

Best Practices for Rural Smart Growth

Requested by

The Community & Regional Planning Technical Advisory Panel,
Division of Transportation Planning

July 21, 2010

The Caltrans Division of Research and Innovation (DRI) receives and evaluates numerous research problem statements for funding every year. DRI conducts Preliminary Investigations on these problem statements to better scope and prioritize the proposed research in light of existing credible work on the topics nationally and internationally. Online and print sources for Preliminary Investigations include the National Cooperative Highway Research Program (NCHRP) and other Transportation Research Board (TRB) programs, the American Association of State Highway and Transportation Officials (AASHTO), the research and practices of other transportation agencies, and related academic and industry research. The views and conclusions in cited works, while generally peer reviewed or published by authoritative sources, may not be accepted without qualification by all experts in the field.

Executive Summary

Background

Smart growth is a development strategy that encompasses economic, environmental and social objectives to manage the growth of a community. The basic principles of smart growth are to:

- Mix land uses.
- Take advantage of compact building design.
- Create a range of housing opportunities and choices.
- Create walkable neighborhoods.
- Foster distinctive, attractive communities with a strong sense of place.
- Preserve open space, farmland, natural beauty and critical environmental areas.
- Strengthen and direct development toward existing communities.
- Provide a variety of transportation choices.
- Make development decisions predictable, fair and cost-effective.
- Encourage stakeholder and community collaboration in development decisions.

Smart growth as a strategy has been well developed and used in metropolitan areas across the country, however, there may be gaps in the understanding of how smart growth can be used in rural regions. In general, rural smart growth is simply the attempt to apply the basic principles of smart growth to rural, less-developed areas. Rural smart growth strategies tend to focus on regional collaboration, the preservation of open spaces and environmental protection.

This Preliminary Investigation seeks to capture a range of available resources and strategies applicable to the development and implementation of smart growth strategies in rural California.

Summary of Findings

We organized our findings into three broad categories:

- National Research.
- State and Regional Initiatives.
- Case Studies and Examples.

Following is a summary of findings by topic area.

National Research

- This section includes 12 research reports, best practice guides and toolkits from NCHRP, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), U.S. Environmental Protection Agency (U.S. EPA), AASHTO, the National Association of Development Organizations, Smart Growth Network, International City/County Management Association, Northeast-Midwest Institute and the National Association of Counties.
- *NCHRP Report 582* and NCHRP Project 8-36, Task 32 are valuable resources that identify specific rural smart growth strategies and implementation methods. Each report also includes case studies highlighting examples of small towns and rural communities that have applied strategies identified in the report.
- The coordination of local, regional and state transportation and land use planning agencies to further core smart growth principles is a key strategy highlighted in four of the reports. These resources serve as blueprints for developing regional strategies that can be applied in a variety of locations instead of specific plans for transportation and infrastructure development.
- Evaluating State DOT Rural Planning Practices, attached as [Appendix A](#), is particularly helpful in that it provides a survey of best practices of state departments of transportation (DOTs) in five areas related to rural land use and transportation.

State and Regional Initiatives

- There are many different state and regional initiatives focused on smart growth development. The 10 examples in this section represent a diversity of geographic regions and all focus on smart growth in rural areas. The major theme of each of these initiatives is the preservation of open space, farmland, forests and natural resources. Programs from smaller, more densely populated states like New Jersey and Maryland are presented along with larger, more rural states like Montana, Idaho and Colorado.

Case Studies and Examples

- This section highlights five projects currently under way that have been identified by the U.S. DOT or the U.S. EPA as projects that further the goals of smart growth and livability. Lancaster County, PA, received the U.S. EPA 2009 Overall Excellence Award for Smart Growth Achievement for its comprehensive planning and implementation of countywide land use and transportation plans. The PlanCheyenne project includes comprehensive regional planning documents being implemented in Wyoming that include visions for roadway, transit, bicycle and pedestrian transportation.

Gaps in Findings

There is a substantial amount of research involving smart growth principles and rural land use and transportation planning. Research into smart growth strategies has historically focused on metropolitan regions, creating a gap in research evaluating the long-term impact and success of smart growth planning in strictly rural regions.

The U.S. DOT/FHWA will be publishing a new Livability in Transportation Guidebook in the next month. This guidebook is expected to contain more information regarding the application of smart growth principles to rural areas and more case studies of those principles implemented in rural areas.

Next Steps

As Caltrans pursues the development and implementation of smart growth strategies in rural California, the department might consider:

- Reviewing the U.S. DOT/FHWA Livability in Transportation Guidebook, expected to be published in July.
- Researching into the long-term successes and setbacks of smart growth practices implemented in rural regions.
- Investigating how rural regions finance comprehensive transportation projects, including mass transit.

Contacts

The following individuals were contacted during the course of this Preliminary Investigation:

Robin Smith

Senior Transportation Planner
FHWA Office of Planning
(720) 963-3072, Robin.Smith@dot.gov

Spencer Stevens

Planner
FHWA Office of Planning Oversight & Stewardship
(202) 366-0149, Spencer.Stevens@dot.gov

Susan Grosser

Community Planner
U.S. DOT/FHWA Office of Planning, Environment, and Realty
(202) 366-2825, Susan.Grosser@dot.gov

National Research

Corridor Approaches to Integrating Transportation and Land Use, NCHRP Project 8-36, Task 86, June 2009.
http://onlinepubs.trb.org/onlinepubs/archive/notesdocs/NCHRP08-36%2886%29_FR.pdf

This report identifies successful innovations in the integration of transportation and land use planning for transportation corridors. Researchers identified 80 possible case study candidates, ultimately choosing six for further research. Of those six, the following two provide important examples of state DOT involvement in rural transportation planning:

- Envision Utah and the Mountain View Environmental Impact Statement. Notable practices include connecting statewide visioning to local corridor implementation, using upfront agreements to keep everyone involved and including a variety of options as part of a balanced transportation solution, not as mitigation or appeasement.
- Gateway 1—Maine Department of Transportation. Notable practices include fostering collaboration among the project team instead of using it to sell DOT ideas, creating lasting institutional arrangements so that commitments to long-term solutions remain, balancing transportation needs with community concerns, using strategies to equalize economic development benefits among communities in the corridor, tailoring public outreach to the community and trying new techniques to get each community interested, and leveraging supportive state legislation to improve incentives for change.

Metropolitan and Rural Transportation Planning: Case Studies and Checklists for Regional Collaboration, National Association of Development Organizations Research Program, Association of Metropolitan Planning Organizations, FHWA, January 2009.

<http://66.132.139.69/uploads/rpompo.pdf>

This resource is a guide to facilitate improved communication and partnerships between state DOTs, metropolitan planning organizations (MPOs) and rural planning organizations (RPOs). The guide documents cases where collaboration across regional planning boundaries has been successful and provides a checklist of actions to improve relationships between planning entities. The checklists are intended to provide best practice examples of steps that organizations can take to improve planning among state, urban and rural planning organizations.

Relevant checklists include:

- Collaboration between MPOs and RPOs to address rapidly urbanizing areas that develop in rural, suburban and exurban areas outside an MPO (page 9).
- RPOs and MPOs work to address climate change and transportation (page 10).
- RPOs and MPOs collaborate on integrated plans for transportation, economic development, housing and land use (page 12).
- The locations of residential areas, human services, employment centers, commercial zones and other destinations encourage planning for regional transit service (page 14).

The report highlights collaboration in Alabama, Arizona, Iowa, Tennessee, Utah, Vermont and Washington, describing each state's practices for successfully building relationships between planning organizations to manage land use and transportation.

Best Practices to Enhance the Transportation-Land Use Connection in the Rural United States, *NCHRP Report 582*, 2007.

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_582a.pdf

This study highlights best practices to support successful community development and land use strategies that maximize transportation capacity and community livability. The report identifies and focuses its research on three core types of rural communities: exurban communities, those that exist on the fringe of urban areas; destination communities, those that feature natural amenities such as mountains, lakes or beaches that attract seasonal residents, retirees and tourists; and production communities, generally found in remote areas and often relying on a single industry such as agriculture, mining or manufacturing.

The report organizes best practices and strategies for rural communities to address accessibility and livability challenges into three categories: setting the regional framework, improving local accessibility and enhancing community design. Strategies and methods are identified in each category.

Setting the Regional Framework

- *Access management*: This strategy is used to preserve capacity and manage transportation and land use. Access management can be used to limit development between exurban communities and job centers and maximize automobile and transit mobility. In destination communities, access management is intended to protect the amenities that attract visitors to the community. For example, allowing strip commercial development or traffic congestion to reduce access to amenities or even damage the amenities themselves will diminish their attraction and that of the local community. Access management for production communities can be used to ensure that truck routes are safe and convenient without putting an unnecessary burden on residential areas and main streets.
- *Overlay districts*: Overlay districts are a prescriptive method of controlling land use along a transportation corridor. This method can be used to regulate characteristics of development such as the type and intensity of development, number and location of driveways allowed, site design and streetscape design.
- *Median construction to limit or direct turning movements*: Applying this strategy to a community's main street reduces both the number of turning movements along the road and the roadway crossing distance, resulting in a safer and more attractive place for pedestrian activity.
- *Growth boundaries*: Growth boundaries or urban service boundaries can be used to direct development to particular locations in a community. Typically, services such as fresh water and sewer systems will not be expanded beyond these boundaries, limiting development potential outside of the directed areas.
- *Rural and land conservation strategy*: This strategy is used to compensate landowners for leaving areas undeveloped while providing incentives for developing in more appropriate locations or credits for foregoing the opportunity to develop. Some of these tools include transfers or purchase of development rights, conservation easements and land banking.
- *Clustering development*: By clustering residences and commercial activities into compact areas, communities can enhance convenient access to services and to open spaces as well as make more efficient use of infrastructure.

Improving Local Accessibility

- *Street connectivity*: This strategy involves the design of a connected road network that allows for more travel path options around the community, minimizing travel distances and increasing opportunities for nonautomobile travel.
- *Complete streets*: Streets are designed to be safe and accessible for vehicles, bicycles and pedestrians.
- *Transit planning*: Options for rural transit planning include fixed-route services, ride-sharing, demand-responsive (dial-a-ride) transit, car-sharing and bike-on-bus programs. Transit planning should be integrated with compact land use planning to concentrate appropriate land uses around transit stops or along transit corridors, creating activity centers for meeting multiple daily needs.

Enhancing Community Design

- *Context-sensitive solutions*: This strategy is defined as “a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility.” Examples of context-sensitive solutions used in rural communities include:
 - Designing streets in town centers to limit the speed and volume of through traffic and provide adequate safe space for other road users.
 - Installing traffic-calming devices in residential neighborhoods to lower travel speeds, or using access management and overlay zoning to limit development within the view shed of rural road corridors.
 - Transferring control of alternate routes around rural downtowns while maintaining control of main street, resulting in slower traffic and safer, more attractive places for users.

Appendix B of the report (page 34 of the PDF) includes 13 case studies chosen based on regional balance and diversity of strategies used. Below is a list of the communities highlighted and the strategies they used.

- Burlington, IA: Downtown revitalization, compact growth, context-sensitive solutions.
- Cutler-Orosi, CA: Context-sensitive solutions, access management, pedestrian orientation, effective public involvement.
- Edgartown, MA: Compact growth, community design.
- Hayden, CO: Consensus building for planning and regulation, growth management, compact development, access management, community character.

- Hutchison, MN: Regional planning and access management, intergovernmental coordination, pedestrian connectivity, compact growth.
- Lincoln City, OR: Context-sensitive solutions, community involvement, access management.
- Moss Point, MS: Road transfers, compact growth, pedestrian orientation, street connectivity.
- Northwest Vermont Project: Regional planning, compact growth, rural land conservation.
- Sedona, AZ: Local accessibility, community design, compact growth, transit planning, pedestrian orientation, street connectivity.
- Traverse City, MI: Local accessibility.
- Unity, ME: Transit planning, compact growth, pedestrian and cycling connections.
- Virginia Creeper Trail: Pedestrian and cycling linkages, land development regulations.
- Western Piedmont Region, NC: Regional corridor planning, access management, overlay districts.

The Role of State DOTs in Support of Transit-Oriented Development (TOD), AASHTO Standing Committee on the Environment, April 2006.

http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/25-25%2820%29_FR.pdf

This report discusses the role state DOTs can play in supporting transit-oriented development (TOD). The report provides an overview of TOD and its benefits; discusses municipal practices that support TOD, and describes activities undertaken or planned by state DOTs to support TOD implementation efforts.

Section 2.4 (page 28 of the PDF) discusses the state and regional agency role in supporting municipal implementation practices. The following seven initiatives are identified as tools to support TOD and are discussed in detail in the report:

- Planning grants.
- Targeted infrastructure funding.
- Smart growth legislation.
- Tying capital grants to local TOD commitments.
- Concurrency/adequate public facilities ordinance requirements.
- Required siting of government buildings near transit.
- Development of regional impact requirements.

The report highlights the Caltrans work in the area, including the 2002 report [Statewide Transit-Oriented Development Study: Factors for Success in California](#). That report produced eight strategies that could be used to encourage implementation of TOD.

Transportation Planning in Rural America: Emerging Models for Local Consultation, Regional Coordination and Rural Planning Organizations, National Association of Development Organizations Research Foundation, December 2005.

<http://66.132.139.69/uploads/scan2005.pdf>

This report discusses how state DOTs are working with regional and RPOs to improve transportation in rural areas and foster more communication and cooperation between the state and localities. Results of a nationwide scan of 320 regional development organizations to determine the involvement of rural local officials in the statewide transportation planning process are reported on pages 8-12.

The report also includes a description of the organizational structures, work programs and partnership models being used by state transportation agencies in 28 states across the country, including California's use of Regional Transportation Planning Agencies.

Transportation Impacts of Smart Growth and Comprehensive Planning Initiatives, NCHRP Project 25-25, Task 2, May 2004.

http://onlinepubs.trb.org/onlinepubs/archive/NotesDocs/25-25%282%29_FR.pdf

This report reviews the methods and outcomes used to evaluate the effectiveness of smart growth and other comprehensive planning initiatives implemented by states and MPOs, and provides guidance for evaluating the impacts of these initiatives.

The report includes six case studies documenting the types of comprehensive planning initiatives undertaken, methods used to evaluate the transportation and environmental impacts of these initiatives, and findings on their effectiveness.

Highlighted findings from the research include:

- Regional modeling studies suggest that land use strategies can have benefits for both transportation conditions and infrastructure costs.
- Empirical data also suggest that land use strategies, if they can be implemented, should have transportation benefits.
- The ability of state and regional agencies to affect land use patterns has been limited.
- State and regional agency programs are helping to support the emerging smart growth movement.
- Transportation concurrency, as implemented in many areas, has not been effective from a regional perspective.
- Nontransportation benefits of comprehensive planning policies may be more significant than transportation benefits.

Tools, Techniques, and Methods for Rural Transportation Planning, NCHRP Project 8-36, Task 32, January 2004.

<http://www.transportation.org/sites/planning/docs/nchrp32.pdf>

This research identifies planning tools, techniques and methods used to support rural transportation planning with an emphasis on problem solving based on relationships between agencies. The report presents case studies that represent best practices associated with the implementation of rural tools and methods.

Eleven transportation planning tools or categories of tools applicable to rural settings were identified.

- Highway Performance Monitoring System and Highway Economic Requirements System.
- Travel models.
- Sketch-planning tools (Transit Cooperative Research Program, NCHRP guidance documents and methods).
- Geographic information systems and data management tools.
- Management systems.
- Air quality analysis tools.
- State and regional long-range transportation plans and capital programming (transportation implementation programs).
- Regional transportation assistance funding.
- Transportation system standards.
- Economic and freight analysis.
- Planning process (state, metropolitan and nonmetropolitan planning arrangements and processes).

Case studies from Wisconsin, Florida, Montana and Kentucky are highlighted on pages 25-72 of the PDF. Each case study describes the tool(s) used, examples of how they were used, lessons learned and contact information for the agency involved.

Section 5.0 (page 74 of the PDF) offers a toolbox of rural tools. Information provided for each category of tools includes a summary of its purpose, state and regions where it has been applied, a brief description and the appropriate contacts for more information.

Evaluating State DOT Rural Planning Practices, NCHRP Project 08-36, Task 35, December 2003.

Attached as [Appendix A](#)

This report describes the role of state DOTs and regional planning organizations in rural transportation planning. The report is organized based on five categories of transportation planning. In each category the report documents current practices in eight sample states – chosen to achieve diversity in terms of size, population, percent of population and highway miles that are rural, geographic region and role of regional planning organizations. Best practices and areas for improvement are also identified. Below are the five categories and page citations for the report's best practices summaries:

- State and regional planning organization roles in rural transportation planning (page 15).
- Public participation in rural areas (page 23).
- Serving the transit dependent in rural areas (page 32).
- Linking transportation and land use in rural areas (page 40).
- Linking transportation and economic development in rural areas (page 48).

Local Tools for Smart Growth: Practical Strategies and Techniques to Improve Our Communities, National Association of Counties, The Joint Center for Sustainable Communities, U.S. EPA, undated.

http://www.naco.org/Content/ContentGroups/Programs_and_Projects/Environmental1/Sources/1528LocalTools.pdf

This report is a collection of tools, resources and examples of smart growth strategies organized into 12 categories. Each category includes the traditional or standard practice, alternative smart growth strategies and examples of communities that have used the smart growth techniques. The most relevant categories are:

- Comprehensive planning (page 9).
- Regional cooperation (page 14).
- Citizen participation (page 20).
- Zoning (page 27).
- Transportation (page 47).
- Open space and farmland protection (page 55).

Important highlights:

On page 28 is a table of 10 types of zoning, their descriptions and uses, including cluster zoning, overlay zoning, purchase of development rights and conservation easements, and transferable development rights.

Tools for open space and farmland protection (page 55) include farmland protection, agricultural protection zoning, land trusts, transfer of development rights and conservation easements.

Getting to Smart Growth II: 100 More Policies for Implementation, Smart Growth Network, International City/County Management Association, 2003.

<http://www.smartgrowth.org/pdf/gettosg2.pdf>

This report details strategies, tips and examples of smart growth land use strategies based on 10 smart growth principles. The most relevant are:

- Mixed land uses.
- Preserving open space, farmland, natural beauty and critical environmental areas.
- Encouraging community and stakeholder collaboration in development decisions.

Policies for implementation are listed for each of the 10 smart growth principles on pages 106-110 of the PDF.

Smart Growth at the Frontier: Strategies and Resources for Rural Communities, Barbara Wells, Northeast-Midwest Institute, 2002.

http://www.activelivingbydesign.org/sites/default/files/RuralSmartGrowth_0.pdf

This report identifies four broad strategies to accomplish smart growth in rural areas: revitalizing small towns, linking natural resource protections with development, maintaining working landscapes and coordinating regional development. Each broader category identifies methods to accomplish each goal and cites examples of communities across the country that have implemented those methods.

Highlights include:

- Revitalizing small towns—rehabilitating contaminated sites (Lacon, IL, page 28 of the PDF): This small rural town in Illinois used assistance from the Illinois EPA and the U.S. EPA along with creative financing to remediate and redevelop the area, including green areas, public parks, housing, retail, restaurants and expanded river front access.
- Linking natural resources protections with development—designing housing development for conservation (page 39 of the PDF): residential development threatens rural landscapes by fragmenting forests, watersheds and habitat. Conservation design is a strategy that can mitigate the impact of new residential development, preserving open space and natural resources. Conservation design clusters new homes on a section of a development parcel so that the remainder can be preserved as open space.
- Maintaining working landscapes—reserving a critical mass of farmland (page 52 of the PDF): The Maine Farms Project used a grant from the U.S. Department of Agriculture to integrate farms, processors, markets, restaurants and food pantries and tie the food system into the broader community development strategy. The program helps make sustainable practices more economically viable and helps preserve farmland.
- Coordinating regional development—planning for countywide use (page 63 of the PDF): Loudoun County, VA, a mostly rural area experiencing fast-paced growth, developed a countywide, 20-year plan that establishes three distinct policy areas: suburban, transition and rural. The plan, developed with the use of

extensive public meetings, preserves open space in the transition area and curbs residential development in rural areas.

Planning for Transportation in Rural Areas, FHWA, Federal Transit Administration, July 2001.

<http://www.fhwa.dot.gov/planning/rural/planningfortrans/ruralguide.pdf>

This report provides resources to rural transportation planners. The report includes characteristics of a rural system; jurisdictional planning issues; the development of rural transportation plans through public consultation; and ways to use transit planning concepts, rural intelligent transportation systems and access management as additional tools.

Relevant sections of the report include:

- Section IV, Successful Rural Transportation Planning (page 37 of the PDF), provides an overview of issues to be resolved before starting the planning process, success factors, key elements, and approaches for public consultation and environmental review.
- Appendix B, Some Additional Tools for Planners (page 62 of the PDF), discusses rural intelligent transportation systems, transit system planning and access management.
- Appendix C, Case Study Profiles (page 71 of the PDF), presents four case studies of successful rural transportation planning activities from Pennsylvania, Kentucky, New Hampshire and Minnesota.

State and Regional Initiatives

Smart Mobility 2010: A Call to Action for the New Decade, Caltrans, February 2010.

http://www.dot.ca.gov/hq/tpp/offices/ocp/smf_files/SmMbilty_v6-3.22.10_150DPI.pdf

This document discusses the integration of land use and transportation planning in California with a focus on Smart Mobility as an overall approach to the state's transportation challenges, which include:

- The state mandate to find solutions to climate change.
- The need to reduce per capita vehicle miles traveled.
- Demand for a safe transportation system that gets people and goods to their destinations.
- The commitment to create a transportation system that advances social equity and environmental justice.

Chapter 3 introduces the concept of place types specifically designed as tools for planning and programming that implement Smart Mobility (page 24 of the PDF). Challenges related to suburban communities, rural and agricultural land, and protected land are discussed. Key planning activities, transportation projects and programs, and development and conservation projects and programs in rural and agricultural lands are identified on page 41 of the PDF.

Sierra Business Council: Sustaining Rural Places Toolkit

<http://www.sbcouncil.org/Publications/Sustaining-Rural-Places-Toolkit>

This toolkit, produced by the Sierra Business Council and Saving the Sierra, provides innovative tools and information to help save rural places. The toolkit is organized in four categories:

- Conservation easement background information and tools.
 - [Conservation Easement Primer](#).
 - [Land Trusts](#).
 - [Land Health Primer](#).
- Public participation tools.
 - [Putting People in Planning: Public Participation](#).
 - [Encouraging Diversity](#).
- Land use planning tools.
 - [Land Use Planning Tools Primer](#).
 - [The Northern Sierra Partnership](#).
- Watershed tools.
 - [Watershed Councils and Watershed Planning](#).
 - [Watershed Actions Steps: 13 Ways to Help Your Watershed](#).
 - [Planning for Water-Wise Development in the Sierra](#).

Montana Smart Growth Coalition

<http://www.mtsmartgrowth.org/pub.html>

The mission of the Montana Smart Growth Coalition is to support safe and healthy communities and sustainable economies; conserve farm, forest and ranch lands; and protect natural resources and wildlife habitat. Relevant reports produced by the coalition include:

- [Land Use and the Montana State Highway System](#), November 2003.
This report discusses the role of the Montana State Department of Transportation (page 35 of the PDF) and includes a section on best practices (page 37 of the PDF), highlighting land use and transportation efforts in Colorado and Florida.
- [Community-Based, Context Sensitive Transportation Planning and Design](#), November 2003.
This report discusses the strategy of context-sensitive design, highlighting best practices in Maryland, Kentucky and Minnesota. The report also details the need for public involvement in state highway projects, highlighting best practices in Vermont and Minnesota.

Smart Growth Vermont

<http://www.smartgrowthvermont.org/learn/landscape/>

Smart Growth Vermont is a nonprofit organization that works with local officials, developers, political leaders and businesses to develop creative land use and development strategies. The organization highlights efforts to preserve Vermont's rural landscape, specifically state programs to [protect forests](#) and create affordable housing while conserving [Vermont's agricultural, historical and recreational areas](#).

New Jersey Smart Growth Gateway

<http://smartgrowthgateway.org/index.shtml>

The Smart Growth Gateway is a resource for New Jersey citizens and state planners to access tools to implement smart growth strategies. One valuable resource is the collection of sample [smart growth ordinances](#) dealing with cluster developments, agricultural overlays, forested area protection, open space protection and wetland management.

Agricultural Smart Growth Plan for New Jersey, New Jersey State Planning Commission, April 2006.

<http://www.nj.gov/agriculture/pdf/smartgrowthplan.pdf>

This report outlines New Jersey's plan for preservation of agricultural land through farmland preservation, agricultural land use planning, economic development, natural resource conservation and agricultural industry sustainability.

Maryland Rural Legacy Program, Maryland Department of Natural Resources

<http://www.dnr.state.md.us/land/rurallegacy/index.asp>

The Maryland Rural Legacy Program was created to discourage sprawl and protect open spaces and farmland. The program encourages local governments and private land trusts to identify rural legacy areas and provides funding through a competitive application process to preserve those areas.

Smart Growth Best Practices: Putting Smart Growth Policy into Practice, Idaho Smart Growth, undated.

http://www.idahosmartgrowth.org/images/uploads/files/smart_growth_best_practices_%282%29.pdf

This report identifies 10 smart growth principles, identifies tools and methods to implement those strategies, and gives examples of Idaho communities that have used each strategy. The two most relevant sections include:

- Principle No. 2: Mixed land uses (page 6 of the PDF). Strategy identified—Adopt a specific area ordinance and plan mixed-use nodes. Examples: City of Boise, Harris Ranch Specific Plan; City of Meridian, Ten-Mile Specific Plan.
- Principle No. 8: Preserve open space, farmland, natural beauty and critical environmental areas (page 16 of the PDF). Strategy identified—Identify high-value open spaces, farmland or habitat, and use a variety of financing techniques to preserve valuable open space. Example: Blaine County, 2025 Proposition 1.

Office of Smart Growth, Colorado Department of Local Affairs, Division of Local Government

<http://dola.colorado.gov/dlg/osg/index.htm>

The Office of Smart Growth provides information and resources involving smart growth initiatives in Colorado. One example, the Sustainable Communities Initiative, works to coordinate partnerships and provide assistance to enhance the sustainability of communities in Colorado. The initiative works to integrate sustainability principles including land use, transportation and mobility; environmental quality; and historic and cultural preservation. The Office of Smart Growth has also developed [model county land use, municipal land use, and water-efficient landscape codes and ordinances](#).

Smart Transportation, Pennsylvania Department of Transportation

<http://smart-transportation.com/about.html>

Pennsylvania DOT is pursuing the goals of smart transportation to address urban congestion and sprawl, improve communication with local transportation planners, and preserve local land use and the environment. PennDOT, working with the New Jersey DOT, produced the [Smart Transportation Guidebook](#), which aims to integrate the planning and design of streets and highways to develop sustainable and livable communities. According to the guidebook, it has “equal applicability to rural, suburban and urban areas.” Pennsylvania DOT is currently using this guidebook to update its design manuals. The guidebook includes chapters on land use context (Chapter 4, page 23); designing roadways (Chapter 6, page 35); and roadway and roadside guidelines (Chapter 7, page 45, and Chapter 8, page 61, respectively).

Case Studies and Examples

In addition to the case studies highlighted in the research reports, guides and toolkits cited earlier, the following projects have been cited by either the U.S. DOT or the U.S. EPA as smart growth projects that support livability.

2009 National Award for Smart Growth Achievement, U.S. EPA

http://www.epa.gov/livability/pdf/sg_awards_2009.pdf

Lancaster County, PA

Lancaster County received the U.S. EPA's 2009 National Award for Smart Growth Achievement Overall Excellence Award. The award is given based on "effectiveness in creating sustainable communities, creating a robust public involvement process, generating partnerships among public, private, and non-profit stakeholders, and serving as national models." This case study is particularly relevant due to Lancaster County's rural character and how the county dealt with pressure to develop farmland and open spaces. A discussion of Lancaster County's comprehensive plan and implementation process begins on page 8: "Lancaster County Planning Commission and its member municipalities created Envision Lancaster County, a comprehensive, multi-staged countywide plan to manage growth and maintain the county's distinctive sense of place over the next 25 years. Envision Lancaster County directs new development to existing towns to protect the farmland, rural areas, and natural landscapes that define the county's character. The plan considers the entire region by promoting reinvestment in existing communities and encouraging more compact, interconnected neighborhoods. By doing so, the plan preserves open space, protects water resources, and provides for greater housing and transportation choices."

PlanCheyenne, Master Plan for Cheyenne and Laramie County, Wyoming

<http://www.plancheyenne.com/welcome.cfm>

PlanCheyenne is highlighted by the U.S. DOT Livability Initiative as one that integrates land use, transportation, parks and open space. The project is organized into three primary plans: community plan, parks and recreation master plan and transportation master plan. Each plan is further divided into four sections:

- *Snapshot* provides information and analysis about the state of the community today. The information benchmarks facts, figures and data in a concise and informative way.
- *Structure* establishes the building blocks that shape the physical character and conceptualizes the community's vision. Many of the design principles, which discuss best practices, are located in this section.
- *Shape* incorporates the physical plan, including maps, as well as policies and goals that will help to guide decisions in the future.
- *Build* identifies the implementation tools necessary to carry out the many ideas identified within the plan.

The [Build](#) section of the transportation master plan includes documentation of strategies to implement the roadway, transit, bicycle and pedestrian vision plans.

Travel Washington State

<http://www.dot.gov/livability/cs-washington.html>

This program is highlighted by the U.S. DOT Livability Initiative for its development of an intercity public transit program. Washington State DOT worked with the Federal Transit Administration to develop and fund intercity bus lines across the state. Currently three bus lines transport people to different parts of the state with plans for a fourth and fifth line opening in 2010. The [Travel Washington](#) web site lists specific route and contact information.

North Central Pennsylvania Regional Planning and Development Commission—Connecting Highways to Local and Regional Community Services that Support Livable Communities

http://www.fhwa.dot.gov/livability/case_studies/pennsylvania/

The Community Development Department within the North Central Pennsylvania Regional Planning and Development Commission has been highlighted by the U.S. DOT Livability Initiative for its work developing integrated strategies and policies for community development and regional planning. The commission received funding for three counties to implement highway improvement projects related to livability and sustainability.

- City of Altoona: \$300,000 to install bike and pedestrian amenities that connect the downtown to the Penn State Altoona campus.
- Centre County MPO, in conjunction with North Central RPO: \$100,000 to study potential park and ride lots in the Moshannon Valley to provide commuter service to neighboring communities.
- Ferguson Township: \$2,970,000 to install a collector road between two arterial roads serving travelers within a proposed traditional neighborhood development that includes a highly connected local street grid.

- Jefferson County Punxsutawney Borough: \$607,200 to upgrade the local transportation network in the downtown area to better complement the intermodal Punxsutawney Transit Facility.

State Highways as Main Streets: A Study of Community Design and Visioning, Jim Nicholls, William Payne, Claire Gear, Jessica Miller, Washington State Department of Transportation, 2009.

<http://www.ruraltransportation.org/uploads/wsdotmnst.pdf>

This document—identified by Robin Smith, Senior Transportation Planner, FHWA Office of Planning—discusses the strategy used in Washington state to build consensus with local communities on how to manage “main street highways.” The document’s focus is on the decision-making process and consensus building. The report identifies 500 miles of the state highway system that serve as community main streets. Partially as a result of this report, the Washington Legislature has introduced [HB 2911](#), which would create a Complete Streets Grant Program. The bill states, in part, “It is the intent of the legislature to encourage street designs that safely meet the needs of all users and also protect and preserve a community’s environment and character.”

APPENDIX A

**EVALUATING STATE DOT RURAL PLANNING
PRACTICES**

Requested by:

American Association of State Highway
and Transportation Officials (AASHTO)

Standing Committee on Planning

Prepared by:

ICF Consulting
Fairfax, VA

December 2003

The information contained in this report was prepared as part of NCHRP Project 08-36, Task 35, National Cooperative Highway Research Program, Transportation Research Board.

Acknowledgements

This study was requested by the American Association of State Highway and Transportation Officials (AASHTO), and conducted as part of National Cooperative Highway Research Program (NCHRP) Project 08-36. The NCHRP is supported by annual voluntary contributions from the state Departments of Transportation. Project 08-36 is intended to fund quick response studies on behalf of the AASHTO Standing Committee on Planning. The report was prepared by ICF Consulting, with assistance from AECOM Consulting. The study Principle Investigator was Jeffrey Ang-Olson of ICF Consulting. The work was guided by a task group chaired by Ken Leonard (Wisconsin DOT) that included Randy Halvorson (Minnesota DOT), Charlie Howard (Washington DOT), and David Lee (Florida DOT). The project was managed by Ronald D. McCready, NCHRP Senior Program Officer.

Disclaimer

The opinions and conclusions expressed or implied are those of the research agency that performed the research and are not necessarily those of the Transportation Research Board or its sponsors. This report has not been reviewed or accepted by the Transportation Research Board's Executive Committee or the Governing Board of the National Research Council.

CONTENTS

EXECUTIVE SUMMARY	i
1 INTRODUCTION	1
1.1 Overview and Purpose	1
1.2 Research Methodology	2
1.3 Report Organization	4
2 STATE AND RPO ROLES IN RURAL TRANSPORTATION PLANNING	5
2.1 Summary of Current Practice	5
2.2 Best Practices	15
2.3 Challenges and Areas for Improvement	17
3 PUBLIC PARTICIPATION IN RURAL AREAS	18
3.1 Summary of Current Practice	18
3.2 Best Practices	23
3.3 Challenges and Areas for Improvement	23
4 SERVING THE TRANSIT DEPENDENT IN RURAL AREAS	25
4.1 Summary of Current Practice	25
4.2 Best Practices	32
4.3 Challenges and Areas for Improvement	33
5 LINKING TRANSPORTATION AND LAND USE IN RURAL AREAS	34
5.1 Summary of Current Practice	34
5.2 Best Practices	40
5.3 Challenges and Areas for Improvement	40
6 LINKING TRANSPORTATION AND ECONOMIC DEVELOPMENT IN RURAL AREAS	42
6.1 Summary of Current Practice	42
6.2 Best Practices	48
6.3 Challenges and Areas for Improvement	48
7 CONCLUSIONS	50
APPENDIX: LIST OF INTERVIEWEES	52

EXECUTIVE SUMMARY

This report provides a description of how transportation planning and programming is performed in rural areas, focusing in particular on the role of state departments of transportation (DOTs) and regional planning organizations (RPOs). The discussion is organized around five topic areas:

- State and RPO roles in rural transportation planning
- Public participation in rural areas
- Serving the transit dependent in rural areas
- Linking transportation and land use in rural areas
- Linking transportation and economic development in rural areas

The report also highlights some best practices in state DOT rural planning and programming, and identifies topic areas that are particularly challenging and warrant improvement.

The study focuses on eight sample states, selected to achieve diversity in terms of size, population, percent of population and highway miles that are rural, geographic region, and role of regional planning organizations. We reviewed relevant literature such as other studies of rural planning issues and rural planning documents produced by state DOTs. We then conducted detailed telephone interviews with state DOT staff in each of the sample states, followed by numerous shorter interviews with staff of state, regional, and local agencies in order to gain different perspectives and learn more about specific topics.

State and RPO roles in rural transportation planning

State DOTs conduct transportation planning and programming for rural areas using a wide variety of approaches. Over the last decade, a number of states have experimented with delegating some rural transportation planning responsibility to RPOs, including Colorado, Maine, Missouri, North Carolina, and Oregon. Other state DOTs retain a more traditional centralized approach that they consider to work well.

In all of the sample states, interviewees at the local and regional level felt that the state DOT was generally doing a good job of listening to and addressing their concerns and needs. This sentiment was expressed regardless of the state DOT approach to rural planning and the use of RPOs. In states that have empowered RPOs with a formal role in transportation planning, interviewees were unanimous that this change has improved rural planning. In these states, rural officials feel that they now have more say in the state transportation decision-making that affects them. State DOT staffs agree that use of RPOs has been successful, particularly in states that use a transparent and consistent system for setting project priorities.

Assigning new responsibilities to RPOs can potentially lead to institutional conflicts with state DOT districts. States may have to overcome a period in which rural planning role and responsibilities are uncertain or redundant. Most states have a mismatch between RPO and DOT district boundaries, and this adds an additional hurdle to involving RPOs in project prioritization, especially when RPOs lie in multiple DOT districts. Some RPOs may lack the capacity to properly take on transportation planning functions, both in terms of funding and staff knowledge. State DOTs should ensure that expectations of RPOs do not exceed their resources and should provide RPOs with guidance and training.

Public participation in rural areas

As with project prioritization methods, approaches to public participation in rural areas vary widely between states. Many state DOTs acknowledge difficulty in obtaining input from rural residents unless there is a specific and controversial project under consideration. RPOs are often in a good position to engage the public and businesses as a result of their work in the areas of social services, economic development, and natural resource preservation. In some states, such as Maine and Missouri, RPOs conduct their own public outreach in order to support transportation planning and programming. The DOTs in Ohio and Oregon have successfully contracted with RPOs to conduct public involvement. Colorado is one of the few states that actively monitors and evaluates the extent and quality of public participation in rural areas.

Some state DOTs take relatively few steps to ensure public involvement in their rural transportation decision-making process, relying heavily on a few individuals in each county to represent rural residents. A broader approach to public involvement is needed in these states, coupled with a systematic evaluation of state DOT performance in achieving public involvement goals. States increasingly recognize the need to improve rural public involvement, and the trend toward greater reliance on RPOs is one direct result of this recognition.

Serving the transit dependent in rural areas

State DOTs administer the federal programs that provide capital and operating funding for general and specialized (elderly and disabled) public transit service in rural areas. Most states require local providers to prepare transit development plans on a three- to five-year cycle in order to document current service and provide short-term capital and operating budgets. Some states have taken steps to improve the coordination of rural transit service, which can facilitate better service through resource sharing. Florida, for example, has an agency dedicated to transit service coordination. Some, though not all, of the states that use RPOs to assist with rural highway planning are turning to these organizations to play a role in regional transit coordination as well, including Colorado and North Carolina.

As a result of the limited funding and consequent funding priorities, few states conduct systematic statewide planning for rural transit. In states that require transit development plans, these plans do not typically assess needs, limiting usefulness for statewide planning. In addition, state DOTs rarely play an active role in planning and coordinating intercity bus service.

Linking transportation and land use in rural areas

There is increasing recognition of the importance of integrating transportation and land use planning in rural areas. The degree of transportation and land use coordination varies widely among the eight sample states. In some states, there is little or no land use planning in rural areas and the state avoids any attempt to influence local land use decisions. In these situations, state DOTs have little opportunity to coordinate their investment decisions with land use decisions. Other states included in the sample, such as Oregon and Maryland, are national leaders in promoting the integration of transportation and land use planning. In these states, local governments are required to develop land use plans, the state attempts to influence land use decisions through smart growth legislation, and a variety of initiatives exist to better coordinate transportation and land use.

A number of states report a growing recognition of the importance of highway access management in limiting undesired growth while maximizing system performance and safety. Maryland has an access management program that can be applied to prevent growth outside designated priority funding areas.

However, most other states apply access management to help achieve growth management on a more ad hoc basis, or do not use access management to accomplish land use objectives.

Linking transportation and economic development in rural areas

The primary driver for rural transportation investments is often the desire to promote economic development. A number of states have established funding sources earmarked for transportation projects that promote rural economic development, including Oregon, Missouri, and Florida. Most state DOTs do a fairly good job of matching transportation investment priorities with rural economic development strategies. The growing use of RPOs helps to ensure this because many RPOs serve as rural economic development coordinators.

When rural transportation projects are advanced for economic development purposes, state DOTs often do not apply rigorous methods to assess whether the investments will actually achieve the economic growth that project proponents claim. State DOTs should develop and use more rigorous analyses of potential economic development impacts.

1 INTRODUCTION

1.1 Overview and Purpose

Rural America relies heavily on the transportation system for safe and efficient movement of people and goods. Transportation planning in rural areas generally receives far less attention and resources than in metropolitan areas, an emphasis that is certainly justified to some degree given the population, economic activity, and congestion levels in our cities. But rural areas are home to 21 percent of the population, 39 percent of VMT, and 73 percent of federal-aid highway miles. Moreover, due to the large distances often involved in rural travel and the relative lack of modal alternatives, rural residents and businesses may rely on the transportation system for day-to-day activities even more than urban dwellers.

There is no single definition of what is “rural”. The U.S. Census definition of rural is based on population density. The U.S. Department of Transportation defines rural in two ways. For highway functional classification and outdoor advertising regulations, rural is considered anything outside of an area with a population of 5,000 or more. For planning purposes, rural is considered to be any lands outside of a metropolitan area with a population of 50,000 or more.¹ This study uses the DOT’s second, planning-related definition.

This definition of rural encompasses a wide range of settlement patterns. At one extreme, found primarily in the western U.S., rural areas are characterized by large tracts of undeveloped land and only scattered clusters of human habitation. Rural can also be used to describe regions dotted with many small towns (under 50,000 population), areas that often have an economy based on agriculture. At the other extreme, rural lands include urban fringe areas that are too low in population density to be considered urban, but are expected to develop and be incorporated into growing metropolitan areas. The transportation needs, and appropriate planning methods, can vary widely across this spectrum.

Many transportation professionals have little understanding of how transportation planning and programming is performed in rural areas. Those who have rudimentary knowledge of rural planning practices may not be aware of the significant changes in the field over the last decade. This report is intended to provide a description of the state of the practice, focusing in particular on the role of state DOTs and regional planning organizations (RPOs). The discussion is organized around five topic areas:

- State and RPO roles in rural transportation planning
- Public participation in rural areas
- Serving the transit dependent in rural areas
- Linking transportation and land use in rural areas
- Linking transportation and economic development in rural areas

The report also highlights some best practices in state DOT rural planning and programming, and identifies topic areas that are particularly challenging and warrant improvement.

¹ See “Planning for Transportation in Rural Areas,” FHWA, available on the Internet at <http://www.fhwa.dot.gov/planning/rural/planningfortrans/index.html>

1.2 Research Methodology

This research was conducted in five general steps: selection of sample states, a literature review, identification of topic areas and development of a discussion guide, detailed interviews with state DOT staff, and follow-up interviews and correspondence with state, regional, and local government staff. These research steps were conducted in sequential order, with considerable overlap between some steps.

1.2.1 Selection of Sample States

We chose to focus the research on a sample of eight states. We felt this sample size was large enough to encompass the full diversity of states but small enough to allow us to conduct multiple interviews and explore topics in detail for each state. Selection of the sample was intended to result in diversity along the following characteristics:

- Size (land area and population)
- Percent of population and highway miles that are rural
- Geographic region
- Role of regional planning organizations

The eight selected sample state are shown in Table 1.1 along with selected characteristics of the states. Two states are located in the Northeast, two in the Southeast, two in the central portion of the U.S., and two in the West. The sample varies widely in terms of the portion of rural residents and rural lands. In Maine, 62 percent resident live outside a metropolitan area, second only to West Virginia by this measure. Florida, on the other hand, is the sixth most urbanized state, with only 16 percent of residents in rural areas. Oregon is the tenth most rural state in terms of land area, with 99 percent of its territory in rural land. At the other extreme, Maryland ranks 46th in terms of the percentage of rural lands.

Table 1.1: Physical and Administrative Characteristics of Sample States

	2001 Population		State Land Area		Federal-Aid Highways		Number of Counties	Number of DOT Districts	Number of RPOs/COGs ^a
	Population (000)	% Rural	Area (sq. miles)	% Rural	Miles	% Rural			
Colorado	4,418	24%	103,729	98%	13,309	75%	64	6	15
Florida	16,332	16%	53,984	84%	19,880	45%	67	7	11
Maine	1,275	62%	32,311	98%	5,126	84%	16	7	7
Maryland	5,375	23%	9,833	83%	6,015	46%	23	7	6
Missouri	5,630	37%	68,898	97%	26,046	84%	114	10	19
N. Carolina	8,187	49%	48,715	93%	16,856	69%	100	14	20
Ohio	11,374	29%	40,953	89%	23,615	64%	88	12	17
Oregon	3,472	29%	95,997	99%	14,112	81%	36	5	11
U.S. Average		28%		97%		73%			

a: Number may differ in some states depending on definition of RPO/COG

1.2.2 Literature Review

We reviewed other recent studies of state DOT rural planning practices as well as planning and programming documents produced by the sample states. Studies reviewed include:

- *Rural Transportation Consultation Processes*, prepared by the National Academy of Public Administration, prepared for FHWA, April 2001.
- “Planning for Transportation in Rural Areas”, FHWA Internet report, available at <http://www.fhwa.dot.gov/planning/rural/planningfortrans/index.html>
- Rural Transportation Planning Workshops, FHWA Internet reports, available at <http://www.fhwa.dot.gov/hep10/state/rural.html>
- Transportation Toolbox for Rural Areas and Small Communities, USDA Internet report, available at <http://ntl.bts.gov/ruraltransport/toolbox/index.cfm>

State DOT documents reviewed include:

- Statewide transportation plans (including strategic and modal plans, if applicable)
- Documentation of public outreach efforts
- STIP and/or state DOT work program
- State DOT planning guidance documents

1.2.3 Identification of Topic Areas

Following a preliminary literature review, we identified five topic areas on which to focus the interviews and other research. These topic areas were known to be of interest to the study review panel and served as a natural structure around which to organize the interviews. As described above, the topic areas are:

- State and RPO roles in rural transportation planning
- Public participation in rural areas
- Serving the transit dependent in rural areas
- Linking transportation and land use in rural areas
- Linking transportation and economic development in rural areas

We then developed a discussion guide to use in our interviews of state DOT staff and other state, regional, and local officials, organized around five topic areas. Under each topic, we formulated two or three broad questions and numerous “prompts” to be used to direct the conversation.

1.2.4 State DOT Interviews

We conducted detailed telephone interviews with state DOT staff in each of the sample states. These preliminary interviews covered all five topic areas and typically lasted from 60 to 90 minutes. We initially contacted the planning director in each state DOT to notify him or her of the study and to request an interview with the most appropriate DOT staff members. In most cases, the interviewee was a state DOT planner specializing in rural area issues. Many state DOTs arranged for multiple staff to participate in the interview in order to answer questions in each of the topic areas.

1.2.5 Follow-up Interviews

Following the more formal state DOT interviews, we conducted numerous shorter interviews with staff of state, regional, and local agencies in order to gain different perspectives and learn more about specific topics. For example, in all states that formally involve RPOs in the planning process, we interviewed the executive director or planner from one or more RPO. We interviewed many state DOT district staff to better understand their role vis-à-vis the DOT headquarters and their relationships with local and regional agencies. To assess rural transit issues, we typically interviewed staff at the state DOT transit division. Economic development issues were explored through interviews with state commerce department staff or with RPOs actively engaged in rural economic development.

1.3 Report Organization

The remainder of this report is organized in six sections. Sections 2 through 6 map to the five topic areas. In each of these sections, we describe the current practice in each sample state, best practices, and challenge and areas for improvement. Section 7 is a discussion of general conclusions. An appendix lists the study interviewees.

2 STATE AND RPO ROLES IN RURAL TRANSPORTATION PLANNING

2.1 Summary of Current Practice

While metropolitan transportation planning has long been the domain of MPOs and funding for metro areas is increasingly being devolved to the MPO level, rural planning remains largely in state DOT hands. All states are required to develop statewide transportation plans, and these plans are intended to address (among other things) the transportation needs of rural residents. State DOTs also typically lead the development of the statewide transportation improvement program (STIP) outside metro areas.

Federal regulations provide little concrete guidance for state DOTs conducting rural planning. ISTEA was largely mute on the topic; TEA-21 calls for enhanced consultation with rural local officials and encourages states to use existing RPOs to facilitate the participation of elected officials. Given this leeway, it is perhaps not surprising that state DOTs conduct transportation planning and programming for rural areas using a wide variety of approaches. Over the last decade, a number of states have experimented with delegating some rural transportation planning responsibility to regional planning organizations (RPOs) or local governments. Other state DOTs retain a more traditional centralized approach that they consider to work well.

This section presents an overview of state DOT rural planning methods in the eight sample states. It includes a brief discussion of the DOT structure, major state DOT planning and programming documents, and any unique state laws that affect rural planning. The discussion under each state focuses specifically on methods used to identify and prioritize transportation projects for inclusion in the STIP.

We also focus on the role of RPOs where applicable. RPOs have a formal role in rural transportation planning in five of the eight sample states and are included in the planning process in some degree in all eight states. In some states, city and county governments also have a formal role in the state DOT's rural planning process.

Table 2.1 summarizes some of the differences in rural transportation planning procedures in the eight sample states. This table, like the summary tables in other sections, is not intended to draw conclusions about best practices or areas where improvement is needed. It is included simply to highlight some of the different approaches to rural transportation planning.

Note that in this section and several of the following sections, the planning and programming processes described generally apply to the roadway system owned by the state. The last column in Table 2.1 shows that the portion of the roadway system owned by the state can vary widely, from as high as 77 percent in North Carolina to 10 percent of Florida. We generally have not attempted to assess the implications of these differences on overall rural planning and programming. Some of the RPO transportation planning processes described here do apply to more than state owned roads – for example, in states where RPOs have developed transportation plans, these plans typically address both local and state-owned facilities.

Table 2.1: Summary of State and RPO Roles in Rural Transportation Planning

	Formal role for RPOs in project prioritization	Long-range transp plans prepared for rural areas	DOT provides formal guidance for local/ regional rural planning	DOT rural planning lead (HQ or districts)	RPO planning addresses many modes	Percent of roadway system owned that is state-owned ^b
Colorado	Yes	Yes	Yes	HQ	Yes	11%
Florida	No	Yes ^a	No	Districts	N/a	10%
Maine	Yes	No	Yes	HQ	Yes	37%
Maryland	No	Yes ^a	No	HQ	N/a	17%
Missouri	Yes	No	No	Districts	Varies	26%
N. Carolina	Yes	Yes (soon)	No	HQ	Yes (soon)	77%
Ohio	No	No	No	Districts	N/a	16%
Oregon	Yes ^c	Yes	Yes	Districts	Varies	11%

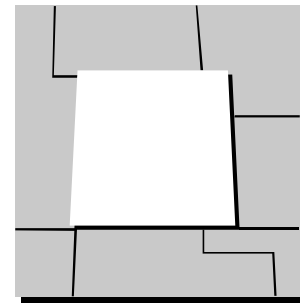
a: As an element of a county or city comprehensive plan

b: Based on centerline miles from 2002 *Highway Statistics*

c: Area Commissions on Transportation (ACTs) have a formal role; councils of government generally do not

2.1.1 Colorado

Colorado has a relatively long experience in rural transportation planning. Colorado is divided into 15 Transportation Planning Regions (TPRs); ten are entirely rural and five others include a combination of metropolitan and rural areas. Since 1991, these regions have had significant responsibilities in long-range transportation planning. The TPRs completed their first set of long-range transportation plans in 1994, and these were then updated in 1999 as a foundation for Colorado's 2020 Statewide Transportation Plan. At the time of this writing, the TPRs are developing 25-year plans that will inform the 2030 Statewide Transportation Plan.



A regional planning commission (RPC) typically guides the planning process in each Transportation Planning Region. Intergovernmental agreements between all cities and counties in the TPR form these RPCs. Colorado DOT provides TPRs with funds to assist the RPC, ranging from \$30,000 to \$75,000 per year depending on land area, population, and recent growth rates. CDOT also provides the RPCs with funds to conduct other planning activities and to hire consultants to help prepare their regional transportation plans. A Statewide Transportation Advisory Committee (STAC) reviews and comments on regional transportation plans. Each TPR has a representative who sits on the STAC.

Transportation plans developed by the TPRs play an important role in establishing statewide project priorities. Only projects that are consistent with the regional transportation plans are eligible for inclusion in the statewide plan and the STIP. However, projects identified in regional transportation plans must be further prioritized for inclusion in the Colorado's six-year STIP. For each two-year STIP update, CDOT's six districts are responsible for compiling the final list of projects, which is then submitted for approval by the Colorado Transportation Commission.

CDOT prepares a formal guidance document called the *Regional Transportation Planning Guidebook* in order to assist RPCs and consultants in preparation of the transportation plan for their regions.² The document provides step-by-step guidance on topics such as public participation, establishing goals and objectives, gathering background data, analysis methods to evaluate mobility and compare alternatives, prioritization process, and financial evaluation. The guidance for TPRs covers all systems and modes of transportation, not just highways. The TPRs address non-highway modes to varying degrees, depending on resources and the capacity of staff. Substantial consideration of non-highway modes is mainly found in TPRs close to metropolitan areas.

The Colorado Transportation Commission makes separate decisions about funds for strategic statewide projects, as well as statewide programs such as maintenance, resurfacing, the bridge program, the safety program, ITS, and CDOT's operations program.

The prioritization process can be complicated by the fact that the CDOT districts, TPRs, and the Transportation Commission districts do not necessarily share common borders. This has created concerns that TPR project prioritization may not be adequately carried forward in the STIP when the TPR is split between CDOT districts. As a result, CDOT is currently reviewing the TRP and district borders to explore options for improving the alignment.

2.1.2 Florida

FDOT district offices lead rural transportation planning in Florida, with input from counties. FDOT develops a statewide transportation plan, last updated in 2000, that establishes goals and objectives to guide transportation investments in the state. FDOT also develops an annual short-term plan for implementing its responsibilities in the statewide transportation plan. And FDOT develops an annual five-year work program, the first three years of which constitute the State Transportation Improvement Program (STIP). Local governments are required by state law to develop a project priority list annually that is, to the maximum extent feasible, incorporated into the work program.



Under Florida law, the county board of commissioners serves as an MPO in counties that are not located in an MPO, and the board is authorized to be involved in the development of the FDOT work program to the same extent as an MPO. In practice, the involvement of counties in FDOT planning varies considerably. Some counties develop an annual list of project priorities, usually after one or more public hearings, which is then submitted to one of the seven geographic FDOT district offices to be used in creating the annual five-year work program. In smaller counties, county input occurs on a less formal basis, such as the county sending a letter to the FDOT district office with notification of transportation improvement needs. The FDOT district engineers or planning staff typically maintain close contacts with the county public works staff and are supposed to be aware of current needs in each county.

FDOT districts review county project needs as well as funding priority lists developed by public transit providers in creating a draft five-year work program. Although local jurisdictions provide much of the input, the FDOT districts retain considerable authority in creating the project lists. The districts then hold public hearings to gain feedback on the draft work program. The county board of commissioners can vote to oppose the work program, although this rarely happens because FDOT works closely with the counties in developing the work program and tries to ensure an equitable allocation of funds. The Florida

² The Regional Transportation Planning Guidebook is available at <http://www.dot.state.co.us/StateWidePlanning/PlansStudies/RegionalPlanning.htm#>

Transportation Commission reviews the draft work program for compliance with applicable laws and department policies, then presents it to the public at an announced public hearing for further review and feedback. If a county has an objection to the draft work program, the county must submit this to the department district secretary and the Commission may consider the objection in its review of the draft work program.

Most transportation needs identified by counties are traffic operations and bridge projects, and nearly all are highway projects. However, nothing prohibits identification of needs for other modes, and FDOT's work program covers all modes.

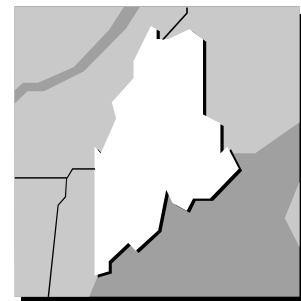
Unless otherwise stipulated by law, funding for the state highway system is allocated to districts, and to counties to the maximum extent feasible, based on a formula weighted 50 percent by population and 50 percent by gas tax receipts. For this reason, there are usually few disputes between counties over funding distribution. Rural counties that are not traversed by a Florida Intrastate Highway System facility (i.e. interstate, limited and controlled access) often receive very limited state highway capacity funds.

Counties are also required to develop a comprehensive plan under the state's 1985 Growth Management Act. Most rural counties do not have a transportation planner on staff, and some do not have even a general planner. Approximately half of the state's 67 counties have fewer than 75,000 residents and thus are eligible for state-funded technical assistance from the Florida Association of Counties. In particular, the Florida Association of Counties employs three "circuit riders" who provide management assistance to rural counties that request it. This assistance could include help updating the transportation element of a county comprehensive plan, although typically it concerns more general management issues like personnel policies or budgetary issues.

Florida's 11 regional planning councils (RPCs) do not provide direct input into the rural transportation project prioritization process, although they work closely with FDOT districts and rural counties on transportation issues.³ For example, RPCs hold contracts with FDOT to perform activities such as assessing highway LOS in rural counties or mapping bikeways. The RPCs provide some technical assistance to counties, such as writing grant applications for transportation funds or other funds. Each RPC also develops a Strategic Regional Policy Plan, which has a transportation element. This plan is required to be consistent with the local comprehensive plans and the statewide comprehensive plan.

2.1.3 Maine

Maine DOT prepares two major statewide transportation planning documents. The more visionary of the two is the 20-year Transportation Plan. This is a policy document that builds on goals put forth by Maine's MPOs and rural regions and incorporates a variety of modal specific planning efforts, such as the Strategic Passenger Transportation Plan, bicycle and pedestrian plans, a freight plan, and the Maine Turnpike Authority 10-year plan. The other major planning document is the six-year Transportation Improvement Plan. This is a relatively new document intended to improve the link between the long range policies of the 20-year plan and Maine's two-year project programming document, known as the Biennial Transportation Improvement Program (BTIP). The Maine DOT's STIP includes the current BTIP, as well as projects not completed from the previous BTIP.



³ Links to Florida's RPCs are available at <http://www.ncfrpc.org/state.html>

Maine's rural transportation planning is informed by seven Regional Transportation Advisory Committees (RTACs). These RTACs were created as part of the voter-enacted Sensible Transportation Policy Act of 1991. RTACs are advisory to Maine DOT and bear responsibilities for planning and public outreach activities in all areas outside of Maine's four MPOs. These committees represent rural interests to Maine DOT by conducting public involvement activities, prioritizing projects, advising Maine DOT on social, environmental, and land use issues, and commenting on whether proposed projects are significant and of substantial public interest. RTAC members are appointed by the head of the State Transportation Commission and include municipal government staff (city managers, planners, engineers, or public works superintendents) and citizen volunteers (environmentalists, business representatives, alternative modes advocates, and other stakeholders).

One of the key roles of the RTACs is to give input on Maine DOT's transportation policies and project priorities, while providing a forum for public input. RTAC policy priorities and concerns are communicated through Regional Advisory Reports prepared by each RTAC every three years with technical support from Maine DOT. A Regional Advisory Report includes general information about the RTAC region and an enumeration of recommended policy changes, major projects, or studies for the region.⁴ These serve to inform both the 20-year and 6-year statewide transportation plans. Regional Advisory Reports address transportation concerns for both state and locally owned roads.

RTAC project priorities are developed using a sophisticated prioritization process. To begin, RTACs gather project requests from municipalities within the region. The RTAC reviews this list, adding or removing projects through a consensus process. These projects feed into the 6-year Plan and represent the list of projects that are prioritized for the BTIP.

The BTIP prioritization process uses scoring sheets that weight various scoring criteria in accordance with RTAC priorities. For example, the economic development score could be weighted at 30 percent, and environment score could be weighted at 10 percent, with all criteria weights totaling 100 percent. Maine DOT provides general guidelines on how to conduct this scoring process, which has been taken to even more advanced levels by some RTAC regions. Once the RTAC scoring is complete, it is balanced by Maine DOT's own project prioritization. The RTAC priorities carry more weight for lower functional class roads. Projects priorities for each region can be funded according to the total budget allocated to that region.

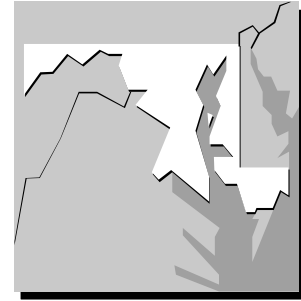
Maine allocates funds to areas based on a statewide assessment of need, as opposed to population-based, jurisdiction-based, or return-to-source distribution methods. Maine DOT continues to refine mechanisms for statewide needs assessment.

The seven Maine DOT maintenance divisions closely mirror RTAC boundaries. In general, the Maine DOT maintenance division leadership is heavily involved with planning and project prioritization, and engages with RTACs on a regular basis. Maine's county governments are relatively weak, so RTACs and Maine DOT maintenance divisions have a particularly important role in transportation planning. Some coordination challenges arise as a result of the limited number of cases where boundaries of the RTACs and the Maine DOT maintenance divisions do not align.

⁴ Regional Advisory Reports are available on the Internet at <http://www.state.me.us/mdot/planning/planningdiv/rars.htm>

2.1.4 Maryland

Maryland DOT's planning process is more centralized than most other states included in the study sample, partly as a result of the state's relatively small size and few counties. The state's 23 counties are grouped into seven State Highway Administration (SHA) districts; 15 counties are considered rural. Each SHA district has a district engineer who maintains a close relationship with county commissioners and local government staff. The SHA districts do not have planners and do not generally perform planning functions.



Rural highway investment priorities are largely determined through the development of three documents, all required by state law. One is the Highway Needs Inventory, a 20-year compilation of major highway deficiencies by county that get fully updated every three years. This document is not fiscally constrained and involves no commitment to project implementation. However, only projects listed in the Highway Needs Inventory are considered for funding. The document is developed by SHA headquarters working closely with the SHA district engineers, county planning directors, and local elected officials.

The second important document is called the Secondary Highway Program Priorities Letter. Each county submits an official priority letter to SHA, some annually, some less frequently. The letter is intended to identify investment priorities for the secondary highway system, although many counties use this as an opportunity to identify priorities for all highways as well as public transit. District planners in SHA headquarters then use the county letters to develop a list of candidate priority projects for each district.

The third document is the six-year Comprehensive Transportation Program (CTP), updated annually. The CTP is developed by SHA headquarters, based on input from SHA district engineers, county planners and public works directors, and elected officials. Once the draft CTP is ready, it is circulated to the counties for review. The Secretary of Transportation, together with senior DOT managers, then conducts an annual tour of all 23 counties to discuss the CTP and hear local concerns. This tour usually occurs over the months of September to November. Comments on the draft CTP are received during the tour, although much of the local input is received earlier and incorporated into the draft. Once the CTP is finalized, it is submitted to the Governor and Maryland Assembly for approval.

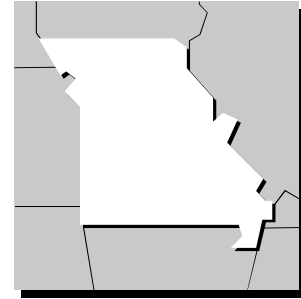
All counties in Maryland are required to develop a comprehensive plan, which includes a transportation element. SHA reviews these plans when updating the Highway Needs Inventory to ensure consistency. Most rural counties do not have a transportation planner on staff, although all have general planners. The county planning director and public works director (or county roads director) are the two local staff members most responsible for representing the county in transportation planning functions, and usually maintain close relationships with the SHA district engineer. The development of the comprehensive plan may also assist counties in identifying transportation needs that are then included in the county project priority list submitted to SHA.

Most rural counties in Maryland have formed tri-county councils to help address regional issues. These councils do not have a formal role in Maryland's rural transportation planning and programming process. However, some of these councils are active in transportation issues. The Tri-County Council for Southern Maryland, for example, has developed a 10-year transportation plan called the Regional Transportation Strategy. This Strategy lays out a set of five transportation goals for the region, identifies transportation and economic trends, and presents a list of potential transportation improvements to be studied and implemented. The Council also performs regional transit service coordination and provides commuter

assistance. In contrast, some other regional councils in the state have little involvement in transportation issues.

2.1.5 Missouri

The Missouri DOT (MoDOT) performs rural transportation planning with substantial input from the state's regional planning commissions (RPCs). MoDOT updates their five-year STIP annually. Approximately 21 percent of state roadway user fees are allocated to cities and counties by state law. Of the total funds available to MoDOT for bridge and highway construction, \$60 million is dedicated to the improvement of major rural intercity corridors, and the remainder is allocated to the ten MoDOT districts by formula. In the five MoDOT districts that contain both urban and rural areas, the distribution of funds between urban and rural areas has been a source of controversy, and the state is currently exploring options to de-politicize highway fund distribution in these districts.



Missouri has 19 RPCs, each comprising between four and 11 counties.⁵ Prior to 1993, the RPCs had no role in transportation planning. In 1993, MoDOT empowered the RPCs with some limited transportation responsibilities, including the formation of a Transportation Advisory Committee (TAC). RPC responsibilities were expanded significantly in 1995 to include the development and implementation of an annual work program, consisting of tasks such as project prioritization, public relations, technical assistance, professional development, and cooperation with MoDOT. Each RPC currently receives \$38,000 from the state annually to carry out the work program, with RPCs providing a 20 percent local match.

Rural transportation needs in Missouri are identified through a combination of input from the TAC, the RPC's own outreach, and outreach by MoDOT districts and headquarters. In the mid-1990s, all RPCs were asked to develop project prioritization criteria. With input from the TAC and the public, each RPC assigned initial weights to project ranking factors identified by MoDOT – factors such as safety, system preservation, economic development, connectivity, and congestion relief. The weighting schemes have differed across RPC, reflecting regional differences within the state, although safety and economic development are typically the top two factors. Each RPC then applies these criteria to a list of candidate projects. MoDOT districts use the summed scores to rank projects for STIP input. The initial RPC prioritization of projects created a backlog that has guided STIP development for several years. This year, RPCs are being asked to revisit their prioritization methods and refresh their project rankings. Although other modes are not excluded, most RPCs have focused their planning exclusively on highway modes.

RPCs work closely with MoDOT districts in carrying out most transportation planning functions. Most RPCs are unable to employ a full-time transportation planner, so they use their existing staff to perform some transportation duties and rely on district staff for other tasks. Typically, MoDOT districts take the lead on tasks that require transportation engineering skills (pavement condition, bridge structural issues, demand forecasting) and RPCs take the lead on transportation tasks involving economic development, land use, public outreach, etc.

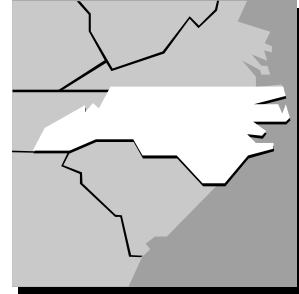
MoDOT is currently in the process of refining the rural planning process and better defining the responsibilities of MoDOT districts and the RPCs. Although the current system is considered quite successful, there is general agreement between MoDOT and the RPCs that a more structured overall framework will help to ensure consistency from year to year. There is also recognition that in some

⁵ Links to Missouri's RPCs are available at <http://macog.mala-rcf.org/default.htm>

regions, MoDOT needs to consider TAC and RPC input earlier in the programming process to allow for more meaningful local involvement. MoDOT would like to see the RPCs strengthen their capabilities and take on more responsibility so that, within the next several years, each can produce its own regional transportation plan. At least one RPC has already achieved this goal.

2.1.6 North Carolina

North Carolina DOT updates a seven-year STIP every two years. The North Carolina Board of Transportation is responsible for selecting projects for STIP inclusion. Each Board of Transportation member represents a division. During the STIP update process, a series of public meetings are held in which potential projects are presented to the Board of Transportation member in that division. NCDOT's Statewide Planning Branch provides technical assistance to rural areas in order to help them assess needs and prioritize projects. Local elected officials then advocate for projects to their Board of Transportation representative.



The Board of Transportation is responsible for balancing funding priorities between urban and rural projects. North Carolina's equity formula is intended to ensure balance throughout the state, requiring that one-third of all state and federal transportation funds (except for urban loop funds) be divided equally among seven different regions, with the remaining two-thirds being divided on the basis of population.

In 2000, NCDOT initiated the development of rural transportation planning organizations (RPOs) throughout the state in order to involve rural areas more directly with transportation planning and decisions.⁶ The 20 RPOs have now been organized, covering all of the state's 100 counties and responsible for all areas outside MPO boundaries. Most RPOs are administered from existing councils of government offices. RPOs were formed locally, with some guidance from NCDOT. North Carolina General Statutes required that each RPO include a minimum of three counties and have a population over 50,000.

The role of the RPOs and their interaction with NCDOT is still evolving. As established in state law, RPO duties are designed to mirror many duties of the MPOs. Four core RPO duties are:

1. Develop long-range local and regional multi-modal transportation plans;
2. Provide a forum for public participation in the transportation planning process;
3. Develop and prioritize suggestions for transportation projects for the STIP; and
4. Provide transportation-related information to local governments and other interested organizations and persons

The more advanced RPOs are currently at the stage of building the staff and data capacity required to conduct long range transportation planning. Some have reached the stage of conducting integrated corridor planning and have assisted local governments with Transportation Enhancements applications. RPOs may address either state or locally owned roads, although the majority of North Carolina roads are owned by the state.

NCDOT has prepared a template intended to guide the RPOs in developing their Prospectus for Continuing Transportation Planning. This guide assists RPOs in identifying and organizing a work program to survey, monitor, and conduct long range planning for multiple transportation modes. The guide highlights statewide objectives that should govern RPO planning as well as state and federal

⁶ For documents describing this process see <http://www.ncdot.org/planning/rpo/>

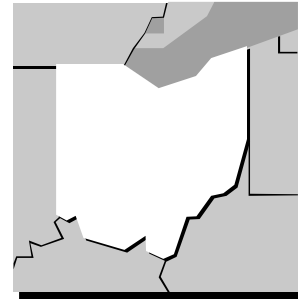
policies on key planning issues such as public participation and environmental justice. All RPOs have submitted such a Prospectus to NCDOT.

NCDOT supports each RPOs with annual state funds of \$80,000 to \$100,000 (annually adjusted for inflation), and local jurisdictions provide a 20 percent match. These funds typically support one new staff person plus other planning activities. Funding has also been provided to the NCDOT Statewide Planning Branch for ten new positions to support the RPOs. NCDOT provides the local matching funds to economically distressed counties, and has also been proactive in securing private grants from the Rural Center of North Carolina to assist RPOs in meeting their fund matching requirements. NCDOT's transit section also provides \$16,000 per RPO in matching funds to develop consistent GIS capabilities.

RPO boundaries do not correspond with 14 NCDOT highway division boundaries. This has not caused complications to date, since NCDOT divisions are primarily responsible for operations and maintenance, with minimal involvement in long-range planning. However, Board of Transportation representation is also based on NCDOT divisions. These governor-appointed Board members are expected to represent their constituents in the project selection process, creating the possibility that boundary differences may cause challenges as RPOs take a more active role in project prioritization.

2.1.7 Ohio

Ohio DOT divisions coordinate with county planning commissions to conduct transportation planning for most of non-metropolitan Ohio. Each of Ohio DOT's 12 districts has a planning office with a large planning staff. These planners are expected to communicate with regional development organizations, attend county planning commission meetings, and generally keep abreast of other planning activities in the district. Most districts serve between seven and nine counties; one DOT district member typically sits on each county commission.



Ohio DOT prepares the statewide transportation plan, called Access Ohio. This plan discusses a number of rural issues including analysis of safety problems, pavement/bridge reconstruction needs, and multi-modal issues such as rail/bike trails in rural areas. However, rural transportation planning goals are not generally discussed on a statewide basis, but rather through the corridor planning process that is part of Access Ohio.

RPOs do not have a formal role in Ohio DOT's rural planning process. RPOs do receive some funding from Ohio DOT and may review and comment on the STIP and transportation plans. Ohio DOT district staff members attend RPO meetings to provide updates on Ohio DOT projects. Some of the more active RPOs assist Ohio DOT with project implementation. Three RPOs in particular are actively involved in regional transportation issues.⁷ Ohio DOT also coordinates with the Appalachian Region Council (ARC) for planning in the southeastern part of the state. ARC wields some authority as a regional body because it has significant funds to conduct planning and fund projects. In some other areas, rural transportation planning issues are addressed through coordinated county planning commissions, in which two or more counties hold joint meetings to address cross-boundary planning. One example of this is Logan and Union Counties in central Ohio.

⁷ These are the Buckeye Hills-Hocking Valley Regional Development District, the Ohio Valley Regional Development Commission, and the Ohio Mideastern Governments Association.

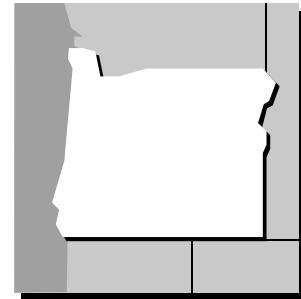
Ohio's Transportation Review Advisory Council (TRAC) conducts statewide prioritization for all "major new capacity projects," defined as projects that add new capacity and cost more than \$5 million.⁸ The TRAC has nine members, six appointed by the governor, two by the state legislature, and one by Ohio DOT. The TRAC is intended to serve as a citizen board that is independent of Ohio DOT. Rural areas propose major new projects to the TRAC through Ohio DOT districts, county and municipality officials, and county engineers. The TRAC scores these projects based on safety, congestion relief, economic development, and intermodal connectivity, then forwards priority lists to the state Transportation Commission for consideration for funding. The TRAC is required by law to publish the methodology used to prioritize projects. While the funds may be used for any transportation project that meets TRAC objectives, TRAC places a priority on state and federal highways.

The TRAC discourages members of the general public from nominating projects, preferring that they work through their local governmental entity to ensure that the project is consistent with local plans. In the previous statewide planning effort, Ohio DOT was overwhelmed by the number of requested projects, many of which lacked adequate justification for funding. During the current statewide planning effort, Ohio DOT is attempting to make it clear to counties how factors such as road hierarchy and delay are critical in prioritization.

Ohio municipalities have significant transportation responsibilities for maintenance and operation of state transportation systems. Home rule regulations state that any road passing through a city, even a state highway, is the city's responsibility. Ohio's paving policy requires the upgrade of state routes with 80 percent state funds and a 20 percent local match every 10 years. Some municipalities have difficulty providing the match. Ohio counties are responsible for the state's two-lane general road system. Beginning in 1998, Ohio DOT began a program that allocates \$19 million dollars per year to counties through the County Engineers Association of Ohio. These funds are used exclusively for federal-aid eligible local roads. Based on city and county input, the County Engineers Association prioritizes how these are spent.

2.1.8 Oregon

Rural transportation planning in Oregon is conducted through a combination of Oregon DOT regional offices, Area Commissions on Transportation, and local jurisdictions. Oregon's 1991 Transportation Planning Rule requires the development of a 20-year Transportation Systems Plan by all counties with more than 25,000 residents and cities with more than 10,000 residents. These plans are expected to provide long range direction for the development of local transportation facilities and services for all modes, provide a framework for prudent and coordinated transportation investments and land use decisions, and provide a linkage to the STIP process. Oregon DOT's 2001 *Transportation System Planning Guidelines* provide detailed, step-by-step guidance for local jurisdictions in the preparation or update of transportation system plans.⁹



Oregon's Statewide Planning Goals specifically address the needs for transportation facilities in rural areas. The Oregon statewide Transportation Plan (1992) has numerous objectives for improving rural economies and livability, although Oregon DOT staff has noted that the plan does not create a vision that can be easily translated into actionable steps. The statewide plan is in process of being updated, with a goal of retaining the vision but providing more detail on implementation steps.

⁸ The TRAC Internet site is <http://www.dot.state.oh.us/trac/>

⁹ Available on the Internet at <http://www.odot.state.or.us/tdb/planning/tsp/index.htm>

The Oregon Transportation Commission called for the creation of Area Commissions on Transportation (ACTs) in 1996 in order to provide an improved regional forum for the discussion and coordination of transportation issues. The 11 ACTs and five Oregon DOT regions focus primarily on the state transportation system, while city and county governments are responsible for recommending projects for the county road system outside of MPO areas. Oregon DOT funds the area manager for each ACT and funds some COGs with approximately \$15,000 per year to provide administrative support. ACTs are composed of public sector officials (from cities, counties, ports, transit agencies, and Oregon DOT) and citizens or advocacy group stakeholders.

Projects priorities are updated every two years in Oregon's 4-year STIP. Oregon DOT regional offices coordinate the identification of needs and project prioritization. The regions maintain a database with project requests from corridor, county, and city plans. ACTs work with Oregon DOT regions to prepare project priority lists for approval by the Oregon Transportation Commission. Projects are prioritized by formula, with key criteria being functional class, traffic volume, and safety. Some regions have recently become more quantitative in their prioritization process, particularly for highway modernization, bridge, and safety projects. There is a growing trend in rural areas to incorporate prioritization criteria that account for rural connectivity and economic development. One Oregon DOT region effectively developed criteria to identify when a route is critical for the basic needs of the regional economy in a rural area, and incorporated this into the project prioritization process. Oregon DOT is now considering this as a statewide policy.

To promote better coordination at the project implementation level, Oregon forms Regional Community Solution Teams with representatives from five state agencies—Housing, Economic Development, Land Conservation and Development, Environmental Quality, and Transportation. Ten of these teams have been created to date, meeting regularly with local groups to resolve development and planning problems, streamline permitting, leverage resources, and integrate investments. Citizen advisory committees, comprised mostly of people who are directly affected by a project, provide input to the teams.

2.2 Best Practices

Our review of the state and RPOs roles in rural transportation planning identifies some practices that appear to be particularly effective and could serve as models for other states. The best practices we have identified come from the four states in our sample that have experience incorporating RPOs in rural transportation planning. We do not intend to suggest that a formal role for RPOs is required to constitute a best practice. But it is clear that among sample states, those that have involved RPOs have improved their process for identifying rural transportation needs and prioritizing projects that address these needs in the STIP by making the process more systematic, inclusive, and transparent.

Missouri's empowerment of regional planning commissions is a good example of using existing RPOs to enhance local involvement in rural transportation planning. Although it has taken several years for some RPCs and MoDOT districts to get used to the structure, both MoDOT and the RPCs agree that the system is a success. A decade ago, there was essentially no local involvement in developing rural transportation spending priorities with the exception of occasional MoDOT public hearings. Now most regions have in place a broad process to involve rural communities in transportation decision making. Evidence of the success can be seen in the fact that two RPCs that had been inactive recently became active again because of the recognized value in contributing to the rural transportation planning process.

Colorado DOT provides exceptionally detailed and useful planning guidance for the state's Transportation Planning Regions (TPRs).¹⁰ The guidance includes extensive descriptions of how to gather

¹⁰ For CDOT's TPR guidance, see www.dot.state.co.us/StateWidePlanning/PlansStudies/RegionalPlanning.htm

information, conduct public involvement, and organize the plan. The guidance also includes detailed suggestions for TPRs regarding methods for project prioritization, including examples of project scoring sheets and advice on how scoring criteria can be weighted and combined in a consistent and transparent fashion. The guidance also includes suggestions for improvements that are generated in the CDOT's debrief workshops held following the adoption of a statewide transportation plan. Many of the TPRs appear to have followed this guidance, which contributes to highly transparent project prioritization processes.

Maine has effectively created a stronger link between transportation planning and programming by developing a six-year transportation plan in addition to a more visionary 20-year plan. Maine DOT strictly adheres to its policy that the 6-year plan should function as the source of projects for the Biannual Transportation Improvement Program (BTIP). As a result, elected officials and stakeholders are increasing coming to realize the importance of participating in the six-year planning process.

Maine's six-year plan describes the method used to prioritize candidate projects. For each area, the Regional Transportation Advisory Committee (RTAC) and the DOT district are given the same number of points to vote on project priorities. Each body allocates these points to candidate projects in accordance with their assessment of the project's importance. In order to help the RTACs develop their own project priorities, the DOT provides them with scoring criteria such as consistency with local comprehensive planning and economic development potential. Each RTAC assigns weights to these factors in order to score projects and develop their priority list. When the RTAC and DOT district priorities are combined, the RTAC's prioritization points are weighted more heavily for local roads and DOT district's points are weighted more heavily for major roads. Maine DOT then completes the prioritization process using the weighted scores, along with the RTACs comments on the draft list.

The RTAC *Regional Advisory Reports* present another opportunity for rural areas to influence state transportation decisions in Maine.¹¹ These reports include well-framed discussions, covering all modes, of the transportation context, priorities, and vision for the region's future.

Oregon requires all counties with more than 25,000 residents and cities with more than 10,000 residents to create a 20-year Transportation Systems Plan. This process encourages local governments to establish short- and long-term, multimodal transportation goals, thereby providing a valuable source of input for the statewide planning and programming process. Oregon DOT has developed step-by-step guidance for local jurisdictions in the preparation or update of these plans.¹²

Problems with bridges in Oregon have led the state to develop innovative rural project prioritization systems. Oregon's bridges are suffering premature cracking because of a design flaw that dates from the 1960s, a problem made worse by increased traffic. Approximately 600 bridges are now in serious condition. In prioritizing routes for critical repairs, Oregon DOT sought to identify key east-west and north-south routes. Oregon DOT District 5 was able to identify communities whose economy would be devastated by even short-term loss of freight access and assign a higher priority to bridges providing access to these towns. The District also incorporated a "freight gap factor" that prioritizes projects if they eliminate the sole remaining restriction on a route that is otherwise posted for a higher load.

¹¹ Maine's Regional Advisory Reports are available on the Internet at <http://www.state.me.us/mdot/planning/planningdiv/rars.htm>

¹² Available on the Internet at <http://www.odot.state.or.us/tdb/planning/tsp/index.htm>

2.3 Challenges and Areas for Improvement

Some state DOTs do not appear to apply project prioritization criteria in a systematic and transparent manner when developing their STIP for rural areas. States may develop their STIP primarily in the state DOT headquarters, relying on informal input from their district staff, local governments and elected officials, and possibly the public. Other states may develop a STIP that is largely a compilation of locally-formulated priority lists. Either approach can work well as long as the system used to assign priorities is fair, open, and ultimately reflects the desires of the public. The interviews conducted for this study suggest that one way to improve rural project prioritization is to create a system for ranking projects, solicit comments on the system and modify it as necessary, then apply the system consistently. If state DOTs choose to delegate project prioritization to RPOs or local governments, they can still maintain the same standards of transparency and consistency.

States can improve planning for rural areas by more specifically addressing rural issues in their long range planning documents. Other than routine lists of deficient bridges and pavements, many state DOTs include only limited discussion of rural transportation needs and improvement strategies in their statewide planning documents. The statewide transportation plan is a logical document in which to discuss broad objectives for rural areas, but many statewide plans contain only general statements about vision, goals, and policies and do not specifically address rural areas. Some states note that RPOs or local governments have been delegated with conducting rural needs assessments and development of improvement strategies, and this is certainly an appropriate level at which to address specific local issues. But DOTs should also consider rural needs on a statewide basis. In doing so, DOTs are likely to identify some specific issues that are common to most rural residents and that would be best addressed in the context of the statewide transportation plan.

For states that use RPOs to assist with rural transportation planning and programming, the mismatch between RPO and DOT district boundaries can potentially make rural planning more challenging. This is particularly true when an RPO lies in more than one DOT district. In Missouri, for example, many RPCs lie in more than one MoDOT district; one RPC actually lies in four districts. This arrangement can make it more difficult for RPOs to effectively promote a locally developed package of priorities. The RPO is forced to advance their regional transportation vision before two or more districts. If the trend toward delegating more transportation planning authority to RPOs continues, this mismatch problem will become more acute. A solution would be to realign RPO or DOT district boundaries so that every RPO lies entirely within one district. However, most states note substantial challenges to such boundary changes. Realigning RPO boundaries can be difficult because the organizations were often established prior to gaining transportation planning functions and their boundaries may reflect commonly recognized geographic regions. Realignment of state DOT district boundaries is also difficult because the districts have often been in existence for decades and have systems and infrastructure in place to most effectively serve particular geographic area.

In states that rely on RPOs for transportation planning, the rural planning process could be further strengthened by providing more resources and guidance to the RPOs. While some RPOs have fully embraced DOT mandates and gone beyond what was expected of them, others have done much less. One reason for this is that RPOs often have inadequate resources to properly complete all that is expected of them. Some RPOs are reportedly unmotivated to get heavily involved in transportation planning if they know they don't have the funding to do it right. State DOTs should also provide more guidance to RPOs in the form of training and resource documents in order to strengthen RPO planning capabilities. Capacity-building is particularly important in some of the RPOs that are plagued with high staff turnover.

3 PUBLIC PARTICIPATION IN RURAL AREAS

3.1 Summary of Current Practice

As with project prioritization methods, approaches to public participation in rural areas vary widely between states. Many state DOTs acknowledge difficulty in obtaining input from rural residents unless there is a specific and controversial project under consideration. One reason for this is sheer numbers – low population density makes it harder to hold public meetings or otherwise engage rural residents face to face. In addition, many rural areas have fewer organized citizen groups that, in metropolitan settings, can function to mobilize greater public involvement.

Clearly these barriers can and have been overcome. States have had success in rural public involvement by proactively soliciting input outside of public meetings, by working with RPOs who have close ties to rural communities through their non-transportation activities, and by using focus groups of rural stakeholders organized around specific issues or corridors. At least one state DOT reports that reaching rural residents can sometimes be easier than reaching urban residents because the rural media is more likely to report on state DOT activities. Table 3.1 summarizes some of the differences in rural public involvement techniques in the eight sample states.

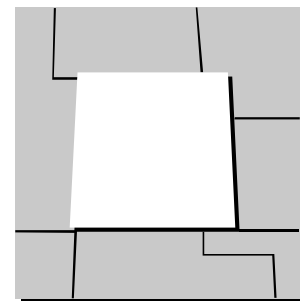
Table 3.1: Rural Public Involvement Approaches in Sample States

	DOT uses RPOs to assist with public outreach	DOT guidance on conducting rural public involvement	DOT study or monitoring of rural public involvement efforts	Specific initiative to reach low-income or minority rural residents
Colorado	Yes	Yes	Yes	Yes
Florida	No	No	No	No
Maine	Yes	Yes	No	No
Maryland	No	No	No	No
Missouri	Yes	No	No	No
N. Carolina	Yes (soon)	No	No	No
Ohio	Yes (some)	No	Yes	No
Oregon	Yes ^a	Yes	No	No

a: Area Commissions on Transportation (ACTs) assist with public outreach; COGs may provide staff to ACTs

3.1.1 Colorado

CDOT's Transportation Planning Regions (TPRs) are expected to actively pursue public comment in rural areas. TPRs hold public meetings for at least three stages of the planning process: 1) vision development, 2) development of the preferred plan, and 3) draft plan. CDOT monitors the extent of public participation in rural areas, estimating that less than two percent of the public and 50 to 60 percent of local elected officials provide input to the process. CDOT maintains a database for each of the TPRs that includes individuals and organizations that have expressed interest in



transportation planning. In this way, CDOT is able to provide assistance with direct mailing on request.

CDOT's *Regional Transportation Planning Guidebook* includes public involvement guidance (*Guidelines for Public Participation in Statewide Transportation Planning and Programming*) for TPRs and recommends preparing a chapter in the regional transportation plan that describes the public participation process used in the development of the plan. The *Guidebook* also suggests including an appendix to the plan documenting public meetings held, including meeting minutes, sign-in sheets, a list of responses to significant issues raised at the meetings and during all document review and comment periods, and the response to those issues.

CDOT evaluates public involvement based on the number of meetings held and attendance at those meetings, the number of comments received, and other means such as interviews and surveys that are employed to gather public perspective. CDOT also conducts surveys to assess whether people feel they are adequately involved in the process. In the past, these surveys were sent to people that were already on the CDOT mailing list – an approach that may miss the perspective of people who are entirely unaware of opportunities to be a part of the planning process. A new survey was recently sent to 1200 citizens selected through means other than the current CDOT mailing list and includes good rural representation.

The 2020 Statewide Transportation Plan includes a summary of the number of attendees and comments received at each of the MPO and TPR open houses for the plan. It shows significant attendance in rural areas, although most comments received came from the Greater Denver Area. CDOT and the TPRs generally do a careful job of responding to public comments. The 2020 Statewide Transportation Plan and several of the rural regional transportation plans include substantive summaries of comments received from the public.

The *Guidelines for Public Participation in Statewide Transportation Planning and Programming* provides advice on ways to reach traditionally underserved populations including low-income, minority, and people who are not proficient in English. CDOT also includes numerous agencies that represent low-income and minority groups on their mailing list. CDOT relies on the districts and TPRs to locate additional organizations that can help engage minority and low-income communities in the planning process. CDOT is currently preparing a research study on how to better address environmental justice. Approximately 12 percent of Colorado's non-urban population is poor and seven percent is minority.

3.1.2 Florida

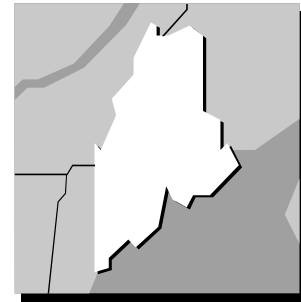
The primary opportunity for rural citizens in Florida to influence transportation investment priorities is through their county elected officials, who convey needs to FDOT districts. By Florida law, all county commissioner meetings are open to the public, and some counties have a meeting each year devoted to developing a project priorities list. A second opportunity comes when FDOT holds public hearings on the draft five-year work program. As described in Section 2, the Florida Transportation Commission also holds a public hearing on the draft work program.



Other public involvement is achieved during the development of the county comprehensive plan primarily through public hearings. Finally, the development of the statewide transportation plan always involves some outreach to rural residents by FDOT. Stakeholders from rural counties and rural county associations were included on the Steering Committee and technical subcommittees that directed the update of the most recent plan update.

3.1.3 Maine

Maine's RTACs were founded primarily for the purpose of improving public involvement in transportation decision-making. The voter referendum that resulted in the Sensible Transportation Policy Act occurred in response to a Maine Turnpike widening that much of the public believed had inadequate public review. The Act specifically requires enhanced public involvement in all Maine DOT activities. Since RTACs are a fundamental part of Maine DOT's public involvement approach, rural areas are well represented.



The purpose of the RTACs is to provide early and effective input into Maine DOT's transportation planning process. All RTAC meetings are open to the public, and agendas and meeting minutes can be sent to any interested individual. RTACs are also charged with advising Maine DOT on the best approaches for public involvement within its region. For any project that requires NEPA environmental review, Maine DOT will propose a public involvement process to the appropriate RTAC, and the RTAC will approve the process or recommend changes.

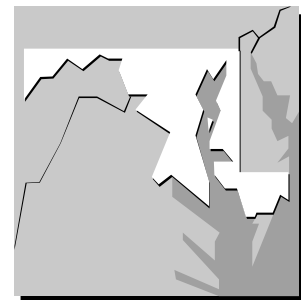
Maine DOT and RTACs also use focus groups to achieve sustained public involvement for certain specific issues. The freight focus group, traveler information advisory committee, and several specific corridor committees all draw great interest from rural stakeholders and have served as an efficient way for members of the public to engage meaningfully on these issues.

Maine DOT recently published a Draft Public Involvement Plan that presents a review of public involvement policies and requirements, lists contact information for various agencies and committees that may be of use for citizens interested in getting involved, and describes the range of activities that the DOT undertakes to promote public involvement. The guide does not provide advice to agencies for how to overcome the challenges of rural public involvement. Maine DOT reports that the most successful public input has occurred when DOT representatives have attended meetings of local community groups in order to present information and get feedback. This is especially true in rural areas where distance can be a significant deterrent to public attendance.

RTACs report on their own public involvement processes and findings in Regional Advisory Reports, described in Section 2. Several of the RTACs conduct public surveys and provide detailed accounts of the number of participants involved in developing the RTAC's priorities.

3.1.4 Maryland

Public input in Maryland's rural transportation planning and programming processes is accomplished in an unstructured manner through contact with local elected officials and county staff. As described in Section 2, counties develop lists of project priorities that are submitted to the State Highway Administration (SHA) for funding consideration. These priority lists typically originate with county planning staff and a planning commission, and are modified and finalized by county commissioners. The public may influence the priorities list by directly contacting county planning staff or a commissioner, or by speaking at a meeting of commissioners.

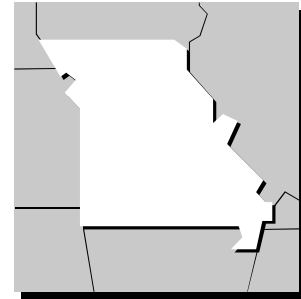


There tends to be more direct public involvement in the development of the required county comprehensive plans. These plans include a transportation element, and during the comprehensive plan development counties may identify both short-term transportation needs and long-term objectives for the

region. Members of the public provide input to the comprehensive plans in public hearings, outreach by county planning staff, and through contact with local elected officials and staff.

3.1.5 Missouri

MoDOT facilitates public participation in rural transportation planning through the RPCs and the MoDOT district offices. One of the primary functions of the RPCs is the formation of a Transportation Advisory Committee (TAC). Members of the TAC are mostly local elected officials – mayors, county supervisors, or their designates (often public works directors). Most TACs also have several citizen members, and may have representatives from freight companies, universities, etc., depending on the major stakeholders in the region. TACs typically meet quarterly.

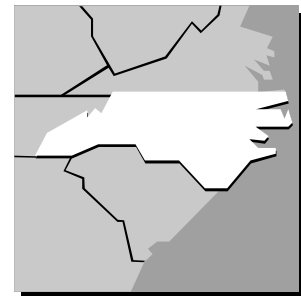


In addition to the TACs, RPCs lead other public involvement efforts, although the extent of these efforts varies widely around the state. The most active RPCs have used tactics such as a periodic newsletter, a monthly radio program, and public meetings in each county (for major decisions).

MoDOT implements a number of other outreach methods in both rural and urban areas. They have found public meetings to be largely ineffective unless they are held to discuss a specific (and controversial) project. For long range planning input, they have moved toward more informal outreach using displays at public gatherings like county fairs and sporting events. MoDOT also has a toll-free number set up for public input. In addition, the MoDOT district engineers gather public input through their extensive contact with local agency staff. One of the goals of the current update of the rural planning framework, requested by the RPCs, is to make clear when and where input is most important to change an outcome.

3.1.6 North Carolina

Rural residents have opportunities to provide direct public input to the transportation planning process through statewide plan updates, STIP hearings, and RPO meetings. The extent of public engagement varies widely by area and the issue is still being discussed. Like most states, North Carolina reports limited success in garnering rural public interest in the STIP and statewide transportation plan development processes. One of the reasons the state initiated the development and involvement of RPOs in 2000 was to increase rural participation in the planning process. The process of creating the RPOs itself involved proactive outreach by NCDOT and broad public participation. The design of RPOs reflects a number of comments and concerns received during this stage.

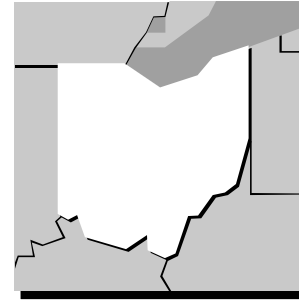


It is too early in the life of most RPOs to have a sense of whether they have succeeded in increasing rural public involvement. NCDOT's Statewide Planning Branch intends to partner more with the RPOs in coming years in order to get the local communities more involved in the planning process. There is currently no evaluation of the degree of public participation, but this is a task that will fall on the RPOs as they begin to conduct planning.

NCDOT has no policy or initiative specifically addressing participation by low-income and minority populations in the long range planning process. However, NCDOT has developed an extensive indirect and cumulative impact analysis process and is providing training to all its staff and consultants on this process. Because environmental justice issues are more apparent during project level planning, they are usually addressed as part of the project development process.

3.1.7 Ohio

For new Ohio DOT projects over \$5 million, public involvement is conducted through the Transportation Review Advisory Council (TRAC), usually in “open house” settings. For long-range planning, some Ohio DOT districts hold public meetings in every county in the district, while others hold meetings only at district headquarters. As described in Section 2, Ohio’s counties are responsible for the two-lane rural road system. The monthly meeting of the County Engineers Association of Ohio generates significant rural interest, in large part because the Association serves as a conduit for significant Ohio funds for rural roads.



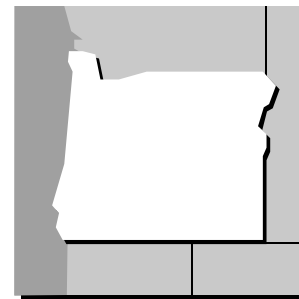
In 1998 Ohio DOT conducted a survey of the 12 districts specifically focused on rural transportation public involvement. This survey found that, beyond most legally required public involvement steps, districts generally hear from the public late in the process and often only when they are opposed to projects. Some experimentation with rural hall town meetings revealed that such forums can be a successful means of obtaining meaningful public input earlier in the planning process.

In some instances, Ohio DOT has found it easier to generate publicity about transportation planning issues in rural than urban areas because local news channels highlight issues more readily. For example, the local TV station regularly attends and broadcasts meetings of one of the very small MPOs (Lima). At times, Ohio DOT has had success through strategic use of public involvement consultants.

In some areas of the state, regional development commissions (RDCs) report that Ohio DOT is making better use of RDCs for conducting public involvement. District offices are more frequently contracting with COGs and RDCs to conduct public involvement in their area. This approach appears to be effective because these organizations work across a wide range of issues (from conservation to economic development to human services) and as a result they have extensive community contacts and are able to involve a wide range of stakeholders.

3.1.8 Oregon

Oregon DOT has a policy that public involvement be “proactive and provide complete information, timely public notice, full public access to key decisions, and opportunities for early and continuing involvement.” The DOT also has a policy to maintain a broad-based, statewide list of stakeholders – individuals and organizations who are interested in or affected by transportation decisions – including tribal government representatives and organizations that reach those traditionally underserved by existing transportation systems. Historically, however, public meetings for the STIP and statewide plan have had poor attendance.



Oregon relies on the Area Commissions on Transportation (ACTs) to improve communication and interaction with local transportation stakeholders. As described in Section 2, the primary mission of the ACTs is to provide a forum for the discussion and coordination of current and future transportation issues and to make recommendations to the Oregon Transportation Commission. Oregon DOT has developed guidance for ACTs that provides the minimum and preferred public involvement requirements for different types of ACT meetings. While the guidance does not provide recommendations for forms of outreach other than public meetings, it notes that ACTs should “use the appropriate level of public involvement and/or public information” and should “identify a strategy for engaging minority and low

income populations in transportation decision-making.” ACTs are required to report on how they are meeting minimum requirements in biennial reports.

In some regions, ODOT has contracted with the COG to conduct public involvement. The Rogue Valley COG has been particularly successful, leading public involvement for the Medford MPO and also the non-MPO areas of the southwest Oregon region. Being involved in many projects outside transportation, the COG has good contacts with the senior and disabled communities, environmental groups (due to their involvement with water issues), and social service organizations. This substantially broadens the network of people they are able to reach. In addition, because the COG staff work primarily on non-transportation issues, they have been effective at translating the complex transportation vocabulary into layman’s terms. The COG uses a phone tree method, whereby they call a small number of some primary contacts and ask each for additional contacts to call. This is a useful approach for reaching a core group of engaged citizens and officials in rural areas.

3.2 Best Practices

Maine’s use of Regional Transportation Advisory Committees (RTACs) appears to have significantly improved the extent and quality of rural public involvement in state DOT decision-making. RTAC members include citizen volunteers as well as local government staff, and thus the RTAC provides a forum for direct public input to Maine DOT. RTACs review and comment on Maine DOT public involvement processes for individual project environmental reviews. RTACs also conduct their own public involvement efforts, and typically report on these in their annual Regional Advisory Reports. These reports often include detailed summaries of public input, as well as an enumeration of various stakeholder meetings and the levels of public participation at each. In some cases, RTACs have conducted broad public surveys about the successes and failures of rural transportation services and included these findings in the advisory report.

Ohio DOT has successfully contracted with RPOs to conduct public involvement. RPOs are often in a good position to engage the public and businesses as a result of their work in the areas of social services, economic development, and natural resource preservation. The staff of these organizations may also be skilled at presenting technical transportation information to a non-technical audience.

Colorado is one of the few states that actively monitors and evaluates the extent and quality of public participation in rural areas. These steps are critical for state DOTs to improve their current public involvement practices. CDOT conducts their evaluation by reviewing the number of meetings held and attendance at those meetings, assessing the number of comments received, and using interviews and surveys to assess whether people feel they are adequately involved in the process. CDOT’s guidance for Transportation Planning Regions includes methods for reaching traditionally underserved populations including low-income, minority, and people who are not proficient in English.

3.3 Challenges and Areas for Improvement

Many state DOTs obtain only a limited amount of direct public participation in their rural transportation decision-making process. DOTs typically develop planning and programming documents for rural areas based on input from public representatives such as county commissioners and from local engineers and planners. While it is important to consult local elected officials and staff, state DOTs should also strive to enhance direct public access to the decision-making process. Maintaining some direct connection with the public is critical because a state DOT may be the only agency in a rural area that considers how the transportation system functions across all jurisdictional boundaries. As such, filtering all public input through local representatives may systematically suppress certain types of concerns. In some cases, the use of RPOs functions to increase such decision-making access. Otherwise, DOTs run the risk of relying

too heavily on a few individuals who may not completely represent the rural public, particularly rural populations that have traditionally been underrepresented in decision making.

Perhaps most importantly, state DOTs need to evaluate their performance in obtaining public participation from rural residents. Many MPOs now routinely conduct such an evaluation after a regional transportation plan cycle. Some DOTs have expressed concern that rural areas could never achieve the degree of participation found in metropolitan areas, in part because of longer travel distances required to attend meetings. However, evaluating performance can mean more than simply counting comments received and meetings attended. Rural public involvement evaluation should include measurement against the state's rural public involvement goals. These goals could include:

- Number of rural stakeholder or community planning meetings at which state DOT representatives make presentations and gather input
- Frequency and method of maintaining up-to-date mailing lists for rural residents
- Rural representation on citizen boards
- Surveys conducted of rural customer satisfaction with the transportation system
- Inclusion of rural media services (including radio and local newspapers) in public announcements about projects, plans, and meetings

4 SERVING THE TRANSIT DEPENDENT IN RURAL AREAS

4.1 Summary of Current Practice

State DOTs administer the federal Section 5311 program that provides capital and operating funding for general public transit service in non-urbanized areas (population under 50,000). State DOTs also generally administer the federal Section 5310 program, which provides funding for specialized service for the elderly and persons with disabilities in both urban and non-urbanized areas. In Georgia and Oklahoma, however, the Departments of Health and Human Services administer the Section 5310.

Private non-profit organizations, public bodies, tribal governments, and operators of public transportation services are eligible to receive Section 5311 funding for the operation of rural general public transit service. Such service may be designed to meet the special needs of the transportation disadvantaged, but must be available and marketed to the general public. Section 5310 provides grants for private non-profit organizations where mass transportation services provided by public agencies are unavailable, insufficient, or inappropriate to meet the special needs of elderly persons and persons with disabilities. Typically, transportation is ancillary to other services provided by these organizations. A public body that is approved by the state to coordinate services or that has certified that no non-profits are readily available to provide the service is also eligible under Section 5310. Often, rural general public service and specialized services are coordinated to maximize the use of scarce resources.

Most state DOTs also provide state funding for rural transit. Colorado is one of only about five states that do not provide any state transit funding. Most general public transit service in rural areas is subsidized with either or both federal and state funding. In some states, such as Colorado, a small number of public transit operators provide unsubsidized service in resort towns.

Most states require local providers to prepare transit development plans on a three- to five-year cycle with annual or biennial updates. These plans document current service, provide short-term capital and operating budgets, and may include needs assessments. Many states utilize federal Section 5313 planning and state funds to assist local providers to complete the requirement. The plans typically provide information for the state's capital replacement program but have more limited use for operations planning.

There is an increasing trend towards regionalization of planning for rural transit. States that use RPOs to conduct rural transportation planning on a regional level may or may not use these organizations to promote planning and coordination of transit service within the region. For example, Colorado's Transportation Planning Regions are involved in long-range transit planning and service coordination, but Missouri's Regional Planning Commissions are not. Other states rely on county-level organizations to coordinate rural transit. For example, Florida has created Community Transportation Coordinators to serve as coordinating body for the county's transportation providers.

Table 4.1 highlights some of the differences in state transit funding and planning in the sample states.

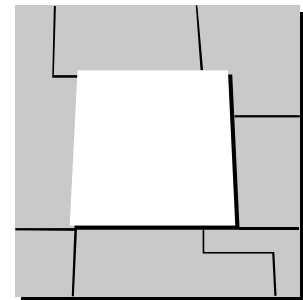
Table 4.1: Summary of State DOT Role in Rural Transit Planning and Funding

	No. of rural general public transit providers	State funding for rural transit	Requirement for transportation development plans	Regional planning units for transit planning	Funds intercity bus service
Colorado	24	No	Yes (element in RTP)	Yes	Yes
Florida	53	Yes	Yes	Yes	Yes
Maine	15	Yes	Yes	Yes	Yes
Maryland	21	Yes	Yes	No	Yes (state, not DOT)
Missouri	30	Yes	No	No	No
N. Carolina	85 ^a	Yes	Yes	Yes	No
Ohio	39	Yes	No (encouraged)	Yes	Generally No
Oregon	36	Yes	Yes	Yes	Yes (extensive)

a: major consolidation under consideration

4.1.1 Colorado

Twenty-four rural transit operators provide public transportation in the rural areas of Colorado with federal subsidies administered by CDOT. In addition, several public transit operators provide unsubsidized service in some of the ski resort areas. CDOT administers the federal Section 5311 program, providing operating and capital funding for rural transit projects. Colorado provides no state funding for public transportation. CDOT generally provides Section 5311 funding to existing rural transit operators for ongoing service. CDOT does not have adequate funding to assist start-up rural transit systems. For the 2004/2005 biannual applications, CDOT expects to receive applications from approximately ten systems that have operated rural service but have not previously requested assistance.



As described in Section 2, Colorado is divided into fifteen Transportation Planning Regions (TPRs), each of which prepares a 25-year long range transportation plan. The transit element of the plan describes the current transit services in the region and identifies where transit should be on 6- and 20-year horizons. CDOT provides FTA Section 5313 planning funds for TPRs to hire consultants to develop the transit element of the plan. Rural transit projects must be contained in or consistent with the regional transportation plans to be eligible for inclusion in the statewide plan and eligible for federal funding.

CDOT's requirement for transit planning through the transportation planning regions has been implemented over the last four years and replaces the previous requirement for five-year transit development plans by each transit operator. By 2004, rural transit planning within the state will complete its transition from the stand alone TDPs to the regional transportation plans.

Some TPRs establish technical advisory committees to assist in the planning process. These committees provide an opportunity for involvement of interested parties representing different modes of transportation and citizen groups. Some of the larger TPRs have separate sub-committees that focus specifically on transit.

CDOT has worked with the rural transit operators over the last several years to ensure that they understand their role and are actively involved in the regional transportation planning process. CDOT requires applicants for Section 5311 funding to provide a certification from the RPC that the projects for which funding is applied are consistent with the regional transportation plan, thereby assuring that the rural transit providers are involved in the regional planning process.

CDOT recently funded an Intercity Bus Feasibility Study focusing on the I-25 (north and south) and I-70 (east and west) corridors. CDOT expects to receive applications for funding for intercity bus services from the city of Colorado Springs north to Castle Rock and from Castle Rock north to Denver on I-25.

4.1.2 Florida

The transit office within the Public Transportation Division of FDOT administers the federal and state transit grant programs. The grants program administration section coordinates the 5310 and 5311 programs and works closely with the FDOT district offices. The seven FDOT district offices monitor all subrecipients, evaluate grant applications, and provide technical assistance to the transit operators. FDOT provides Section 5311 funding to about 53 rural transit providers.



Florida has established an independent Commission for the Transportation Disadvantaged (CTD), charged with coordinating transportation services provided to the transportation disadvantaged. The CTD has 12 staff and an oversight board with representatives from state agencies, transit providers, businesses, and community groups (e.g., elderly, disabled, rural residents). Each county has a designated Community Transportation Coordinator (CTC), often a transit provider, which serves as the coordinating body for the county's transportation providers (in both urban and rural areas). The CTCs apply for funds on behalf of their providers, and the Section 5311 recipients must be part of the coordinated system. All operational funding is allocated to CTCs based on population. Capital funding may be allocated by formula or on the basis of needs. Since every county in the state receives funding, FDOT does not receive applications from new service providers (any new providers would be required to coordinate through the county's CTC).

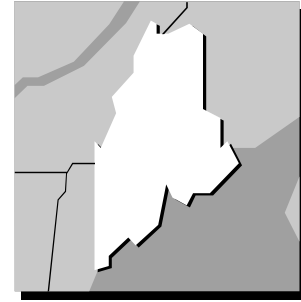
The CTD requires the development of an annual transit disadvantaged service plan that identifies short- and long-term needs. In rural areas, service plan updates are led by the regional planning councils, with substantial input from the local service providers.

The CTD also administers state's Transportation Disadvantaged Trust Fund, which receives \$1.50 for every vehicle registration or renewal. Florida residents can also make a voluntary contribution to the trust fund by checking a box in their vehicle registration form. Funds are used only for transit and only in the county where they are collected.

Historically, FDOT has funded five small private providers that offer "meaningful" intercity bus service in the state. A new bill in Florida, with definitive eligibility criteria, has been passed that grants interstate/intercity bus carriers \$2 million of state funds to provide intercity bus service.

4.1.3 Maine

Maine DOT administers the Section 5310 and Section 5311 assistance to 15 subrecipients that provide regional coordinated transit service throughout the state. The Office of Passenger Transportation administers the program for both the rural and urban programs. Maine DOT requires biennial applications for their rural operators that includes vehicle inventory and maintenance information on each vehicle.



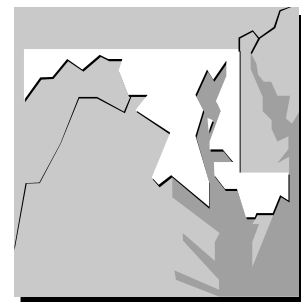
As described in Section 2, Maine has seven Regional Transportation Advisory Committees (RTACs) that perform planning and project prioritization for rural regions. The RTACs include representatives from private transportation providers, and have a role in regional transit coordination. Maine DOT uses consultants to develop Biennial Regional Operations Plans (BOP) every two years. The BOP must describe project coordination, methods for review of existing providers, methods for comparing costs between interested providers, and criteria for making decisions.

Maine DOT allocates Section 5311 assistance to each region in the state based on their percentage of the state's rural population, road miles, and area. The BOP contains the applications and the recommended awards for each region. This regional planning process determines how the Section 5310 and 5311 funding will be allocated between operating, capital, and project administration. Since all Section 5311 recipients also receive Section 5310 assistance, the Section 5311 funds tend to be used for operating expenses. Based on the BOPs, Maine DOT awards this funding directly to the subrecipients.

Maine DOT funds intercity bus service within the state, soliciting proposals annually for intercity bus projects. In 2000, Maine DOT conducted a statewide passenger transportation plan, which identified intercity bus needs.

4.1.4 Maryland

The Maryland Transit Administration (MTA) administers the federal Section 5311 program and state funding for rural transit. Approximately 21 operators provide rural public transit service in 24 Maryland counties. MTA allocates Section 5311 funds by formula based on rural population and current funding distributions (90 percent based on prior year funding levels among all eligible jurisdictions, 10 percent based on rural populations). MTA primarily funds existing systems, however, when new projects are determined viable, they will be funded for two years with state money. If they are successful at the end of the two years, the projects will roll over to the Section 5311 program. Additionally, a Transit Development Plan must precede the start of any new system.



Maryland developed a Comprehensive Transit Plan in 2000, led by a Transit Advisory Panel made up of 28 government, business, and community leaders. This plan describes short- and long-term recommendations for transit in each county, including funding levels necessary to achieve goals. As part of the Comprehensive Transit Plan development process, MTA and local providers developed transit needs assessments for each county in 1999.

Maryland has established an Interagency Committee on Specialized Transportation, which determines the funding for specialized transportation (elderly and disabled). The committee includes members from Department of Aging, Department of Education, Department of Health and Mental Hygiene, Department

of Human Resources, The Governor's Office for Individuals with Disabilities, and the Department of Transportation. This committee has established the following criteria to receive funds:

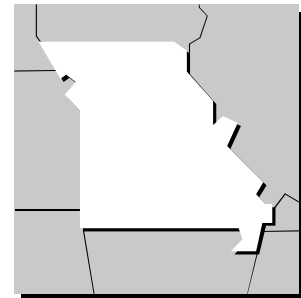
- Extent and urgency of local needs
- Coordination and cooperation with other regional operators
- Vehicle utilization
- Fiscal and managerial capability

The MTA requires an Annual Transportation Plan for all applicants of state Public Transportation programs (5307, 5311) and the Statewide Special Transportation Assistance Program. MTA will only accept one transportation plan per county, requiring counties with multiple providers to coordinate the development of one regional document. MTA encourages providers to use this plan to examine opportunities for coordination at the project level, such as the sharing of vehicles, supplies, staff, purchase of service, individual trips, hours, miles, and fuel purchasing.

MTA provides ongoing planning assistance to rural operators. For example, MTA assists with the development of five-year operating and capital plans and the required Transit Development Plans. A Transit Development Plan must be completed before service is initiated and must be completed by the local operators on a five-year cycle.

4.1.5 Missouri

The transit section of the MoDOT provides funding for about 30 transit providers in rural areas, with service covering each county in the state. MoDOT administers the Section 5311 program, which covers about 30 percent of the current transit budget. Missouri's Elderly and Handicapped Transportation Assistance Program provides state financial assistance for nonprofit organizations offering transportation services to the elderly and disabled. Funds for this program come from state general revenues and are appropriated each year.



Because public transit service is currently provided in each county, MoDOT does little transit planning. MoDOT reviews census data to identify significant changes in populations, but does not formally assess needs at the local level. The statewide transportation plan includes a transit component. As part of the current update of the statewide plan, MoDOT will do a statewide passenger movement study, including transit. One transit provider, OATS, provides transit service for 87 of Missouri's 114 counties. Because of their large service area, they occasionally conduct their own needs assessments. Another Missouri transit provider serves 20 counties.

MoDOT generally funds existing providers to maintain constant levels of service; it does not generally receive applications to fund new providers. Occasionally, MoDOT will provide funds for service expansion. However, the need is generally identified by the transit provider, not through state planning efforts. MoDOT does not require transit development plans or other evidence of transit planning in grant applications.

MoDOT does not formally plan for intercity bus service. MoDOT reviews applications and provides funds for projects that meet specific needs. MoDOT currently funds three intercity bus providers, two small local companies and one larger company.

4.1.6 North Carolina

Eighty-five rural transit operators provide public transportation in the rural areas of North Carolina. Each of North Carolina's 100 counties is served by only one rural transit operator. Several operators provide service in multiple counties. NCDOT's policy is to fund only one applicant per county or region (if multi-county). Early transit development plans completed 10 to 20 years ago by each county designated the applicant agency for the county. As a result, NCDOT funds only existing systems.



NCDOT administers the federal Section 5311 program, providing administration and capital funding for rural transit projects. NCDOT transfers all federal Section 5310 funds for specialized service for the elderly and disabled persons to the Section 5311 program for rural general public transit service. The state provides approximately \$24 million for rural general public transit service operating assistance. NCDOT allocates federal and state administrative funds to the transit operators based on number of miles, hours, and trips provided. NCDOT selects capital projects on the basis of need, providing replacement vehicles at 100,000 miles, larger vehicles when warranted, as well as facilities and technology.

As described in Section 2, North Carolina has initiated the development of regional planning organizations (RPOs) throughout the state to encourage more local involvement with rural transportation planning and decisions. NCDOT believes the RPOs may play a pivotal role as organizations that can further the regionalization of rural transit and possibly serve as the local grantee.

NCDOT also has a transit regionalization initiative underway. A recent study completed by North Carolina State University recommended the consolidation of the 85 rural transit systems into a significantly smaller number of regional transit systems, perhaps 34. NCDOT has presented the initiative at conferences, has sent the report to each rural transit agency, and is implementing a series of regional meetings to discuss consolidation and get public input. NCDOT's strategy for achieving the consolidation includes incentives, possibly in the form of additional operating assistance.

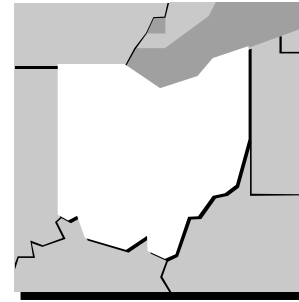
Currently, NCDOT requires each rural transit operator to update its transportation development plan (TDP) every five years. NCDOT hires consultants to prepare the TDPs using 80 percent federal funding, 10 percent state funding, and 10 percent from the local transit provider. The TDPs have evolved over time into management and operations reviews, and NCDOT will initiate a regional element into the process with the upcoming cycle that will address the feasibility of consolidating the systems within regions. NCDOT uses the TDPs as input for its funding decisions, particularly on the capital side, where the TDPs provide important information on vehicle needs, both replacement and new service expansion.

NCDOT uses both federal Section 5311f and state funds to support its intercity bus program, which is designed to fill in the gaps in service left with the deregulation of the intercity bus industry. NCDOT currently subsidizes some service in Boone and Charlotte as well as some regional service around Asheville. NCDOT will be seeking proposals in the near future for intercity bus service in a handful of additional regions.

4.1.7 Ohio

Ohio DOT provides funding for 39 rural general public transit systems in 41 counties. Twenty-eight of the state's 88 counties are not served by public transit, either urban or rural. Ohio DOT administers the Section 5311 program and provides state matching funds for capital and operating projects through the state's general revenues.

Ohio DOT generally provides continuation funding for existing rural systems, as funding is limited. State funding, both from general revenues and other sources, is declining. This will adversely affect funding for rural public transit, but will have an even more significant negative impact on funding for specialized services for the elderly and persons with disabilities in both rural and urban areas.



Since 1996, Ohio DOT has administered the Ohio Coordination Program, a state-funded program that provides funding to public entities to assist in the coordination of transportation services among local human service agencies in counties with no public transportation system. Ohio DOT will provide \$1.3 million to 19 counties in 2003 under this program.

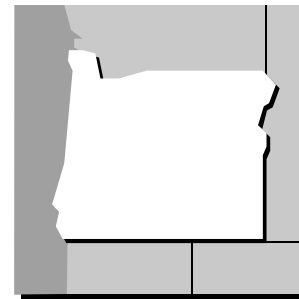
Ohio DOT requires all rural public transit providers to develop four-year capital and operating plans, which are updated annually. The state uses these plans to plan future applications for federal funding. Ohio DOT will only fund capital projects that are included in the four-year plan. The plans do not address needs; rather they project capital and operating expenditures and equipment purchases. Most rural systems do not do any additional planning.

Ohio DOT encourages, but does not generally require, all rural public transit providers to develop three- to five-year Transit Development Plans (TDPs). Ohio DOT develops TDPs for new rural systems and will assist existing rural transit systems to prepare TDPs upon request. The plans document the existing system, assess needs through surveys and focus groups, assess how perceived needs are being met, and address alternatives for enhancing the system. Ohio DOT uses Section 5311 administrative funds and Section 5313 research and planning funds matched with state funds to hire consultants to develop the local TDPs. The local providers do not have to provide any of the funding themselves, though this may change as state funds decrease. In addition, Ohio DOT has developed a TDP template for rural transit providers to assist them in the development of TDPs and updates.

Ohio DOT administers the Section 5311(f) intercity bus program, but generally does not do statewide planning for intercity bus service. The agency evaluates applications and selects intercity bus projects for funding. Ohio DOT recently completed a reevaluation of its intercity bus program.

4.1.8 Oregon

The Public Transportation Division within Oregon DOT administers the federal funding for the state's rural transportation providers. Oregon DOT's Small Cities and Rural Areas Transit Assistance Program (Section 5311) is targeted to existing transit providers and is allocated based on a formula with variables such as ridership, service, and general population. Oregon DOT typically expends about 10 percent of Section 5311 funding on new providers. The federal Section 5310 funding (in both urban and rural areas) is allocated based on project applications. The first priority is to maintain existing service, then to add service to existing agencies, and finally to fund new providers. Due to the funding limitations, Oregon DOT typically funds only existing



services for the elderly and disabled. Oregon DOT also uses funds transferred from the STP flexible funding program, primarily for the services for the elderly and disabled, but also for rural general public transit service.

As described in Section 2, Oregon relies on Area Commissions on Transportation (ACTs) to provide regional transportation representation at a level between citizen and state. ACTs must have transit representation, but also include local elected officials and business representation. Oregon DOT's goal is to have ACTs serve all regions in a systematic and coordinated way so that the unique needs of each community are addressed. Requiring each ACT to have transit representation is intended to ensure that rural transit needs are considered and addressed during early planning processes.

Oregon DOT has undertaken extensive efforts to develop and implement an intercity bus program that meets the needs of not only residents in the urban areas, but also those in rural areas. The program seeks to provide intermodal connectivity by filling in gaps in service. The current intercity bus plan was developed through the statewide planning process. Oregon DOT developed a matrix identifying the current network of services, examined the market areas throughout the state, and worked with local communities to identify needs. From there, Oregon DOT encouraged public and private transportation providers to start a dialogue about current needs and methods by which they could meet future needs. The agency is currently writing grants to increase the intercity bus network and connectivity. Oregon DOT estimates that the percentage of needs being met has risen from 66 percent to about 85 percent as a result of the program.

4.2 Best Practices

There is a positive trend toward regionalization in rural transit planning. A number of states that use RPOs to assist with rural highway planning are turning to these organizations to play a role in regional transit coordination as well, including Colorado and North Carolina. While the roles of these regional organizations are still evolving in many states, a regional perspective will help ensure that needs are assessed and prioritized, that services are coordinated to maximize coverage, and that limited resources are effectively utilized.

North Carolina and Florida fund only one entity per county. The designated entity may operate the service, contract for some or all of the service, or coordinate multiple providers. This approach ensures more effective coordination of service with the county. While Maryland will fund multiple providers within a county, it requires them to coordinate in the development of a countywide transportation plan.

States that have established coordinating entities or encourage coordinated service have realized gains in efficiency, resulting in more service in rural areas. The U.S. General Accounting Office issued a report in June 2003 on the transportation disadvantaged and the role of coordination.¹³ The report describes the effects of coordination efforts in South Dakota:

“A transit agency in South Dakota consolidated the transportation previously provided by both senior and medical centers as well as other federal, state, and local programs. This consolidation allowed the agency to expand its service hours and increase the number of trips provided while reducing the average cost of providing each trip by about 20 percent.”

Maryland went through an extensive statewide transit planning process, culminating in the first-ever Maryland Comprehensive Transit Plan in 2000. The plan lays out long-term goals for transit in the state,

¹³ *Transportation Disadvantaged Populations: Some Coordination Efforts Among Programs Providing Transportation Services, but Obstacles Persist*, U.S. General Accounting Office, June 2003.

describes existing service in each county, and presents recommendations for each county organized around nine themes (e.g., system preservation, integrated and coordinated service, and land use and transit. Costs estimates are developed for each recommendation, helping to ensure that the plan is realistic. The combination of a long-term statewide vision for transit coupled with detailed county-level objectives is a good example of state DOT leadership in transit.

Florida's Commission for the Transportation Disadvantaged is an independent agency dedicated to coordinating transit services provided to the transportation disadvantaged. The CTD designates a Community Transportation Coordinator for each county that allocates Section 5311 funds and help to maximize service coordination if multiple providers exist in a county. In rural areas, the CTD requires regional planning commissions to update annually a transit disadvantaged service plan, identifying short- and long-term needs. The CTD also administers state's Transportation Disadvantaged Trust Fund, which receives \$1.50 for every vehicle registration or renewal.

Oregon DOT has taken a systematic and proactive approach to planning for intercity bus services. The DOT's goal is to identify and fill any gaps in service in the state. Oregon DOT developed a matrix of existing intercity bus service in the state and conducted outreach throughout the state to identify unmet needs. The DOT is currently soliciting applications from private providers to operate service in the identified areas.

4.3 Challenges and Areas for Improvement

Most states have limited federal and state funding for rural transit. As a result, priorities are typically vehicle replacement and continued operation of existing service levels. If additional funds are available, states will generally fund expansion of existing systems before funding the start-up of new systems. TEA-21 provided additional funding for rural transit, which has eased the funding limitations somewhat. Still, in many states, there are rural areas with no transit service.

As a result of the limited funding and consequent funding priorities, few states conduct systematic statewide planning for rural transit. Regional planning efforts can help to assist states to piece together rural transit unmet needs and prioritize projects. While most states require the development of transit development plans at the local level as a condition for receiving federal and/or state rural transit funds, the TDPs are usually done for one specific rural transit operator, addressing capital and operating budgeting, maintenance plans, and other items related to the specific agency. These plans do not typically assess needs, limiting usefulness for statewide planning.

Rural transit service could benefit from additional planning. Some states are in the early stages of coordinating transit planning efforts on a regional basis. States that either require or strongly encourage regional transportation coordination have successfully improved service by resource sharing. When agencies coordinate their resources, they can realize the financial benefits of sharing staff, vehicles, maintenance facilities, and other infrastructure. They often identify route inefficiencies and overlap, and can serve more people without increasing costs.

Most states have little or no involvement in intercity bus service. With airlines and Amtrak reducing service in low volume corridors, intercity buses often provide the only public carrier connection between isolated rural communities and major urban areas. Elderly and disabled residents who cannot drive are particularly dependent on intercity bus service. While it may not fall under their formal mandate, state DOTs should consider playing a role in reviewing intercity bus service coverage and needs, coordinating between providers to encourage maximum service coverage, and providing funding assistance to intercity operators in order to fill gaps.

5 LINKING TRANSPORTATION AND LAND USE IN RURAL AREAS

5.1 Summary of Current Practice

There is increasing recognition of the importance of integrating transportation and land use planning in both urban and rural areas. Transportation investments can have a major impact on development patterns particularly in rural areas on the metropolitan fringe. Similarly, rapid population and employment growth can significantly affect rural travel patterns and the level of service on rural highways. By better coordinating transportation and land use planning, state and local governments can help maximize the efficiency of public expenditures and limit unwanted growth. Yet this coordination is challenging for the fundamental reason that nearly all land use decisions are made at the local level while most transportation investment decisions are made at the state level.

The degree of transportation and land use coordination varies widely among the eight sample states reviewed in this study. In some states, there is little or no land use planning in rural areas and the state avoids any attempt to influence local land use decisions. In these situations, state DOTs have little opportunity to coordinate their investment decisions with land use decisions. Other states included in the sample, such as Oregon and Maryland, are national leaders in promoting the integration of transportation and land use planning. In these states, local governments are required to develop land use plans, the state attempts to influence land use decisions through smart growth legislation, and a variety of initiatives exist to better coordinate transportation and land use.

A number of states report a growing recognition of the importance of highway access management in limiting undesired growth while maximizing system performance and safety. Maryland has an access management policy specifically intended to limit unplanned rural growth. Some state DOTs do not have an explicit policy such as this, but do apply access management to help achieve growth management on a more ad hoc basis. Other state DOTs use access management only to accomplish traffic engineering objectives.

Table 5.1 summarizes some of the differences between the sample states in terms of coordinating transportation and land use planning.

Table 5.1: Summary of Statewide Coordination of Transportation and Land Use

	Local gov'ts required to do comprehensive plans	Statewide smart growth policy	State restrictions on infrastructure funding outside designated growth areas	Transportation plans and programs must conform to land use plans	State DOT access management program used to manage growth
Colorado	No	No	No	No	No
Florida	Yes	No	No	Yes	Yes
Maine	Yes	No	Yes ^a	No	Yes
Maryland	Yes	Yes	Yes	Yes	Yes
Missouri	No	No	No	No	No
N. Carolina	No	No	No	No	No
Ohio	No	No	No	No	No
Oregon	Yes	Yes	No	Yes	No

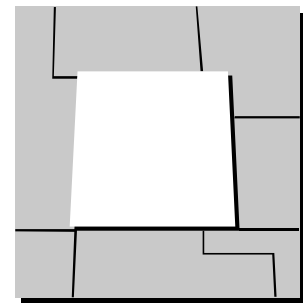
a: Restriction does not apply to roadway funding

5.1.1 Colorado

City and county governments in Colorado are exclusively responsible for land use planning. When local comprehensive plans address transportation priorities, these plans are typically reviewed by CDOT. With each governmental entity being a member of a Transportation Planning Region (TPR), they are expected to communicate any transportation needs identified in such plans to the TPR.

Although the state and regional agencies have traditionally had little or no involvement in local land use issues, there is currently some discussion of requiring the TPRs to consider land use plans when developing their regional transportation plans. Current state guidance for TPRs, released in January 2003, do not discuss land use, but this may change in the future.

As with many states, CDOT views their current best option for land use coordination lies with access management requirements. These currently operate at the project level, and therefore do not facilitate advance planning, but CDOT reports that recent efforts seek to better link access management to long range planning.



5.1.2 Florida

Florida's 1985 Growth Management Act requires the development of comprehensive plans by local governments, regional planning councils, and the state. Comprehensive plans are intended to guide future growth and development, and they must include a transportation element. Local and regional comprehensive plans must be consistent with one another, and with the statewide comprehensive plan. FDOT and the Florida Department of Community Affairs review the plans to ensure consistency with the statewide comprehensive plan and FDOT's work program. When the plans



were originally developed in the mid-1980s, the state provided the counties with funding to complete the initial plans. Local governments are required to update the plans through an evaluation and appraisal process. The Growth Management Act also includes a “concurrency” provision, which requires local governments to ensure that public services and facilities (e.g., roads, sewers, parks, stormwater drainage, etc.) are available to meet the demand that new development will place on these services.

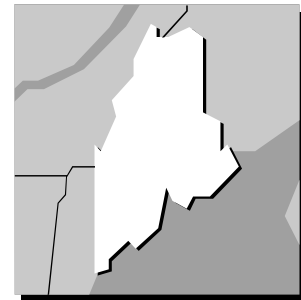
The state Department of Community Affairs coordinates the review of FDOT’s Five-Year Work Program and other transportation plans to determine consistency with adopted local comprehensive plans. In addition, Department of Community Affairs staff provides training and technical assistance to local governments regarding transportation planning and concurrency.

Florida also requires an assessment of the effects of any “development of regional impact,” defined as a development which, because of its character, magnitude, or location, would have a substantial effect upon the health, safety, or welfare of citizens of the region. The Regional Planning Councils generally take the lead in coordinating the production of the impact review, with assistance and review by the Department of Community Affairs.

Florida has a comprehensive access management program implemented in response to 1988 State Highway System Access Management Act. FDOT requires that developers demonstrate local government approval of a site plan before new access management is granted. FDOT has developed a number of guidebooks with access management strategies for communities, including model land development regulations that support access management and corridor studies and strategies for rural areas.¹⁴ The Department of Community Affairs requires that local comprehensive plans include policies for implementing access controls, and the agency considers access controls when reviewing local government compliance with the Growth Management Act.

5.1.3 Maine

Maine DOT is working on several fronts to better coordinate transportation and land use. With active involvement and coordination with the Maine State Planning Office, Maine DOT has initiated several model coordination efforts. Maine DOT participates in the state’s Smart Growth Coordinating Committee, which is charged with coordinating state policies, programs, and investments in support of the governor’s Smart Growth Initiative.



The Sensible Transportation Policy Act that created Regional Transportation Advisory Committees (RTACs) also requires Maine DOT to consider land use. A new access management law has been one outcome of such requirements, although the law is focused primarily on safety and capacity preservation rather than growth management. Another state policy, Maine’s Resource Allocation Policy, is geared toward preserving the existing transportation system as a first priority, and requires Maine DOT to consider induced demand potential when evaluating highway capacity enhancement.

Maine enacted legislation in 2000 that limits state growth-related capital investments to designated growth areas contained in local government comprehensive plans or to areas served by a public sewer system. However, the law specifically exempts highway widening from the requirement, and therefore has little impact on transportation planning or programming. Maine has had a Growth Management Act since the 1980’s but the law does not mandate coordination of land use planning and transportation investments. Maine DOT is currently working with other state agencies to rewrite parts of the Sensible

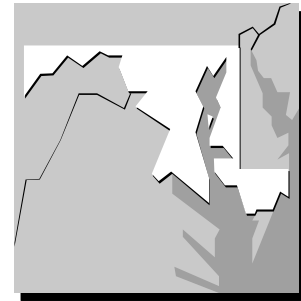
¹⁴ Available at http://www.cutr.usf.edu/research/access_m/publicat.htm

Transportation Policy Act so as to better support the land use coordination goals of the Growth Management Act.

Better land use coordination appears to be on the horizon at the rural corridor level as well. Maine DOT is developing an approach to corridor transportation planning that links together and builds collaboration between a numerous smaller towns along a corridor.

5.1.4 Maryland

Maryland is recognized as a national leader in promoting smart growth and is one of the most active states in linking transportation investment and land use decisions. The 1997 Priority Funding Areas Act is intended to direct state spending to designated growth areas. Growth-related projects covered by the legislation include highways, sewer and water construction, economic development assistance, and state leases or construction of new office facilities. The law designates certain areas as Smart Growth Areas, primarily the traditional core of Maryland's urban development and areas targeted for economic development. Local government (counties) can designate additional Smart Growth Areas, provided that they meet minimum criteria. The practical effect of this law is that secondary road improvements are generally not funded outside of designated Smart Growth Areas.



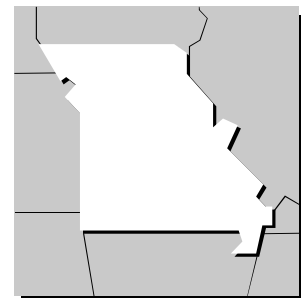
A companion initiative, called Rural Legacy, is intended to preserve the rural character of selected areas. The state designates Rural Legacy Areas and targets funding for land preservation to this areas. Apart from these specific regulations, Maryland's various smart growth initiatives have the effect of focusing attention on the linkages between public infrastructure investment and growth patterns. As such, they influence all planning in Maryland.

The Maryland State Highway Administration has a strong access management program, and uses the program to help minimize development pressure associated with highways in rural areas where development is not planned. Legislation passed in 1997 allows SHA to deny new highway system access when alternative access is available. This policy is generally applied outside of Priority Funding Areas, if the local government development approval process fails to deny access.

SHA also develops Access Management Plans for selected primary highway corridors. Once a corridor is included in the Access Management Program, state funds are identified to acquire property or access controls from willing sellers. Currently the US 301, US 50, US 113, and MD 2/4 corridors are eligible for such funding. SHA expertise is available to work with local jurisdictions on corridor access management plans or other techniques to help integrate the highway with development plans.

5.1.5 Missouri

There is relatively little land use planning in Missouri outside metropolitan areas. Only about one-third of the state's counties do any long-range land use planning. Local governments retain all land use control, and most rural counties are anxious to receive any infrastructure investment that could induce growth. Consequently, there is little coordination between rural transportation investment and land use planning.

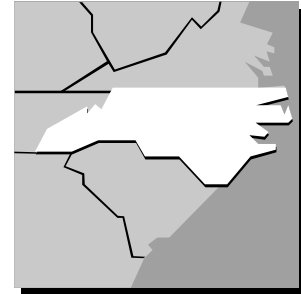


Because of the extensive involvement of Missouri's regional planning commissions (RPCs) and local governments in MoDOT rural planning, major land use changes do get accounted for in transportation project prioritization. In this way, funding can be secured for roadway improvements that support large new developments.

MoDOT has purchased access limitations on new alignments of primary arterial routes for many years, and has recently added a new set of access management guidelines that will expand the process to include minor arterial routes. MoDOT does not use access limitations to restrict or limit development, and cannot deny access based on property use.

5.1.6 North Carolina

There is currently little coordination of land use planning and transportation investment priorities in North Carolina at the state level, although NCDOT is making an effort to rectify this situation. The most significant step has been the creation of Regional Planning Organizations (RPOs), described in Section 2. Half of the new positions created by NCDOT to support the RPOs are land use planners. As the RPOs develop capabilities to conduct regional transportation planning for rural areas, they will bring transportation decision making closer to the level at which land use decisions are being made, thereby fostering a stronger linkage.

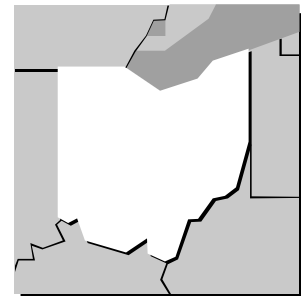


Cities and counties are not required to regularly update a comprehensive plan in North Carolina. The twenty coastal counties that fall under the state's Coastal Area Management Act (CAMA) are required to update their land use plans on a regular basis (every 3 – 5 years). The North Carolina General Assembly recently revised the General Statute that governs the development of thoroughfare plans to require the development of a land use plan before NCDOT can provide transportation planning assistance. The state's Division of Community Assistance (located in the Department of Commerce) provides technical assistance with land use planning for small cities and counties, including guidance for developing a general plan. NCDOT has made efforts to coordinate with this agency, including helping to develop a transportation element of their Land Development Plan Guidelines.

Induced development at the fringe of metropolitan areas is a significant issue confronting NCDOT in project implementation. NCDOT is currently spending \$1.5 million to train staff on analysis of indirect and cumulative impacts. A few local jurisdictions have responded to induced development concerns by trying to estimate the land use changes that result from highway capacity expansion.

5.1.7 Ohio

Ohio has no statewide smart growth legislation, and local governments are not required to develop comprehensive plans. There is generally little land use planning in rural areas, and therefore little coordination of highway investment decisions and land use objectives. A possible exception is the area near Lake Erie, where the Lake Erie Commission is actively looking at ways to promote smart growth in order to minimize runoff and improve water quality. Ohio DOT is assisting in this effort by reviewing current programmed projects in the area.



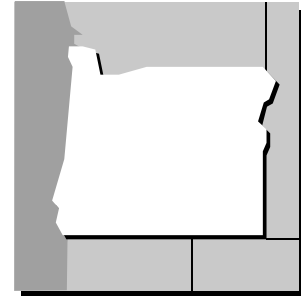
Like many states, Ohio DOT does not have requirements to consider the potential growth-inducing effects of transportation investments in rural areas. While Ohio DOT does forecast the impacts of transportation

investments out 20 years, these forecasts rely on land use projections from local governments, which are typically based on historic growth trends.

Ohio's municipalities have control over access to state routes within their jurisdiction. Ohio's access management guidelines provide education and training to local governments regarding how land use decisions can be used to preserve the capacity and safety of roadways. Counties in Ohio generally understand the importance of access management policies but have been unable to enforce any restrictions. However, a state bill was recently enacted that enables counties to implement their own access management policies on state highways.

5.1.8 Oregon

Oregon addresses transportation-land use coordination through a number of programs, most of which apply to rural as well as urban areas. Oregon's Transportation Planning Rule forms the foundation that links land use plans to transportation investments. The rule requires that transportation plans identify impacts on local land use patterns, environmental quality, energy use, existing transportation facilities, and fiscal resources. All cities and counties must develop comprehensive plans, and these plans include a transportation element that identifies associated traffic growth and transportation needs. Although these requirements do not necessarily mandate coordination of transportation and land use, the identification of impacts in both directions naturally helps to promote coordination.



As part of the statewide Livability Initiative, Oregon's governor announced a set of Quality Development Objectives, which apply to numerous state agencies and also reinforce the coordination of transportation and land use in rural areas. One objective is to direct state infrastructure investment to planned urban growth areas. Oregon DOT is currently attempting to develop STIP prioritization criteria that are more consistent with the Quality Development Objectives.

Oregon's Transportation Growth Management Program provides direct assistance to communities, both urban and rural, that are working to integrate land use and transportation planning and encourage smart growth development. The program was formed by Oregon DOT and the state's Department of Land Conservation and Development (DLCD) in 1992, and is supported by state general funds as well as federal TEA-21 funds. Through this program, Oregon DOT and DLCD can provide local governments with grants, a quick response team of consultants, and technical assistance such as code writing. A number of projects have been in rural areas.

Another way that Oregon DOT works to coordinate transportation investments with land use goals is through the use of Special Transportation Areas (STAs). STAs were first introduced in the state's 1991 Highway Plan as a way to balance highway performance with local access to community activities, business, and residences. STAs are designed for use in downtowns, business districts, and community centers and offer the opportunity to better preserve the community functions of compact downtown areas through pedestrian and multimodal accessibility. STAs are increasingly being considered in rural communities. Oregon DOT is considering the possibility of requiring STA status in order to receive certain funding.

Oregon DOT's recently adopted Bypass Policy is an important addition to their rural transportation and land use coordination efforts because of the large number of rural bypasses.¹⁵ The policy acknowledges

¹⁵ Amendment to 1999 Oregon Highway Plan, April 16, 2003.

the induced growth associated with bypasses and the economic, capacity, and environmental consequences that can result. The policy presents a checklist to help Oregon DOT and local jurisdictions ensure that bypasses are selected and designed in ways that do not generate negative land use impacts.

Coordination with federal land use plans is a significant consideration for Oregon DOT. Sixty percent of the state's land is under federal land management agency jurisdiction, an unusually high percentage. Since these federal agencies generally have land use plans for these areas and are included in the consultative process, this represents an important component of the state's rural transportation and land use coordination.

5.2 Best Practices

Florida requires the development of comprehensive plans, including both a land use element and a transportation element, by local governments, regional planning councils, and the state. Local and regional comprehensive plans must be consistent with one another, and with the statewide comprehensive plan. FDOT districts also review the plans to ensure consistency with FDOT's five-year work program. Similarly, the state Department of Community Affairs coordinates the review of FDOT's work program and other transportation plans to determine consistency with adopted local comprehensive plans. This multi-level system of plans and reviews helps to promote the coordination of transportation and land use decisions at all government levels.

Maryland's Priority Funding Areas Act requires local governments to designate growth areas and, in most cases, prevents state funding of new infrastructure outside these areas. In this way, the state retains local land use control but discourages unplanned growth. The state's access management program complements this policy. Maryland's State Highway Administration is authorized to deny new highway system access when alternative access is available, and the agency exercises this authority if the local government development approval process fails to prevent growth outside designated priority funding areas.

The coordination of transportation and land use is deeply embedded in Oregon as a result of several laws and initiatives. The state's Transportation Planning Rule requires that all transportation plans (local, regional, statewide) identify impacts on local land use patterns. At the same time, all cities and counties are required to develop land use plans, including a transportation element that identifies traffic impacts and transportation needs.

Oregon DOT and the state's Department of Land Conservation and Development work together to implement a program focused specifically at improving transportation and land use coordination at the local level. Called the Transportation Growth Management Program and funded with both state and federal dollars, the program provides communities, including many in rural areas, with grants and technical assistance on an as-needed basis.

5.3 Challenges and Areas for Improvement

All state DOTs can improve the coordination of their highway investment decisions with land use objectives. In some states, there is currently little or no consideration of the potential growth effects of highway improvements. Even in the absence of local land use planning, DOTs in these states should at a minimum recognize and, if possible, quantify the growth implications of transportation decisions. While such recognition does not constitute coordination, it does help to remind citizens and elected officials of the linkages.

Where local governments develop and regularly update comprehensive plans, state DOTs should review those plans and ensure that their planning and programming documents are not inconsistent with local growth objectives. The example set by Maryland shows how a state DOT can help to minimize unwanted growth without usurping local land use authority.

In the future, state DOTs should move beyond this “do no harm” position by using their decision-making authority to proactively encourage better land use planning. State DOTs need to better incorporate land use criteria into project prioritization systems. A few states have expressed an interest in doing this now, but have found it difficult to quantify land use considerations in a way that they can be incorporated into prioritization processes. This is particularly challenging in rural areas because land use objectives are often poorly defined and may be subservient to economic development objectives.

DOTs need a better understanding of the land use implications of rural bypasses. Highway bypass projects are commonplace in rural areas as a way to improve capacity and safety. Sometimes a bypass is desired by the community being bypassed and sometimes it is not. A bypass can have significant effects on growth patterns, possibly causing a drain on existing businesses in the heart of the community and over time, deterioration of level of service on the bypass. By better forecasting land use effects of rural bypasses and incorporating those forecasts in the planning process, state DOTs can help to make their decisions more consistent with local growth objectives.

Lastly, many state DOTs should better incorporate consideration of local land use plans and goals in their access management programs and policies. While states increasingly recognize that access management can be an important tool to limit undesired growth in rural areas, most do not use access management for these purposes or do so inconsistently. State DOTs should develop clear policies for the use of access management that acknowledges growth effects, and then apply these policies in a consistent manner.

6 LINKING TRANSPORTATION AND ECONOMIC DEVELOPMENT IN RURAL AREAS

6.1 Summary of Current Practice

Transportation investments have the potential to promote growth in rural area economic sectors such as agriculture, food processing, natural resources (mining, forestry, etc.) and tourism. Unlike urban areas, the primary driver for rural transportation investments is often the desire to promote economic development. This section reviews the coordination between state DOT planning and economic development activities for rural areas. We also describe a number of initiatives by state DOTs and other state agencies to promote rural economic development through transportation.

At the state level, planning for economic development is normally carried out by the state commerce department. Some states maintain regional planning offices that are affiliated with a state agency in order to coordinate economic development planning with local entities. These regional planning offices may receive funding from a variety of federal, state, and local sources. In Maryland, for example, the Department of Business and Economic Development has five regional offices engaged in economic development.

Approaches to statewide economic development planning vary, with some states allocating considerable responsibility to independent regional organizations. In states that have large rural areas and/or populations, this delegation is common; the state typically supports regional organizations both in terms of project and program development, as well as with funding. For example, Maine has five regional organizations involved in economic development that are supported through grants and program assistance by the state's Department of Economic and Community Development.

Rural economic development is supported at the federal level by the Economic Development Administration (EDA), a division of the Department of Commerce. EDA provides grants for infrastructure development, local capacity building, and business development, and generally supports state and local economic development planning. RPOs can become EDA-designated Economic Development Districts (EDD). The 320 EDD organizations nationwide are often coordinating entities for various federal and state programs. There are several advantages for a region to become an EDD, including additional funds through EDA programs and technical assistance. An EDD helps with the preparation and maintenance of the Comprehensive Economic Development Strategy that communities must submit in order to qualify for federal funding.

The US Department of Agriculture (USDA) also plays an active role in rural development. USDA's financial programs support public facilities and services such as water and sewer systems, housing, health clinics, emergency service facilities, and electric and telephone service. USDA promotes economic development by supporting loans to businesses through banks and community-managed lending pools. USDA also oversees the Rural Enterprise Zone/Enterprise Community programs.

Table 6.1 summarizes some of the differences between consideration of economic development by DOTs in the eight sample states.

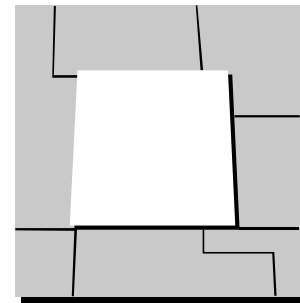
Table 6.1: Summary of Linkage Between State DOT Planning and Economic Development

	DOT funds dedicated to rural economic development	Economic development formally considered as project prioritization criteria	Other DOT programs dedicated to rural economic development
Colorado	No	No	No
Florida	Yes	No	Yes
Maine	No	Yes ^a	No
Maryland	No	No	No
Missouri	Yes	Yes ^a	No
N. Carolina	No	No	No
Ohio	No	Yes	No
Oregon	Yes	Yes	Yes

a: Criteria established by RPOs

6.1.1 Colorado

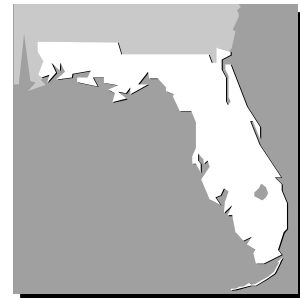
Rural economic development in Colorado is led by the state's economic development agencies. Because there is a large overlap between these agencies and the regional planning commissions, there is a natural link between economic development strategies and transportation project priorities. CDOT guidance encourages the regions to incorporate economic considerations in project prioritization, but the guidance focuses on economic efficiency with no specific considerations of the economic development potential of certain rural projects. Some TPRs may currently consider economic development in project prioritization but this does not stem from CDOT guidance.



CDOT does not lead any programs dedicated to rural economic development. The department does participate to a small degree in the statewide Rural Development Council, which seeks to support locally defined community development strategies.

6.1.2 Florida

FDOT maintains close relationships with state and regional economic development agencies and participates in a number of initiatives to promote rural economic development through transportation investments. The most prominent is Florida's Rural Economic Development Initiative (REDI), which focuses the efforts of state and regional agencies on rural economic development. Under REDI, the state designates "rural areas of critical concern," usually multi-county areas that suffer from relatively high unemployment and low average income. A number of state agencies respond by offering flexibility and/or funding to these areas. For example, in the first year of REDI, FDOT's Aviation Office provided over \$400,000 in grants to five rural airports in Calhoun, Franklin, Holmes, and Jackson Counties.



FDOT will waive or reduce local matching requirements for projects in REDI areas upon request. For example, local governments are often required to provide half of the 20 percent match on federally funded projects not on the state highway system; under REDI, FDOT might waive the local match. In fiscal year 2001-2002, over \$37 million in FDOT projects benefited from the REDI waiver program. FDOT will also consider moving projects forward in the five-year work program if they are in a REDI area.

Another FDOT initiative that can be used to promote rural economic development is the Strategic Intermodal System. Under this new program, FDOT will develop methods to identify and prioritize emerging intermodal corridors, many of which are in rural areas. This program is expected to help rural counties advance selected corridor projects in FDOT's work program and STIP.

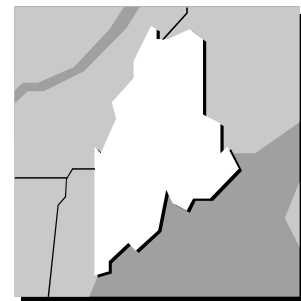
As described in Section 2, Florida has 11 regional planning councils, all of which are engaged to some degree in economic development planning. Most of the more rural RPCs are federally designated economic development districts. The RPCs work closely with FDOT districts as well as county commissioners, and through these relationships have opportunities to influence rural transportation planning and help link it with economic development strategies.

In 1996, Florida became the first state to abolish its commerce department, placing responsibility for statewide economic development efforts in a public-private partnership known as Enterprise Florida, Inc. Enterprise Florida develops an annual five-year strategic plan that, among other things, identifies tactics and responsibilities for developing infrastructure to support a competitive economy. This provides another opportunity for the state to coordinate economic development objectives and transportation investments.

Finally, Florida funds the Economic Development Transportation Fund, commonly referred to as the "Road Fund." This program provides funding of up to \$2 million to local governments to alleviate transportation problems that adversely impact a specific company's location or expansion decision. The funds are often used to make roadway improvements, and can be an important funding source for rural communities promoting economic development.

6.1.3 Maine

Maine has no formal structure for incorporating economic development in the transportation planning process, and Maine DOT reports that relatively few projects or studies are driven by economic development considerations. However, Maine's reliance on Regional Transportation Advisory Committees (RTACs) for rural transportation planning input helps to ensure that system improvements support economic development objectives where possible.



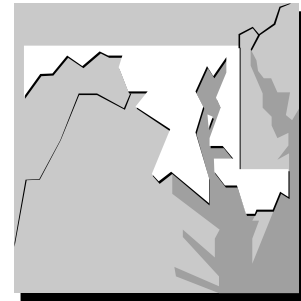
As described in Section 2, the seven RTACs are staffed by existing regional councils, organizations that also typically lead regional economic development efforts. RTACs are therefore fully aware of the region's economic development strategies. Maine DOT's project prioritization process is influenced by weighted scoring criteria established by the RTACs. These priorities vary by region, but typically include economic development. RTAC project scoring carries more weight for local roads than for major highways, but is considered for every project.

Maine DOT is currently conducting one feasibility study that is driven by economic development goals, a proposed extension of I-95 in northern Maine. I-95 currently ends in Holton, 100 miles south of the northern tip of Maine. The economy in this area has suffered recently, due in part to the closing of an Air Force base in 1994, and the principal remaining industries are agriculture and forest product. Proponents

hope that the I-95 extension will promote tourism and business development. The local community, not Maine DOT, initiated the study by lobbying its congressional delegation to secure funding.

6.1.4 Maryland

The Maryland Department of Business and Economic Development supports rural economic development by providing technical assistance, grants, and loans to local and regional entities. The agency maintains five regional offices that assist in carrying out this work, three of which cover predominantly rural areas. Most of Maryland's rural counties belong to a regional planning council. In rural areas, regional councils are also involved in economic development, particularly infrastructure development, and receive funding from the state. Each county in Maryland has its own economic development office.

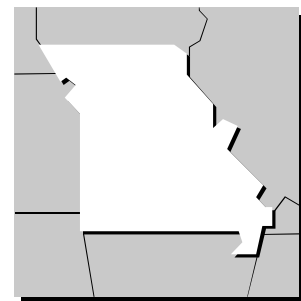


Maryland DOT does not have a structured process to consider transportation investments from an economic development perspective. Local, regional, and state organizations can and do advocate directly to DOT for transportation improvements that support rural economic development. The Department of Business and Economic Development has a good relationship with Maryland DOT and through this, can often secure funding for small-scale roadway projects that help a relocating or expanding business. Larger projects that support economic development objectives are considered for inclusion in the Consolidated Transportation Program through the standard process, as described in Section 2.

Rural economic development is of greatest concern in the three counties of western Maryland. The region enjoys relatively good east-west access via Interstate 68, but poor north-south access. Maryland DOT recently completed a north-south corridor study with the DOTs of Pennsylvania, Virginia, and West Virginia that examined potential improvements to U.S. highways 219 and 220 in the area. Maryland DOT works with the Appalachian Regional Commission, which exercises control over funding earmarked to implement the Appalachian Development Highway System.

6.1.5 Missouri

MoDOT actively supports rural economic development efforts with transportation investments. In the early 1990s, the state embarked on an ambitious program to link every city with more than 5,000 residents to a four-lane highway. By the mid-1990s, it became apparent that the cost of this program was too great, and the state now focuses on improving major intercity corridors without bypassing cities.



MoDOT has tried to quantify the economic development effects of transportation investments, but like many states, has found this difficult.

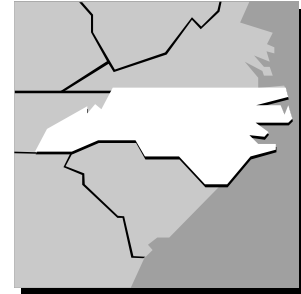
The state actively supports infrastructure improvements that will induce new business location, including approximately \$20 million each year of dedicated MoDOT funding. Most of this money goes to highway interchanges, although it technically could be used for any mode.

The active role of regional planning commissions in rural project prioritization helps to ensure a strong linkage between economic development strategies and highway investments. All of the 19 RPCs are involved in economic development planning, and about half are federally-designated economic development districts (EDDs). EDDs are required to prepare an annual Comprehensive Economic Development Strategy, which includes a transportation component and discusses transportation needs.

One example of transportation investment supporting economic development comes from a new Wal-Mart distribution center. The facility, proposed for the town of St James on I-44, would generate heavy truck volumes and require a new access road. The Meramac Regional Planning Commission worked with MoDOT District 9 to secure funding for the road from MoDOT headquarters, using MoDOT's dedicated economic development funding.

6.1.6 North Carolina

Project prioritization methods in North Carolina do not formally consider economic development potential. However, the state's transition to more reliance on RPOs for regional transportation planning is expected to help ensure that transportation investments support local economic development objectives. Most of the existing regional councils that were designated to serve as RPOs already perform economic development planning activities for their region, so transportation decisions will now be more closely coordinated with these activities.



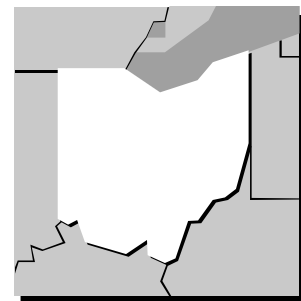
Several years ago the North Carolina Department of Commerce completed a study of ways to increase rural prosperity. One of the outcomes of this study was the identification of several transportation improvements that would promote economic development. Specifically, the study recommended that the state give priority to completion of improvements along three critical rural highways: Highway 70, Highway 17, and Highway 19E.

The state Department of Commerce (Division of Community Assistance) operates a community planning program with five regional offices to provide planning and related technical assistance to small towns and rural communities. The Department also has an Economic Development Board that is responsible for state economic development research and planning and is charged with making recommendations on policy changes in the area of economic development. The Board has organized committees to focus on seven major areas of economic development in North Carolina, including one focused on Infrastructure, Transportation, and Environment.

The state's formula for distribution of highway funds is intended to ensure that rural counties receive a fair share of available funds. This formula was modified as a direct result of a perceived lack of transportation improvements in the rural areas by legislators. As in all states, rural highway investments that promote economic development can also have unintended and possibly negative side effects. An example is the completion of I-40 in Johnston County, which greatly reduced travel time between rural and urban areas, improved jobs access, and allowed considerable sprawl development.

6.1.7 Ohio

Ohio organizes and implements rural economic development efforts through its Department of Development. Communities or regional development agencies typically present economic development plans to the state, and the state provides funding, information, and technical assistance.



Two Ohio DOT initiatives specifically promote transportation investments that support rural economic development. One is the use of the Transportation Review Advisory Council (TRAC), described in Section 2. For transportation projects with a cost of \$5 million, TRAC reviews the project and awards prioritization points according to the following criteria: reduce congestion, increase mobility, provide connectivity, and increase a region's accessibility for economic development. In terms

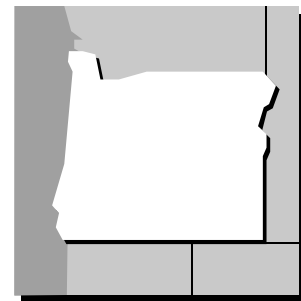
of economic development, TRAC only awards points for jobs that are new to the state rather than those that are a redistribution of jobs within the state.

The second initiative was part of the last statewide plan, called Access Ohio. Launched in the early 1990s, the goal of Access Ohio was that 90 percent all citizens in Ohio would have access to a major corridor within 10 minutes of home. Ohio DOT held approximately 100 meetings around the state to discuss the transportation needs of local communities, and through this process identified a number of “macrocorridors” where improvements were focused. The result of Access Ohio is five major construction projects occurring in rural Ohio. One example is in Meigs County, one of the poorest counties in the state, where \$200 million is being spent on a new highway.

Access Ohio is in the process of being updated, and input will be solicited via a survey rather than public meetings. The initiative is now more fiscally constrained, and most new projects cannot be undertaken for economic development purposes alone.

6.1.8 Oregon

Oregon has a comprehensive and coordinated approach to rural economic development and planning that facilitates close coordination with Oregon DOT. A prime example is the use of Regional Community Solution Teams (RCSTs). In 1995, the Oregon’s Governor convened a meeting between five state agencies – Environmental Quality, Transportation, Housing, Economic and Community Development, and Land Conservation and Development – in order to discuss how to better coordinate planning. The outcome of the meeting was the development of an integrated approach to planning, known as Community Solutions. State agencies work together in multi-agency RCSTs at the local level, meeting regularly with local groups to resolve development and planning problems, streamline permitting, leverage resources, and integrate investments. The RCSTs keep informed of planned transportation projects and Oregon DOT grant opportunities through their Oregon DOT member. Similarly, Oregon DOT and other agencies are kept abreast of economic development strategies through the participation of the Economic and Community Development Department.



As described in Section 2, Oregon DOT relies on Area Commissions on Transportation (ACTs) to serve as an advisory body to address all modes of transportation, with a primary focus on the state highway system. An ACT also considers regional and local transportation issues if they affect the state system. As the STIP is developed, ACT members prioritize their regional needs for the Oregon Transportation Commission. ACTs establish a public process to determine project selection priorities for the STIP. The makeup of the ACTs is conducive to discussions of economic development issues and helps to ensure that projects with economic development benefits are considered for prioritization.

Oregon DOT has an Immediate Opportunity Fund that finances the construction of public works projects in support of the creation or retention of permanent jobs. While the fund can be used for projects throughout the state, it is used primarily for rural projects. To be eligible for funding, the project must result in the creation of one permanent job for every \$20,000 loaned or granted.

Another way in which transportation needs in support of economic development are identified is through the Needs and Issues Inventory process. Administered by the Economic and Community Development Department, this standardized process is an on-going collection and annual prioritization of local and regional infrastructure and community facility needs. City and county governments, tribes, ports, special districts, and economic and community development-related non-profit organizations participate in the process by submitting Project Notification Forms. The Department provides access to an on-line Needs

and Issues Database, which contains all of the information collected through the Needs and Issues Inventory process. The Department also provides on-line access to all prioritized lists. Transportation needs identified through this process are reviewed by Oregon Department of Transportation as part of the STIP process.

6.2 Best Practices

Ohio's use of the Transportation Review Advisory Council (TRAC) to prioritize projects over \$5 million allows the state to more objectively consider the potential economic development benefits to the state as a whole. In many states, local elected officials advocate for rural transportation improvements as a way to promote economic development, and there is little or no consideration of whether the new jobs are really a net increase for the state or merely a redistribution of existing jobs within the state. Ohio's TRAC uses economic development potential as one of several criteria to score proposed projects, but considers only the net increase in state jobs.

Florida's Rural Economic Development Initiative (REDI) is a good example of the state DOT working in concert with other state agencies to promote economic development in targeted rural areas. Once an area is designated a "rural area of critical concern" under REDI, a number of state agencies offer flexibility and/or funding to these areas. FDOT has responded by waiving or reducing local matching requirements for projects in REDI areas upon request. FDOT will also consider moving projects forward in the five-year work program if they are in a REDI area.

Missouri's use of regional planning commissions (RPCs) for rural transportation planning helps to maximize the coordination of economic development strategies and transportation priorities. All of Missouri's 19 RPCs are involved in economic development, and approximately half of them are federally designated Economic Development Districts (EDDs). The staffs of these organizations are inherently aware of local economic development efforts when they assist with producing the RPC's list of transportation priorities.

A number of states have established funding sources earmarked for transportation projects that promote rural economic development. Oregon DOT, for example, has an Immediate Opportunity Fund that is available for projects that create or retain permanent jobs, with a minimum threshold of one permanent job for every \$20,000 loaned or granted. Missouri DOT dedicates approximately \$20 million annually for transportation improvements that will induce new business location. Florida's Economic Development Transportation Fund provides up to \$2 million to local governments to alleviate transportation problems that adversely affect a specific company's location or expansion decision.

6.3 Challenges and Areas for Improvement

Economic development is often a top priority for rural areas, and state infrastructure investments should support this goal. Assessing the potential economic development benefits of transportation investments in rural areas is challenging, however. Many state DOTs profess to having a poor understanding of this linkage. It is particularly difficult to forecast the extent to which a highway investment will generate *new* economic growth, as opposed to the investment redistributing jobs and income from another part of the state or the investment occurring at the same time as economic growth that would have happened anyway. Yet proponents for rural highway projects (and to a lesser extent, improvements in other modal infrastructure) repeatedly cite potential economic development benefits. Clearly state DOTs need to improve their analytical capabilities for making these assessments. Otherwise, states risk spending scarce public resources on rural transportation projects that have little or no net benefit to the state.

One potential approach is currently being explored by Montana DOT. Faced with numerous requests for rural highway widening in the name of economic development, Montana has decided to create an integrated modeling framework that attempts to quantify how and where a particular transportation investment will affect the state's economy. This major effort is still underway, so it is too soon to evaluate its success.

7 CONCLUSIONS

The primary purpose of this report is to document state DOT planning practices for rural areas, to highlight best practices, and identify areas of needed improvement. These findings are detailed in the previous five sections. This research also allows us to draw to some general conclusions about the current state of rural transportation planning.

1. State DOTs receive high marks from local and regional officials in rural areas.

In all eight sample states, interviewees felt the state DOT was generally doing a good job of listening to and addressing their concerns and needs. This sentiment was expressed regardless of the state DOT approach to rural planning and the use of RPOs. State DOT staff in all sample states appears to be sincere in their efforts incorporate rural priorities in their planning and programming documents as much as possible, and they maintain good relationships with local government staff and elected officials. In several states, interviewees noted an improvement in state DOT attention to rural areas over the last few years, an improvement that is perhaps attributable to heightened focus on rural areas at the federal level. State DOT staff also felt that they were doing an adequate job of identifying rural needs and promoting solutions through the planning and programming process.

2. The use of RPOs has improved the rural transportation planning process.

In states that have empowered RPOs with a formal role in rural transportation planning, interviewees were unanimous that this has improved rural planning. The success is most evident in states like Maine and Missouri that began relying on RPOs in the early to mid-1990s and have had sufficient time to observe the change. Several factors contribute to the sense of improvement in these states. First, rural officials (particularly RPOs but also cities and counties) feel that they have more say in the state transportation decision-making that affects them. They also come to understand the planning and programming process better, and for that reason may be more appreciative of state DOT efforts. On their part, state DOTs feel that the empowerment of RPOs has improved rural planning, if for no other reason than making their entire planning process more legitimate and defensible. This is particularly true in states that use a transparent and consistent system for setting project priorities.

3. The empowerment of RPOs can present new challenges.

Assigning new responsibilities to RPOs can potentially lead to institutional conflicts with state DOT districts. States may have to overcome a period in which rural planning role and responsibilities are uncertain or redundant. Most states have a mismatch between RPO and DOT district boundaries, and this adds an additional hurdle to involving RPOs in project prioritization, especially when RPOs lie in multiple DOT districts. Some RPOs may lack the capacity to properly take on transportation planning functions, both in terms of funding and staff knowledge. State DOTs should ensure that expectations of RPOs do not exceed their resources and should provide RPOs with guidance and training.

4. State DOTs could improve rural public participation.

Many state DOTs obtain only a limited amount of direct public participation in their rural transportation decision-making process. Some states rely on only one or a few individuals in each county – a planning director, public works director, county commissioners, or a district engineer – to represent rural residents. Although it can be very challenging, a broader approach to rural public involvement is needed, coupled with a systematic evaluation of state DOT performance in achieving rural public involvement goals. On a

positive note, states increasingly recognize the need to improve rural public involvement. The trend toward greater reliance on RPOs is one direct result of this recognition.

5. Most state DOTs could do a better job of linking transportation planning with land use in rural areas.

This conclusion should be no surprise – many state DOTs we interviewed gave themselves low marks in terms of land use coordination. Oregon and Maryland, national leaders in promoting smart growth, are exceptions. A number of other states make little effort to ensure that transportation investments are consistent with land use objectives, other than perhaps a perfunctory review of local comprehensive plans. Many state DOTs feel powerless to promote better land use coordination because land use is under local control. But even with these limitations, state DOTs could more systematically evaluate the growth inducing effects of their investment decisions and compare these effects with locally developed growth objectives.

6. Some state DOTs are proactive and innovative in promoting rural economic development through transportation investments, but all need to improve their methods for assessing potential economic development benefits.

A number of state DOTs have funding programs earmarked for rural economic development. Many state DOTs do a fairly good job of matching transportation investment priorities with rural economic development strategies where these strategies exist. The growing use of RPOs helps to ensure this because many RPOs serve as rural economic development coordinators. In many rural areas, however, this coordination can be challenging because economic development strategies have not been clearly articulated for the region and the benefits of specific economic development initiatives have not been quantified. State DOTs need to do a better job of ensuring that large transportation investments will actually achieve the economic growth that project proponents claim. This requires more rigorous analysis of potential economic development impacts.

APPENDIX: LIST OF INTERVIEWEES

Colorado

George Ventura, Manager, Regional Planning Unit, Colorado DOT
Leah Ware, Manager, Statewide Planning Unit, Colorado DOT
Irene Merrifield, Regional Planning Unit, Colorado DOT
Pat Loose, Colorado DOT
Carl Hapes, Cheyenne County Commissioner

Florida

Melanie Weaver Carr, Office of Policy Planning, Florida DOT
Renee Cross, Office of Policy Planning, Florida DOT
Kathleen Neill, Office of Policy Planning, Florida DOT
Robert Magee, Office of Policy Planning, Florida DOT
Mary C. Freeman, South Florida Manager, Commission for the Transportation Disadvantaged
Ed Coven, State Transit Manager, Florida DOT
Mary Helen Blakeslee, Office of Trade, Tourism and Economic Development, Governor's Office
Frank Williams, Economist, Office of Economic and Demographic Research
Tommy Barfield, Director of Production, District 3, Florida DOT
Charles Blume, Executive Director, Apalachee Regional Planning Council
Bruce Ballister, Planning Director, Gadsden County
Robert Presnel, Public Works Director, Gadsden County
Mark Mondell, Principal Planner, Withlacoochee Regional Planning Council
Vivian Zaricki, Florida Association of Counties

Maine

Jim Fischer, Hancock County Planning Commission
Marianne Hays, Maine State Planning Office
Roger Raymond, Region 2 Transportation Advisory Committee
Peter Robohm, Region 5 Transportation Advisory Committee
Martin Rooney, Statewide Planning, Bureau of Planning, Maine DOT
Ray Saucher, Manager of Major Studies, Maine DOT

Maryland

Mike Nixon, Office of Planning, Maryland DOT
James Thompson, Regional Rural Planning, Maryland State Highway Administration
Vaughn Lewis, Regional Rural Planning, Maryland State Highway Administration
John Gring, Director of Inter Agency and Local Government Coordination, Department Business and Economic Development
Steve Magoon, Planning Director, Calvert County
John Nelson, Planning Director, Garrett County

Missouri

Cheryl Ball, Long Range Planning Coordinator, Missouri DOT
Steve Billings, Administrator of Transit, Transit Section, Missouri DOT
Shirley Tarwater, Transit Operations Specialist, Missouri DOT
Richard Cavender, Executive Director, Meramec Regional Planning Commission
Garry Taylor, Executive Director, Mid-Missouri Regional Planning Commission
Anita Davis, Planner, Boonslick Regional Planning Commission
Chris Dunn, Planner, Mo Kan Regional Planning Commission

North Carolina

Mike Bruff, Director, Statewide Planning Branch, North Carolina DOT
Charles Glover, Assistance Director for Planning and Programming, North Carolina DOT
Ray McIntyre, Program Development Branch, North Carolina DOT
Marianne Frederick, Acting Assistant Director of Community Assistance, North Carolina Department of
Commerce
John Marshall, Coordinator, Unifour Rural Planning Organization

Ohio

Debbie Fought, District 10, Ohio DOT
Matt Selhorst, Deputy Director, Division of Planning, Ohio DOT
Rosemary Amiet, Rural Transit Manager, Ohio DOT
Jeff Spencer, Executive Director, Ohio Valley Regional Development Commission
Mike Jacoby, Region 11 Field Office, Governor's Office of Economic Development
Roger Davis, Licking County Transportation Study

Oregon

Jim Bryant, Interim Region 4 Planning Manager, Oregon DOT
Mark DeVoney, former Region 4 Planning Manager, Oregon DOT
Stephen Dickey, Capital Programs Manager, Oregon DOT
Robin Phillips, Intercity Programs Coordinator, Oregon DOT
Tom Schuft, Region 5 Manager, Oregon DOT
Dick Reynolds, Program Coordinator, Corridor Planning, Oregon DOT
Jerri Bohard, Planning Section Manager, Oregon DOT
MerrieSue Carlson, Governor's Regional Coordinator, Community Development
John Morrison, Program Manager, Rogue Valley Council of Governments