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## Theme #1: Active Transportation

### Culture

1. Document active transportation behaviors and attitudes of rural residents (including barriers) to support active transportation policy and compare with urban areas.
2. Analyze rural bicycle culture and safety differences between U.S. and European countries such as Denmark and the Netherlands.
3. Evaluate the difference in bicycle culture and non-bicycle culture.

### Data

1. Develop and document techniques for obtaining reliable pedestrian and bicyclists counts in rural areas (including recreational use).
2. Identify impacts of not having reliable pedestrian and bicycle counts outside of metro areas.
3. Develop the effect of lack of bicycle volume data on crash rate calculation.
4. Identify surrogate risk measures of pedestrian and bicycle traffic volumes when data from direct observations is unavailable.

### Electric Scooters

1. Identify health and safety benefits and disbenefits of electric scooter use in rural areas.
2. Analyze rural and small-town electric scooter crashes and determine whether the use of helmets or other personal protective equipment should be mandatory in these areas.
3. Analyze economics of electric scooter rental industry and determine whether scooter-sharing is financially viable in small towns.
4. Evaluate potential synergies between electric scooters and rural public transportation, along with methods for safely storing scooters during the transit portion of the trip.
5. Identify appropriate design criteria for accommodating electric scooters safely on rural roads and small-town streets, for example when scooters should be separated from pedestrian and/or motorized traffic.

### Infrastructure

1. Evaluate the assumption that signing for bike routes tells drivers that bicyclists are there.
2. Develop rural bicycle infrastructure design strategies for longer distance commuting.
3. Evaluate road user comprehension of Advisory Bike Lanes.
4. Develop geometric design guidance for Advisory Bike Lanes.
5. Analyze effectiveness of road diets in rural areas.
6. Develop an expanded guidebook for accommodating bicycles on rural roads with low-cost share the road techniques.

7. Develop a Synthesis of Practice on policies and equipment for transporting bicycles on rural transit vehicles and providing bike parking at transit stops.
8. Identify best practices for providing bicycle access and parking at rural tourism/recreational sites.

### Marketing

1. Identify innovative methods to promote active transportation in rural communities.
2. Document successful methods for creating public and government support for active transportation.
3. Develop marketing tools for parental acceptance of walking to school.

### Planning

1. Identifying traditional and non-traditional stakeholder groups for rural pedestrian facilities.
2. Identifying travel sheds for rural pedestrian facilities.
3. Identify best practices for cross-jurisdictional coordination of pedestrian and bicycle facilities development.
4. Analyze demographics of rural active infrastructure users.
5. Analyze variations in rural and small-town biking and walking rates in relation to climate, terrain, traffic volume, road design, development density, and land use; identify policy implications.
6. Determine the nature and extent of concerns (i.e. parents, school system, country roads department, law enforcement) about children walking/biking to school and identify appropriate physical and policy countermeasures.
7. Evaluate feasibility of bicycle share programs in small towns.
8. Identify factors affecting public acceptance of investments in active transportation facilities and develop case examples of successful and not-so-successful project-level public outreach for proposed facilities.

### Policy

1. Evaluate the impacts and enforcement of safe passing laws for nonmotorized modes.
2. Document noteworthy practices or strategies for effective non-infrastructure tools to improve the safety and wellbeing of children traveling to/from school.
3. Identify and document methods for funding sidewalk installation/upgrades and maintenance obligations that do not require property tax special-assessments.
4. Conduct periodic (e.g., biennial) surveys of local elected officials to track trends in acceptance and funding for ADA compliance and pedestrian safety investments in small towns.

### Safety

1. Evaluate and document safe access for bicyclists and pedestrian users in rural America (e.g., where does it exist, gaps, connectivity).

2. Evaluate and document safe routes to schools in rural areas (e.g., lighting, signing, visibility, connectivity).
3. Assess rural and small-town pedestrian and/or bicyclist safety needs.
4. Document and evaluate low cost and innovative safety improvements for rural bicyclists and pedestrians.
5. Analyze nature and extent of equestrian (horseback-rider) crashes on rural highways.
6. Analyze non-motorized road user conflicts with All-Terrain Vehicles and possible countermeasures.
7. Develop a guidebook for evaluating the safety of rural ped/bike infrastructure and selecting appropriate fixes including key performance measures for comparison.
8. Evaluate crash data to identify rural roadway factors that may be hazardous to bicyclists and pedestrians, infrastructure deficiencies, and effective roadway treatments.
9. Develop a generalized rural non-motorized road user safety model that supports systemic risk analysis and project prioritization.
10. Identify best practices for Safe Routes to Schools programs.
11. Identify best practices for accommodating people with disabilities in active transportation facilities.
12. Evaluate the effectiveness of high intensity Fresnel lamps to improve the conspicuity of bicycles and assess the costs and benefits of mandating their use when riding on high-speed rural highways.
13. Develop a unified national technical standard for portable mobile telephony applications and DSRC devices that would give motorists advance notice as they approach rural non-motorized road users, e.g. in areas with limited visibility.
14. Identify best practices for assuring the safety of children who walk or bike to school along high-speed two-lane rural highways.

## Tribal

1. Evaluate land use and roadway features on tribal reservations to identify obstacles to pedestrian and bicyclist safety.
2. Develop a guidebook to assist tribal planners with identification of non-motorized road user hazards and prioritization of countermeasures including roadway design, speed management, road user behavior, and vehicle safety inspection.