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## Theme #6: Rural Products to Market

### Coordination

1. Evaluate the effectiveness of U.S. shipper associations which have been formed to improve access to freight services and identify freight cost reduction strategies aimed at making rural industries and agriculture more competitive in global markets.
2. Identify practical methods to improve coordination across freight modes, holistically address bottlenecks, and optimize the effectiveness of the freight system as a whole.
3. Develop freight supply chain use cases and deployment strategies.
4. Develop an all-modes guide for local officials describing the structure of rural freight systems; factors affecting freight costs; the organizational objectives and roles of private freight carriers, shippers, shipper associations, local government, state government, and federal agencies; methods for incentivizing private investments in freight infrastructure; and methods for allocating the costs of freight infrastructure when it is partially or entirely subsidized by the public sector.
5. Develop guidance for analyzing the resilience of the rural freight network (including privately-operated freight services) covering disruptions caused by natural disasters, adverse weather/climate events, and human events such as labor disputes.

### Marine Freight

1. Conduct research to determine whether revitalization of short-sea shipping between domestic U.S. ports would benefit rural freight shippers. Evaluate the technical and regulatory environments required to achieve costs competitive with trucking and rail for shorter movements along maritime corridors such as the Great Lakes, Mississippi River, Atlantic Coast, and Pacific Coast including Alaska.
2. Conduct a comprehensive evaluation of the economic and social impacts of the Jones Act, which prohibits foreign ships from carrying freight between U.S. ports, including effects on consumers and businesses in Alaska, American Samoa, Guam, Hawaii, the Northern Mariana Islands, and Puerto Rico.
3. Identify trends affecting the use of small maritime ports and analyze the potential for shifting freight shipments from trucking to maritime services based at small ports.
4. Identify methods for enhancing the environmental, transportation and navigational benefits of the inland waterway systems.

## Oversize/Overweight Loads on Highways

1. Evaluate the feasibility of developing a national unified oversize/overweight (OSOW) load permitting system that incorporates clearance and weight restrictions for rural highways under state, county, and local jurisdiction.
2. Create a low cost, automated online oversize/overweight (OSOW) permit system for use by local agencies in rural areas.
3. Develop guidance to assist rural roadway designers in forecasting the volume of heavy/wide agricultural loads for the purposes of pavement and bridge design.

## Rail and Intermodal Freight

1. Identify methods for increasing the availability of empty intermodal containers in locations distant from seaports, such as the use of locally produced one-trip containers.
2. Explore public sector roles in assuring adequate freight car supply among short-line railroads (AR040).
3. Evaluate the economic development potential of providing shared-use rail-highway transloading facilities to extend the reach of rail services beyond the rail line itself. Develop methods for identifying economically viable locations for truck-to-rail intermodal cargo transfer facilities, and prepare a guide to help rural communities develop transloading facilities in partnership with local shortline railroads or other organizations.
4. Develop case examples of public investments in terminal facilities that support the efficient transfer of rural freight between rail, waterways, air, and highways.
5. Develop a guidebook to assist state and local agencies in identifying gaps in the current freight rail network that potentially constrain economic development opportunities. Identify methods for evaluating strategic reinvestment in freight rail to support industrial development.
6. Evaluate rail policy alternatives that can improve freight connectivity.
7. Evaluate the impacts of subsidy programs for short line railroads.
8. Evaluate the effectiveness of current rail policies in serving rural shippers.
9. Identify barriers to the reinstatement of freight rail lines that have been placed in state "rail banks" or rail-to-trail programs. Identify successful and unsuccessful examples of rail line reinstatement projects and their characteristics.

## Safety

1. Identify low-cost methods for signaling rural railroad crossings.
2. Identify methods for improving the crashworthiness of railroad crossing signals.
3. Analyze truck and bus safety research needs (ANB70).

## Social Issues

1. Assess the extent of suicides and trespasser/homeless deaths on rural freight rail corridors, and identify methods for reducing crashes involving trains that strike people on or near the track in rural areas.

2. Identify cost-effective strategies for improving local access to freight services while minimizing the quality-of-life impacts of freight operations.
3. Evaluate impacts of limited freight service availability in remote and frontier communities.
4. Conduct a self-assessment bias evaluation to determine the extent to which commercial truck drivers overestimate their driving safety and health (ANB70).

### Trends and Competitiveness

1. Analyze the trends affecting rural freight services to document the current status of the freight market and identify metrics and benchmarks to help future local, state and national officials assess freight market health and determine whether any policy adjustments are necessary.
2. Analyze impacts of rail industry consolidation and declining coal traffic on freight costs and service quality in rural areas.
3. Evaluate the impact of Federal agricultural policies on demand for long-distance transportation of agricultural products, and potential changes in commodity flows/travel demand if ag programs are restructured.
4. Evaluate the competitiveness of short line railroads, as compared to trucking, including the effects of long-term trends affecting the freight market.
5. Analyze impacts of energy development (wind, natural gas, and petroleum extraction) on rural road safety, heavy vehicle use, workforce development, and traffic flow (RNS 9).
6. Identify the implications of climate change for rail and barge freight demand, services and networks (A0020T).
7. Develop methods to estimate transportation demand related to agricultural production.
8. Develop a guidebook to inform state and local agencies on statistically-valid methods for collecting data on rural freight movements (especially seasonal agricultural traffic) at the community and corridor levels.
9. Develop recommended practices for gauging public opinion about investments in non-highway freight handling facilities such as barge terminals, rail lines, and pipelines. Identify methods for separating the opinions of citizens directly impacted by freight projects from those of the broader rural community.

### Truck Freight

1. Research low-cost methods for automated truck weight monitoring on rural roadways.
2. Develop guidance on methods for computing seasonally-adjusted traffic volumes that take into consideration localized traffic surges related to planting and harvest activities.
3. Evaluate the impacts of large/heavy agricultural equipment on rural traffic safety, traffic flow, pavements, and bridges.
4. Evaluate the viability of developing of shared-use trucking terminals as a rural economic development asset.
5. Evaluate the feasibility of subsidizing privately constructed regional truck-to-truck transloading stations to reduce trucking costs in smaller communities.

6. Develop transportation agency guidance on determining the demand for heavy truck parking and methods for matching truck parking supply with demand.