

# Transportation Requirements for Special Needs Populations

By Thomas P. Russo, Emergency Management



How to reach special needs populations pre-disaster and prepare them for response actions and post-disaster recovery operations is one of the many aspects of advance planning that local authorities must address as they seek to build community resilience. A particularly complex phase of pre-disaster preparedness is planning for the transportation needs of those who are designated as “access and functional needs populations” (AFNP) within coastal communities. A model that triages special needs populations pre-disaster depending upon transportation requirements could be instructive when planning with the diversity represented in AFNP.

Along the coastal communities in states where the threat of hurricanes is high, emergency managers wrestle with how best to [integrate planning](#) for those who have an access or functional need. Coalition development has been a key tool for organizations that may have competing interests or even have missions with unlikely commonality. It also is a tool that coastal communities can use to form a task force, which would include stakeholders and individuals with access and functional needs, to address their unique transportation issues during a disaster. The purpose of an AFNP coalition task force is threefold: (a) explore the assumptions, limitations, and other interrelated transportation issues involved; (b) determine the resources and options available; and (c) define and better understand AFNP groups.

To understand the behavior of AFNP evacuees, such as occurred during Hurricane Sandy in 2012, this model describes three general scenarios governing preparedness operations needed to meet the local transportation needs for AFNPs.

Each person, of course, may have his or her own transportation preferences, depending on specific

functional needs. The worst case scenario for coastal regions would be a threatening hurricane as was witnessed in 2012 along the New Jersey coast with significant surge and strength to trigger a major coastal evacuation. This model of evacuation scenarios, with certain assumptions, would also work for other disaster situations and for other operational plans – the stockpiling and distribution of various Strategic National Stockpile medications and other resources, for example.

The following model and its three scenarios could be adopted to guide, or triage behavior patterns of AFNPs into smaller and better defined groups, and to prioritize the planning efforts developed by both scenario and functional need: (a) If transportation is available, the AFNP would act on the recommendation to evacuate; (b) If transportation is *not* available, adoption of the order to evacuate would depend on the availability of other public and/or private resources; and (c) If transportation is available, there still would be isolated and/or unidentified populations, as well as recalcitrant – i.e., unwilling to evacuate – citizens.

*U.S. coastal communities have unique and difficult transportation needs during major disaster situations. Compounding the problem are many differences in the transportation resources required for access and functional needs populations.*

## Background Complexities & What-If Scenarios

Among coastal communities, emergency management authorities (EMA) have long recognized the critical need to: (a) reach all population groups in the area; and (b) determine the most effective strategy to include access and functional needs populations in its emergency plans.

EMAs have adopted and currently operate under the federal government’s National Incident Management System (NIMS) since NIMS inception. Many emergency operation centers (EOCs) are structured around incident command, with organized support services provided in its planning, logistics, operations, and administration sections. EMAs have also made great efforts to build



many partnerships along the coast, in addition to those with public transportation resources. During [hurricane evacuation](#) operations, regional transportation authorities have been incorporated into the EOC under Emergency Support Function 1 (ESF 1 Transportation) to assist with transportation issues during an emergency. Scenario 2 of the model directly involves ESF 1 during pre-disaster orientation, training, and exercise, as well as post-disaster response. In contrast, the emphasis of the model with Scenario 1 is directed toward pre-disaster education. Following are some of the particulars for each scenario of the model.

**Scenario 1: If Transportation Is Available:** Many AFNP residents with transportation resources know that to maintain the level of functionality for such residents requires a stable infrastructure and, primarily for that reason, evacuation would be the most prudent choice. These sensitive populations often are dependent on utility infrastructures and systems such as electric power, which may be limited following a disaster. In the aftermath of Hurricane Sandy in 2012, when power was out for an extended period of time, many examples of similar dependencies were documented. Citizens reliant upon or needing dialysis drove a vehicle (or were driven) to hospital emergency rooms for resupply or treatment because the circumstances of the storm overwhelmed their pre-disaster preparations. This segment of AFNP could be reached, in most cases, pre-disaster through a targeted and determined educational campaign.

The pre-disaster role of a coalition task force is to work with stakeholder organizations and AFNPs to

develop an educational campaign and accompany it with an individual evacuation plan when a transportation source is available. An evacuation plan should be developed that could be used by any organization that works with an AFNP. For example, in South Carolina, special medical needs providers use such a plan for healthcare facilities that partner and pre-plan with those who may have to evacuate. This tool could be adapted and become an additional topic for a pre-disaster education campaign.

Other topics in the campaign could include emergency management EOC operations and orientation sessions, with specific focus on transportation as one of the major components of the pre-disaster education effort. Educational topics of discussion also include: (a) the use of emergency management methods for first-alert communications when a threat is impending; and (b) activation of the methods for achieving the outreach of information or its community outreach information network ([COIN](#)) to mobilize for evacuation.

**Scenario 2: When Transportation Is Not Available:** Vehicle accessibility, for both supply and accommodation, poses the greatest current challenge to emergency planners and becomes much more complex during emergency operations. In addition to a limited supply of vehicles, the need to use vehicles without special accommodations further complicates planning efforts.

A first step is to conduct a gap analysis and determine the specific factor(s) contributing to the limited availability of (or inaccessibility to) the transportation resources in the area. The questions to be asked are threefold: (a) Is the transportation problem caused by vehicle availability? (b) Is it because of limited or no access to public transportation? (c) Is it a result of inaccessibility to vehicles with special accommodations such as chair lifts?

A typical concern is that, although the use of public transportation may seem to be a possible option of last resort, many if not all AFNPs might have, at best, limited access from their residences to the pickup points during evacuation operations. It is only after these and other

transportation limitations are fully understood that known and available transportation resources can be matched to determine the gaps that may still exist in the AFNP emergency transportation infrastructure.

**Scenario 3: Isolated, Unidentified, or Recalcitrant Populations:** Those who work with AFNP, including EMA, acknowledge that there are certain people such as the homeless, those suffering from mental illness, or others with functional disabilities who will elect to remain isolated, unidentified, or simply refuse to evacuate under any circumstance. In South Carolina, estimates suggest that approximately 20 percent of the state's AFNPs would fall into this group.

Also worth noting, several reasonable assumptions will surface as a coalition task force engages in the logistics of addressing the unique transportation needs of AFNPs for disaster response and recovery. For example, if the desired outcome is evacuation, the assumptions that underlie this action could represent several behaviors that must be reconciled before a decision is made to evacuate. It is essential, therefore, that stakeholder organizations and AFNPs have been sufficiently educated that, once alerted, the evacuees act as expected (Scenario 1 described above) and accept decisions that would result in either taking refuge in a safe shelter or evacuating.

Another assumption is that the unique methods of communication identified for each functional group should be developed and implemented prior to an incident. A key factor in this calculation is that adequate time must be available to mobilize the communications network and activate the necessary transportation resources to meet incident requirements. Given the current alerting technology, hazards that start with little or no warning such as tornadoes and earthquakes may not allow sufficient time for notification, but others such as hurricanes would provide advance notice.

### Limitations & Restrictions

In terms of the supply of transportation resources – both public and private sector – likely to be available, a number of limitations could compromise the recruitment of either private sector or nonprofit organizations to provide supplemental transportation resources. These limitations include the following:

- A memorandum of agreement would be necessary prior to an incident when supplemental transportation resources are required;
- Private sector resources would almost always require a cost reimbursement agreement of some type, and even nonprofit organizations may require some level of reimbursement as well; and
- Either type of organization, public or private, may have competing commitments of its own.

Public transportation organizations are typically the most accommodating during an emergency that requires short-notice transportation resources. Private sector transportation resources are usually committed to a contract and, therefore, may not be available when requested for public use. Resources that would offer some potential relief are public and/or private organizations possessing vehicles that are not only multipurpose and equipped with special accommodations but also meet the special requirements posed by AFNP rescue operations. As a result, this composite of resources, their capabilities, and availability should be identified and inventoried, and the conditions of availability determined for both pre-disaster and post-disaster situations.

*Thomas (Tom) P. Russo, CEM, is an independent public health and emergency management professional with nearly 30 years of experience in strategic planning, project management, and professional development, including 18 years in public health. Trained in emergency management, public health, homeland security, and association management, Russo holds a Master's degree in Homeland Security Studies from the Naval Postgraduate School's Center for Homeland Defense and Security and has authored a number of articles on topics ranging from medical surge, mass fatality and pandemic policy and preparedness to the continuity of operations planning readiness for medical facilities.*

