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Theme #8: Rural Public and School Transportation

Data and Trends

1. Identify strategies to train and motivate first responders to gather appropriate data for bus-involved traffic incidents.
2. Identify tools to assess demand for the regional services that connect metropolitan areas with outlying areas, especially as goods movement distribution and healthcare are centralized.
3. Evaluate methods to improve transit access through improving transit data.
4. Create and analyze separate, rural-specific benchmarks/performance metrics for intercity bus and public transit.
5. Develop key public transit performance metrics and target levels for discretionary travel (ADA40).
6. Evaluate the impact of private vehicle use in rural communities that have invested a significant amount of money in creating a multi-modal transportation system offering.
7. Characterize and quantify markets for rural public transportation; identify socioeconomic and technological trends which may shape these markets going forward.
8. Inventory all rural transit providers and create a comprehensive rural transit coverage map.
9. Develop synthesis of practice on the integration of rural transit planning with overall rural transportation planning.
10. Develop case examples that quantify the impacts to rural transportation agencies when non-emergency medical transportation providers cease operations.
11. Identify methods for comparing rural transit system ridership with demand for alternative services such as ridesourcing and carpooling.
12. Identify best practices for matching rural transit service intensity with passenger demand.
13. Develop case examples of rural transit and school bus systems that have found innovative methods for utilizing human resources and equipment efficiently during off-peak periods.

Intercity Bus

1. Development and implementation of a national intercity bus atlas (RNS23).
2. Innovative business models for rural intercity passenger transportation (RNS24).
3. Identify ideas for making intercity bus services more attractive. What services/attributes, marketing, and priority infrastructure would assist with this?
4. Develop a guidebook to assist tribal communities, local governments, and private intercity bus providers with implementing and improving connectivity between local, tribal, regional, and long-distance bus services.
5. Identify methods to coordinate state intercity bus subsidy programs across jurisdictional boundaries.

6. Analyze existing intercity bus subsidy programs and their relationships with unsubsidized commercial services provided by traditional, ethnic, and express carriers. Compare the characteristics of routes requiring long-term subsidy and those which are financially self-sustaining.

Marketing/Eligibility

1. Identify strategies to ensure that riders and potential riders know and understand their eligibility status, so no one gets left behind.
2. Evaluate the effectiveness of current rural transit service marketing programs and the specific marketing techniques that are effective.
3. Assess the impact of re-branding rural transit services to switch from a focus on human service to one emphasizing that the system is open to the general public.
4. Assess the impact of marketing techniques: travel training, personal bottom-up approach vs. top-down wide audience.
5. Identify relationships between transit/paratransit equipment specifications and customer acceptance or service marketability metrics.
6. Develop tools that assist public transportation customers with visualizing network connections and linkages.
7. Develop software to link the Intercity Bus Atlas to the BTS National Transit Map.
8. Identify the effects of using electronic payment systems (including multi-agency debit cards) on rural transit ridership.

Passenger Rail

1. Identify methods to boost Amtrak ridership and support the long-term viability of Amtrak services outside the Northeast Corridor.
2. Identify methods Amtrak is using to build network access with other modes and identify rail/bus best practices for states.
3. Evaluate the value of accommodating bicycles on long-distance passenger trains and/or providing bicycle rental at rural stations.
4. Exploring the value of passenger rail service in rural network access (RNS20): Analyze available data about rural Amtrak ridership, trip patterns, trip purposes, and passenger demographics to identify service gaps and opportunities to strengthen Amtrak and its connections to other modes.
5. Forecast passenger demand and revenue on low volume intercity rail services (AR010).
6. Identify the benefits and disbenefits of Amtrak stops at low-volume stations and develop measures of the social benefits of providing Amtrak services outside the Northeast Corridor.

Planning

1. Update TRCP Report 150, "Communication with Vulnerable Populations." Identify social resilience in rural communities; assess social networks (person to person and online) to support emerging communications and emerging transportation.

2. Document best practices for cross-jurisdictional coordination of passenger transportation using travel shed concepts.
3. Develop recommended practices for funding passenger transportation services in travel sheds that cross jurisdictional boundaries.
4. Expand the use of the Oregon DOT methodology for identifying "Key Transit Hubs" (transfer points) to include the entire United States.

Policy

1. Evaluate the merits of a stored-value card that would allow cognitively independent subsidized riders to make their own decisions about mode choice and carrier.
2. Integrate transit subsidy programs with overall medical treatment programs for people with cognitive disabilities.
3. Re-evaluate the Federal Transit Administration's National Transit Database (NTD) to simplify reporting requirements but cover more FTA programs.
4. Evaluate transportation policies across multiple Federal agencies (DHHA, FTA, VA, etc.) to identify opportunities to improve service coordination and increase productivity.
5. Identify methods to provide transportation (including long-distance transportation) for low-income people who wish to testify at legal proceedings as witnesses, subject matter experts, etc.
6. Identify strategies for assuring that affordable housing developed in rural areas has a residential density sufficient to serve efficiently with transit.

Public Transit

1. Assess the impacts of driverless vehicles on rural transit.
2. Identify the service quality expectations of rural transit riders on underfunded and low-density systems.
3. Compare transit and no-transit small urban communities.
4. Assess the effectiveness of alternative fuels sources for rural applications.
5. Identify security measures for rural transit systems and cost-effective deployment options.
6. Identify best practices for transit oriented development in small towns (ADA30).
7. Identify best practices to build out infrastructure to accommodate electric vehicles/buses.
8. Measure the impact of rural bus stop infrastructure conditions and bus stop ADA compliance on ridership; identify potential solutions for improving the safety, comfort, and accessibility of rural bus stops.
9. Identify the transit operational issues, best practices, and lessons learned for "necks" of peninsulas.
10. Identify strategies for encouraging rural transit service coordination and/or mergers to improve services that cross jurisdictional boundaries.
11. Identify barriers to the expansion of on-demand paratransit services in rural areas.
12. Identify best practices for human service transportation in underserved rural areas.
13. Identify relationships between roadway surface conditions, passenger comfort, and vehicle maintenance costs for rural public transit and paratransit systems.

14. Identify gaps in the availability of training rural transit and paratransit vehicle operators and potential solutions.
15. Evaluate the feasibility of using low-cost surfacing materials for rural bus stops and platforms, such as gravel stabilized with acrylic polymer.
16. Evaluate the importance of providing access to medical facilities and testing laboratories on rural transit routes.
17. Prepare a meta-analysis of rural transit system feasibility studies to identify the characteristics of route expansions and new systems which advanced to the implementation stage.
18. Evaluate the extent of rural transit system utilization of the General Transit Feed Specification (GFTS) to disseminate route and schedule information through commercial mapping services such as Google Maps. Identify barriers to further GFTS implementation and methods to encourage GFTS use by rural operators.
19. Evaluate cost effective options for "on-demand" transit services in rural areas
20. Identify strategies for rural transportation and college-oriented services to interact and benefit each other.
21. Identify new/innovative transit operations models for the future.
22. Identify tools to train and incentivize transit agencies to implement best practices including compliance requirements.
23. Analyze changes in demand for public transportation as the rural (and tribal) populations age.
24. Update TCRP Report 150, "Communication with Vulnerable Populations: A Transportation Planning & Emergency Management Toolkit." Consider adding more information about tribal communities and the roles of rural social service agencies.
25. Identify best practices for preparing riders (specifically elderly and veterans) to use the public transit systems via social media.
26. Evaluate potential effects of the Safe Routes to School program on the transportation preferences of the post-Millennial generation.
27. Evaluate the feasibility of implementing rural autonomous public transportation systems.

Public Transportation Modeling and Forecasting

1. Update TCRP 147 demand model at the route level with additional data points from expanded use of in-kind and add a network model.
2. Evaluate the characteristics, benefits and drawbacks, and design considerations for deviated fixed route systems that have been implemented in rural areas.

School Transportation

1. Research the changing trends in communities where parents drive their kids to school – what is driving it and should schools be designed differently to accommodate this trend?
2. Research relationships between school bus use and state/local policies that allow students to attend a district other than the one where they reside.