



MOBILITY AND PUBLIC TRANSPORTATION

Evacuation Preparedness of Public Transportation and School Buses In Rural Coastal Communities of the North Gulf Region

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EXECUTIVE SUMMARY

According to the Federal Highway Administration (FHWA), nearly 40 percent of the country's transit-dependent population—primarily senior citizens, persons with disabilities, and low-income individuals—live in rural areas. Due to a lack of travel services, rural populations are more dependent on automobiles than their urban counterparts. When an evacuation takes place, rural coastal communities are at high risk, and difficult to evacuate in a timely manner due to larger geographical areas, low population densities and limited resources. Coastal communities along the Interstate 10 (I-10) corridor from Florida to Louisiana are predominantly rural. When natural disasters occur, rural coastal communities are difficult to evacuate quickly. To help address the issue, public transportation can be a successful partner for rural areas in accomplishing the four tasks of emergency management planning: (1) mitigation, (2) preparedness, (3) response, and (4) recovery.

The objective of this study was to assess the emergency preparedness of public transportation and school bus systems in rural coastal communities in the Gulf Coast region. The assessment focused on how adequately transit systems were prepared and what role they could play in the event of an emergency/evacuation event. For the assessment, a survey was adopted as the methodology. The survey was distributed to 46 public, private, and school transportation agencies within the 24 coastal counties of Florida, Alabama, and Mississippi, and four parishes of Louisiana in the Northern Gulf of Mexico region (NGM). Twenty four surveys were returned for a 52 percent response rate. The survey focused on the following topics:

- Transit services provided in rural areas;
- Communication systems used for transit;
- Ridership information and estimation;
- Information specific to emergency events;
- Transit employee issues;
- Evacuation preparation;
- Transit expenditures and revenue, and purchased transportation for emergency events; and
- Assessment of transit needs/coordination.

The survey results of rural transit systems conducted for this assessment provided many insights on transit operations during evacuations, and how rural transit systems had become successful partners in complex, multi-agency emergency operations. Major findings of the survey include the following:

- In an emergency event, transit agencies became more flexible in their service delivery and provided more demand-response services.
- Passenger assistance levels increased when the transit systems moved from routine operations to emergency events.
- Transit services were active in improving coordination, conducting regular mock drills, increasing participation of people and transit, and establishing mutual aid agreements.
- Funding for evacuation-related operations and capital expenses for transit was the most significant and frequently cited concern related to emergency planning.

- Concern for families and personal well-being had prevented transit employees from reporting to work during an evacuation in the past.
- School bus systems emerged as a critical resource, because they were safe, reliable and readily available resources for rural evacuation operation.

Rural transit systems had also fulfilled their assigned role within their own local emergency management operations. However, this role was largely limited to the “preparedness” activity of emergency management—readiness to evacuate people out of the dangerous zone by responding to specific requests. Lessons learned from this assessment may be utilized in improving rural evacuation practices in the following areas:

- Technical issues such as sparse communication network coverage in rural areas or network breakdown hinder evacuation operations. Transit agencies equipped with satellite phone technology and passenger information that would help to disseminate information more efficiently will help in coordinating an evacuation operation.
- Employee responsibilities in emergency events should be well defined in job descriptions and reinforced with necessary job training. A “prior commitment” form could be signed by employees during the hiring process, along with notification of defined emergency assistance benefits for serving in emergency events.
- In the reauthorization of the SAFETEA-LU, it is suggested that Congress recognize the inadequate finance issue and authorize the Federal Transit Administration (FTA) or the Federal Emergency Management Agency (FEMA) to reimburse transit evacuation expenses including operation, training, and preparation for local, state, and national level disasters.

Many of the issues identified by transit agencies are also a concern for school bus systems. However, the following advantages and disadvantages of using school buses should be considered during emergency management planning:

- **Advantages:** School buses are equipped to deal with altered schedules and weather conditions. They are highly visible in traffic and can be given priority in a queue. Schools can act as shelters and school resources such as nurses, drivers, mechanics, and safety officers can be utilized in evacuation operations.
- **Disadvantages:** Adult capacities on buses intended to carry children are limited. Drivers have to rely on local Emergency Management Agencies (EMAs) for passenger information. Buses are not equipped with air conditioning. Moreover, they have limited wheelchair accessible spaces.