility needs.

ADDRESSING RURAL MOBILITY CHALLENGES

The participants discussed challenges to ensuring rural mobility across modes, with an emphasis on transit and some discussion of bicycle and pedestrian issues. RTPOs often have relationships with rural transportation providers and stakeholders who participate in multimodal transportation planning, as well as agencies providing services to regional residents. Access to essential services remains a challenge for rural regions wishing to improve mobility for residents and visitors. A summary of the highlights from the participants’ discussion follows.

Health resource centers (or rural clinics) and senior centers have served as an anchor for starting dialogues with local jurisdictions about transportation. The Brazos Valley Council of Governments in Texas has coordinated staff efforts among regional planning, workforce, and aging programs. The region has been able to provide counties with a 2:1 grant if the counties can invest in transportation at the senior center. The grants support 1,200 rides per month.

Volunteer driver programs can fill a mobility gap, but they can be complicated to administer due to liability issues. Some agencies have used grants such as the Retired and Senior Volunteer Program (RSVP) from the Corporation for National and Community Service to cover insurance for volunteer drivers and to provide small stipends. Even where volunteer driver programs have been successful in the past, transportation professionals view the programs’ future as questionable. As current volunteer drivers become in need of rides themselves, younger generations of drivers may be less interested in volunteering in that kind of capacity.

In smaller, rural places, existing transit and mobility services may not be well known and might not have a website to publicize available services. In Michigan, the website www.getaroundwup.org provides information on transit services, carpooling options, and non-motorized transportation. Developed by the Western Upper Peninsula Planning and Development Region with support from the Michigan DOT, the website has been beneficial to transportation providers and helped to cement already strong relationships between the RDO and providers. The website effectively functions as a model of a regional transportation resource guide, which could also be adopted by other regions.

THE KENTUCKIANA REGIONAL PLANNING AND DEVELOPMENT AGENCY COMPLETED A COORDINATED HUMAN SERVICES TRANSPORTATION PLAN FOR ITS WHOLE REGION—METRO AND RURAL AREAS TOGETHER—TO IDENTIFY STRATEGIES AND PERFORMANCE MEASURES.

The Kentuckiana Regional Planning and Development Agency (KIPDA) serves both the Louisville metropolitan area and surrounding rural counties. In 2014, KIPDA completed a coordinated human services transportation plan for the whole region—metro and rural areas together—which covers 25 percent of the population of Kentucky. Prior efforts had focused only on the metropolitan portion of the region, through the agency’s metropolitan planning organization (MPO). Through the larger regional plan effort, the region developed strategies and performance measures from a process of identifying important issues, which included a provider survey and consumer survey. Performance measures include access to transportation services for targeted populations, improved infrastructure,
reduction in costs, ADA compliant pedestrian facilities, and more. The plan is a model for completing a regional coordinated plan for a large region.²

Measuring performance is important to many regions, but it is done differently in different places. In Colorado, a state directive sets revenue service miles, condition of the rural transit fleet (percent of vehicles in good and fair condition), and ridership as performance measures for the state. For other areas of the country, tracking performance includes trips and funding such as donations to show the health of the service and local commitment to providing transit service. Finding matching funds is a challenge to providing service in many places.

Accessing existing service can also be a challenge for some would-be riders. Peer exchange participants discussed systems in North Carolina and Texas that use various “bus buddy” approaches to conduct travel training, including using high school students to help new transit users navigate the system or using paid staff. Travel training programs might be an opportunity to use volunteers to achieve an agency’s goals.

In Ohio, the statewide long-range plan update recommended conducting a transit needs study. Through the study, broadband access and scheduling service were identified as needs. To address these needs, the Ohio DOT applied for a federal Transportation Investment Generating Economic Recovery (TIGER) grant together with 34 rural agencies. The project was awarded a grant in 2015, and the agencies are buying scheduling software, tablets for vehicles, putting towers up in a few places, and partnering with Connect Ohio (part of Connected Nation, a national nonprofit organization that expands access to and use of broadband Internet by engaging with community stakeholders, state leaders, and technology providers in technology expansion programs).³ Through this partnership, the project is covering a large area with broadband for a relatively small cost, and with some match from each agency involved.

Rural mobility includes intercity bus access. One approach in Colorado has been to initiate a state DOT-owned system called Bustang, which currently connects corridors in three directions, serving travel to Denver, Colorado Springs, Fort Collins, Glenwood Springs and other destinations.⁴ The state is looking at expanding that model of a branded interregional network, rather than separate operator grants for individual routes. The expanded effort would make new connections, or improve the quality of service for existing route connections. Currently, rural connectors are a different system, but the state is looking to integrate the rural routes with the Bustang system that currently serves mostly commuters. Bustang provides Wi-Fi and other amenities on its buses, similar to bus rapid transit and other intercity services elsewhere in the country.

Rural intercity bus needs exist, but are met differently in different places. In Ohio, a state-subsidized intercity bus system called GoBus has grown significantly over time.⁵ The system interlines with Greyhound. In Michigan’s Upper Peninsula, intercounty mobility needs are met through interlocal agreements. Other intercity service is provided by the company Indian Trails, but the route only occurs once a day in each direction, and service stops

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⁴ Colorado DOT (nd). Bustang, www.ridebustang.com
may occur at times unpopular with riders. Differing state policies regarding liability prevent scheduled service from being developed locally between Michigan and Wisconsin, although ad hoc trips do take place through existing services.

Rideshare programs are sometimes effective for residents in rural places served by a regional hub for employment and services, or connecting to a larger city. In central Oregon, a rideshare database program provides users with an incentive for taking a certain number of rides. The incentive is typically a gift card to a local business. It began as a program for commuters, but now has been extended for residents traveling to access services. Rideshare programs often involve significant employer participation, and may even operate with some funding support from area employers. Peer exchange participants noted that rideshare involves developing relationships between the participants, which might support ride programs in low density areas. One participant shared information about a rideshare program with potential, but with low demand to connect to a large urban area that is nearby. With no budget for marketing, few residents participate. Other peer exchange participants suggested working with an area educational institution to use the program as a public relations project for students, or to give a presentation to local chambers of commerce whose members might pass information on to their employees.

New private sector services such as Liberty Mobility Now, Inc. offer the possibility of Mobility as a Service, on-demand transportation in rural and small urban settings. The company was selected to receive a Federal Transit Administration Small Business Innovation Research grant to develop its model and software. Liberty Mobility Now began offering rides in 2016 in limited areas and plans to expand to serve seven states in 2017. The service works with existing transit to schedule trips, and with individual drivers to schedule rides that do not fit into existing trip parameters.

A promising funding model is the All Roads Transportation Safety Program used in Oregon, which provides funding for local roads off the state system. In this program, funding is systematically programmed along corridors, so that investments support one another and avoid a piecemeal approach. Safety data, benefit-cost analysis, and crash modification factors are among the criteria used to make decisions for that program, and funds are divided between addressing systemic safety improvements and particular hot spots.

Small communities in rural areas are seeing increased interest in multi-use paths and sidewalks, including in examples discussed by participants from New Mexico and Oregon. Some regions, including in Kentucky, have used a sidewalk inventory or Americans with Disabilities Act inventory of accessible facilities to begin to identify existing assets and needs. In Colorado, the state has begun an inventory of bicycle and pedestrian assets. Without systematic information on bicycle and pedestrian infrastructure, it is difficult to prioritize projects and programs. Colorado DOT hopes to establish a level of service for different facilities in different areas, and to plan strategically what outcomes are desired for particular facilities in the long term.

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Increasingly, state DOTs are including economic development and economic vitality in their agency goals and in long-range plans, recognizing the interrelationships between transportation, economic development, and land use. These priorities tend to exist for RTPOs, too, so the discussion covered multiple aspects of the relationship between transportation and economic development, with a focus on planning processes.

RDOs, whose programs sometimes include serving as RTPOs, often reach out to a wide variety of officials and stakeholder groups, including economic development partners. For states, local economic development stakeholders are not always traditional transportation planning partners, who tend to include public works or local officials. Colorado DOT is trying to more directly engage with other state agencies with a hand in economic development, as well as building a freight advisory council with diverse public and private stakeholders. Many other states are taking a similar approach in response to federal guidance.

In Michigan, the Regional Prosperity Initiative has brought new attention to how the work of planners and other regional services relates to economic prosperity. The state established new regional prosperity district boundaries that do not exactly align with existing regional planning agency boundaries. A new state funding source for planning was established, and regional planning agencies and metropolitan planning organizations are the eligible entities to apply in partnership with higher education, community economic workforce development, local community planners, and transportation stakeholders from their prosperity region. In the western Upper Peninsula, the stakeholders meet monthly, which has been an effective way to develop a plan, work on implementation, and get agencies and stakeholders at the same table. The Regional Prosperity Plans developed by the regions may be developed in alignment with Comprehensive Economic Development Strategies (CEDS), which are regional economic development plans required by the U.S. Department of Commerce’s Economic Development Administration.

In the Brazos Valley Council of Governments region in Texas, getting stakeholders involved in multiple capacities can help to cross-pollinate ideas, for instance among individuals who serve on some combination of economic development committees, the local United Way board, city council, and other groups. However, if these individuals hear the same information at every meeting, they may become apathetic to hearing a message or a call to action. RDOs, as multi-function agencies, can hold one meeting to talk about cross-cutting issues, and they can serve in a supporting role for an issue as it passes through many different leadership groups for their input or action on the topic. The CEDS process can be a mechanism for bringing together diverse stakeholders such as nonprofits and regional trucking associations to deepen relationships and work together.

7 Michigan Department of Technology, Management and Budget (nd). Regional Prosperity Initiative, www.michigan.gov/dtmb/0,5552,7-150-66155---,00.html
Some states establish infrastructure funds or other institutional processes to support economic development. For example, the Oregon DOT has Immediate Opportunity Funds, and applications can be submitted throughout the year. This program ties public roads to a private business to enhance economic development outcomes such as new jobs. In 2011, Oregon established Regional Solutions Centers intended to integrate state agency work in the context of 11 regions across the state. When a business prospect contacts Business Oregon, the Regional Solutions coordinator for the region of interest mobilizes all the partner agencies such as regional planning and development organizations. In these “one-stop” meetings, the partners find out what a business’s needs are, including transportation, and how the business might be brought into the region.

In other states, the rural areas address transportation needs through the Statewide Transportation Improvement Program (STIP) prioritization process developed by the state DOT. However, economic development may not be a strong factor in light of other major infrastructure needs. In states where the state DOT has adopted economic development or vitality as a goal, the DOT and regional transportation planning organizations still might not have a regular role in discussions about business location decisions, or in how transportation is serving the economy.

Peer exchange participants discussed the difficulties of funding shortfalls, including the need to focus on maintenance rather than capacity in many areas across the nation. For some places, economic analysis models are helpful but too resource intensive to use as a tool systematically. Instead, economic analysis tools tend to be used on a limited number of projects. Incorporating economic development or vitality as a goal in long-range plans is increasing, as well as in consideration for the scoring for particular programs or for developing regional priority lists. Ohio’s Transportation Review Advisory Council’s review of major new transportation projects is one example of including economic development in a specific program.8

In smaller areas, even minor infrastructure projects on the order of a sidewalk can bring in stakeholders to discuss impacts. Connections from rural to urban areas are also important, and recognizing that there are stakeholders outside rural areas with an interest in connecting through them. Finding the value proposition relating to completing infrastructure is central to determining whether stakeholders are interested in supporting a project in a rural area. This may be true for freight-related projects, as well as tourism-related projects that serve very rural areas with large fluctuations in the traffic they serve.

Asset management and safety programs have data available for prioritization. Colorado also utilizes the Regional Priority Program to allow regions to set their own criteria for identifying projects that are important to that area. This provides flexibility to support projects for which there are not perfect data or measures.

Business continuity is not completely dependent upon transportation access, but the vitality of businesses over time does affect the fabric of

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Succession planning for small businesses is one method for preserving local economies. Succession planning helps business owners nearing retirement identify potential new owners, so that businesses can remain solvent, while the sale of the business benefits the owner, jobs may be retained, and the contribution to the regional economy is preserved. Business continuity maintains firms' positions in the economy and maintains commercial uses of transportation related to their work.

Small transportation projects such as intersection improvements can be significant for maintaining or increasing economic vitality in small places. In North Carolina and many other places, new developments in small towns and rural areas sometimes necessitate the installation of new stoplights or other traffic control to facilitate workers, shoppers, or residents entering and exiting the development. These new traffic control devices can affect freight transit times, cost shipping firms more money, or cause them to look at re-routing to avoid routes with many of these new development-related stoplights. The Ohio DOT is looking into freight traffic on two-lane roads, beginning with a pilot study on U.S. 250 to identify smaller projects that could improve the operation of the roadway to benefit freight and other road users.

Participants related how RTPOs can be effective at engaging local governments and other stakeholders in planning. Through transportation committee structures, they engage cities’ and counties’ elected officials and professional staff to identify potential transportation projects in line with needs and planned development. Using RTPOs to conduct rural, regional transportation planning can be a first step at identifying potential projects and ensuring that there is local support for a project, and the land use change and development that may come with it, before submitting a project request to a state DOT for funding consideration. By building relationships with stakeholders, RTPO’s engagement with partners and the public can remove some politics that can occur when proposing projects before it reaches the state. Once those relationships are formed, regional organizations may receive more requests for technical assistance on local issues and to write local zoning code or other ordinances. Community design shapes the vitality of its economy.

RURAL PUBLIC INVOLVEMENT

Public involvement is a requirement for state DOTs, and is often a task that RTPOs complete for their own regional planning and in support of statewide plans. Getting input from the public in rural regions can be difficult, but participants shared information about practices that had been successful in getting the general public and targeted stakeholders involved in providing feedback.

Incentives can be offered to help people attend public meetings. For example, a local transit provider offered free rides during a timeframe leading up to and following a public meeting for riders using the route where a meeting was being held. A meeting venue such as a church might have an on-site childcare facility, so that childcare could be provided during the meeting. Transportation or childcare can decrease barriers for people to attend.

Offering food and an opportunity for social interaction can improve engagement. Hosting a pie and ice cream social was an effective public outreach strategy in the Piedmont Triad region of North Carolina. An RTPO in New Mexico has had success with turning a meeting into a workshop to bring in stakeholders with an interest in that topic. From technical trainings on using computer software to techniques for harvesting water off of highways, a portion of a meeting agenda can be devoted to improving skills and sharing actionable information that will be of interest to people. A portion of the agenda can also be devoted to gathering input and making decisions, while a group of people are gathered.
Location is a key consideration when conducting public engagement. Peer exchange participants shared ways in which they spent time in places where people already were or wanted to visit. For example, participants shared that locations offering services, including senior centers and rural health clinics, are natural gathering spots for people. Organizations that meet regularly, such as chambers of commerce or nonprofit networks, offer a good venue for engaging with their network members. Other possibilities include service and fraternal or sororal organizations, economic development agency meetings, environment and other local advocacy group meetings. In one peer exchange example, local breweries were selected as public involvement sites, and the breweries were willing to contribute drink tickets for meeting attendees. Where local government meetings, such as county commission meetings, are well attended and shared in local media, they can be an effective venue for reaching stakeholders beyond the commissioners at the meeting.

Project-level engagement in public open houses and other traditional methods tend to attract more public interest, compared to lower interest in long-range planning and developing the Statewide or regional Transportation Improvement Program (STIP or TIP). To counter lower public interest, Colorado DOT held a telephone town hall as part of its most recent long-range planning cycle. The telephone town halls had previously been used on projects before, rather than during plan development. Colorado DOT held a long-range plan telephone town hall with each of its Transportation Planning Regions (TPRs) to enhance engagement in long-range plan development. The TPRs serve rural and metropolitan planning regions across the state. This method allowed residents to call a number to join, text their phone number to receive a call, or receive a call on their landline that they could choose to stay on or not. Through the telephone town halls, 58,000 people participated in developing the long-range plan. In a second round of engagement, designed to maintain the public dialogue about transportation after the plan’s adoption, 20,000 people participated in the telephone town halls.

Not everyone who participated in Colorado DOT’s telephone town halls spoke out about their views, but they were still receiving information about the state and region’s transportation efforts. For those participants who did ask questions, a representative of the TPR participated along with someone from Colorado DOT who could respond to queries. If a telephone town hall participant had a question that could not be answered immediately on the phone, the caller provided their contact information for later follow-up. The TPRs and Colorado DOT developed talking points for the telephone town halls to ensure that they would communicate important information, as well as a script for providing poll questions for touchtone phone responses that attendees could key in. Colorado has also tried to increase engagement with more online content and surveys.
Another creative engagement method that was shared was to engage participants to draw their vision. In one regional planning process in the Piedmont Triad region of North Carolina, the region provided 11 in. by 17 in. placemats at area restaurants to collect drawings and key words identifying their priorities. Analyzing this qualitative information was a manual process of looking at the drawings and determining themes. To target disadvantaged communities, this planning effort also hired universities as consultants early in the process. Students worked in communities to get feedback for the regional planning process, which aligned with work the university was doing already. Where there were language differences, university participants also served as translators.

In Michigan’s Western Upper Peninsula, public outreach efforts always have a high degree of engagement from area groups focused on people with disabilities, including development disabilities. They have a strong interest in transit and a strong will to reach regional and state-level decision makers to talk about their needs. A young professionals group also provides input on many public agency activities, because the rural area is trying hard to retain that segment of the population that has different ideas and desires about transportation.

Strategies that participants shared for engaging youth included going into high schools for presentations, and meeting with 4-H clubs. Also, competitions for photos or videos relating to transportation are effective for getting youth involved, such as prizes for top videos explaining how to ride a bus.

A mix of older and newer forms of media continue to be effective at reaching various segments of the population. Local cable access channels and TV news, radio, or newspaper coverage help to get out the word about transportation issues or meetings. Social media, such as Facebook events, can be shared with other area organizations. Public agencies such as RDOs and RTPOs may not have large numbers of Facebook followers, but if traditional local media do follow and report on the regional organization, the information is shared with a wider public.

**OPPORTUNITIES TO INCREASE ECONOMIC DEVELOPMENT BY HAVING A SAFE TRANSPORTATION SYSTEM**

Participants of the RTPO peer exchange also related safety to other pressing rural transportation issues in multidisciplinary discussions occurring at *Moving Rural America: National Working Summit on Transportation in Rural America*, which served as the second phase of the peer exchange. Discussions that engaged most of the RTPO participants and other planners focused on the connection of safety with economic development generally, and on freight.

The multidisciplinary economic development discussions emphasized several themes and noteworthy practices. This included planning for development that is sensitive to the context of the region, promotes placemaking, and builds upon multiple assets and forms of community capital. It was important for participants to consider transportation and safety along with community aesthetics, political stability, and regional amenities, and to balance retention efforts with recruitment efforts. The discussion on these themes is described in more detail below.
Rural freight transportation is symbolic of rural-urban connections and of economic development generally. Participants discussed how pass-through freight may not result in major local benefits, but improved infrastructure can benefit local businesses that need to ship out or receive goods as well as freight passing through rural regions. Funding for rural freight improvements is a challenge, given the magnitude of rural needs over such large areas. Urban areas also have large freight needs to improve freight mobility and address bottlenecks; urban improvements can also help rural areas who ship to urban markets or gateways, but the needs for safe, adequate transportation for freight still remain in rural areas.

Nationally, truck movements are projected to decline over time, both in the share of freight moved relative to other modes of transportation and actual declining volumes. Nevertheless, other modes such as rail and pipeline will not be able to replace first- and last-mile truck trips, including trips in rural areas. Freight investment often includes private projects, but they can be controversial within communities due to local impacts and perceptions of freight transportation. Local discussions about project plans and expected impacts can mitigate concerns in some cases.

Rural transportation related to tourism brought up the topic of scenic byways. Scenic byways can benefit from planning for visitor experiences and services, as well as planning for safe transport along the route. Byways organizations and their partners can plan using the method “3-3-sleep.” This strategy assumes that visitors with an overnight stay in a rural region need to eat three times each day, should have three activities to do, and somewhere to sleep. When those experiences exist, visitors are more likely to stay overnight. Otherwise they might plan only to visit a destination accessed by a byway, which might include a national or state park, and then return home again without spending much time or money in communities along the byway.

The ability to plan for tourism, or any development, is limited to the resources available. Local officials may work full-time jobs and not be available for meetings or to discuss local government matters during their work day. Some communities have managers or administrators who are strong voices in the community, while others have limited staff who perform so many duties that completing a byways plan or other development action plan on their own may not be feasible.

One participant explained that for rural tourism destinations such as national parks and other federal and public lands, recreational travel is conducted primarily by automobile. However, traffic congestion is often not a major problem because adequate capacity exists on the roadways, while the congestion problems occur at parking facilities. Because people are interested in accessing environmentally sensitive areas, building major new parking facilities would detract from preservation of those assets. Transit, bicycle, and other solutions play important roles...
in accessing destinations within the public lands while managing parking congestion within the public lands and in gateway communities. Demand for trails to access destinations by hiking or cycling has increased significantly over time.

With so many visitors arriving in cars, however, it is difficult to induce mode shift for travel within the public lands. An opportunity for economic development may exist to connect transportation access points, such as parking facilities and transit hubs, with a place where people want to stop. Businesses serving visitors, including tour concessionaires or other visitor amenities, can be part of the solution to vehicular traffic by serving as a point of aggregation for visitors arriving by car. Without those developments to attract visitors, it may be difficult to avoid parking congestion.

Participants noted that gateway communities might provide the right conditions for a successful public-private partnership around safe transportation access to public lands. Also, participants discussed special event transportation as a model for partnerships where the private sector is involved in solving challenging parking congestion dilemmas. Such developments would require strong and trusting partnerships to result in economic and transportation benefits. Reducing traffic and parking congestion in public lands might also result in safety benefits. Along with a potential for reducing crashes, this might also include travelers feeling safer. Participants in the discussion noted instances when they or others felt unsafe and had increased stress while driving in an unfamiliar area and on roads that are scenic but might also be narrow, winding, or otherwise feel hazardous.

The public sector roles in economic growth might include planning for transit that accommodates special events and tourist travel needs. This includes planning for transit as integrated with pedestrian and bicycle travel, such as sidewalks, bicycle parking, and bicycle racks on transit vehicles. Transit that accommodates popular tourist activities, such as tubing, might also be effective. Public financing support such as through revolving loan funds (RLFs) can lead to investments in businesses that create jobs as a result of developing or improving a site or access to a site.

Funding constraints hamper efforts to maintain and improve infrastructure all over the nation, and divides exist between regions within a state on how to prioritize funds. Areas that grow often find that their existing infrastructure becomes insufficient for the demands of new residents and businesses. Investments often cannot keep up with the pace of growth, although integrating transportation with land use and communicating with decision makers and investors were seen as ways to alleviate stresses by directing growth. This can occur in places where land use planning and authority exist by aligning master plans with transportation plans and funding requests. Where little or no planning and zoning has been adopted locally, conversations with investors and stakeholders can result in identifying areas where the growth is likely to occur. If growth and community change occur without infrastructure investment, the livability of a small place is likely to suffer. Improvements can be operational, beyond laying new pavement or establishing new transportation service, that may be more expensive than operational projects. At times, transportation impacts occur with little warning, such as changes in markets or technology that make an unused natural resource worth extracting. Participants gave examples of some places that are returning paved roads to gravel due to traffic from oil and gas industry, and rail lines that were established.
primarily to move agricultural goods being used so heavily by oil trains that agricultural products become difficult to ship out of the region.

Although participants did not have many ready solutions to the funding problems, the group discussed the Federal Lands Access Program (FLAP) as a way to fund improvements to local roads that are used to access federal lands. The program can also be used as match toward other federal funds, even though FLAP funds are also federal transportation dollars. A region could identify which routes are important to tourism and/or freight travel that also access federal lands, and apply for FLAP funds to improve roads that are important to their regional economy. The group noted that assigning economic benefit to investment could be a compelling way to advocate for more funds and for funding from non-traditional sources, but difficult to accomplish with the resources available.

Economic resilience was discussed from many angles, including through diversification. Participants in the economic development discussion noted that tourism has been one diversification strategy for rural regions that have seen a reduction in traditional resource extraction industry activity and employment. In particular, oil and gas and the timber industry were mentioned as having decreased, and mountain biking and other tourist activities have increased. The mix of jobs, however, is different between the old and new industries.

Other participants mentioned the balance between recruiting new employers and retaining existing businesses. Affordable, quality housing is an important factor to recruiting both residents and businesses. Having an available workforce that has the skills or capacity to do the work is also very important, as is safe transportation access to their place of employment and to educational facilities for workforce training for workers themselves or schooling for their family members. Placing a new large housing development or large employer on smaller roadways can become a safety problem without consideration of turn lanes or other improvements. Transit-oriented or transit-ready development can improve safety outcomes and economic benefits, as service becomes available, by offering an alternative to driving and another option for residents and visitors to get around.

In addition to adequate transportation, broadband infrastructure was mentioned as an opportunity and a challenge for rural areas. One method for extending broadband can be to use mini-towers on street light poles at regular intervals. This strategy is much less expensive than installing large cell towers and can provide high speed internet along corridors, without additional land acquisition. Each region has particular assets, such as its climate and resources, that can appeal to businesses. Even building codes and landscaping can affect community vitality, as can reports of local government meetings and other events in the local media that depict community cohesion and the level of political stability.

Response times for emergency medical services reportedly were a factor in business location decisions and businesses’ ability to get loans. Rural places often have longer response times. In order to support rural emergency response, some counties in Oklahoma have passed a sales tax to be able to obtain new equipment and
training for members of their volunteer fire departments. Some other rural counties are able to get used equipment from counties that have passed the sales tax increase, so they are benefitting from getting equipment replacements sooner than they would otherwise be able to on very limited budgets.

The rural economic development portion of the peer exchange concluded with a discussion on some possible solutions to improving economic outcomes, and about measuring improvements. Participants’ suggestions included more engagement with federal land managers and other senior staff about the relationship of federal lands to neighboring communities and their economies. Signage can help to improve wayfinding so that visitors know about visitor services and experiences that may entice them to plan longer trips in rural areas. Participants discussed some metrics relating specifically to roadway condition, such as Pavement Surface Evaluation and Rating (PASER), to understand infrastructure health, as well as other infrastructure such as broadband redundancy and the quality of water and sewer. A rough pre/post study on transportation project-level benefits can be done using Google Maps to estimate whether a project really improved travel times. Other metrics were more specific to the regions and their economic mix, such as ticket sales to special events, hotel stays, and restaurant receipts. Analyzing jobs and unemployment levels was considered useful to understanding trends relating to transportation and economic development. Participants also recommended that performance measurement occur at a regional level, rather than community level, to reflect inter-community travel, and that measures should be context-sensitive to the relative rural or urban context of the projects. Programs and metrics related to youth and younger adults were considered helpful for understanding community vitality, as well as efforts devoted to strengthening social bonds in order to better support existing businesses or to work together to address a new economic opportunity.

CONNECTING TO TRANSPORTATION SAFETY

The Moving Rural America: National Working Summit on Transportation in Rural America event included several other plenary sessions and smaller group discussions. Plenary sessions and reports from other small groups led to the identification of lessons learned, tools, and information useful to RTPOs and other partners.

Colorado DOT’s RoadX program offered examples of innovative methods to address safety and improve overall quality of life statewide, including in rural areas. Technology to implement virtual guardrails through roadside sensors can improve the safety benefits of connected vehicles and infrastructure. Truck platooning is another technology improvement being tested. Deploying technology requires also investing in broadband, which can provide economic benefits to rural areas as well as transportation safety benefits.

Technology change is expected to result in significant safety benefits over time. For instance, vehicle-to-vehicle (v2v), vehicle-to-infrastructure (v2I), and vehicle-to-other object (v2x) connectivity can help to reduce the severity
of crashes or entirely prevent collisions or lane departures that lead to deaths and serious injuries. One example of a connected vehicle technology deployment might include a bicycle with transponder, which could allow a motorist in a connected vehicle to detect a cyclist they do not see and take action to avoid a collision. Another anticipated technology gain would be to connect emergency medical services and enforcement with mapping. This might occur by taking advantage of FirstNet, a dedicated wireless network spectrum that was authorized in federal law in 2012. Data for trip planning was also considered as a potential future technology improvement; with increased information available about travel, a visitor might someday be able to plan a trip into a national park or federal land using data about the safety of their route and expected safety and congestion hotspots. Still, with the rapid pace of technological change, participants emphasized that transportation safety is the result of system management rather than relying solely on technology.

Plenary speakers emphasized the importance of having transportation options in rural areas, since alternative transportation is essential transportation, especially for individuals without a vehicle or who cannot drive. Speakers also cited increasing interest in and demand for safe bicycle and pedestrian infrastructure even in smaller communities, and that offering non-motorized transportation and transit improves safety. Where transit exists, it can meet the mobility needs of people who would otherwise engage in unsafe behavior, such as driving while under the influence of drugs or alcohol. In some instances, there is no safer alternative than providing transit service, as related in one case study from the Lummi Nation. In remote places, including many reservations and other rural areas, distance to access medical care results in increased deaths and decreased quality of life due to severe injuries.

Several speakers emphasized performance measurement, including understanding safety culture in organizations, developing a rural quality of service metric, investing safety resources proportionally with needs to get bigger returns, and using performance-based practical design. Comparing transportation safety in the rural United States to rural areas in other nations to understand performance and better apply safety practice was also mentioned.

Data was another theme of discussion. Safety advocates and planners often use the Fatal Analysis Reporting System (FARS) from the National Highway Traffic Safety Administration to analyze safety trends. Another data resource from the Centers for Disease Control is the Web-based Injury

9 For more resources, see U.S. Department of Transportation (nd). Intelligent Transportation Systems Joint Program Office, www.its.dot.gov
Statistics Query and Reporting System (WISQARS), which provides information on fatal and non-fatal injuries, including transportation-related injuries. Although purchasing access to private data can be expensive, one participant suggested that consortia of rural counties could approach cell phone companies for rural data that would be beneficial for planning; forming a consortium or cooperative of localities might bring down the cost for individual communities to access the data.

However, another participant countered that even more important than having more data is the ability to use existing data. Local agencies and officials do not necessarily need more data to start improving safety, but they do need more assistance with turning existing data into actionable information.

Developing local road safety plans that align with a state’s Strategic Highway Safety Plan can be a mechanism for turning safety data into strategies. Without a plan, agencies do not have a roadmap for improving safety and meeting their goals.

Some local transportation safety plans are developed by local governments, while some RTPOs are also taking on safety planning. Including transportation safety in Public Health Improvement Plans is another option. Public health officials in Eagle County, Colorado realized that motor vehicle crashes were a leading cause of death for their residents, and worked with Colorado DOT to address transportation safety through wildlife fencing. This led to an immediate result in fewer animal collision crashes, as well as fewer hospitalizations and deaths resulting from animal collisions. The county also passed a seatbelt ordinance intended to increase seatbelt use and reduce the risk of serious injury or death when crashes do occur. The county’s plan is an example of integrating transportation safety with other public health issues and strategic actions to improve outcomes.10

Several participants recommended increasing the variety of professionals involved in transportation safety efforts. Volunteer emergency responders, for example, may know where safety problems are that are not captured in data. Emergency responders engaged in safety discussions should include public works agencies, who bring particular technical knowledge and also do respond in emergencies that involve public works. Increasing the participation of those groups in public health efforts was recognized as a benefit, as well as increasing the level of participation of public health professionals in transportation safety.

10 Eagle County Public Health Agency (2017). Eagle County Community Health Improvement Plan, http://www.eaglecounty.us/flipbook/chip/files/inc/7f121aa0f2.pdf
Participants of the first, small group phase of the RTPO peer exchange included the following individuals:

- Susan Christensen, Greater Eastern Oregon Development Commission
- Randall Embry, Kentuckiana Regional Planning and Development Agency
- Cerisse Grijalva, Southwest New Mexico Council of Governments
- Elizabeth Jernigan, Piedmont Triad Regional Council (NC)
- Jessica Laitsch, Southwest Colorado Council of Governments
- Michael Parks, Brazos Valley Council of Governments (TX)
- Danny Reese, George Washington Regional Commission (VA)
- Andrew Shepler, Ohio DOT
- Jeff Sudmeier, Colorado DOT
- Jaime Sullivan, National Center for Rural Road Safety
- Jerry Wuorenmaa, Western U.P. Planning & Development Region (MI)

In addition, more than 100 other individuals representing many disciplines relating to rural transportation planning, management, operations, and safety attended *Moving Rural America: National Working Summit on Transportation in Rural America*, organized by the National Center for Rural Road Safety. The summit was a larger convening that served as the second phase of the RTPO peer exchange. Information and perspectives from these individuals that relate to the efforts of RTPOs and their partners to address rural transportation challenges are also included in this peer exchange summary. More information on the summit is available from the National Center for Rural Road Safety, at ruralsafetycenter.org/news-events/moving-rural-america-summit.

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