



APTA STANDARDS DEVELOPMENT PROGRAM
RECOMMENDED PRACTICE

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Shelter of Transit Vehicles and Nonrevenue Equipment During Emergencies

Abstract: This *Recommended Practice* suggests operational strategies to secure a transit agency's fleet and nonrevenue equipment during times of emergencies. The end goal is to protect the agency's assets from various types of local hazards.

Keywords: emergency operations center (EOC), evacuation, evacuation plans, memorandum of understanding (MOU), vehicle storage

Summary: Emergencies may pose a threat to the fleet and nonrevenue equipment, from such threats as hurricanes, tornadoes, flooding, earthquakes, fires, civil unrest and acts of terrorism. The decision to shelter the fleet and secure nonrevenue equipment may prevent or reduce the extent of damage from the effects of such threats. Identifying such assets in advance and preparing for contingencies reduces the need for last-minute reactionary responses that may not be optimized for the involved hazards. The transit agency may communicate and coordinate its actions with local government and emergency management staff, such as the local or regional EOC, if available.

Scope and purpose: This *Recommended Practice* covers protection of both bus and rail transit fleets from local hazards, as well as critical nonrevenue equipment. Many more options are available to protect bus fleets, since they can be relocated anywhere accessible by road. Rail fleets have more limited flexibility, but some choices are addressed in this document. The intent is to cover as much of the transit agency's essential assets as possible so that damage from the oncoming threat is mitigated. National or international events such as acts of terrorism that threaten transit fleets are not covered, since those should be addressed in other security procedures associated with increased DHS threat levels. Transit agencies should determine how this *Recommended Practice* may help them plan to secure their fleet and equipment against various local hazards. These guidelines are not an exhaustive list of precautionary measures but are intended to reinforce the notion that transit agencies need to plan ahead to respond to their local hazards. Local and unique considerations may require additional protective measures not identified in this document.

This Recommended Practice represents a common viewpoint of those parties concerned with its provisions, namely, transit operating/planning agencies, manufacturers, consultants, engineers and general interest groups. The application of any standards, practices or guidelines contained herein is voluntary. In some cases, federal and/or state regulations govern portions of a rail transit system's operations. In those cases, the government regulations take precedence over this standard. APTA recognizes that for certain applications, the standards or practices, as implemented by individual transit agencies, may be either more or less restrictive than those given in this document.

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The American Public Transportation Association greatly appreciates the contributions of The Security Standards Working Group – Security Emergency Management, which provided the primary effort in the drafting of this *Recommended Practice*.

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1. Shelter of transit fleets and equipment during emergencies

When local conditions arise that threaten damage and destruction of the transit fleet and nonrevenue equipment, the transit agency should consider implementing pre-identified protective actions. Such actions typically are based on available all-hazard risk assessments or other means that prepare the transit agency to act under such conditions. Threshold criteria may be pre-identified to guide the transit agency to take action. Such criteria will lessen the burden of having to make decisions under stressful conditions.

The decision to take action may be coordinated with local or county government agencies and their Emergency Operations Center(s). Mutual aid agreements with other transit agencies and city, county or regional jurisdictions may offer useful options for sheltering the fleet.

1.1 Support of local or regional evacuation

During local emergencies, the transit agency may need to help evacuate or transport elements of the community, or serve other purposes if requested by appropriate government officials such as the EOC. In this case, local needs may take priority before securing the transit fleet. Threshold conditions that threaten employee safety and the transit fleet should be identified in advance to ensure their safety and protection.

1.2 All-hazard risk assessment

In order to adequately assess the hazards and threats to the transit fleet and nonrevenue equipment, an all-hazard risk assessment or threat and vulnerability assessment may be performed to evaluate the likelihood and severity of potential hazards. Based on the results of the analyses, the transit agency can make an educated decision on whether to store and shelter the fleet at their normal location, or to relocate them elsewhere.

1.3 Pre-event planning

Pre-event planning is essential before an actual emergency. This includes coordination with both internal staff and external agencies. Such coordination may include city and county emergency preparedness departments, public works, traffic and transportation, utilities, police, fire and others.

1.3.1 Threat identification

Identify the threats posed by natural, human or technological events for each transit fleet storage location. This will expedite the decision-making process as a threat unfolds. Natural threats may include hurricanes, flooding, tornadoes, earthquakes, blizzards and other similar types of events. Human threats may include civil unrest, terrorism or other threats posed by humans action.

1.3.2 Refuge area identification

Identify the suitable locations that will provide shelter from the involved threat(s). The locations may differ depending on the threat. For example, areas of higher elevation away from flood basins are suitable for protection against flooding but may not be optimal for protection against brush fires if they are near vegetated areas. Although rail transit systems have limited options, some locations along the rail routes may offer better protection than others.

1.3.3 Fueling locations

For bus fleets, identify the closest alternate fueling locations. This is especially important for non-diesel fueled fleets, such as those using compressed natural gas (CNG). If alternate bus storage locations are significant distances away from the normal fueling locations, other fueling facilities will need to be identified along the access routes.

1.3.4 Employee transport

Consideration should be given to transport of transit operators from the alternative storage site(s). The transit agency should verify that operators have adequate communications capability and security along the route, in case they need assistance.

1.3.5 Employee resources

Before any hazard, the transit agency should consider identifying employees who may be needed to perform tasks related to the securing of transit vehicles and nonrevenue equipment. The transit agency may also consider taking steps to allow needed employees to prepare their families before performing their duties at work as time permits. This will assure the workers that their families will be reasonably prepared.

1.3.6 Transit fleet security

Identify the security requirements that will be needed at the alternative storage facilities.

1.3.7 Written agreements

Identify legal agreements or contracts that should be prepared and approved ahead of time to secure the locations for alternate bus storage. Similar issues exist for fueling transit buses at non-transit agency facilities. These may include memoranda of understanding, indemnity forms, proof of insurance, among others.

This is generally not a consideration for rail fleets, since storage is anywhere on the rail network.

1.3.8 Incident command

Identify the decision process to send the transit buses to a sheltered location, or to store the rail fleet at an alternate location along the right-of-way. This may include decision criteria and identification of individuals who will authorize the transport to alternate locations. Identify vital nonrevenue equipment that should be secured from the involved threat in order to determine priorities and allocation of staffing resources.

1.3.9 Suspension of service criteria

Identify the criteria for stopping bus and rail service in preparation for securing the fleet. For example, the transit agency should identify threshold wind conditions that trigger a shutdown before a hurricane or tornado hits the area. This includes identifying who needs to be included in or informed of the decision.

2. Training

The transit agency should consider conducting training exercises to prepare employees to perform their expected duties before an approaching hazard.

References

Transit agencies are encouraged to consult their local emergency plans, such as Continuity of Operations Plans (COOP), city or regional Evacuation Plans and local disaster plans.

Definitions

all-hazard risk assessment: An inventory and assessment of natural and manmade threats specific to the involved jurisdiction generally in terms of severity, frequency and impacts.

hi-rail vehicle: A road vehicle equipped to operate on both roads and railroad tracks.

mutual aid agreement: An agreement that establishes procedures and protocols for providing materials, supplies and services to or from neighboring transit agencies or other organizations in the event of a community or regional emergency or other large-scale event that can overwhelm the ability of a single agency to respond effectively.

threshold criteria: Pre-identified local hazard or threat condition levels that prompt the transit agency to take protective measures.

Abbreviations and acronyms

COOP	Continuity of Operations Plan
CNG	Compressed Natural Gas
DHS	Department of Homeland Security
EOC	Emergency Operations Center
MOU	memorandum of understanding