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Paratransit Emergency Preparedness and Operations Handbook

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Research sponsored by the Federal Transit Administration in cooperation with the Transit Development Corporation
TRANSIT COOPERATIVE RESEARCH PROGRAM

The nation’s growth and the need to meet mobility, environmental, and energy objectives place demands on public transit systems. Current systems, some of which are old and in need of upgrading, must expand service area, increase service frequency, and improve efficiency to serve these demands. Research is necessary to solve operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the transit industry. The Transit Cooperative Research Program (TCRP) serves as one of the principal means by which the transit industry can develop innovative near-term solutions to meet demands placed on it.

The need for TCRP was originally identified in TRB Special Report 213—Research for Public Transit: New Directions, published in 1987 and based on a study sponsored by the Urban Mass Transportation Administration—now the Federal Transit Administration (FTA). A report by the American Public Transportation Association (APTA), Transportation 2000, also recognized the need for local, problem-solving research. TCRP, modeled after the longstanding and successful National Cooperative Highway Research Program, undertakes research and other technical activities in response to the needs of transit service providers. The scope of TCRP includes a variety of transit research fields including planning, service configuration, equipment, facilities, operations, human resources, maintenance, policy, and administrative practices.

TCRP was established under FTA sponsorship in July 1992. Proposed by the U.S. Department of Transportation, TCRP was authorized as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). On May 13, 1992, a memorandum agreement outlining TCRP operating procedures was executed by the three cooperating organizations: FTA, the National Academies, acting through the Transportation Research Board (TRB); and the Transit Development Corporation, Inc. (TDC), a nonprofit educational and research organization established by APTA. TDC is responsible for forming the independent governing board, designated as the TCRP Oversight and Project Selection (TOPS) Committee.

Research problem statements for TCRP are solicited periodically but may be submitted to TRB by anyone at any time. It is the responsibility of the TOPS Committee to formulate the research program by identifying the highest priority projects. As part of the evaluation, the TOPS Committee defines funding levels and expected products.

Once selected, each project is assigned to an expert panel, appointed by the Transportation Research Board. The panels prepare project statements (requests for proposals), select contractors, and provide technical guidance and counsel throughout the life of the project. The process for developing research problem statements and selecting research agencies has been used by TRB in managing cooperative research programs since 1962. As in other TRB activities, TCRP project panels serve voluntarily without compensation.

Because research cannot have the desired impact if products fail to reach the intended audience, special emphasis is placed on disseminating TCRP results to the intended end users of the research: transit agencies, service providers, and suppliers. TRB provides a series of research reports, syntheses of transit practice, and other supporting material developed by TCRP research. APTA will arrange for workshops, training aids, field visits, and other activities to ensure that results are implemented by urban and rural transit industry practitioners.

The TCRP provides a forum where transit agencies can cooperatively address common operational problems. The TCRP results support and complement other ongoing transit research and training programs.

TCRP REPORT 160

Project A-37
ISSN 1073-4872
Library of Congress Control Number 2012956444
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Published reports of the
TRANSIT COOPERATIVE RESEARCH PROGRAM
are available from:
Transportation Research Board
Business Office
500 Fifth Street, NW
Washington, DC 20001

and can be ordered through the Internet at
http://www.national-academies.org/trb/bookstore

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FOREWORD

By Stephan A. Parker
Staff Officer
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TCRP Report 160: Paratransit Emergency Preparedness and Operations Handbook provides paratransit service providers with guidance, strategies, tools, and resources to plan and prepare for, respond to, and recover from a range of emergencies. The guidance has applicability to urban, suburban, rural, and tribal paratransit operating environments. Guidance is directed to in-house paratransit operations and to paratransit services operated under contract. It has relevance for Americans with Disabilities Act (ADA) paratransit and general public demand-response operations.

The guidance, strategies, and tools in this Handbook are based on an all-hazards approach that has applicability to a wide range of “notice” and “no-notice” emergency events including accidents and incidents, acts of nature, hazardous materials releases, technological emergencies, criminal activities, and terrorism. A significant focus of this Handbook is providing information that will assist paratransit providers in planning to meet the needs of their customers during local emergencies. The Handbook also addresses (1) the role paratransit could play in responding to community emergencies and (2) the coordination with emergency management, first responders, and other key stakeholders that is required to carry out that role successfully.

In the research effort led by Boyd, Caton & Grant Transportation Group, Inc., the research team conducted 60 interviews with over 150 local, state, and national experts in paratransit emergency preparedness and response; the interviews were used to validate the findings of a focused literature review and to identify effective emerging practices that may not be reflected in contemporary literature and planning guidance. The team developed a lessons-learned matrix of key findings, effective practices, and their applicability to urban, suburban, rural, and tribal paratransit operations in both notice and no-notice emergencies. Finally, the research team conducted two validation workshops of the draft Handbook—held in Los Angeles, California, and Fargo, North Dakota—to obtain feedback from urban and suburban paratransit managers, transit managers, emergency managers, first responders, and other partner agencies. The resulting Handbook features a field-tested Capabilities Assessment Checklist, which is a self-assessment tool to aid agencies in addressing critical paratransit emergency preparedness and operations issues.

This project created four products that are available on the TRB website (http://www.trb.org/Main/Blurbs/168321.aspx): (1) the Handbook, described above; (2) the contractor’s final report, which documents the development of the Handbook, including detailed information on the interviews; (3) an HTML version of the Handbook; and (4) a PowerPoint presentation describing the entire project.
# CONTENTS

1 Summary

6 Chapter 1 Introduction

9 Chapter 2 Capabilities Assessment

15 Chapter 3 Preparedness

15 3.A Planning

18 3.A.1 Resource Capabilities Assessment

20 3.A.2 Emergency Support Function 1 (ESF-1) Coordination

22 3.A.3 Interagency Coordination

24 3.A.4 Essential Material Supply

26 3.A.5 Duplication of Emergency Service Obligations


32 3.A.7 Surge Capacity

36 3.A.8 Contracted Paratransit Services

38 3.B Training

39 3.B.1 National Incident Management System/Incident Command System

41 3.B.2 Emergency Preparedness Training

42 3.B.3 Personal and Family Preparedness

42 3.C Exercises

43 3.C.1 Discussion-Based Exercises

45 3.C.2 Operational Exercises

48 3.C.3 Inclusion of People with Access and Functional Needs

48 Chapter 4 Prevention

48 4.A Risk Assessment

50 4.A.1 Threat and Vulnerability Assessment

52 4.A.2 Interagency Risk-Related Communication

52 4.B Liability Management

53 4.B.1 Insurance Limitations

56 4.B.2 Memoranda of Understanding and Mutual Aid Agreements

56 4.C Education and Outreach

57 4.C.1 Customer Preparedness

57 4.C.2 Adaptive Equipment

59 Chapter 5 Response

59 5.A Communication

63 5.A.1 Interoperability

65 5.A.2 Emergency Communications

65 5.B Coordination

67 5.B.1 Emergency Operations Center

69 5.B.2 Departmental Emergency Operations Center

69 5.B.3 Staging and Pre-positioning
Paratransit Emergency Preparedness and Operations Handbook

This Handbook was developed through Transit Cooperative Research Program (TCRP) Project A-37, “Paratransit Emergency Preparedness and Operations Handbook.” Its purpose is to provide paratransit service providers with guidance, strategies, tools, and resources to plan and prepare for, respond to, and recover from a range of emergencies.

The guidance offered in this Handbook has applicability to urban, suburban, rural, and tribal paratransit operating environments. Guidance is not only directed to in-house paratransit operations, but also to paratransit services operated under contract. It has relevance for Americans with Disabilities (ADA) paratransit and general public demand-response operations.

The guidance, strategies, and tools in this Handbook are based on an all-hazards approach that has applicability to a wide range of notice and no-notice emergency events including accidents and incidents, acts of nature, hazardous material release, technological emergencies, criminal activity, and terrorism.

A significant focus of this Handbook is providing information that will assist paratransit providers in planning to meet the needs of their customers during local emergencies. The Handbook also addresses (1) the role paratransit could play in responding to community emergencies and (2) the coordination with emergency management, first responders, and other key stakeholders that is required to carry out that role successfully.

Provided at the end of the Preparedness, Prevention, Response, and Recovery chapters are strategies, tools and links to resources specific to each topic. These are included to aid transit agencies in implementing the guidance within this Handbook.

The appendix contains a glossary and the acronyms used throughout the Handbook.

Following is a summary of the six chapters of this Handbook.

**Chapter 1: Introduction**

Chapter 1 of this Handbook defines paratransit and its mission in emergency preparedness and response, presents the background for TCRP Project A-37, and describes how to use the Handbook.

**Chapter 2: Capabilities Assessment Checklist**

Chapter 2 contains a Capabilities Assessment Checklist to assist paratransit agencies in evaluating strengths and weaknesses in their emergency preparedness planning and operations.
Chapter 3: Preparedness

The Preparedness chapter provides general guidance on planning, training, and exercising as it pertains to paratransit providers. Key recommendations include the following.

Planning

- An inventory of vehicles and other critical assets should be used to assess paratransit emergency response capabilities available to serve existing customers during local emergencies. This assessment should be updated periodically to ensure it adequately reflects the current state of paratransit resource capabilities. This assessment should also be shared with local emergency management and other essential partner agencies for planning paratransit’s role in community-wide emergencies.
- Plans should be developed for providing essential services to existing paratransit customers during local emergencies.
- Paratransit providers and emergency managers should develop collaborative strategies for the use of paratransit resources when responding to regional emergencies and establish systems for command and control.
- Paratransit providers need to become involved with local emergency planning efforts including participating at Local Emergency Planning Committee (LEPC) and/or Urban Area Security Initiative (UASI) committee meetings.
- Paratransit needs to develop backup capabilities for communication systems, computer-based dispatching systems, critical power supply, and fuel resources.
- Planning needs to include a system to prioritize paratransit service requests during emergencies to avoid over-committing paratransit resources.
- In addition to safety and security plans, it is important for paratransit to also have emergency response procedures and protocols for paratransit managers and frontline staff to follow during emergency events.
- Agencies that contract for paratransit services should ensure that contract language defines the expectations for contracted resources utilized in disaster exercises and response activities.
- Paratransit needs to develop plans to support staffing demands for expanded internal emergency operations.
  - Paratransit agencies should identify essential personnel who are required to report to work during emergencies.
  - Polling the workforce to determine who will actually report to work during disasters helps to establish more realistic planning assumptions.
  - Deployment plans need to consider hours-of-service rules that apply to commercial driver’s license (CDL) drivers.
  - If non-agency drivers are used to augment paratransit staff or if external stakeholders commandeer vehicles, paratransit agencies may need to provide training to those drivers on vehicle and lift equipment operation and passenger assistance techniques.

Training

- Providing information and training on personal and family emergency preparedness increases the likelihood that paratransit staff will report to work during an emergency.
- Paratransit personnel should receive specific training on their expected roles and responsibilities when responding to emergencies and disasters.
- Paratransit staff should become certified in the National Incident Management System (NIMS) to the level that is appropriate to his or her position in the organization and his or her anticipated role in emergency response.
Exercises

- Paratransit agencies are encouraged to participate in emergency response drills and exercises.
  - Discussion-based exercises help validate policies, procedures, and communications strategies and ensure that emergency procedures will actually work.
  - Functional exercises simulate emergency events to test and improve the performance of essential paratransit emergency response skills.
  - Full-scale exercises simulate emergency events involving multiple responding agencies and disciplines operating together on location as they would during a real disaster.
- Paratransit should work with emergency management to identify exercise opportunities for paratransit personnel and to ensure that people with access and functional needs are invited to participate in emergency drills and exercises.

Chapter 4: Prevention

The Prevention chapter provides general guidance on risk assessment, liability management, and education/outreach as it pertains to paratransit providers. Key recommendations include the following.

Risk Assessment

- Paratransit agencies need to periodically assess vulnerability to safety hazards and security threats in order to reduce risk and minimize impacts of emergency events.
- Results from the threat and vulnerability assessment should be:
  - Used as impetus to improve internal policies, procedures, and work practices;
  - Used to justify structural or engineering upgrades to facilities and equipment in order to prevent or reduce damage from anticipated hazards and threats; and
  - Shared with local public safety agencies and emergency management to foster interagency coordination and to improve overall situational awareness.

Liability Management

- Paratransit providers need to research and resolve any concerns about liability and limits to insurance coverage for paratransit resources that may be used during emergency exercises and emergency response, whether they be localized—involving only paratransit—or community-wide—involving emergency management and paratransit.
- Paratransit providers should develop Memoranda of Understanding (MOUs) or other inter-agency agreements with emergency management and other key stakeholders defining paratransit’s roles and responsibilities during a community-wide emergency response, including communications strategies, mission-tasking procedures, and reimbursement arrangements.

Education/Outreach

- Paratransit agencies can help their customers by educating them on personal emergency preparedness. Personal preparedness for paratransit customers should include planning for personal effects, medications, mobility devices, oxygen bottles, and other equipment necessary to maintain safety and independence when away from home for an extended period or when sheltering in place at home. Sheltering in place also entails stockpiling food and water and possible planning for alternative power sources.
- Paratransit agencies should communicate with their customers to establish realistic expectations regarding paratransit service delivery during emergencies.
Chapter 5: Response

The Response chapter provides general guidance on communication, coordination, and operations as it pertains to paratransit providers. Key recommendations include the following.

Communication

- Paratransit should identify strategies to enhance interoperability, allowing paratransit, public transit, school bus transportation, public safety agencies, and emergency management to communicate during community-wide emergency response.
- Paratransit agencies need to develop strategies and methods for communicating service continuity and other service-related information with customers and partner agencies before, during and after emergencies.

Coordination

- Paratransit and emergency management need to determine how paratransit will communicate and coordinate with the Emergency Operations Center (EOC) during community-wide emergency response.
- A transportation Departmental Emergency Operations Center (DOC) involving paratransit, public transit, school bus transportation, and other transportation resources may be the best solution for command and control of transportation resources during a response to transportation emergencies and/or community-wide disasters.
- Paratransit should consider strategies to stage or pre-position resources in order to improve emergency response capabilities.
- Fueling and preparing vehicles at the end of each service day helps ensure that paratransit resources are optimally available to respond to any type of emergency.

Operations

- During an emergency response, paratransit managers should establish thresholds for service suspension in the context of both risk and service capacity.
- When emergency conditions warrant service suspension, paratransit managers should plan for how they will address the needs of customers who are “in system” when an emergency occurs. In a major disaster, this may require coordinating with emergency management to meet the needs of these customers.
- It is important for paratransit to address emergency dispatching concerns including backup power sources, manual dispatching capabilities, and, if necessary, carrying out the dispatching function from an alternative facility or mobile command center.
- Paratransit agencies are an important resource in helping to identify people with disabilities and others with access and functional needs who may need assistance during emergency evacuations.
- Paratransit should coordinate with emergency management and medical transportation providers before and during emergencies to ensure that paratransit is not asked to transport people whose physical and psychological needs exceed the training and capabilities of paratransit staff.
- Paratransit managers should maintain call-down lists to mobilize essential personnel in case of an emergency.
- Paratransit agencies should have realistic policies and procedures for transporting pets during an emergency response and should coordinate with essential stakeholders to address the shelter needs of pets that are relocated by paratransit.
Chapter 6: Recovery

The Recovery chapter provides general guidance on reconstitution, reentry, post-disaster service assessment, and restitution as it pertains to paratransit providers. Key recommendations include the following.

Reconstitution

- Following a service disruption, paratransit agencies need to focus initially on sustaining or reconstituting essential life-supporting transportation services for their customers.
- Reconstituting and restoring full paratransit service after an emergency may occur in phases.
- Reconstitution of service demands proactive communication with customers and partner agencies regarding available paratransit services and service restoration plans.

Reentry

- Paratransit should work with emergency management to ensure that people being returned to their residences have the necessary resources and support required to safely return home following emergencies and resume living independently. This issue is of particular concern for people with disabilities and others with access and functional needs.

Post-Disaster Service Assessment

- Following a major disaster, population demographics may shift dramatically. A post-disaster service assessment may be needed to adjust to changing service needs and to accommodate increased paratransit demand. This may involve finding ways to expedite eligibility assessments or temporarily waiving paratransit eligibility requirements.

Restitution

- Preparing paratransit employees to resume their normal work duties may require post-crisis counseling for staff that may have experienced trauma during an emergency or disaster.
- Paratransit should have a method to document emergency transportation-related costs, as well as any damage to paratransit resources as a result of an emergency or disaster. In many cases, these costs may be reimbursable by insurance or state or federal disaster aid.
CHAPTER 1

Introduction

Paratransit is an alternative mode of flexible passenger transportation that does not follow fixed routes or schedules. By van, mini-bus or bus, paratransit agencies transport millions of Americans each day. Paratransit services may vary considerably on the degree of flexibility they provide their customers. At their simplest they may consist of a taxi or small bus that will run along a more or less defined route and then stop to pick up or discharge passengers on request. At the other end of the spectrum is fully demand-responsive transport. The most flexible paratransit systems offer on-demand, call-up, and door-to-door service from any origin to any destination in a service area. Paratransit services are operated by public transit agencies, community groups or not-for-profit organizations, as well as for-profit private companies or operators. Paratransit services are delivered in urban, suburban, rural, and tribal areas and can be either complementary paratransit as required by the ADA, or general public demand-response transportation.

Mission

Paratransit service providers have a special role in supporting the mobility of people within their service area, including those with access and functional needs, and in fulfilling critical transportation requirements during emergencies. Paratransit’s primary responsibility during emergencies is to provide transportation services to existing customers. Additionally, large or small, urban or rural, public or private, paratransit providers are now being recognized as significant players in responding to local and regional emergencies. In fulfilling this new role, however, paratransit providers face numerous challenges in defining appropriate responses to emerging emergency planning and preparedness requirements.

During an emergency, most paratransit providers consider first and foremost the safety and well being of the passengers who are onboard their vehicles, the drivers and dispatchers providing service, and the vehicles and facilities critical to the operation. Depending on the nature of the emergency, in the minutes and hours after a specific event, paratransit service providers will typically work to address the needs of:

1. Passengers who are onboard;
2. Passengers who traveled using the service earlier in the day and are attempting to return home;
3. Passengers who are at home and require life-sustaining trips; and
4. Passengers with pre-existing non-life-sustaining scheduled trips who are at home awaiting pickup.

Only once these priorities are managed can the paratransit provider begin to support emergency operations as directed by local, regional, state, or federal emergency management or first-responder
personnel. Yet many in the emergency management and planning community may anticipate a high degree of support from paratransit providers directly following an emergency.

Both to enhance immediate response to emergency situations and to support greater integration into community planning and preparedness, this Handbook highlights important emergency planning considerations for urban/suburban and rural/tribal paratransit service providers and provides public and private paratransit service operators with tools and resources to support enhanced communication and coordination with local and state emergency management agencies and personnel.

It is essential that paratransit, public transit, law enforcement, fire and rescue, emergency medical services, and emergency managers work and plan both independently and together in order to build internal and external relationships that will lead to better communication, coordination, and cooperation in the delivery of paratransit services during an emergency. The extent to which services can be successfully delivered in an emergency depends on many factors, including the characteristics of the area in which a transit system operates, the characteristics of the transit system, the characteristics of an emergency incident, the predisposition of the public, and available resources.

It is hoped that this Handbook and its supporting materials will assist paratransit providers in becoming more resilient, resourceful, and robust during all phases of emergency management: preparedness, prevention, response, and recovery. To more clearly understand certain Handbook sections, it may be helpful to be familiar with NIMS and the Incident Command System (ICS).

Research Background

This Handbook is based on an extensive literature review of critical resources issued by local, state and federal agencies including the Federal Emergency Management Agency (FEMA), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Transportation Research Board (TRB). Input was also gathered from paratransit providers and other stakeholders through more than sixty in-depth interviews with over 150 expert participants nationwide, including representatives of organizations supporting citizens with access and functional needs, the university research community, and paratransit providers with experience in major emergency situations. Additionally, contents of this Handbook were validated through workshops involving paratransit managers, transit managers, emergency managers, first responders, and other partner agencies.

Use of This Handbook

Recommended steps to effectively utilize this Handbook:

1. Refer to the appendix of this Handbook for the definition of terms and acronyms used in this Handbook.
2. Complete the Capabilities Assessment Checklist in Chapter 2. This checklist is a self-assessment tool for evaluating paratransit emergency preparedness and operations. It can guide an assessment of the existing emergency preparedness, prevention, response and recovery posture. Based on this evaluation, your agency should be able to identify emergency-related strengths, as well as areas needing improvement, and track progress over time. Each question in the checklist is indexed to corresponding guidance in the Handbook.
3. Read the guidance offered in Chapters 3 through 6; each chapter is divided into important elements. Guidance for each element includes a synopsis of the topic area, considerations
based on agency size and composition, and effective practices identified through this TCRP research effort. Each element has correlating strategies and tools.

4. Use the strategies and tools to create action plans that build paratransit emergency capabilities in areas that were identified as needing improvement in the Capabilities Assessment Checklist.

5. Access the resource links at the end of each strategy/tool section for information that may help your agency to strengthen its emergency-related mission. Note that some resource links are appropriate regardless of agency size and operating characteristics, while other links are specific to urban/suburban or rural/tribal paratransit systems.

6. Based on the steps above, move forward in building your paratransit agency’s emergency preparedness and operations infrastructure.
Capabilities Assessment

This Capabilities Assessment Checklist is a self-assessment tool to aid your agency in addressing critical paratransit emergency preparedness and operations issues.

- Respond to each statement based on your best evaluation of the status of your agency’s activities.
- If your agency has addressed a statement, place a checkmark in the column titled “Addressed.”
- If your agency has not addressed an item, place a checkmark in the column titled “Not Addressed.”
- If the item is not applicable to your agency, place a checkmark in the column titled “N/A.”
- For guidance, strategies, tools, and resources regarding the statements that you marked as “Not Addressed,” refer to the Handbook section listed in the column entitled “Index.”
### 1. PLANNING

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<th>PREPAREDNESS – Paratransit Activity</th>
<th>Index</th>
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<tbody>
<tr>
<td>a) <strong>Resource Capability Assessment</strong></td>
<td></td>
<td></td>
<td>Critical assets (personnel &amp; vehicles) &amp; assessed capabilities &amp; limitations have been identified.</td>
<td>Sect. 3.A.1</td>
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<tr>
<td>a) <strong>Resource Capability Assessment</strong></td>
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<td>A capabilities assessment has been shared with local emergency management &amp; first responders.</td>
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<td>b) <strong>Emergency Support Function #1 (ESF-1) – Transportation Coordination</strong></td>
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<td>Participation with emergency management in planning for the use of paratransit resources to support emergency response &amp; recovery is encouraged.</td>
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<td>c) <strong>Interagency Coordination</strong></td>
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<td></td>
<td>Regularly participates in Local Emergency Planning Committee (LEPC) meetings.</td>
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<td>c) <strong>Interagency Coordination</strong></td>
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<td></td>
<td>Participates in Urban Area Strategic Initiative (UASI) meetings.</td>
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<td>c) <strong>Interagency Coordination</strong></td>
<td></td>
<td></td>
<td>Participates in local or regional emergency planning &amp; preparedness activities.</td>
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<td>d) <strong>Essential Material Supply</strong></td>
<td></td>
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<td>Have contingency plans for ensuring access to fuel, power &amp; other resources essential to the continuity of paratransit operations.</td>
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<td>e) <strong>Duplication of Emergency Service Obligations</strong></td>
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<td>Resources are not over extended through existing agreements &amp; paratransit emergency response commitments are realistic &amp; achievable.</td>
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<td>e) <strong>Duplication of Emergency Service Obligations</strong></td>
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<td>Has a system for prioritizing paratransit response to multiple requests for assistance during community emergencies.</td>
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<td>f) <strong>Emergency Operations Plans</strong></td>
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<td>Management solicits &amp; reviews guidance on paratransit emergency preparedness from appropriate local, state, and/or federal entities.</td>
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<td>f) <strong>Emergency Operations Plans</strong></td>
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<td>Management solicits advice about lessons learned from other paratransit providers that have responded to emergencies &amp; disaster incidents.</td>
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<td>f) <strong>Emergency Operations Plans</strong></td>
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<td>Safety plan is up-to-date.</td>
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<td>f) <strong>Emergency Operations Plans</strong></td>
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<td>Security plan is up-to-date.</td>
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<tr>
<td>f) <strong>Emergency Operations Plans</strong></td>
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<td>Emergency operations procedures are up-to-date (including protocols for paratransit drivers, dispatchers, mechanics, supervisors, managers, etc.).</td>
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<td>g) <strong>Surge Capacity</strong></td>
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<td>Has formal policies regarding essential paratransit staff’s responsibility to report to work during emergency response activities.</td>
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<td>g) <strong>Surge Capacity</strong></td>
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<td>Has a mechanism to identify paratransit drivers’ availability to report to work during emergency response activities.</td>
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<td>g) <strong>Surge Capacity</strong></td>
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<td>Management has developed strategies to sustain paratransit emergency response operations as long as necessary (including driver relief).</td>
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<tr>
<td>g) <strong>Surge Capacity</strong></td>
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<td>Management has developed contingency plans to augment paratransit driving staff during emergency response &amp; recovery.</td>
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<tr>
<td>g) <strong>Surge Capacity</strong></td>
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<td>Emergency plans address the possibility of emergency management &amp; first responders operating paratransit vehicles during community emergency response &amp; recovery.</td>
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<tr>
<td>g) <strong>Surge Capacity</strong></td>
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<td></td>
<td>Non-paratransit personnel are trained to operate paratransit vehicles, including wheelchair lifts &amp; securement, as necessary.</td>
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### PREPAREDNESS – Paratransit Activity

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<th>PREPAREDNESS – Paratransit Activity</th>
<th>Index</th>
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<td>h) <strong>Contracted Paratransit Services</strong></td>
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<td>Contracts with paratransit contractors contain formal language regarding their roles &amp; responsibilities during community emergency response.</td>
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<td>Specific and realistic expectations have been established for contracted paratransit services to participate in emergency response operations. (Expectations are reinforced through procedures, protocols, training, and exercises.)</td>
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### 2. TRAINING

#### a) National Incident Management System (NIMS) Compliance
- Essential personnel are trained on NIMS & the Incident Command System (ICS). [Sect. 3.B.1](#)

#### b) Emergency Preparedness Training
- Personnel are trained regarding their roles & responsibilities when responding to community emergencies. [Sect. 3.B.2](#)

#### c) Personal and Family Preparedness
- Personnel are trained in personal & family emergency preparedness. [Sect. 3.B.3](#)

### 3. EXERCISES

#### a) Discussion-Based Exercises
- The staff participates in tabletop exercises to assess & validate their roles in emergency response. [Sect. 3.C.1](#)

#### b) Operational Exercises
- Internal drills & exercises are conducted to prepare staff to effectively support emergency response & recovery. [Sect. 3.C.2](#)
- Participation in local or regional disaster exercises that help ensure successful integration of paratransit resources into emergency response and recovery is encouraged. [Sect. 3.C.2](#)

#### c) Inclusion of People with Access and Functional Needs
- Every effort is made to ensure that individuals with access & functional needs are invited to participate in local & regional disaster drills & exercises. [Sect. 3.C.3](#)
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<th>PREVENTION – Paratransit Activity</th>
<th>Index</th>
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<td>1. RISK ASSESSMENT</td>
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<td>a) Threat and Vulnerability Assessment (TVA)</td>
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<td>TVAs are periodically reviewed &amp; updated to identify safety hazards &amp; security threats that may impact operations and/or the service area.</td>
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<td>TVA results drive response priorities, policies &amp; protocols.</td>
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<td>b) Interagency Communications &amp; Coordination</td>
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<td>Coordination with local emergency management &amp; first responders during the TVA process is encouraged.</td>
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<td>2. LIABILITY MANAGEMENT</td>
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<td>a) Insurance Limitations</td>
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<td>Insurance liability coverage concerns for staff &amp; vehicles that may be utilized during emergency exercises and/or during actual emergency response &amp; recovery have been addressed and resolved.</td>
<td>Sect. 4.B.1</td>
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<td>b) Memoranda of Understanding / Mutual Aid Agreements</td>
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<td>Agreements with emergency management have been signed that define paratransit’s roles &amp; responsibilities &amp; reimbursement arrangements for the use of resources during emergency response &amp; recovery.</td>
<td>Sect. 4.B.2</td>
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<td>3. EDUCATION / OUTREACH</td>
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<td>a) Customer Preparedness</td>
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<td>Information is provided to customers on what to do to prepare for emergencies.</td>
<td>Sect. 4.C.1</td>
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<td>Information is provided to customers on what to expect in terms of paratransit services during mandatory evacuations &amp; other community emergencies.</td>
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<td>b) Equipment</td>
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<td>Management has established policies for transporting wheelchairs, oxygen bottles &amp; other medical equipment on vehicles during emergency response activities.</td>
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<tr>
<td><strong>1. COMMUNICATION</strong></td>
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<tr>
<td>a) <strong>Interoperability</strong></td>
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<td></td>
<td>Communication systems are interoperable with other transportation providers in the region during emergency response &amp; recovery.</td>
<td>Sect. 5.A.1</td>
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<td>Communication systems are interoperable with emergency management &amp; first responders during emergency response &amp; recovery.</td>
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<tr>
<td>b) <strong>Communications Regarding Service Continuity</strong></td>
<td></td>
<td></td>
<td>Has a system to communicate with partner agencies, such as other transportation agencies &amp; human service organizations, before, during &amp; after community emergencies.</td>
<td>Sect. 5.A.2</td>
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<td>Has a system to notify customers and caregivers when service must be suspended or altered.</td>
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<td><strong>2. COORDINATION</strong></td>
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<tr>
<td>a) <strong>Emergency Operations Center (EOC)/Incident Command Post</strong></td>
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<td>Has a formal role within the emergency operations system that will be activated during emergency response &amp; recovery.</td>
<td>Sect. 5.B.1</td>
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<td>Has a plan for coordinating with the EOC during emergency response &amp; recovery.</td>
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<td>b) <strong>Departmental Emergency Operations Center(s) (DOC)</strong></td>
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<td>Has a strategy to establish a DOC that will coordinate paratransit/transportation activities during an emergency.</td>
<td>Sect. 5.B.2</td>
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<td>A location has been designated as the control center for paratransit / transportation emergency operations &amp; communications.</td>
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<td>There are clear thresholds for when the DOC should be activated during emergency response &amp; recovery.</td>
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<td>A plan has been established to coordinate paratransit, public transit, school district transportation &amp; other transportation resources for emergency response.</td>
<td>Sect. 5.B.2</td>
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<tr>
<td>c) <strong>Staging and Pre-positioning</strong></td>
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<td>Locations have been established for staging paratransit vehicles during emergency response &amp; recovery.</td>
<td>Sect. 5.B.3</td>
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<td>A strategy has been established to ensure vehicles are, or can be, stored out of likely disaster impact zones.</td>
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<td>Has a policy ensuring that all paratransit vehicles are fueled &amp; prepared at the end of the day or at the end of each shift.</td>
<td>Sect. 5.B.3</td>
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<td><strong>3. OPERATIONS</strong></td>
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<tr>
<td>a) <strong>Service Continuity</strong></td>
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<td>Thresholds have been established for suspending regular paratransit service.</td>
<td>Sect. 5.C.1</td>
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<td>Formal plans address the transportation needs of paratransit customers that are “in system” when a no-notice emergency occurs.</td>
<td>Sect. 5.C.1</td>
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<td>b) <strong>Dispatching Under Emergency Conditions</strong></td>
<td></td>
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<td>Has a backup power source to support dispatch &amp; other essential functions during emergency response &amp; recovery.</td>
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<td>Has redundant manual dispatching capabilities that can be relied upon if the electronic dispatch system becomes inoperable.</td>
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<td>Has an alternative facility to operate from if the primary facility is inaccessible.</td>
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### RESPONSE – Paratransit Activity

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<tr>
<td><strong>c) Identifying Location and Needs of Individuals Requiring Evacuation Assistance</strong></td>
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<td><strong>d) Mobilization</strong></td>
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<td><strong>e) Transport of Pets</strong></td>
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### RECOVERY – Paratransit Activity

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<td><strong>2. REENTRY</strong></td>
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<td><strong>3. POST-DISASTER ASSESSMENT</strong></td>
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<td><strong>4. RESTITUTION</strong></td>
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<td></td>
<td>Sect. 6.D.3</td>
</tr>
</tbody>
</table>

- Has coordinated with emergency management to help identify individuals with access & functional needs that may need transportation assistance during an emergency.
- Has coordinated with emergency management to develop a system to identify whether paratransit is the appropriate emergency response resource or whether ambulances or other medically related transportation should be deployed during emergency response based on the needs of evacuees.
- Has an updated call-down system to rapidly mobilize essential paratransit staff to support emergency response & recovery.
- Emergency management understands the amount of time it will take to fully mobilize paratransit resources in support of emergency response & recovery.
- Internal policy addresses transporting pets (not service animals) on vehicles during emergency response.
- Has coordinated with emergency management & other appropriate entities, such as the Humane Society & animal shelters, to address concerns related to transporting & housing pets during emergency response & recovery.
- Has a plan to sustain essential life-supporting transportation services, such as dialysis trips, as long as possible during emergency response & recovery.
- Has a plan for reconstituting essential life-supporting transportation services as soon as possible after an emergency.
- Has a plan for reconstituting normal services after a disaster.
- Has a communications plan to alert customers & other partner agencies regarding service continuity & reconstitution.
- Worked with emergency management to develop plans supporting safe reentry of individuals with access & functional needs to their residences following evacuations.
- Has a plan to accommodate the possible increased demand for paratransit eligibility certification & paratransit service delivery following an emergency.
- Has a procedure to provide post-crisis counseling for staff, which may be necessary due to the psychological trauma experienced during emergencies & disasters.
- Has a system to document damage to paratransit equipment & facilities that occurs during emergency response & recovery.
- Management clearly understands the necessary record keeping & reporting requirements, including task assignments, cost/mile & cost/hour information, required to receive reimbursement for services provided during emergency response & recovery.
Preparedness

Preparedness is a state of readiness that allows individuals or an enterprise to avoid, prevent, respond to, and recover from the effects of natural disasters, criminal acts, terrorism, or technological incidents. Paratransit preparedness is built on a continuous cycle of planning, training, and exercising, with follow-up evaluation and performance monitoring to build personal and organizational capabilities.

Personal preparedness focuses on building awareness, knowledge, and skills so people can operate equipment safely, follow procedures, and take other appropriate actions in an emergency. Paratransit organizational preparedness includes improving or upgrading equipment and facilities to better withstand or more readily recover from the effects of a disaster.

3.A Planning

3.A.1 Resource Capabilities Assessment

A resource capabilities assessment is a detailed inventory of what resources your organization could utilize to support your own customers during an emergency, as well as to participate in community-wide emergency response efforts. This assessment includes vehicles, facilities, equipment, tools, and most importantly, your people and their individual talents and skills. A resource capabilities assessment includes an inventory of transit vehicles and their specific characteristics, transit facilities and their capacity to support emergency response, specialized transit equipment and tools that can assist emergency operations, and transit staff and the skill sets they possess.

This assessment is not just the sum total of your assets; it also considers limitations. For example, if you plan to continue delivering essential services to your normal customers during an emergency, what is the spare capacity of vehicles and drivers that you can contribute to community emergency response? How long will it take to mobilize them? What could you provide if you cancel all but life-sustaining medical transportation? Once mobilized, can you maintain a maximum effort for the next 12, 24, or 48 hours? What will it take to return to normal after the emergency is over? These and other related questions are part of a realistic capabilities assessment. This assessment should be updated periodically to ensure it adequately reflects the current state of paratransit resource capabilities.

The information gleaned from these assessments needs to be discussed in the context of likely emergency response scenarios. First, consider how you will address the essential needs of your own customers, and then have discussions with local (city or county) emergency management to develop a clear understanding of organizational capabilities, limitations, and expectations. This will help ensure that limited paratransit resources will be used effectively, focused on missions that do the most good for vulnerable members of the community.
Considerations

- In urban and suburban areas, fixed-route coaches and school buses are normally used for mass evacuation missions. Paratransit vehicles are more often focused on helping people with access and functional needs.
- It is important that emergency management understands the capabilities and limitations of paratransit. Emergency management may not consider how paratransit should support emergency response. If information is not shared in the planning process, the needs of people with access and functional needs and the resources to serve them may be over- or underestimated.
- Asset inventories are most helpful for advance-notice emergencies when plans to strategically pre-position and stage resources can be executed. In no-notice events, knowing the number of vehicles and drivers paratransit can provide on short notice may help emergency responders and incident commanders deploy those resources where and when they are needed most.

Effective Practices

- Many paratransit systems maintain a current vehicle inventory based on class, type, capacity, and wheelchair accessibility. In some states, these vehicle inventories are reviewed annually as part of the system safety program plan. While an inventory is only part of a resource capabilities assessment, it is a key building block and a good way to get started.

Strategy

- Conduct an assessment of your critical paratransit resources. Share this assessment with emergency management to aid in defining your potential role in community-wide emergency response plans. Emphasize your commitment to first and foremost serve your customers.
- The tool that follows provides a structure for gathering information on critical paratransit assets. Your asset analysis will include the number and special operating characteristics of each type of paratransit revenue vehicle and non-revenue support vehicle. It should also include an assessment of paratransit facilities and ancillary equipment that could be used to support emergency response activities. Another essential component is the number of drivers, mechanics, dispatchers, and supervisory staff available for deployment during emergency operations.

Tool: Resource Capabilities Assessment

Assess the following paratransit resource capabilities and update the assessment periodically to ensure it adequately reflects the current state of your paratransit resource capabilities.

<table>
<thead>
<tr>
<th>Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue fleet size and availability:</strong></td>
</tr>
<tr>
<td>❑ Total number of passenger-carrying revenue service vehicles</td>
</tr>
<tr>
<td>❑ Number committed during peak service hours, off-peak hours, nights, and weekends</td>
</tr>
<tr>
<td>❑ Average number of spare vehicles available during peak and off-peak hours</td>
</tr>
<tr>
<td>❑ Average number of spare vehicles out of service due to scheduled, unscheduled or long-term maintenance issues</td>
</tr>
<tr>
<td><strong>Revenue fleet passenger capacity by vehicle type:</strong></td>
</tr>
<tr>
<td>❑ Total, all seats and securement spaces occupied</td>
</tr>
<tr>
<td>❑ Total seated capacity for ambulatory passengers</td>
</tr>
<tr>
<td>❑ Maximum number of securement spaces</td>
</tr>
</tbody>
</table>
Revenue fleet year, make, and model by vehicle type:
- Engine make and model
- Fuel type and estimated range
- Length, width, height, turning radius, and turning circle
- Floor plan of vehicle

Non-revenue and support vehicles:
- Any heavy-duty service trucks or tow trucks
- Light-duty trucks or vans
- Sedans or passenger cars
- Any other equipment, such as tractors or backhoes

Facilities
- Operations and maintenance facilities that could be used for staging and servicing emergency response vehicles, including both your own equipment and equipment from other transportation agencies
- Paratransit facilities that have the potential for sheltering and feeding your employees, their families, or other responders from outside the area
- Tools or other equipment that could be useful in supporting emergency response, including generators, portable lights, air compressors, chain saws or other power tools

Capability and Availability of Personnel

Drivers:
- Number of drivers available during peak and off-peak operating periods
- Roster of extra board, off-duty, or part-time drivers that could be called in
- Realistic estimates of the time required to mobilize drivers on short notice

Maintenance staff capability:
- Number of mechanics and service workers qualified to work on your vehicles and vehicles other than your own
- Number of maintenance and service workers that could fill other roles or assignments if called on to do so

Dispatchers, supervisors, managers, and other staff:
- Number of staff that can serve in supervisory or dispatching roles during emergency operations
- Number of staff, other than drivers or mechanics, that are available to fill critical needs based on their experience or expertise

Resources for Urban/Suburban and Rural/Tribal Areas

- Critical Asset Analysis Form
  A rating system to determine the levels of criticality and vulnerability of a transit organization’s critical assets.

- Capabilities Assessment Checklist
  http://bussafety.fta.dot.gov/show_resource.php?id=3104
  Checklist to assist transit agencies in conducting a capabilities assessment to determine whether their system has targeted security measures and preparedness planning procedures in place.
• **Vehicle Inventory Database**
  

  This worksheet is the spec or design of a potential vehicle inventory database. The idea is to collect all the vital info on each vehicle and put it in the database so dispatchers or supervisors can call up a “record” and find out anything they might need to know about a vehicle. For ICS, it provides a complete description of a “resource,” namely, the vehicle.

### 3.A.2 Emergency Support Function 1 (ESF-1) Coordination

The National Response Framework (NRF) includes fifteen emergency support functions (ESFs) covering core areas of responsibility for emergency response and recovery. Under this system, ESF-1 is transportation. Some states utilize slightly different structures that parallel, but are not identical to, the national ESF system.

From a practical perspective, an emergency response mission for transportation involves two primary functions: evacuation and reentry. It is generally assumed that most of the population will evacuate in private automobiles. Most emergency evacuation plans anticipate using school and transit buses for the needs of transit-dependent citizens, and some plans include paratransit resources for those with access and functional needs. Some plans anticipate calling in private contractors or assume that buses from neighboring jurisdictions will be mobilized. Unless there is a coordinated plan to marshal these diverse resources, they will not be effectively deployed.

Frequently, the transportation representative within the EOC has experience with highways but limited experience with public transit and even less with paratransit. This lack of experience/expertise can lead to paratransit being underutilized, overextended, or inappropriately deployed during a community emergency.

Paratransit’s primary focus during emergencies will be to provide life-sustaining transportation services to its customers. When paratransit managers have an active role in community-wide emergency operations, they can better coordinate resources to support emergency transportation requests, disseminate emergency information to paratransit customers, and provide external stakeholders with perspective on the needs of paratransit clients.

Secondary use of paratransit vehicles during community emergencies may include the provision of transportation for emergency responders; the distribution of food, water, or other supplies; and temporary shelter or respite location for responders and/or the public.

**Considerations**
- In urban/suburban areas, it is common for the transit system to have a seat in the EOC. Problems can arise if there is insufficient communication and coordination between transit and paratransit.
- Many rural/tribal paratransit providers do not have a formal role at their local EOC, a shortcoming that tends to negatively impact response capabilities.
- In emergencies with advance notice, where the EOC is activated prior to the event, paratransit can play an effective role in identifying and evacuating individuals with access and functional needs.
- In no-notice emergencies, the EOC is activated after the disaster has occurred. Lack of prior planning reduces the likelihood of paratransit being included in unified command.

**Effective Practices**
- A proven approach to overcoming coordination challenges is to marshal all transportation resources under ESF-1. In such instances, agency representatives from transit, paratransit, and other transportation agencies sit within the ESF-1 group of the Operations or Logistics
section of the EOC. Using this approach, when the EOC identifies the need for transportation resources, they notify the lead for ESF-1 who then deploys the appropriate resources to support the mission request.

**Strategy**

- Work with local emergency management and other transportation providers in your area to create a transportation operations plan for emergency response and define the role of your paratransit agency within that plan.

**Tool: ESF-1 Coordination**

- Determine how transportation resources will be managed through the local EOC and who will be assigned as the lead agency.
- Make sure the role of paratransit is clearly defined. In smaller communities, paratransit may be asked to take a lead role.
- If so requested, designate a representative who could be sent to the EOC to represent your agency during emergencies.
- Have a representative from your agency participate in meetings that include all transportation agencies within your service area to discuss roles and responsibilities in emergency response and recovery.
- Establish a reliable communication system to connect your paratransit dispatch center or your transportation Departmental Emergency Operations Center (DOE) to the local EOC in emergencies.

**Resources for Urban/Suburban and Rural/Tribal Areas**

- **Transportation and Emergency Preparedness Checklist**
  Developed by the National Consortium on Human Services Transportation, this checklist was designed as a tool for the planning process prior to an emergency situation to ensure safe and appropriate transportation for transportation-dependent populations, including the elderly, persons with disabilities, and individuals without access to personal transportation in an emergency situation.

- **Implications for Public Transportation Agencies**
  http://bussafety.fta.dot.gov/show_resource.php?id=4132

- **An Outline for Developing a Local Transit System Emergency Management Plan**
  Excerpt from the Texas Department of Transportation’s “Guidebook for Emergency Management Planning for Texas Transit Agencies” that presents outlines for a transit agency emergency plan and for a local emergency plan annex.

- **Disaster Response: Lessons Learned in Kansas**
  An article from the April 2008 Kansas Trans Reporter newsletter that discusses lessons learned regarding what has gone well and what has not for Kansas area transit agencies that have responded to natural disasters.
3.A.3 Interagency Coordination

To effectively serve your customers during emergencies, your agency needs to coordinate emergency transportation services with its human service partners and medical service providers as well as other key stakeholders.

It is critical that paratransit agencies discuss with local hospitals and other medical facilities, such as dialysis clinics, the likelihood of life-sustaining health services being unavailable during an emergency. This discussion would include ascertaining whether these facilities have backup power generators to allow them to continue operating when an emergency involves long power outages within a community. A good approach would be for paratransit to identify alternative locations where passengers could be transported for life-sustaining care if the primary location is no longer in operation. This coordination and communication between paratransit agencies and medical care providers should take place from the onset of an emergency until after the emergency has passed and medical care providers are able to resume operating on a normal schedule. This critical concern is best addressed through good up-front planning involving paratransit providers, medical care facilities, and partner human service agencies.

Because key community emergency management decisions are made at LEPC meetings involving law enforcement, fire and rescue, public health, and other partner agencies, it is essential for paratransit to be involved. When transit and paratransit managers do not engage or are not invited into the emergency planning process, it can lead to serious gaps in Emergency Operations Plans (EOPs). Proactive paratransit providers work hard to ensure they have a voice at the emergency planning table. Sometimes getting a voice at the table takes a “push” from state emergency management, the state department of transportation (DOT), local political leadership, or advocates.

Considerations

- In urban/suburban areas, the local transit system may participate on the LEPC, but frequently the paratransit division is not involved. As a result, emergency management may make assumptions on how to use transportation resources without full consideration of paratransit capabilities and paratransit clients.
- In designated high-risk metropolitan areas of the United States, interagency coordination also occurs through the UASI. This program provides funding to address the unique planning, organization, equipment, training, and exercise needs of high-threat, high-density urban areas related to terrorist threat.
- In rural/tribal settings, paratransit providers are often left out of the LEPC process. Thus, plans to serve individuals with access and functional needs during community emergencies may not be fully developed.

Effective Practices

- Paratransit assigns a safety or operations manager to work with local emergency management and participate in the LEPC along with law enforcement, fire and rescue, public health, and other partner agencies. This individual frequently will serve as paratransit’s agency representative at the local EOC during an emergency event.
Strategy

- Be proactive in soliciting invitations from emergency management and/or other key stakeholders to participate in local and/or regional emergency planning meetings. LEPC meetings or UASI meetings are often the platforms for most successfully interfacing with partner agencies and/or emergency management. Once your agency receives an invitation, be sure a representative attends all meetings. This will ensure the highest level of interagency coordination within the community emergency planning and preparedness process.

Tool: Interagency Coordination

- Work with internal paratransit staff and partner agencies to develop plans to serve your customers during emergencies.
- Identify the individual or individuals responsible for the emergency management function within your paratransit service area and contact them to set up a meeting(s). If your paratransit operation covers multiple counties, you will need to contact multiple emergency managers.
- Appoint a representative from your agency to interface with emergency management.
- Discuss with emergency management the best utilization of your paratransit resources in support of a community-wide emergency response.
- During emergency planning meetings, reinforce the need to engage in productive dialogue on the most effective and coordinated use of paratransit resources in support of community emergency response.
- Be proactive and aggressive with emergency management. If necessary, solicit guidance from the state Office of Emergency Management and/or the state DOT, and/or find a champion within city or county government to ensure participation in the emergency planning process.

Resources for Urban/Suburban and Rural/Tribal Areas

- TRB Special Report 294: The Role of Transit in Emergency Evacuation
  This report explores the roles that transit systems can play in accommodating the evacuation, egress, and ingress of people from and to critical locations in times of emergency.

- Response and Recovery for Declared Emergencies and Disasters
  This document addresses response and recovery actions that transit agencies can take, including securing funding and reimbursement for restoring services following a declared emergency or disaster. It is written specifically for transit agencies that are either affected by a declared emergency or disaster or that offer services to an affected community or region. It applies to all modes of transit and to all types of declared emergencies and disasters.

- Supporting Community Evacuation
  This excerpt from Chapter 5 of TCRP Report 86: Public Transportation Security, Volume 7: Public Transportation Emergency Mobilization and Emergency Operations Guide describes activities
that transportation systems may take to improve their capabilities to support community evacuations.

- **Elements of Interorganizational Agreements**
  This excerpt from the “Guidebook for Emergency Management Planning for Texas Transit Agencies” explains what the content of interorganizational agreements or MOUs relating to emergency planning and procedures should encompass.

- **Local Emergency Planning Committees Purpose**
  This document was developed by the Nebraska Emergency Management Agency (www.nema.ne.gov) to provide a description of LEPCs and explain their purpose.

- **Local Emergency Planning Committee Handbook**
  This handbook from the Texas Department of Public Safety was developed to provide LEPCs with the guidance needed to make the Emergency Planning and Community Right-to-Know Act and related state laws work.

- **Locate your LEPC**
  This website allows agencies to search for LEPCs by state or zip code.

- **Illustration of Roles Transit Plays in Emergency Evacuation**
  This illustration from TRB Special Report 294 lists the primary roles that five transit systems take on during emergency evacuations in their respective cities.

  This project provides an all-hazards emergency evacuation guide for transportation and emergency management agencies that identifies, reviews, and integrates a range of resources necessary for state transportation agencies to plan, train, exercise, and execute all-hazards emergency evacuations. The primary audiences are those at the state and local level who are responsible for planning (and execution or support) of an evacuation within a state, including but not limited to transportation, public safety, and emergency management. The guide will be of interest to other entities involved in support of evacuations, including transit, paratransit, advisors on access and functional needs, fire and rescue, law enforcement, public works, and health and human services, as appropriate, to be able to mobilize evacuation resources and make well-considered tactical decisions. The guide is designed to be applicable on a state, multi-state, or cross-jurisdictional border basis.

### 3.A.4 Essential Material Supply

Your agency will need to address how it will obtain the essential materials required to provide life-supporting transportation services to its customers during an emergency, as well as to assist emergency management in disaster response, if called upon to do so. A supply chain disruption during or after an emergency may curtail essential services for vulnerable populations, including transportation for dialysis or other life-sustaining medical treatment. Thus, your agency needs priority access to fuel, backup power, and other essential supplies to maintain operations.

Mission-critical resources for paratransit include fuel, communications systems, dispatching systems, petty cash, and contingency contracts for goods and services. Fuel is the most critical commodity. There may be competition for fuel supplies and other goods and services based
on local hazard and threat scenarios. The greater the competition for these resources, the more advanced planning is required.

**Considerations**
- In urban/suburban areas, paratransit agencies may have on-site fuel storage capacity, as well as partners in local or regional government to provide reliable sources for fuel or other mission-critical resources. Large agencies are also more likely to have alternative facilities for dispatching and staging vehicles. However, advance planning is required to ensure that backup systems and Mutual Aid Agreements (MAAs) are operational.
- In rural/tribal settings, paratransit agencies often rely on commercial suppliers for fuel and other commodities and are less likely to have contingency contracts with other vendors or MAAs with local government.
- With advance-notice events, there is time to requisition and stock up on critical resources. As such, the public’s expectations regarding emergency response and recovery will be higher. For no-notice events, agencies will have to get by with supplies on hand; therefore, those with storage capacity (or full tanks) can sustain operations the longest.

**Effective Practices**
- Self-reliance and on-site storage capacity is the most desirable strategy for fuel supplies. Paratransit providers have successfully used security and emergency preparedness grants to upgrade operational facilities, increase on-site fuel storage and purchase backup generators and power systems.
- In some regions, the agency that leads the ESF-1 function takes the lead in fuel procurement. Emergency management will work with state, county, or municipal entities and private fuel vendors to guarantee that transit and paratransit are a high priority for fuel supplies.
- A three-day supply of food and water stored at the paratransit base for employees is very helpful in supporting any extended emergency deployment.

**Strategy**
- Local resource availability during an emergency is critical to paratransit emergency response capabilities. The greater the competition for resources to support long-term emergency response, the greater the need for advance planning. These plans should include redundancy for critical resources such as fuel, backup electrical power, and other essential resources such as food and water for staff and hard copy backups of critical documents. Access to essential material supply may require close coordination with emergency management and other key public and/or private stakeholders.

**Tool: Essential Material Supply**
The following issues are to be considered as a part of the paratransit planning process.

<table>
<thead>
<tr>
<th>Fuel supply:</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ Off-site fueling: primary vendor and backup sources</td>
</tr>
<tr>
<td>❑ On-site fueling: facilities, storage capacity, underground or above-ground tanks</td>
</tr>
<tr>
<td>❑ The length of time you can operate without getting a fuel delivery</td>
</tr>
<tr>
<td>❑ Types of fuel required</td>
</tr>
</tbody>
</table>
Vendor contracts or purchase orders with primary sources of fuel for on- or off-site fuel servicing
- Agency position on the vendor’s priority list
- Vendor commitments to other entities that could compromise your access to essential material supply

Alternative or backup sources of fuel if the primary source is unavailable
- City or county yard
- School district
- State DOT
- The ability of your agency to supply other responders who may need fuel

**Electrical power:**
- Battery backup systems for computers and servers
- Critical computer data backed up and stored off-site
- Access to a backup generator that is regularly maintained and tested
- Emergency lighting, flashlights and batteries
- Batteries for radios and cell phones

**Other resources:**
- Provision for food and water for staff in an emergency
- Hard copy backups of critical information including trip manifests, dispatch or incident logs, mission requests and operational orders
- Provision for housing of staff in an emergency

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**Resource for Urban/Suburban Areas**

- **Recommended Practice for a Continuity of Operations Plan**
  http://bussafety.fta.dot.gov/show_resource.php?id=4125
  This document is a recommended practice from the American Public Transportation Association (APTA) for creating and implementing a Continuity of Operations Plan (COOP).

**Resources for Rural/Tribal Areas**

  http://bussafety.fta.dot.gov/show_resource.php?id=2987
  The purpose of this report is to assist transportation agencies in evaluating and modifying existing operations plans, policies, and procedures, as called for in NIMS.

- **COOP Planning Checklist**
  This checklist is from TCRP Report 86/NCHRP Report 525, Volume 8: Continuity of Operations (COOP) Planning Guidelines for Transportation Agencies to assist in developing a COOP from the beginning.

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**3.A.5 Duplication of Emergency Service Obligations**

Emergency transportation plans must account for the needs of people with communication, transportation, health, independence, and support-system limitations for local incidents as
well as community-wide disasters that can overwhelm local resources. Problems can arise when paratransit providers are knowingly or unknowingly written into emergency plans for social service agencies and resident care centers. In such instances, paratransit may feel obligated to hold back staff and vehicles in order to meet these service obligations, especially if contracted to do so. Multiple simultaneous service requests may also overwhelm paratransit resources. To ensure paratransit is able to meet its primary obligation to customers and, if necessary, support community emergency response, it is essential that paratransit not overcommit its resources. There should be clear dialogue on this issue between paratransit providers, paratransit partner agencies, and emergency management during the planning process.

Considerations

- Duplication of emergency service obligations may not be apparent in response to local incidents but can become a more significant problem for large-scale disasters where resource limitations have more serious and immediate life-safety impacts.
- In urban/suburban settings, transit coaches are more often utilized to support evacuation requests, while paratransit resources are used to sustain regular paratransit operations.
- In rural/tribal settings, paratransit/demand-response service is more often the only public transit resource. With limited resources available, overcommitment is compounded by lack of involvement with local emergency management in the planning process.
- Duplication of emergency response commitments occurs during notice and no-notice events, but during no-notice emergencies there is less time to assess and respond to evacuation needs and less opportunity for effective interagency communication and coordination.

Effective Practices

- In many states, resident care centers are required to have evacuation plans. Some parts of the country ensure these plans are coordinated to help identify and eliminate dangerous service duplication concerns.
- In some states, resident care centers are directed to develop their own evacuation plans using their own resources or private carriers rather than relying on public transit or paratransit resources.
- In practice, all service requests for evacuation should be coordinated through the local EOC ensuring that mission assignments are operating in support of the Incident Action Plan.

Strategy

- Successful paratransit planning includes strategies to prioritize multiple requests for paratransit resources, thus ensuring that emergency response commitments to customers and outside entities are achievable. Participate in planning meetings with emergency management, human service agencies, resident care centers, and other key stakeholders to clearly delineate paratransit priorities in emergency response and recovery. These priorities also need to be reflected in your paratransit emergency operation plans and protocols.

Tool: Prioritizing Service Obligations

- Before committing resources to emergency management in support of community-wide emergency response or entering into contracts to assist with evacuating resident care centers, consider the potential negative impact on your ability to meet your own customers’ emergency transportation needs.
▪ Urge resident care centers to develop evacuation plans that do not rely on paratransit as a primary resource.
▪ Work with emergency management to establish realistic expectations for paratransit’s role in supporting community emergency response and to prioritize competing service requests.
▪ During major emergencies, coordinate with the local EOC to ensure that paratransit operational assignments are consistent with the overall mission and the previously agreed-upon paratransit emergency response role.
▪ Be prepared to augment reservations and scheduling staff to manage increased demand, to notify customers of trip cancellations, and to handle service-related inquiries and urgent requests from customers and concerned family members.

Resources for Urban/Suburban and Rural/Tribal Areas

▪ **Checklist for Capabilities Assessment Summary and Transit Resources Available**
  http://bussafety.fta.dot.gov/show_resource.php?id=3745
  A form from the “Guidebook for Emergency Management Planning for Texas Transit Agencies” for listing community emergency response services that a transit agency is able to perform and resources that a transit system is able to provide in the event of a community emergency.

▪ **Congregate and Residential Care Facilities**
  Chapter 6 of FHWA’s “Evacuating Populations with Special Needs” discusses the transportation needs for evacuating congregate and residential care facilities (CRCF) and the associated adaptive equipment.


Forward-thinking paratransit providers have plans that address safety, security, and emergency preparedness. Guidance in developing these plans is often provided by local, state, and federal entities as well as peer paratransit providers that have experience in responding to disasters. The specific focus of these plans is generally as follows:

▪ A **system safety program plan** addresses (1) vehicle safety, (2) worker safety, and (3) customer safety. It is intended for wide distribution internally, with partner agencies, and with the public.

▪ A **system security plan** addresses security threats from criminal or terrorist elements to (1) transit facilities, (2) transit equipment, and (3) transit personnel and customers. Due to the sensitive nature of a System Security Plan, it is distributed internally and shared with partners on a need-to-know basis.

▪ A paratransit agency’s **Emergency Operations Plan** addresses internal paratransit issues regarding (1) paratransit command and control, (2) paratransit continuity of operations, (3) paratransit incident response operations, and (4) paratransit post-event recovery. Paratransit EOPs are often shared with emergency management and included as an annex to the overall EOP.

For many paratransit agency managers, dispatchers, and drivers, emergency response actions are improvised because emergency response plans and protocols have not been formalized. Effective paratransit EOPs should be distilled into checklists providing the level
of detail needed for effective response by drivers, dispatchers, maintenance staff, supervisors, and managers.

An important concept in addressing safety concerns includes collecting safety data related to vehicle accidents and passenger/employee incidents. This data can be analyzed for accident and incident trends that can then be proactively addressed by the paratransit agency. Safety- or security-related “near-miss” data involves collecting information about when an accident is narrowly averted or an on-vehicle security threat does not come to fruition. This data can be helpful in addressing concerns to lower paratransit vulnerability. For more information on developing safety, security, and emergency operation plans, policies, and procedures, visit the FTA Bus Safety and Security Program website at http://bussafety.fta.dot.gov.

Considerations

- Paratransit safety considerations are similar for paratransit providers in urban, suburban, rural, and tribal areas, with the exception of traffic volume.
- Paratransit security concerns tend to be greater in urban/suburban areas than in rural/tribal areas, as the prevalence of crime and the risk of terrorism tend to be greater in urban centers.
- Regardless of agency size, location, and composition, emergency plans should provide paratransit staff with clear response protocols that apply to all types of emergency events, with or without prior warning or preparation.

Effective Practices

- Where the state DOT takes an active role in safety, security, and emergency management oversight, paratransit will often receive technical assistance. This includes planning templates provided by the state DOT; training on safety, security, and emergency procedures; and support for local and regional exercises and interagency coordination. This eases the burden of plan development and fosters continuity across jurisdictions.
- Some paratransit agencies have developed job- and location-specific emergency procedures, protocols, and checklists for managers, supervisors, dispatchers, drivers, and mechanics. Incident-specific checklists based on paratransit emergency planning can be kept on a computer for dispatchers, put in a binder or on a clipboard for supervisors, or printed on laminated cards for drivers. (The resource section includes links to emergency procedures and protocol examples.)
- In a number of states, emergency preparedness and response capabilities are considered when evaluating grant applications. This gives paratransit an added incentive for supporting their emergency preparedness program.
- It is helpful when FTA Regional Offices are proactive in providing emergency preparedness guidance to transit and paratransit providers. The FTA Bus Safety and Security Program is an excellent source of emergency preparedness technical assistance material.

Strategy

- Paratransit normal operations and emergency operations are well served by a system safety program plan, system security plan, and a paratransit EOP. The models for preparing these plans are varied. Some transit agencies combine all three into a single document; some have separate safety, security and emergency preparedness plans. The approach taken is far less important than the content of the planning document(s). These plans should include policies, procedures and protocols to enhance the safety of paratransit operations; to improve the security of paratransit personnel, customers, vehicles and facilities; and to meet paratransit customer emergency transportation needs and/or support community-wide emergency response and recovery.
**Tool: Safety, Security, and Emergency Preparedness Plans**

**Topics to consider within an Emergency Operations Plan:**
- **Preparedness**
  - Who has the authority, both internally and externally, to make emergency response decisions and issue directions
  - Mechanism to assess emergency situations and initiate timely reaction strategies
  - Emergency assignments for key personnel
  - Continuity of management/line of succession
  - Alert notification lists
  - Intra-agency and interagency communication systems
  - Designation of an emergency dispatch center and alternate backup
  - Inventory and maintenance of vehicles and equipment
  - Training requirements
  - Protection of vital records
  - Interagency agreements
- **Response**
  - Service suspension thresholds
  - Meeting customer emergency transportation needs
  - Interface with emergency management and first responders
  - Public information/communications
  - Actions of management staff during an emergency
  - Actions of dispatch and supervisory staff during an emergency
  - Actions of drivers, maintenance, and other field staff during an emergency
  - Vehicle mobilization, communication, and operations
- **Recovery**
  - Crisis counseling for staff
  - Damage assessment/impact/evaluation
  - Cleanup and salvage operations
  - Business restoration/reconstitution
  - Finance, insurance, and reimbursement
  - Data recovery

**Topics to consider within a paratransit system safety program plan:**
- Authority and policy statement for system safety program plan
- Purpose and goals of system safety program plan
- Identifiable and attainable safety objectives
- System description/organizational structure
- Procedures to update plan
- Procedures for controlling release of plan
- Hazard identification/resolution process
- Accident/incident reporting and investigation
- Safety data acquisition/analysis
  - Safety incident record keeping
  - Safety near-miss reporting
  - Safety data trend analysis
- Inspection process for facilities, equipment, and rolling stock
- Maintenance audits/inspections (all systems and facilities)
- Rules/procedures review
- System modification review/approval process
- Training and certification review/audit
Preparedness

- Interdepartmental/interagency coordination
- Risks in your operating environment
- Safety of your passenger facilities
- Employee safety program
- Contractor safety coordination
- Drug and alcohol abuse programs
- Procurement
- Hazardous materials programs
- Safety related to alternative fuels such as CNG

**Topics to consider within a paratransit system security plan:**

- **Threat and vulnerability assessment**
  - Identification of criminal or terrorist threats
  - Vulnerability of critical paratransit assets
- **Facility security**
  - Administrative offices
  - Maintenance facilities
  - Transfer centers
  - Vehicle storage areas
- **Administrative security**
  - Security roles and responsibilities
  - Computer and electronics security
  - Hard copy files
  - Bomb threats
  - Suspicious mail
- **Security of fare handling**
  - Fare handling and counting procedures
  - Fare transfer
- **Handling security events on paratransit vehicles**
  - On-vehicle security technology
  - Handling dangerous passengers
  - Responding to hostage situations
  - Responding to suspicious items
  - Requesting law enforcement assistance
- **Security awareness and response**
  - Identifying suspicious people, behavior, and vehicles
  - Procedures for reporting suspicions
  - Security awareness and response training
- **Security data acquisition and analysis**
  - Security incident record keeping
  - Security near-miss reporting
  - Security data trend analysis

**Resources for Urban/Suburban Areas**


Prepared by APTA, this document serves as a primer and guideline for both new start and established bus systems in defining the elements recommended for inclusion in a system safety program plan.
  This APTA-recommended practice for the development and implementation of a security and emergency preparedness plan represents a common viewpoint of those parties concerned with its provisions, namely transit operating/planning agencies (transit systems), manufacturers, consultants, engineers and general interest groups.

- **Protective Measures Implementation Process and Worksheets**
  This site features a process and checklist taken from the “Transit Agency Security and Emergency Management Protective Measures” document. The objective of this general implementation process is to integrate the Homeland Security Advisory System threat conditions with a transit agency’s security and emergency management program using an applicable subset of protective measures.

- **System Hazard and Security Plan (HSP) Template and Instructions**
  A template published by TRB to guide the development of a transit agency plan that deals with security events from routine to severe and identifies specific threats, organizational and personnel roles and responsibilities, and countermeasure and strategy activities.

- **Checklists for Emergency Response Planning and System Security**
  A checklist from APTA’s website that provides guidance for emergency response planning, coordination, and training.

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**Resources for Rural/Tribal Areas**

- **Bus Transit System Safety and Security Review Template**
  This Florida DOT template for developing or revising system safety and security program plans references Florida state code for easy compliance verification.

- **Passenger, Vehicle, and System Safety Program Plan**
  The Buncombe County Community Transportation Program guide for preventing accidents and injuries to customers, employees, and the general public lists resources for completing all of the necessary reports for accountability to safety.

- **Managing System Safety for Rural Transit**
  This briefing from the Community Transportation Association of America (CTAA) outlines steps for rural transit agencies to develop and implement a system safety plan.

- **Skagit Transit System Safety Program Plan**
  This plan establishes methods for ensuring that the safety implications of system modifications are addressed prior to making changes and provides a mechanism for identifying, eliminating, and/or controlling hazards.

- **Missouri Model Transit Bus Safety and Security Program**
  This document provides a sample safety and security program from the Missouri DOT, Transit Section.

- **System Security and Emergency Preparedness Plan (SSEPP) Template**
  This detailed, yet generic, template from the Ohio DOT may assist agencies in developing an SSEPP by using a “fill-in-the-blank” approach.
• **Model System Security Program Plan Template**
  This Louisiana Department of Transportation and Development template is to assist transit agencies in developing a comprehensive system security program plan.

• **Safety and Security Plan**
  This document is a sample plan from the Tillamook County Transportation District.

• **Developing an Emergency Operations Plan**
  http://bussafety.fta.dot.gov/show_resource.php?id=4133
  This excerpt from Section 4 of *TCRP Report 86: Public Transportation Security, Volume 7: Public Transportation Emergency Mobilization and Emergency Operations Guide* provides guidance to transit agencies in developing a comprehensive EOP.

• **Sample Emergency Preparedness Plan**
  This sample emergency preparedness plan worksheet from the Center for Urban Transportation Research (CUTR) uses an easy-to-follow outline structure to guide users in developing an emergency preparedness plan.

• **Disaster Information from FEMA**
  This link to FEMA's website can assist with finding information on declared disasters and emergencies and disaster aid programs.

• **Disaster Response and Evacuation Policy**
  This resource outlines disaster response policy and procedures and includes a notification and deployment/evacuation checklist. It was developed by the Southeast Alabama Regional Planning & Development Commission.

• **Emergency Response Functional Checklist**
  This checklist from Wiregrass Transit Authority provides a list of tasks for emergency notification, deployment, and evacuation.

• **Transit Operating Procedures for Safety and Security**
  This in-depth guide was written for the New Mexico DOT to aid transit agencies in developing standard operating procedures, emergency operating procedures, and transit security procedures; it comes with numerous standardized forms.

• **Guidance for Paratransit Emergency Planning**
  http://bussafety.fta.dot.gov/show_resource.php?id=4180
  This document outlines the results of a study conducted in 2008 to improve preparedness of ADA paratransit for emergencies. The following are a few of the topics addressed: responding to requests for transportation assistance during a disaster, including from other agencies; ensuring contractor preparedness and staff availability, including contract provisions about contractor staff obligation; prioritizing trips; and registries of paratransit customers who will need assistance during an emergency.

**Sample Emergency Protocols**

• **Transit Property Trespass**
  http://bussafety.fta.dot.gov/show_resource.php?id=4111

• **Suspicious Item on Transit Vehicle**

• **Emergency Management Requests Transit Assistance**
• **Dangerous Person(s) on Transit Property**

• **Dangerous Person on Transit Vehicle**

• **Shooter or Hostage Situation on Transit Vehicle**

• **Suspicious Item in or near Transit Facility**

• **Serious Transit Vehicle Accident/Incident**

• **Transit Vehicle Fire**
  http://bussafety.fta.dot.gov/show_resource.php?id=3590

• **Armed Robbery**

• **Bomb Threat/Suspicious Device**

• **Vehicle Fire**

• **Facility Hazmat**

• **Facility Fire**

• **Natural Disaster**

• **Transit Medical Emergency**

• **Criminal Acts on Transit Property**

• **Injury/Assault**

• **Security-Sensitive Information**

• **Suspicious Mail**

• **Power Outage**

• **Transit Property Theft**

### 3.A.7 Surge Capacity

Paratransit agencies that are part of a government entity frequently have personnel policies that designate staff as “emergency response workers.” In cases where emergency service is not mandated, some agencies develop “volunteer lists” of personnel who indicate they are willing to work in support of an emergency response. Regardless, experience from recent disasters demonstrates that paratransit drivers, dispatchers, supervisors, and mechanics may be unable to report to work due to disaster effects, as well as concerns for personal or family welfare. This can result in insufficient staff to support operations.

In a major community-wide or regional disaster event, emergency response operational periods are typically twelve hours long, which may run counter to the United States Department of Transportation (USDOT) and applicable state regulations for driving and on-duty hours. Twelve-hour shifts (or twelve on and twelve off) may be feasible for paratransit drivers as long
as the duty cycle includes non-driving time and total driving time does not exceed ten hours per shift. Since emergency response activities often continue for extended hours and even days, issues of driver fatigue and relief shifts inevitably arise. Managing staff hours and preventing fatigue is an obvious health and safety issue.

In general, paratransit providers will want their own trained and qualified personnel to operate their vehicles. However, in a large-scale emergency it may be necessary to bring in additional drivers from neighboring jurisdictions or to utilize public safety, public works, or National Guard personnel to augment local staff. Many states allow law enforcement or emergency responders to commandeer vehicles (for example, to enter a contaminated or dangerous environment). The planning process needs to address concerns related to licensing, vehicle orientation and training, insurance, liability, and cost recovery.

Considerations
- Paratransit providers—large or small, urban or rural—may experience a lower percentage of staff reporting to work during emergencies than anticipated. Accurately estimating the number of employees willing and able to report for duty during a community emergency presents a significant challenge.
- No-notice emergencies are particularly challenging because there is no lead-time for mobilization. Mobilizing employees for emergency response is doubly challenging if power, telephone and cell phone service has been disrupted.
- In many states, a sworn officer can waive the Passenger Endorsement requirement for otherwise properly licensed drivers to operate vehicles in an emergency situation.

Effective Practices
- The best mobilization plans are built around a detailed personnel roster that defines roles, responsibilities, and duty stations for each person. The roster works as a call-down list, so each position has a “primary” as well as “backups” identified.
- A personal and family preparedness orientation increases the likelihood that staff will be prepared to report to work to support emergency response and will help management gain a realistic picture of who will be available should a disaster strike.
- Establishing operational periods that provide for sufficient rest and recuperation for essential personnel, as well as providing adequate food and water for all staff involved in the response, helps limit the impact of extended operational hours.

Strategy
- Develop a formal policy defining the responsibilities and report-to-work requirements for essential personnel. This policy should include a mechanism to determine the number of available frontline staff that will report during emergencies and strategies to sustain paratransit emergency response operations as long as necessary with plans for driver relief.
- Since there may be situations when non-paratransit personnel may be assigned to operate your paratransit vehicles during an emergency response, planning should also consider procedures for training external personnel on paratransit vehicle operation.

Tool: Addressing Surge Capacity

<table>
<thead>
<tr>
<th>Essential Personnel</th>
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</thead>
<tbody>
<tr>
<td><strong>Approaches to mobilizing paratransit employees during emergencies:</strong></td>
</tr>
<tr>
<td>- Develop a personnel policy that designates paratransit job positions that must report to work during emergencies. Designated personnel will include</td>
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</tbody>
</table>
managers, supervisors, dispatchers, mechanics, and drivers. This policy must be consistent with appropriate governmental or private-sector protocol, union contract language, and paratransit system mission and values.

- In lieu of, or in addition to, an essential personnel policy, create a structure enabling employees with significant family obligations to deselect themselves from emergency response activities. This gives management a more accurate assessment of the number of employees that can be expected to report to work to support an emergency response.

- Maintain contact information and call-down lists in a database application that serves as the master list. Assign a single staff member to keep the data accurate and up-to-date. Ideally, the information can be accessed and formatted in a variety of ways from a single source of data, e.g., remotely via the Internet, posted on a wall, laminated and kept at home, or placed on a clipboard in a vehicle.

- Establish a phone number where employees can call for pre-recorded information about emergency operations.

**Vehicle Operations**

**Approaches to maximizing the number of qualified, trained paratransit drivers:**

- Flexible and part-time staffing: Having more drivers than vehicles reduces the need for supplementing driving staff in an emergency mobilization and increases the flexibility of day-to-day operations. Agencies that employ part-time drivers may be able to meet temporary demands by increasing the hours of part-time staff.

- Maintenance personnel: Mechanics and service workers routinely drive paratransit vehicles and, based on vehicle type, may be required to possess a CDL. They can fill in for driving tasks to the extent their on-duty hours are not exceeded. Additional training on passenger securement and passenger sensitivity may be required.

- Mandated driver qualifications: Make it organizational policy for supervisors, managers, and other staff to maintain their CDLs if the paratransit fleet requires a CDL. Provide refresher training on a regular basis.

- Mutual aid: Coordinate with neighboring school districts, transit agencies, or other governmental motor-pool services to add drivers to your paratransit staff in emergencies.

- Contract service: Include language in paratransit service contracts to address the option of augmenting driving staff and vehicles from the contractor’s regional/national resources.

**Applicable DOT and CDL driving and on-duty service rules you should consider:**

- Drivers are limited to ten hours of driving and fifteen total hours on-duty time (i.e., not more than ten hours driving duty and five hours of non-driving duty) before taking a mandatory minimum eight hours off for rest.

- Drivers may not exceed sixty total hours on duty in a rolling seven-day period, or seventy hours on duty in a rolling eight-day period, depending on the method the agency uses for calculating driving hours.

- Agencies operating seven days a week usually choose to use the rolling eight-day period, while those operating five or six days a week tend to use
the rolling seven-day period. Either way, hours worked before the onset of an emergency have to be considered when calculating eligible driving hours.

- A driver who is out of hours is generally not allowed to drive, with some latitude given under emergency conditions to allow a driver to complete a trip if it could reasonably be performed within legal driving hours in normal circumstances.

**Vehicle Orientation**

*Approaches for addressing concerns of non-paratransit personnel operating paratransit vehicles:*

- All paratransit drivers must receive training on basic vehicle operations, use of lift equipment, and properly securing mobility devices. Providing sufficient training to inexperienced personnel after disaster response is underway is unrealistic and time consuming. Thus, emergency responders who already have CDLs that meet or exceed minimal qualifications for the type of paratransit vehicle to be driven are the best candidates for a quick orientation.

- Based on insurance concerns or other factors, paratransit systems may have policies that prohibit operation of their equipment by anyone other than bona fide personnel. Address legal, insurance, and liability concerns surrounding this issue during the planning process.

- Despite insurance or liability concerns, some states give law enforcement and other first responders the legal right to commandeer vehicles during an emergency. Determine if this action is legal in your state and plan accordingly.

**Resources for Urban/Suburban and Rural/Tribal Areas**

**Essential Personnel**

- **Essential Personnel Policy**
  This policy from Coast Transit Authority summarizes procedures to ensure the presence of adequate and appropriate personnel essential to carry out the transit agency’s responsibilities for hurricane evacuations and other emergency response events.

- **Employee Emergency Response Participation**
  This document is Wiregrass Transit Authority’s template for employees to acknowledge whether they agree to participate in emergency response efforts.

- **Mobilization Personal Readiness Checklist**
  This checklist from the Caltrans Transit Emergency Planning Guidance Technical Appendices provides support to responders in taking care of personal needs before deployment.

**Vehicle Operation**

- **Resource Inventory Form**
  APTA’s Emergency Response Preparedness Program template for transit agencies to use in listing transportation resources that can be spared to assist emergency management in a disaster response.
Vehicle Orientation

- **New Bus Operator Vehicle Orientation Documentation Form**
  

  This form is New Mexico DOT’s checklist that is used to certify and document that a driver has received instruction on and understands the operation and purpose of the listed features and functions of a specific vehicle prototype.

- **Vehicle and Equipment Orientation Documentation Form**
  

  This Cleveland Area Rapid Transit form is used to document driver orientation on vehicles and equipment.

### 3.8 A. Contracted Paratransit Services

When paratransit is under direct control of a transit agency or government entity, there is a clear mandate to continue to serve paratransit customers, as well as to support emergency response missions, to the extent possible. Issues of billing and cost recovery are usually not part of the equation—at least in the initial phases of an emergency. This is less true when it comes to contracted service where provider contracts may not specify emergency responsibilities of contracted paratransit staff, and the contracting transit agency or authority may lack the ability to direct the activities of contractor staff during an emergency. In practice, paratransit contractors are usually responsive to agency service requests but, by nature, contracted service is a more arms-length transaction than in-house operations. Private contractors may not have the same protections or obligations as the contracting entity, and if there is no guarantee that emergency service requests are billable at prevailing rates, contractors may refuse to participate. This issue can be particularly complex when the contracting agency provides the vehicles and the contractor provides the drivers and support staff to put those vehicles on the road.

Contract service providers need to be participants in the emergency response planning process to ensure all impacting issues are appropriately addressed and actual emergency response activities will not be negatively impacted. Contracted service provider staff should be active in emergency response planning; developing emergency response procedures and protocols; and participating in training, drills, and exercises.

**Considerations**

- Many urban/suburban transit systems enter into contracts with paratransit service providers. The transit system or governing entity needs to ensure that contract language includes the requirements and expectations for contractor participation in community emergency response, including reimbursement rates for such services.

- While most rural/tribal paratransit services are operated in-house, those rural systems that contract for paratransit service should include contract language covering requirements and expectations during community emergency response.

**Effective Practices**

- Some government entities and transit systems have paratransit service provider contracts that address requirements and expectations during emergency response operations. Where such contract language does not exist, some agencies develop an MOU or similar agreement to address this issue in the interim until the paratransit service contract is next put out to bid.

- Involving both internal and contracted paratransit staff in emergency planning, training, and exercises further reinforces understanding about emergency roles and responsibilities.
• It has proven helpful to have an in-house paratransit employee dedicated to staying in communication with contracted paratransit services during an emergency to keep the connection between supervisors open and available.

**Strategy**

• If your agency contracts out any or all of its paratransit services, ensure contracts contain formal language regarding your contractor’s roles and responsibilities during emergencies, either in service to your customers or in support of community-wide emergency response and recovery. Additionally, reinforce these expectations through planning, training, and exercises.

**Tool: Contracted Paratransit Services**

- Review existing contracts to determine whether contract language addresses the responsibility of the contracted service provider to deliver transportation services during emergency response and recovery. Record-keeping requirements, the types of services considered reimbursable, and reimbursement rates should be specified in such agreements.
- If an existing paratransit contract does not contain formal language that addresses contractor roles and responsibilities during emergencies, consider developing an MOU, contract amendment, or similar agreement to address this issue.
- To reinforce understanding regarding emergency roles and responsibilities, offer to assist contractors in developing emergency response procedures and protocols and provide training and exercises on those protocols.
- Develop systems to document services performed in support of an emergency response. Securing reimbursement for such services will depend on documentation that shows the cost of paratransit staff hours, vehicle operating hours, and miles over and above the baseline costs of maintaining normal service.

**Resources for Urban/Suburban and Rural/Tribal Areas**

• **Transit Service Contracting**
  This excerpt from Chapter 8 of the Iowa DOT, Office of Public Transit, “Transit Manager’s Handbook” discusses topics to be considered when contracting with outside parties.

• **Contract Elements and Performance Standards**
  http://www.trb.org/Publications/Blurbs/153664.aspx
  Chapters 5 and 6 of *TCRP Synthesis of Transit Practice 31: Paratransit Contracting and Service Delivery Methods* contain excerpts about paratransit contracting elements such as methods of compensation, contractor continuity, performance incentives and penalties, performance monitoring of contractors, and customer complaint procedures.

• **Ensuring Contractor Preparedness and Staff Availability**
  This excerpt from “Guidance for Paratransit Emergency Preparedness” lists contract provisions from several agencies that were interviewed for a study on paratransit emergency planning.
3.B Training

3.B.1 National Incident Management System/Incident Command System

The ICS, NIMS, and NRF are federally mandated training certification programs for any agency that may be asked to support emergency response and recovery activities. FEMA and other organizations may consider NIMS certification in establishing eligibility for disaster reimbursement.

NIMS certification is designed to help any agency, including paratransit, integrate quickly and effectively into the command and field levels of an emergency response, regardless of jurisdiction or incident size. This training includes the courses ICS-100, ICS-200, ICS-300, ICS-400, IS-700 NIMS, and IS-800 NIMS. Free online courses are available at http://training.fema.gov.

Considerations

- Frequently, the upper echelon of operational leadership within urban/suburban transit systems may be NIMS certified, but paratransit managers, supervisors, and dispatchers may not be. This can create significant problems when paratransit resources are deployed in a large-scale community emergency response.
- Rural/tribal paratransit organizations may be unaware of NIMS certification requirements or not deem it a high priority. When paratransit management is unfamiliar with NIMS, coordination and cooperation in a community-wide emergency response can be negatively impacted.

Effective Practices

- Some state DOTs encourage or mandate NIMS certification as part of safety, security, and emergency management oversight.
- Transit and paratransit agencies may direct employees to take the online NIMS and ICS courses, attend courses conducted by local police or fire and rescue personnel, or retain consultants to teach the NIMS and ICS courses in the context of paratransit operations.
- Paratransit systems sometimes make basic NIMS and ICS training part of their new-hire curriculum, ensuring that new employees receive the certification.
- At many agencies, NIMS compliance is a result of internal advocacy.

Strategy

- Your paratransit agency has options regarding the way it can meet the NIMS compliance requirement. You may direct employees to take online courses, attend training conducted by local police or fire and rescue personnel, or bring in outside expertise to teach FEMA courses in the context of paratransit operations. Whatever approach you take, addressing the requirement for NIMS training and certification is a priority.

Tool: Addressing NIMS Compliance Requirements

- Identify the level of NIMS training and compliance that is mandated for paratransit operations, maintenance, dispatch, and supervisory/management job functions.
  - The following recommendations are provided in accordance with Homeland Security Presidential Directive 5 (HSPD-5). Some lesser variation on this training may serve short-term paratransit training requirements.
    - ICS-100 and IS-700 certification for all paratransit employees
    - Additionally, ICS-200, IS-800, and IS-546 for all dispatchers and supervisors
    - Additionally, ICS-300, ICS-400, IS-702, and IS-800 for management
Determine the best route for receiving NIMS training.
- If you determine the most desirable avenue is through training workshops, contact your local public safety or emergency management agency, or contract through an emergency management consulting firm.
- If you determine that self-paced online training is the appropriate avenue for NIMS certification, explore the options available on the FEMA website.

Consider making NIMS training part of your agency’s new-hire orientation program.
As your paratransit staff becomes NIMS compliant, inform local emergency management of this fact.

Resource for Urban/Suburban and Rural/Tribal Areas

- **NIMS Training Program**
  This link is to FEMA’s NIMS online training courses.

### 3.B.2 Emergency Preparedness Training

Safe vehicle operations, driver safety, passenger safety, and overall organizational performance depend on effective and relevant training in safety, security, and emergency response at all levels of an organization. There are no universal training standards in the paratransit industry, though most agencies provide some training on vehicle fires and evacuation, accident handling, potentially violent passengers, and other dangerous situations that may occur. Some agencies provide specific guidance and training on roles and responsibilities during community-wide emergencies.

#### Considerations

- Due to organizational size and complexity of paratransit systems in urban areas, it is more likely that emergency response training has been provided to leadership and management staff; however, it has not always been provided to supervisory or frontline personnel.
- In rural and tribal paratransit systems, emergency response training tends to be uneven due to limited resources and because it is not always regarded as a high priority.
- Advance-notice emergencies and planned special events may provide a window of opportunity to conduct timely emergency response briefings and training to staff. Response to no-notice incidents depends on existing plans, procedures, experience, and training.

#### Effective Practices

- Paratransit providers that create internal emergency response plans and protocols and provide training for their staff on roles and responsibilities that are critical to success during internal or community-wide emergency response have been proven to be more effective during an emergency. The importance of this planning and training has been clearly underscored by the successful transit response to flooding events in North Dakota and wildfire events in California, Arizona, and New Mexico.
- Paratransit providers should consider providing first aid, cardiopulmonary resuscitation (CPR), and/or automated external defibrillator (AED) training to frontline employees and drivers since emergency situations may require paratransit drivers to respond to passengers’ medical needs.
**Strategy**

- Train all frontline and supervisory paratransit staff on procedures and protocols for responding to internal paratransit-specific emergencies as well as community disasters. The skills developed during this training are critical to successful employee performance, be it for paratransit emergency response or community emergency response. Ideally, this training will be a combination of classroom-setting orientations on emergency procedures and protocols and on-vehicle, hands-on demonstrations of emergency response skills.

**Tool: Training for Emergency Response**

<table>
<thead>
<tr>
<th>Topics to address, at a minimum, when training on the topic of internal paratransit emergencies:</th>
</tr>
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<tbody>
<tr>
<td>- Vehicle breakdowns</td>
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<tr>
<td>- Passenger incidents</td>
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<tr>
<td>- Vehicle accidents</td>
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<tr>
<td>- Vehicle fire and evacuation</td>
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<tr>
<td>- Biohazard spills</td>
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<tr>
<td>- Potentially dangerous passengers</td>
</tr>
<tr>
<td>- On-vehicle hostage situations</td>
</tr>
<tr>
<td>- Suspicious items and improvised explosive devices (IEDs)</td>
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<tr>
<td>- Chemical, biological, and radiological (CBR) releases</td>
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<tr>
<td>- High-probability acts of nature that would impact the life-safety of paratransit staff and/or customers</td>
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<table>
<thead>
<tr>
<th>Topics to address, at a minimum, when training on external emergency response:</th>
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<tbody>
<tr>
<td>- Individual roles and responsibilities</td>
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<tr>
<td>- Report-to-work requirements and strategies</td>
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<tr>
<td>- Preparing, pre-positioning, and staging vehicles</td>
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<tr>
<td>- Emergency dispatching</td>
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<tr>
<td>- Communication systems during emergencies</td>
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<tr>
<td>- Vehicle operation during emergencies</td>
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<tr>
<td>- Meeting customer emergency transportation needs</td>
</tr>
<tr>
<td>- Emergency protocols for transport of passengers and pets</td>
</tr>
<tr>
<td>- Emergency dropoff locations and strategies</td>
</tr>
<tr>
<td>- Care for customers who are in system or temporarily the ward of paratransit</td>
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<tr>
<td>- Surge capacity and sustaining emergency operations</td>
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<tr>
<td>- Interacting with emergency management and first responders</td>
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<tr>
<td>- Service shutdown and startup</td>
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<tr>
<td>- Record-keeping and documentation requirements</td>
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<tr>
<td>- After-action reports (AARs)</td>
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</tbody>
</table>

**Resources for Urban/Suburban and Rural/Tribal Areas**

- **Vehicle Evacuation Procedures**
  
  
  This website features New Mexico DOT’s vehicle evacuation procedures for drivers.

- **Immediate Actions (IAs) for Transit Agencies for Potential and Actual Life-Threatening Incidents**
  
  
  This FTA guidance is intended to help transit agencies reinforce and improve how well their frontline employees react and respond to potential and actual life-threatening incidents.
3.B.3 Personal and Family Preparedness

Effective emergency planning recognizes the benefit of public outreach and education on personal and family preparedness. Paratransit employees who do not have personal and family emergency plans are less likely to report to work following a disaster. This can result in insufficient staff to support life-sustaining trips and other emergency response mission requests. Providing training in personal and family preparedness can help mitigate this concern.

Considerations

- To date, many urban/suburban and rural/tribal paratransit providers have not emphasized personal emergency preparedness for staff.
- In advance-notice incidents, paratransit staff may have time to assemble supplies and prepare to “weather the storm.” Impacts from no-notice events are substantially greater on staff that does not have preparedness plans.
- In emergency events where advance notice is possible, paratransit staff may have a small window to assemble personal supplies and develop appropriate family response strategies. Paratransit emergency response activities can be hampered by paratransit staff not properly preparing their families for emergencies, thus delaying their response time or precluding them from responding at all.

Effective Practices

- Paratransit agencies should conduct a personal preparedness and emergency operations briefing annually for employees and include this training as part of their new-hire program. Such programs are frequently offered in conjunction with regional and national preparedness programs, such as the Great Shakeout or National Preparedness Month. Information and materials are available at no or low cost from the American Red Cross, FEMA, the National Transit Institute (NTI) and local emergency management.
- At some agencies, employees are required to have a personal survival plan on file with the agency’s health and safety or human resources office that includes preparedness arrangements and up-to-date emergency contact information.

Strategy

- Provide employees with informational materials about personal and family emergency preparedness so your staff is better prepared and more likely to report to work and perform successfully during emergencies. These materials can be distributed on an annual basis, perhaps in advance of each major storm season. Conduct training on personal preparedness using in-house trainers, the Red Cross, local emergency management, or other subject matter experts. Consider addressing personal and family preparedness issues as a part of the new-hire orientation program.

Tool: Personal and Family Preparedness

Important elements of personal preparedness:

- How to get instructions related to work or school
- Shelter-in-place and evacuation plans for the home and workplace
- Preparation for the needs of family members and pets
- Three or more days’ supply of emergency food and water
- Shutoff of gas, electricity, water and other utilities
- Sanitation management and supplies
- Necessary prescription drugs and life-sustaining medical equipment
- Cash on hand
- Items to include in a well-stocked disaster supply kit including your emergency contacts list and evacuation plan
Resources for Urban/Suburban and Rural/Tribal Areas

- **Personal Workplace Disaster Supplies Kit Checklist**
  http://bussafety.fta.dot.gov/show_resource.php?id=4128
  This one-page document from the American Red Cross lists the recommended supplies to keep at the workplace in case employees are confined for many hours, or perhaps overnight, during a disaster or emergency.

- **Emergency Preparedness Guide for Transit Employees on the Job and at Home**
  This guide from NTI and FTA helps transit employees prepare themselves and their families to cope with man-made or natural emergencies while still allowing them to effectively fulfill their transit duties.

- **Immediately after a Disaster**
  This FEMA web link provides emergency response steps and other information to assist individuals and families immediately after a disaster.

### 3.C Exercises

#### 3.C.1 Discussion-Based Exercises

A key strategy to assess emergency response plans is discussion-based exercises, commonly called tabletop exercises. Using an emergency scenario, tabletop exercises provide a forum for a paratransit agency, or for multiple participating agencies, to review EOPs, policies, procedures, command structure, and communication protocols.

Paratransit managers and supervisors are encouraged to participate in tabletop exercises coordinated by their city or county and engage with partner agencies in realistic disaster scenarios. This is where planning assumptions are tested and working relationships with emergency management, first responders, and other emergency support agencies are established. If not invited to the table, paratransit should be proactive and advocate to get involved or identify advocates in local government or the community to encourage participation. State DOTs and state emergency management agencies can also act as catalysts at the state level to encourage participation.

#### Considerations

- In urban/suburban areas, paratransit systems sometimes conduct internal discussion-based exercises to orient staff to their roles and responsibilities related to serving their customers during an emergency. Additionally, at times, paratransit staff should participate in external tabletop exercises involving key community emergency response stakeholders.

- In rural/tribal areas, paratransit staff does not usually conduct internal discussion-based exercises and often are not invited to participate in external community-wide tabletop exercises.

#### Effective Practices

- Participation in basic and advanced tabletop exercises, both internally and externally, helps validate transportation planning assumptions, fosters greater coordination, and tends to lay the groundwork for a more successful disaster response.

#### Strategy

- Hold discussion-based and tabletop exercises internally to build staff skills, validate your emergency response plans, and enhance your staff’s understanding of their roles and responsibilities for meeting customer transportation needs during an emergency response. Proactively solicit emergency management for an invitation to participate in community exercises in order to
foster relationships with first responders and partner agencies and ensure that your emergency plans do not conflict with broader community emergency response procedures. State DOTs and state emergency management agencies may be able to act as catalysts at the state level to encourage paratransit involvement in community emergency response simulations and exercises.

Tool: Discussion-Based Exercises

<table>
<thead>
<tr>
<th>Exercises can address strategies for:</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ Mobilization of paratransit staff</td>
</tr>
<tr>
<td>❑ Internal and external protocols and procedures</td>
</tr>
<tr>
<td>❑ Communication with paratransit customers in emergencies</td>
</tr>
<tr>
<td>❑ Interagency communication and coordination</td>
</tr>
<tr>
<td>❑ Identification of individuals who may need emergency transportation assistance</td>
</tr>
<tr>
<td>❑ Preparation, pre-positioning, and staging of paratransit vehicles</td>
</tr>
<tr>
<td>❑ Review and test of paratransit EOPs, procedures, and checklists</td>
</tr>
<tr>
<td>❑ Provision of paratransit services to meet individual life-supporting medical needs</td>
</tr>
<tr>
<td>❑ Sustaining of long-term paratransit emergency response support</td>
</tr>
<tr>
<td>❑ Service suspension and reconstitution procedures</td>
</tr>
</tbody>
</table>

Resource for Urban/Suburban and Rural/Tribal Areas

▪ Tabletop Exercises
  This document, excerpted from the Caltrans Transit Emergency Preparedness Technical Appendices, lists eleven crisis/emergency scenarios for transit agencies to use to conduct tabletop exercises.

3.C.2 Operational Exercises

Operational exercises include functional and full-scale exercises.

Functional exercises test and evaluate the operational capability of specific emergency response functions such as mobilization, communications, or activation of a transportation-specific operations center.

A full-scale exercise, by comparison, tests and evaluates the capability of multiple functions operating together. Full-scale exercises occur in real time, in the field, involving the actual movement of equipment and personnel in the manner they would be called upon in an actual event.

Participating in functional and full-scale exercises allows paratransit staff, emergency management, and first responders to practice mobilizing an effective and coordinated community emergency response.

Functional and full-scale exercises generally conclude with a debriefing session where participants analyze their successes and failures. Outcomes from this analysis are documented in an AAR that includes an improvement plan detailing strategies for participants to enhance and update their organization’s emergency plans and protocols.

Considerations

▪ Urban/suburban transit systems are frequently integrated into community emergency drills and exercises. However, exercises tend to rely on fixed-route buses rather than paratransit
vehicles. Thus, paratransit providers, whether internal or contracted, have little opportunity to exercise their capability to respond to actual emergency events.

- Similarly, in rural/tribal areas, school buses are often the main transportation resource emergency managers anticipate using for emergency response, and paratransit is often an after-thought when constructing community emergency response drills and exercises.
- Paratransit agencies that have participated in emergency drills and exercises respond more effectively to advance-notice and no-notice emergencies.
- Under the 2001 Emergency Supplemental Appropriations Act for Recovery from and Response to Terrorist Attacks on the United States, Public Law 107-38, FTA awarded funding to support conducting emergency preparedness drills. Paratransit providers were encouraged to coordinate with regional FTA representatives to determine their grant qualifications. More information can be found at http://www.fta.dot.gov/13442_1595.html.

**Effective Practices**

- Paratransit providers that actively pursue opportunities to conduct internal emergency drills and participate in external emergency exercises are typically better prepared to respond to emergencies. Practicing internal emergency drills can enhance and benefit the working relationships of paratransit staff, while participating in external exercises can help develop or strengthen relationships between paratransit, first responders, and emergency management.

**Strategy**

- Participate in functional and full-scale exercises that enhance response and recovery capabilities and ensure that paratransit emergency response plans and protocols do not conflict with those of other agencies or local response strategies. You may need to identify advocates in local government or within the community that can help encourage emergency management to include paratransit in exercises. State DOTs and state emergency management agencies also may be able to act as catalysts at the state level to support your involvement in local and regional exercises.

**Tool: Operational Exercises**

<table>
<thead>
<tr>
<th>Functional exercises can help your agency to assess or test:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Activation of your internal emergency dispatch operation or DOC</td>
</tr>
<tr>
<td>- Backup power generators, including emergency lighting and fuel pumps</td>
</tr>
<tr>
<td>- Battery backup for computer systems and re-boot of the system from a backup</td>
</tr>
<tr>
<td>- Backup communications equipment such as radios and cell phones</td>
</tr>
<tr>
<td>- Emergency dispatching capabilities</td>
</tr>
<tr>
<td>- Emergency call-down protocols for mobilizing staff</td>
</tr>
<tr>
<td>- Vehicle pre-positioning and staging protocols</td>
</tr>
<tr>
<td>- Customer communication procedures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participation in full-scale exercises can help your agency to assess:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Mobilization of paratransit resources in support of a community emergency response</td>
</tr>
<tr>
<td>- Communication and coordination between paratransit and the EOC</td>
</tr>
<tr>
<td>- Paratransit functionality within the Incident Command (IC) structure</td>
</tr>
<tr>
<td>- Identification of individuals requiring paratransit evacuation assistance</td>
</tr>
<tr>
<td>- Pre-positioning and staging of paratransit vehicles</td>
</tr>
<tr>
<td>- Dispatch of paratransit vehicles based on mission assignments</td>
</tr>
</tbody>
</table>
Paratransit pickup and dropoff of evacuees
- Medical issues related to evacuating resident care centers and other sensitive locations
- Use of paratransit vehicles for non-evacuation purposes
- Communication protocols to notify paratransit customers of service continuity and broader emergency response concerns
- Resource tracking and management
- Sustaining of paratransit services over an extended period of time

Resource for Urban/Suburban Areas
- Guidelines for Transportation Emergency Training Exercises
  The ninth volume of both NCHRP Report 525: Surface Transportation Security and TCRP Report 86: Public Transportation Security assists transportation agencies in developing drills and exercises in alignment with NIMS.

Resource for Rural/Tribal Areas
- Homeland Security Exercise and Evaluation Program Volume IV: Sample Exercise Documents and Formats
  The Department of Homeland Security (DHS) provides sample exercise documents and formats intended for the exercise planner to use and/or modify when designing and developing exercises.

3.C.3 Inclusion of People with Access and Functional Needs

Emergency response drills and exercises should include individuals who experience limitations with walking, hearing, seeing, speaking, breathing, understanding, learning, remembering, responding quickly, or fatigue. Not including these individuals in planning, drills, and exercises can easily lead to faulty emergency planning assumptions.

Considerations
- Based on current definitions, people with access and functional needs comprise a significant percentage of the population of our country. As a result of legal decisions and social changes, many people that fall within this definition live independently throughout the community. Paratransit is an essential resource for these individuals in urban, suburban, rural, and tribal communities.
- Advice from individuals with access and functional needs can be extremely helpful in planning for and exercising an emergency response. These individuals can assist by providing input on priorities for service in an emergency, appropriate staging area locations, effective protocols for serving passengers on a paratransit vehicle during an emergency, and evacuating customers with or without assistive devices.
- A common planning assumption for advance-notice emergencies is that people who may need extra time evacuating, such as older adults and people with disabilities, will be encouraged to evacuate early. This can have significant impacts on paratransit operations and should be examined during interagency exercises.
- Following no-notice emergencies, most paratransit agencies plan to return customers to their homes. Some percentage of paratransit customers will be unable to return home
because of disaster effects or lack of support resources at their homes following the disaster. Planning for how to best serve these customers caught “in system” on paratransit vehicles or at dropoff locations should be examined during both internal and interagency exercises.

**Effective Practices**

- By advocating for the inclusion of people with access and functional needs in discussion-based and operational exercises, paratransit can help prepare itself and the community for the diversity of emergency response challenges faced in urban, suburban, rural, and tribal communities.

**Strategy**

- When people with communication limitations, medical needs, independence concerns, supervision requirements, and transportation limitations as well as representatives from disability and aging organizations are included in emergency planning and disaster exercises, emergency response plans are more likely to address the diverse and specific necessities of people with access and functional needs.
- Although your paratransit agency cannot unilaterally ensure such inclusion takes place, it can play a strong role as a catalyst. Through your interactions with emergency management, you can help provide a voice for people with access and functional needs in the emergency planning process.

**Tool: Inclusion of People with Access and Functional Needs**

**Action steps to encourage inclusion of people with access and functional needs in emergency planning and exercises include:**

- Communicating to emergency management the positive outcomes realized when people with access and functional needs are included in the emergency preparedness planning process.
- Communicating to emergency management the contributions to the emergency preparedness planning process that human service agencies and disability advocacy groups can make.
- Communicating to emergency management the importance of individuals with access and functional needs participating in disaster drills, simulations, and exercises.
- Assisting emergency management in identifying individuals with access and functional needs, as well as agencies or advocacy organizations, that may be willing to participate in the emergency planning process.

**Resources for Urban/Suburban and Rural/Tribal Areas**

- **Preparedness for All: Why Including People with Disabilities in Drills Is a Learning Tool**
  

  This excerpt is from *IAEM Bulletin*, Volume 22, No. 4, April 2005. Co-authors of this article are Michael Byrne, Director of Justice & Public Safety, Microsoft, and former First Deputy Director, New York City Office of Emergency Management/Capt. FDNY, and Elizabeth A. Davis, JD, EdM, Director, EAD & Associates Emergency Management & Special Needs Consultants, and former Special Needs Advisor, New York City Office of Emergency Management.
• *Emergency Planning for Special Needs Populations*
  This article addresses the process Josephine County, Oregon, has undertaken to bring residents with special needs into its emergency planning process. It is an excerpt from *IAEM Bulletin*, Volume 22, No. 4, April 2005, authored by Mark Sorensen, Regional Healthcare Preparedness Coordinator of Josephine County.

• *Serving and Protecting All by Applying Lessons Learned—Including People with Disabilities and Seniors in Disaster Services*
  http://bussafety.fta.dot.gov/show_resource.php?id=4172
  Recommendations in this document are intended to help states benefit from lessons learned so that strong and resilient infrastructures can be built that will include the diverse populations of people with disabilities and seniors in all emergency services.
Prevention

Prevention starts with being aware of potential hazards and avoiding unnecessary risks. These hazards and risks include risks to personal health and safety and damage to vehicles, equipment, and facilities. Prevention efforts may include short- and long-term measures. Mitigation is another term sometimes used interchangeably with prevention or preparedness measures and is usually applied to long-term solutions.

Also, people, in general, need to be better prepared to cope with emergencies and disasters. This need extends to paratransit employees and customers; some may benefit from better education and outreach on how to be self-sufficient, while others may need additional assistance due to their medical needs or adaptive equipment.

Risk assessment provides the informational basis for prevention strategies.

4.A Risk Assessment

4.A.1 Threat and Vulnerability Assessment

A threat and vulnerability assessment is an analysis of safety hazards and security threats including vehicle and workplace accidents; acts of nature; criminal acts; terrorism; and other risks that can cause loss of life, personal injuries, and property damage and disrupt operations. A threat and vulnerability assessment combines knowledge of your paratransit operating environment with critical analysis to rate the probability and severity of these hazards and threats in order to determine what the greatest risks to your agency may be.

A threat and vulnerability assessment establishes a baseline to justify improvements in facilities, equipment, policies, procedures, and training to build a more robust and resilient paratransit system. It is a key building block of system safety program plans, paratransit security plans, and EOPs. Having these plans in place is one criterion used to evaluate security and emergency preparedness grant applications.

Considerations

- Paratransit agencies that conducted accurate vulnerability assessments have been able to focus their limited resources on risk-reduction strategies addressing the hazards and threats that pose the greatest risk to critical infrastructure and mission capacity. This is true for paratransit operations in urban, suburban, rural, and tribal settings.
- Threat and vulnerability assessment helps paratransit agencies to better prepare for advance-notice emergencies such as hurricanes as well as no-notice emergencies, like earthquakes, and to develop emergency response strategies that address the actual hazards and threats that they face.
Effective Practices

- The Transportation Security Administration (TSA) has been involved with threat and vulnerability assessments at larger transit agencies as part of its ongoing initiative to secure America’s transportation infrastructure.
- The number and quality of threat and vulnerability assessments have greatly increased in cases where state DOTs have provided guidance regarding threat and vulnerability assessment activities.
- In areas recently struck by disasters, paratransit agencies that had performed risk assessments prior to the disaster were typically better prepared and suffered fewer disaster losses.

Strategy

- Threat and vulnerability assessments are typically conducted using matrix analysis to chart likelihood and severity for the wide range of hazards and threats an organization faces. Through careful review of paratransit accident and incident records, vehicle and facility inspections, and discussions with key paratransit staff, partner agencies, emergency management, and first responders, your agency can effectively identify the hazards and threats that pose the greatest risk. Actions can then be taken to avoid, transfer, or control risk.

Tools: Threat and Vulnerability Assessment

<table>
<thead>
<tr>
<th>Critical paratransit assets to identify when considering vulnerability include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ Revenue service vehicles</td>
</tr>
<tr>
<td>❑ Maintenance vehicles</td>
</tr>
<tr>
<td>❑ Administrative vehicles</td>
</tr>
<tr>
<td>❑ Administrative facilities</td>
</tr>
<tr>
<td>❑ Maintenance facilities</td>
</tr>
<tr>
<td>❑ Vehicle storage areas</td>
</tr>
<tr>
<td>❑ Fuel storage areas</td>
</tr>
<tr>
<td>❑ Transit/transfer centers</td>
</tr>
<tr>
<td>❑ Bus stops and shelters</td>
</tr>
<tr>
<td>❑ Computers and other office equipment</td>
</tr>
<tr>
<td>❑ Trip scheduling and dispatching systems</td>
</tr>
<tr>
<td>❑ Communications equipment</td>
</tr>
<tr>
<td>❑ Paratransit staff</td>
</tr>
<tr>
<td>❑ Paratransit customers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazards and threats to consider when performing a paratransit vulnerability assessment include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>❑ Vehicle accidents</td>
</tr>
<tr>
<td>❑ Passenger incidents</td>
</tr>
<tr>
<td>❑ Employee incidents</td>
</tr>
<tr>
<td>❑ Acts of nature</td>
</tr>
<tr>
<td>✅ Tornado</td>
</tr>
<tr>
<td>✅ Hurricane</td>
</tr>
<tr>
<td>✅ Tsunami</td>
</tr>
<tr>
<td>✅ Earthquake</td>
</tr>
<tr>
<td>✅ Flooding</td>
</tr>
<tr>
<td>✅ Ice storm</td>
</tr>
<tr>
<td>✅ Thunderstorm</td>
</tr>
</tbody>
</table>
- High wind
- Wildfire
- Debris flow
- Volcanic eruption
- Extended power outages
- Communication loss
- Information loss
- Facility loss
- Vehicle loss
- Fuel and critical supply loss
- Loss of essential personnel
- Facility fires
- Vehicle fires
- Hazardous material spills
- Criminal activity on or around vehicles
- Criminal activity in facilities
- Acts of terrorism

Resource for Urban/Suburban Areas

- Safety and Security Site Assessment Checklist
  http://bussafety.fta.dot.gov/show_resource.php?id=4123
  This document from Nusura, Inc., is a checklist for conducting a comprehensive safety and security site assessment.

Resources for Rural/Tribal Areas

- Threat & Vulnerability Assessment Forms
  This series of forms, developed for FTA's Transit Bus Safety and Security Program by Ream Lazaro and Michael Noel, is for the assessment of accidents and incidents, organizational infrastructure, acts of nature, hazardous materials, criminal activity, and domestic or international terrorism using a severity rating system.

- Prioritized Vulnerability Report Form
  http://bussafety.fta.dot.gov/show_resource.php?id=3761
  This threat and vulnerability assessment form is used to record elements of vulnerability, current levels of protection, and whether action is required. It is excerpted from “Transit Safety & Security Prototype Approach for Colorado Section 5310 and 5311 Transit Providers.”

4.A.2 Interagency Risk-Related Communication

It is critical that your paratransit organization has methodologies in place to communicate with your partner agencies—such as human service agencies, resident care centers, and medical providers—before, during, and after emergencies so your customers can be effectively served throughout an incident. Coordination between paratransit and local emergency management and public safety agencies is essential to effective emergency preparedness, response, and recovery.

Paratransit has critical information and resources to help emergency management address the transportation concerns of people with disabilities and others with access and functional needs. Conversely, local emergency management, law enforcement, and fire protection personnel have critical information to help paratransit with your hazard and threat assessments and
can be of great assistance in addressing paratransit’s potential role in the overall EOP. Without coordination, misunderstandings regarding roles, responsibilities, and capabilities can develop, and paratransit resources can be either greatly over- or underestimated.

Open dialogue is needed to help paratransit providers better understand the risks you will face in serving your own customers during an emergency and to help emergency managers understand what kind of support paratransit may be able to provide during community-wide emergency operations, including equipment, drivers, dispatchers, mechanics, supervisors, and other support staff.

Considerations
- Most urban/suburban transit agencies are involved with their local emergency management and first-responder community and collaborate on risk management issues, but often that relationship does not extend to paratransit operations, resulting in possible disconnect regarding paratransit-specific emergency management considerations.
- Due to resource limitations and a lack of understanding about emergency planning, many rural/tribal paratransit systems have not conducted vulnerability assessments or have not communicated with emergency management regarding risk management concerns.
- Interagency communication about risk and risk-reduction strategies tends to reduce the impact of no-notice and advance-notice emergencies, though there may be greater benefits for no-notice emergencies where there is limited potential for preparation.

Effective Practices
- The best risk mitigation programs involve input from stakeholders within and outside paratransit, including human service agencies, medical providers, resident care centers, emergency management, and public safety agencies. This input helps ensure that a diversity of perspectives are considered and fosters interagency relationships that speed up incident response, thereby reducing disaster impacts.
- Interagency risk communication leads to a better emergency planning process from the paratransit perspective and helps paratransit providers, partner agencies, and emergency management understand the risks and benefits inherent in paratransit operations.

Strategy
- Through open dialogue with partner agencies, emergency management, and public safety agencies, paratransit providers can better understand local hazards and threats to help identify vulnerabilities to assets; emergency management can better understand paratransit capabilities and limitations; and first responders can better understand and mitigate paratransit safety and security concerns. Share information about your paratransit resources, vulnerabilities, and your mission to customer service with key external stakeholders to jointly develop strategies to reduce risk, mitigate disaster impact, and respond to transportation needs during emergencies.

Tool: Interagency Risk-Related Communication

Common emergency planning documents that can help facilitate dialogue between paratransit and key external stakeholders include:
- Hazard, threat and vulnerability assessments
- Gap analysis reports
- After-action reports
- Safety and security plans
- Emergency operations plans
- Evacuation plans
Resource for Urban/Suburban and Rural/Tribal Areas

- Critical Asset Threat and Vulnerability Assessment Form

  This form, an excerpt from “Transit Safety & Security Prototype Approach for Colorado Section 5310 and 5311 Transit Providers,” can be used to conduct threat and vulnerability assessments of an agency’s critical assets.

4.B Liability Management

4.B.1 Insurance Limitations

Paratransit providers are not always aware of limitations to liability coverage for equipment and personnel involved in disaster exercises or deployed during emergency response and recovery. Insurance policies vary in relationship to this issue. Certain insurance policies will not cover paratransit assets mobilized for emergency response, and others will cover such response but only if it involves acts of nature rather than acts of terrorism. Depending on the type of insurance coverage, there may be limitations on coverage for staff that are injured or equipment that is damaged or destroyed. In addition to assessing any such policy limitations with your insurance carrier, you should discuss umbrella insurance options for paratransit resources with emergency management.

Considerations

- Paratransit agencies in urban/suburban environments are sometimes self-insured. In such cases, any liability payouts have direct budgetary impacts requiring effective risk management in order to protect assets.
- Some urban/suburban transit agencies that contract for paratransit service require contractors to carry their own insurance as a contract condition. Issues can arise when a private contractor refuses to perform emergency response activities because of liability concerns.
- Many paratransit providers, particularly in rural/tribal areas, have not discussed with emergency management other options that may be available to protect assets.
- Some paratransit providers have discovered insurance coverage is in effect if the emergency was an act of nature but not if the emergency was the result of an act of terrorism.

Effective Practices

- Paratransit agencies that self-insure have found it helpful to explore liability limitations with local or county emergency management officials and/or legal counsel.
- In some cases, limitations to coverage have been addressed through MOUs with a contracting transit system, emergency management, or the city or county.
- In some states, a formal emergency proclamation provides the legal authority for providing emergency response support thereby lessening liability concerns.

Strategy

- Close coordination and ongoing communication between your agency and its insurance carrier can help resolve potential gaps in liability coverage for paratransit equipment and personnel involved in emergency drills and deployed during emergencies, including evacuation-related operations.
Tool: Insurance Limitations

Steps to address insurance questions related to participating in emergency exercises, providing emergency customer transportation, or responding to community disasters include:

- If you are a stand-alone agency, set up a meeting with your insurance carrier to discuss the scope of coverage that your insurance policy provides.
- If you are a part of a larger entity such as a municipality, county, or non-profit organization, set up a meeting with the individual who manages the insurance coverage for that entity to discuss the scope of insurance coverage for paratransit assets.
- Request a letter from your insurance carrier or the larger entity with which you are affiliated that documents coverage of paratransit assets when used during emergency response activities.
- Meet with emergency management to discuss paratransit insurance coverage issues, including any limitations that may apply to your agency when participating in community emergency response and recovery.
- If there are insurance limitations that preclude your agency from participating in emergency response activities, attempt to resolve them. This may involve blanket coverage that emergency management could extend to your agency for participating in community emergency exercises, as well as actual emergency response and recovery.

Resource for Urban/Suburban and Rural/Tribal Areas

- Local Disaster Response Reimbursement and Insurance Concerns
  Developed by Communique USA, this document takes a look at disaster response reimbursement, insurance concerns, and FTA’s perspective regarding reimbursable disaster response activities.

4.B.2 Memoranda of Understanding and Mutual Aid Agreements

A lack of understanding of when and how paratransit providers will operate during emergencies, and whether they will be reimbursed for providing emergency services to other agencies, can be a significant issue. Having written agreements in place in advance of a disaster helps prevent misunderstandings that could negatively affect paratransit budgets and the ability to support normal paratransit operations into the future.

Written agreements between paratransit, partner agencies, and/or emergency management that define roles, responsibilities, and procedures for reimbursement, when applicable, are essential to effective emergency response and recovery. Such agreements should include guidance on paratransit emergency operation protocols, cost/hour and cost/mile reimbursement rates, and detailed expectations for record keeping and documentation.

Considerations

- Many paratransit agencies have unwritten or informal agreements with partner agencies and/or emergency management regarding their roles and responsibilities in emergency situations.
Such informal agreements can be a source of misunderstanding and conflict, resulting in less than optimal performance during emergency operations and negatively influencing future relationships between paratransit, partner agencies, emergency management, public safety organizations, and other key stakeholders. Informal agreements are more common in rural/tribal operating environments than in urban/suburban environments.

- The probability of successful reimbursement for paratransit resources used to support community emergency response is enhanced when paratransit providers, both urban/suburban and rural/tribal, proactively work with emergency management to develop written agreements regarding roles and responsibilities. Signed interagency agreements are frequently a requirement of eligibility for local, state, and/or federal disaster relief funds.
- Regardless of agency size or composition, it is recommended that legal counsel review interagency agreements.

**Effective Practices**

- Several state and national organizations have published sample agreements that can be adapted for use by paratransit managers and emergency managers.
- Some jurisdictions that contract for paratransit service include contract language addressing emergency roles and responsibilities for their contractors.
- In the absence of specific contract language, some jurisdictions utilize MOUs, memoranda of agreement, or MAAs to address the paratransit contractor’s role in emergencies.

**Strategy**

- A formal agreement with emergency management that defines your agency’s role in emergency response ensures there are no misunderstandings about the commitment your agency has to providing transportation services to customers while also taking part in community emergency response and recovery.
- Depending on your organizational structure, you may want to consider interagency agreements with other transportation entities, local emergency management, and essential contractor agencies. Interagency workshops can be an effective forum for negotiating such agreements.
- Have legal counsel review MOUs, MAAs, and interagency agreements before authorizing them. All agreements should include expectations for reimbursement of disaster-related costs.

**Tool: Paratransit/Emergency Management MOUs or MAAs**

<table>
<thead>
<tr>
<th>Basics to include in an MOU or MAA between emergency management and paratransit include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Purpose of agreement</td>
</tr>
<tr>
<td>- Parties involved</td>
</tr>
<tr>
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<td>- Scope of use</td>
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<td>- Understanding regarding mutual support to be provided</td>
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<td>- Agreement regarding terms of compensation</td>
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<td>- Authority over and responsibility for resources when activated</td>
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<td>- Terms of agreement and periodic review</td>
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<td>- Indemnification and hold harmless agreement</td>
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<tr>
<td>- Termination</td>
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<tr>
<td>- List of resources and key points of contact for all parties</td>
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Resources for Urban/Suburban Areas

- **APTA/Public Transit Industry Mutual Aid Assistance Agreement**
  APTA and its public transit members established a process whereby public transit systems and their geographic operating regions may receive and provide assistance in the form of personnel and equipment to aid in restoring and/or maintaining public transit or evacuation service when such service may be required. This Mutual Aid Assistance Agreement sets forth the terms and conditions to which the undersigned APTA member entity agrees to provide assistance.

- **Draft Mutual Aid Agreement**
  A template from Caltrans Transit Emergency Planning Guidance Technical Appendices for documenting the intention of a transit agency and local public safety agency/agencies to work together on a continuing and lasting basis toward maximum cooperation and mutual assistance in the areas of emergency preparedness and disaster response.

Resources for Rural/Tribal Areas

- **Basics to Include in an MOU**
  This document from the Community Transportation Association of the Northwest (CTANW) website lists the basic issues to include in any MOU.

- **Sample MOU Between Transit and Emergency Management**
  http://bussafety.fta.dot.gov/show_resource.php?id=4114
  This is an example of an MOU between a business and the local office of emergency management, from the CTANW website.

- **Sample Interagency Agreement MOU**
  http://bussafety.fta.dot.gov/show_resource.php?id=4115
  This is an example of an interagency agreement for emergency bus mobilization, from the CTANW website.

- **Sample Commitment to Partnership MOU**
  This is an example of a collaborative MOU to address transportation needs, from the CTANW website.

- **Sample Mutual Aid Agreement**
  This is an example of a public transportation emergency response MAA, from the CTANW website.

- **Managing Requests for Transportation Assistance from Vulnerable Populations**
  This is an example of a transportation annex appendix to a regional disaster plan for managing requests for transportation assistance from vulnerable populations, from the CTANW website.

- **Best Practices—Special Needs Transportation Emergency Preparedness**
  http://bussafety.fta.dot.gov/show_resource.php?id=4119
  This document from the CTANW website presents important issues for transit systems to consider when working with regional emergency management and in developing transportation MOUs addressing emergency preparedness.

- **Sample Emergency Bus Mobilization Plan**
  This sample plan from the CTANW website can be used to coordinate the mobilization of bus resources in support of emergency activities. This plan is usually a part of the ESF-1 Transportation function within a county comprehensive emergency management plan.
• **MOU for Vehicle Augmentation and Emergency Response**
  
  This document outlines the agreement between Wiregrass Transit Authority and local emergency management to provide transit vehicles in the event of a community emergency.

### 4.C Education and Outreach

#### 4.C.1 Customer Preparedness

Emergency planning is everyone’s responsibility, including paratransit customers. Because people with disabilities and others with access and functional needs often have greater needs for support during emergencies, some argue that emergency planning is particularly critical for paratransit customers. Paratransit agencies are encouraged to conduct outreach regarding personal emergency preparedness and the impact that an emergency may have on regular paratransit service.

Some paratransit agencies provide personal preparedness information to their customers as part of their ADA eligibility certification/recertification or otherwise; however, most do not. When paratransit customers are not prepared to shelter in place or evacuate in the face of a disaster, it is often paratransit that becomes the provider of last resort. It is incumbent upon paratransit, emergency management, and other agencies to provide good information about how to prepare for emergencies in general, as well as strategies for evacuating or sheltering in place.

#### Considerations

- When urban/suburban and rural/tribal paratransit providers do not emphasize customer personal preparedness, customers may have unrealistic expectations about paratransit assistance during community emergencies.
- In emergency events where advance notice is possible, customers may have a small window to assemble necessary supplies and develop appropriate response strategies. Many emergency response activities are hampered by customers’ poor preparation for evacuation, which puts the customer in jeopardy and distracts paratransit’s attention from its overall emergency response mission.
- Advance preparation is critical to ensure personal safety during no-notice emergencies.

#### Effective Practices

- Some paratransit agencies provide free preparedness training to customers to help them understand their personal responsibilities during a disaster and the services they can expect from paratransit.
- Guidance documents on personal emergency preparedness are available from the American Red Cross, FEMA, and local emergency management. These materials are often available in accessible formats (braille, large print, discs, audio, etc.).
- Some paratransit agencies distribute basic preparedness kits.

#### Strategy

- Providing paratransit customers with personal preparedness information and realistic expectations regarding what paratransit can and cannot do during emergencies may help keep customers safe and at the same time, alleviate some emergency response burden from paratransit. This is an opportunity to collaborate with social service agencies, public health agencies, and emergency management on effective outreach strategies.
Tool: Customer Preparedness

Shelter-in-place planning:
- Sufficient food and water stores for a week
- Prescription drugs for at least one week
- Backup systems for heating and cooking
- Backup power supply for critical systems such as powered wheelchairs and oxygen collectors
- Backup systems for sanitation

Evacuation planning:
- Go kit for home and workplace including:
  - Sufficient food and water stores for three days
  - Prescription drugs for at least three days
  - Essential adaptive equipment
  - Personal identification and essential documents
  - Power chargers for critical systems such as powered wheelchairs and oxygen collectors
  - Cash in small bills
- Personal preparedness plans should account for the needs of loved ones and pets and should include a family reunification plan.

Resources for Urban/Suburban and Rural/Tribal Areas

- **Prepare Your Family for Disasters**
  This three-page document from the American Red Cross and the Centers for Disease Control provides information on advance preparations a family can make to cope with a disaster.

- **Preparing for Disaster**
  http://bussafety.fta.dot.gov/show_resource.php?id=4127
  This booklet from FEMA and the American Red Cross provides steps on how families can be prepared to cope with disaster—get informed, make a plan, assemble a kit, and maintain the plan and kit.

- **Be Red Cross ready. Get a kit. Make a plan. Be informed**
  This informational one-page brochure from the American Red Cross provides a checklist of things families can do to be prepared for disasters and other emergencies.

- **Disaster Preparedness for Those with Special Needs**
  http://bussafety.fta.dot.gov/show_resource.php?id=4140
  This excerpt from the Florida Agency on Aging of Pasco-Pinellas, Inc. website provides information on preparing in advance for a disaster and is intended especially for people who have special needs or are caring for someone with special needs.

4.C.2 Adaptive Equipment

When people with disabilities are evacuated without their wheelchairs, oxygen, or other adaptive equipment, they lose their independence and become an added burden on the emergency response system. Paratransit emergency plans must account for this fact. Additionally, your paratransit agency should work with its local emergency managers to help them understand the kinds of adaptive equipment your customers may need in shelters or other evacuation facilities.
Sharing statistics about the types of customers paratransit serves also helps emergency management with its emergency planning assumptions. When possible and practical, your paratransit agency should encourage emergency management to work with disability care providers to better understand the kinds of equipment that people with disabilities need to take with them when required to vacate their homes for an extended period of time.

**Considerations**

- Lack of information regarding the adaptive equipment needs of evacuees can result in paratransit providers, whether urban/suburban or rural/tribal, being deployed to transport evacuees with equipment that paratransit is unable or unqualified to transport.
- Due to size and scope of operations, paratransit agencies in rural/tribal environments are often more familiar with the particular needs of the customers they serve including the adaptive equipment they require.

**Effective Practices**

- Close coordination between paratransit providers, customers, partner agencies, emergency management, emergency medical responders, and other key stakeholders results in better systems for dispatching the most appropriate transportation resource capable of serving the evacuee and accommodating his or her needed adaptive equipment.

**Strategy**

- It is essential to transport adaptive equipment with evacuees. Train all paratransit drivers that may operate vehicles during an emergency response on handling and securing adaptive equipment. When appropriate, drivers should also be encouraged to question evacuees on whether they are bringing sufficient supplies of prescription medications, oxygen, and other essentials to last them for several days.

**Tool: Adaptive Equipment**

**Examples of adaptive equipment:**
- Orthotics/prosthetics
- Manual or motorized wheelchair
- Scooter, Segway, walker, cane, or other mobility device
- Electronic speech aids
- Seating and/or positioning aids
- Portable oxygen tanks
- Oxygen concentrator
- Suction and breathing equipment
- Apnea monitor
- Commode chair
- Halter monitors for heart conditions

**Resource for Urban/Suburban and Rural/Tribal Areas**

- **Congregate and Residential Care Facilities**

  Chapter 6 of FHWA’s “Evacuating Populations with Special Needs” discusses the transportation accommodations necessary for evacuating CRCF and the associated adaptive equipment.
Response

Paratransit preparedness plans are put into action during the response phase of reacting to emergencies. Actions are taken to provide life-sustaining support, prevent loss of life or further injuries, stabilize and control the situation, treat and transport the injured, address other basic humanitarian needs, and prevent further property or environmental damage. Paratransit serves a role in responding to smaller-scale emergencies primarily by focusing on meeting the needs of its own customer base. In a larger-scale emergency, paratransit can serve a supporting role in emergency response by working with emergency management within the ICS. Planning and training for the following response levels will help facilitate effective paratransit resource utilization:

- **Level 4, Routine Response:** An event requiring a single department utilizing on-duty resources. Direction and control is provided by the single resource with normal administrative oversight. On-duty paratransit staff usually can handle this type of response without additional resources.
- **Level 3, Limited Response:** An emergency that requires multiple first-responder resources. EOC staff may be placed on standby if the situation worsens. Off-duty or on-call paratransit resources may be needed to support the response and sustain or restore normal operations. Paratransit management is notified and involved in administrative oversight.
- **Level 2, Full Emergency:** Many or all first-responder resources are deployed. Logistic and administrative support is provided by the EOC. Additional support from outside mutual aid agencies may be required. This type of event forces the alteration or suspension of regular paratransit service. Paratransit senior management and additional support staff are mobilized.
- **Level 1, Disaster Response:** A disaster of regional or national significance. Direction and control is consolidated into a single ICS organization. All resources are focused on disaster response and recovery. All first-responder resources are fully deployed. Outside assistance and augmentation of emergency units by non-emergency personnel may be required. The EOC directs the use of response resources to the best advantage. On-site assistance from state and federal agencies is expected. Most or all of regular paratransit service is cancelled. Paratransit management may send an agency representative to the EOC to work within the transportation emergency support function and respond to mission requests.

5.A Communication

5.A.1 Interoperability

In the field of emergency management, the term interoperability is typically used to describe radio communication systems that enable responders to communicate with each other. Ideally, all agencies responding to an emergency would use an interoperable radio system to share information
Paratransit Emergency Preparedness and Operations Handbook

and service requests. Thus, paratransit would have its own designated channel for internal communications with the ability to switch to other channels to communicate with the Incident Command Post (ICP), the EOC, or responders from other agencies to support effective response and to ensure the safety of paratransit drivers, paratransit passengers, and other responding agencies.

In the absence of interoperability, paratransit agencies must relay information from the ICP or EOC to paratransit dispatch and then to or from the paratransit driver. This type of communication relay introduces opportunities for misunderstanding and misinterpretation. If communication systems fail, paratransit drivers are left to make critical decisions on their own with limited guidance or overall situational awareness.

The Federal Communications Commission (FCC) radio “narrowbanding” mandate affects operators of radios that use channels in the following ranges:

- VHF (150–174 MHz)
- UHF (421–512 MHz)

These new FCC rules affect all licenses held under Part 90 Business, Educational, Industrial, Public Safety, and State and Local Government VHF (150–174 MHz) and UHF (421–512 MHz) private land mobile radio (PLMR). The FCC now requires that all existing Part 90 radio systems operating in the VHF (150–174 MHz) and UHF (421–512 MHz) bands must convert those systems either to a maximum bandwidth of 12.5 kHz or to a technology that provides at least one voice path per 12.5 kHz of bandwidth or equivalent efficiency.

This includes (but is not limited to) radio users in the following groups:

- State and local public safety systems
- Transit operators
- Paratransit operators
- School buses
- Taxicabs and limousines

Affected equipment includes all conventional and trunked VHF and UHF two-way handheld portable radios, vehicle-mounted radios, dispatcher stations, wireless data, telemetry, or SCADA links (called subscriber radios), and any associated conventional base or trunked repeaters or relay stations (called infrastructure radios). This ensures more efficient use of the radio spectrum, creating additional channel capacity to support a greater number of users. The advent of narrowbanding has resulted in many transit and paratransit agencies upgrading to radio systems that are interoperable with emergency management and first responders.

Considerations

- A lack of interoperability between paratransit, transit, school bus transportation, emergency management, and first responders creates operational challenges for emergency response in both urban/suburban and rural/tribal settings.
- Breakdowns in communication due to interoperability hamper response efforts for both advance-notice events and no-notice emergencies.
- In urban areas where emergency response systems are more complex and deployed resources must communicate and coordinate in real time, interoperability is more common. Frequently, however, transit and paratransit agencies do not have interoperable capabilities. Furthermore, in cases where transit or paratransit are indeed part of the interoperable communications system, contracted paratransit operations may not be.
- Some rural/tribal paratransit systems use cell phones as the primary means of communication between drivers and dispatch. The Government Emergency Telecommunications Service (GETS), a White House-directed emergency phone service provided by the National Communications System (NCS), is also available to support federal, state, local, and tribal govern-
ment, industry, and non-governmental organization personnel. GETS provides emergency access and priority processing in the local and long-distance segments of the public switched telephone network (PSTN). It is intended to be used in an emergency or crisis situation when the PSTN is congested and the probability of completing a call over normal or other alternative telecommunication means has significantly decreased. Additional information on GETS is available at http://gets.ncs.gov/program_info.html.

**Effective Practices**

▪▪ Some paratransit systems use two-way radios as the primary mode of communication, with either company or personal cell phones as backup. This creates redundancy in the communication system.

▪▪ Communication with deployed paratransit assets can be enhanced when a paratransit supervisor with a handheld radio is on the ground at the staging area for face-to-face communication with paratransit drivers.

▪▪ Text messaging through cell phones has often proven to be an effective communication method between paratransit management and deployed paratransit drivers during emergency response activities.

▪▪ Interoperability issues are sometimes mitigated by providing interoperable handheld radios to key transportation personnel working in the EOC or ICP. This provision can circumvent the need to relay all information through paratransit dispatch, improving response times and situational awareness.

▪▪ Some paratransit agencies have worked with local emergency management and communications departments to identify and resolve interoperability challenges and, in some cases, have successfully funded paratransit radio system upgrades using DHS grant resources.

**Strategy**

▪▪ If your agency does not have an interoperable radio system enabling direct communication with other transportation providers and incident managers during emergency response, plans for alternative communication methods need to be made with emergency management. Proactively address this issue to ensure effective use of transportation resources and enhance the safety of your drivers, passengers, and other personnel in the emergency response zone.

**Tool: Interoperability**

- Ensure that paratransit radio systems are compliant with the FCC narrowbanding requirements.
- Identify the communication systems that will be needed to support each paratransit essential function. Give consideration to the various links that need to be established such as communications with internal departments, field personnel, outside agencies, law enforcement, fire and rescue, emergency medical response, and emergency management.
- Determine whether the existing paratransit radio system can operate on a common channel with IC and first responders.
- If paratransit does not have radio interoperability, initiate discussions with emergency management on effective alternatives for timely communication between IC and deployed transportation resources.
- Explore alternative strategies to radio interoperability, for example:
  - Plan for a paratransit representative to be assigned to the EOC or the ICP with a handheld radio that allows for direct communication between the agency representative and deployed paratransit resources.
- Ask emergency management to provide handheld radios for drivers of paratransit vehicles deployed in disaster response. This allows for direct communication between paratransit resources, the EOC, and first responders.
- Establish or become part of a transportation DOC in order to facilitate emergency response activities using the optimal transportation resource.
- Identify other alternative strategies that enhance effective and timely communication between emergency management, first responders, paratransit dispatch, and deployed paratransit resources.

❑ Formalize a plan for communication between paratransit and all key stakeholders during an emergency community response, whether that plan is based on interoperability or an established alternative communication methodology.

❑ Train all paratransit managers, supervisors, dispatchers, drivers, and other appropriate staff on the communication plan.

Resource for Urban/Suburban Areas
- Developing Multi-Agency Interoperability Communications Systems
  This Office for Domestic Preparedness handbook was developed to address interoperability and intended to enhance communications among the numerous agencies who would respond to large-scale incidents or emergencies.

Resource for Rural/Tribal Areas
- Beyond Radio: Redefining Interoperability to Enhance Public Safety
  This white paper from CISCO Systems, Inc. examines the challenges of communications interoperability for day-to-day operations as well as emergency response and explains how sending radio communications over an IP network addresses the challenges.

- Local Radio Interoperability Solved with High-Tech Trailers
  This March 2011 article from the emergencymgmt.com website describes the trailer designed to unify the different radio bands used by emergency management and emergency responder agencies. The trailer, called Communications-on-Wheels (COW), patches together radio systems of different frequencies.

- Joint Council on Transit Wireless Communications
  The Joint Council on Transit Wireless Communications was established in 2009 in response to the results of TCRP Project C-18, “Strategic Plan for Meeting Transit Industry Wireless Communications Needs.” Under the project, a strategic plan for transit industry wireless communications was developed through a collaborative effort with APTA, CTAA, and other industry representatives. One of the transit industry goals identified in the resulting strategic plan is the creation of a joint council to implement the strategic plan. The Joint Council, which was initially funded through TCRP and NCHRP, works to capture all aspects of the passenger transportation industry. Because the wireless communications needs of the more traditional “transit” industry substantially overlap with the needs of other passenger transportation service providers, the Joint Council provides a place to address these shared interests and to engage crucial partner organizations including FTA, DHS, FCC, TRB, and TCRP. To meet the wireless communications goals of the transit industry, it will be important to maintain an ongoing exchange with these partner organizations.
Government Emergency Telecommunications System (GETS)
The DHS NCS website explains the GETS for priority voice and data transmission lines.

5.A.2 Emergency Communications

When an emergency occurs, paratransit managers must evaluate the situation and determine if service can continue as scheduled or if service must be adjusted, suspended, or shut down altogether. Providing timely and accurate advisories about service continuity, disruptions, or cancellations is crucial. When suspending or altering service, paratransit must notify customers as well as caregivers, medical providers, and resident facilities so arrangements can be made for continuity of care. This information may be conveyed via telephone, texts, email, agency websites, and through traditional and social media outlets as dictated by local agency preferences and protocols. To ensure consistency and accuracy of information, this responsibility often falls to a single paratransit point of contact and this person formally or informally serves as the paratransit Public Information Officer (PIO).

Considerations

- In rural/tribal areas, broadcast radio serves as an accessible, timely, and trusted source of information.
- In urban/suburban areas, media tends to be more fragmented, making communications delivered through the media more complicated.
- Use of social media and email tends to be more prevalent in urban areas than in rural areas.
- With advance notice, paratransit providers are able to stop taking reservations, cancel non-essential rides, and scale back or suspend service before disaster strikes. This also makes service continuity notification concerns less challenging.
- No-notice emergencies require pre-planning and creative responses on the part of paratransit providers, social service agencies, care providers, and emergency management in order to transport and care for passengers with access and functional needs.
- Protocols for documenting passenger pickup and dropoff locations will help with future scheduling and assist in determining passenger location. Procedures for locating missing persons, such as contacting the Red Cross, should also be considered.
- Given the limits on available transportation resources during emergencies, requesting that customers volunteer to cancel their non-life-sustaining appointments will help reduce the use of transit assets without violating ADA requirements.

Effective Practices

- Some paratransit agencies have invested in mass notification systems that can call selected customers with pre-recorded messages about service and service continuity. However, it is more common for agencies to notify customers by making individual telephone calls. Paratransit providers may notify medical providers, resident care centers, and other partner agencies in a similar manner.
- Paratransit agencies often rely on local radio and television stations to announce service advisories. Public meetings held at accessible locations can also support dissemination of information. These announcements can be filmed on-site and broadcast on local public access channels in a similar fashion to the broadcast of city council meetings. These announcements should also be captioned.
- Print media are additional communication resources, though print media may be less timely than social and broadcast media. A majority of news outlets now also post to websites.
- Social networks, such as Facebook or Twitter, are emerging as effective communication tools. It should be noted, however, that people with access and functional needs use Internet-based media at disproportionately low levels.
Strategy

- Work out methods in advance for communicating timely and accurate information to paratransit customers and partner agencies about service disruptions, shutdowns, and subsequent service startup and include these methods in your EOP. Partner agencies may include primary caregivers, medical providers, and resident care centers. When formulating your communication strategies, take into account the needs of people with sight and hearing impairment, cognitive disabilities, and limited English proficiency.

- Identify a single point of contact responsible for communicating service continuity information; based on your agency’s size and organizational structure, this may be the PIO or other appropriate staff member. The information to convey may include details regarding service suspension and resumption plans; the alternative transportation services available; and, in community emergencies, details about evacuation orders, shelter facilities, and reentry considerations.

Tool: Emergency Communications

 Strategies for communicating service continuity information with customers and key stakeholders during emergencies include:

- Phone calls to customers scheduled for a ride within the anticipated service suspension period.
- Phone calls to service providers to discuss dropoff locations for paratransit customers currently at their facility or en route to their facility.
- Automated alert notification systems that send phone calls, texts, emails, or other electronic messages.
- For customers calling in, pre-recorded service alert messages, as well as information updates available as a keypad menu option or given while waiting to speak to a customer service agent.
- Updates and service alerts posted on the agency website.
- Posts to Twitter, Facebook, YouTube, and other social media networks.
- News releases, scheduled briefings, or other notifications to TV, radio, and print media.
- Service alerts, news releases, and related communications should be available in large print for people with visual impairments and in essential secondary languages for people with limited English proficiency.
- When hosting news briefings, consider having a sign language interpreter next to the speaker and work with cameramen to include the signer in the frame.
- Work with television stations to have the news anchor’s voice information provided on news crawls and other information displayed on the screen.

Resource for Urban/Suburban and Rural/Tribal Areas

- Providing a Mobile Solution for Emergency Public Information
  http://bussafety.fta.dot.gov/show_resource.php?id=4179

  This December 2011 article from the emergencymgmt.com website discusses Houston’s Office of Emergency Management website that is optimized for mobile devices such as smartphones and tablets to get timely emergency information to residents wherever they may be.

Resources for Urban/Suburban Areas

- Emergency Service Plan for Winter Weather and Other Emergency Conditions
  http://bussafety.fta.dot.gov/show_resource.php?id=4214

  This emergency service plan includes procedures for winter weather operations, traffic jams caused by accidents, hazardous materials spills, and miscellaneous events.
- **Communication Systems Supporting Essential Functions Worksheet**
  Complete one of these worksheets from *TCRP Report 86/NCHRP Report 525, Volume 8: Continuity of Operations (COOP) Planning Guidelines for Transportation Agencies* for each essential function. This worksheet is for listing the current vendor of each communication system and its contact information, the services the vendor is currently providing the agency, any special emergency contact information, and any special emergency services the vendor has to offer.

- **Government Emergency Telecommunications System (GETS)**
  The DHS NCS website explains the GETS for priority voice and data transmission lines.

**Resources for Rural/Tribal Areas**

- **Computer Security Breach/System Failure Emergency Procedures**
  This is an emergency checklist for dealing with a computer system failure or security breach.

- **Handling the Media During a Crisis**
  This January 2008 *Kansas Trans Reporter* newsletter article provides tips on how to interact with the media in a transit emergency.

### 5.B Coordination

**5.B.1 Emergency Operations Center**

An EOC is the physical location where representatives from responding agencies come together during an emergency to coordinate response and recovery actions and resources. EOCs may alternatively be called command centers, situation rooms, war rooms, crisis management centers, or other similar terms. The EOC is not an ICP where tactical decisions are made and resources deployed to support the incident objectives; rather, the EOC is where the incident objectives are established and strategic decisions are made about resource allocation.

A local, county, or regional EOC oversees, supports, and provides resources to all the ICPs and the responders working under their respective commands during emergency operations. The EOC can optimize communication and coordination by effective information management and presentation.

Paratransit providers with an established role at the EOC provide emergency managers and staff with perspective on the needs of paratransit customers, coordinate paratransit resources to support emergency transportation requests, and disseminate information to paratransit customers. Unfortunately, many paratransit agencies do not have a formal role at the EOC and therefore have limited ability to provide input to emergency management on the transportation needs of their customers.

**Considerations**

- Transportation and emergency management should work together to establish a transportation strategy that meets emergency response needs and transportation operational requirements. Often, fixed-route transit assets and school buses are utilized to evacuate people from affected high-density areas, while paratransit assets may be assigned to narrow streets or more isolated neighborhoods not suited for larger buses or to meet the emergency transportation needs of its own customers.
- In urban/suburban areas, larger transit systems often have a seat in the EOC, presumably representing paratransit. In rural/tribal areas, it is uncommon for paratransit to have a formally
assigned role at the EOC. Problems can arise when there is insufficient communication and coordination between transit, paratransit, and emergency management.

- In rural/tribal areas, school buses are often the primary resource for evacuating people. Paratransit vehicles are likely to be used to evacuate paratransit customers and/or people with access and functional needs. Lack of coordination can lead to duplication of efforts or gaps in response.
- In an advance-notice disaster, paratransit can help emergency management by identifying individuals most likely to need evacuation assistance. Emergency paratransit services are often limited to life-sustaining trips for their own customers. Paratransit resources can be mobilized to support emergency response missions that focus on those with access and functional needs.
- In no-notice emergencies when the EOC is activated, emergency management may not consider the need for paratransit input if prior planning has not occurred.

**Effective Practices**

- One effective practice to facilitate coordination is for paratransit to send an agency representative to the EOC during emergencies to interact directly with other transportation representatives as dictated by local plans and policies.
- Another common practice is for paratransit to join other transportation providers working together under unified command to address emergency transportation needs in a transportation-specific operations center located away from the EOC but operating in close coordination with the EOC.
- In some locales, emergency managers establish an advisor within the EOC to assist with issues related to people with access and functional needs. This role is sometimes tasked to the paratransit representative due to his or her experience working with customers with disabilities and others with access and functional needs.

**Strategy**

- As a paratransit provider, you may or may not have an established role in the EOC. If emergency management has designated a role for your agency, a representative from your agency would typically work with other transportation agencies and law enforcement within the EOC. The paratransit representative must be properly trained and have the authority to effectively carry out his or her responsibilities within the NIMS and IC structure.

**Tool: Emergency Operations Center**

- Initiate discussions with emergency management regarding the role it expects your agency to perform within the disaster response structure and whether you are to provide a representative to sit in the EOC.
- If a representative from your agency is assigned to the EOC, determine precisely what that person’s responsibilities will be.
- Your representative to the EOC should be NIMS certified, extremely knowledgeable about paratransit operations, capable of thinking outside the box, and aware of the communication protocols used for dispatching paratransit resources.
- If your agency is not asked to provide a representative, discuss with emergency management alternative strategies for mission tasking of paratransit resources needed for community emergency response.
Resources for Urban/Suburban and Rural/Tribal Areas

- **Emergency Operations Center Guide**
  
  
  This document from the Kenai Peninsula Borough Office of Emergency Management describes in detail the purpose and function of an EOC.

  
  
  This report examines development of transportation response options to an extreme event involving chemical, biological, or radiological agents. The report also includes a spreadsheet tool, called “TERET,” that is designed to assist transportation managers with recognition of mass-care transportation needs and identification and mitigation of potential transportation-related criticalities in essential services during extreme events.

  
  
  This report is designed to help executive management and emergency response planners at state transportation agencies as they and their local and regional counterparts assess their respective emergency response plans and identify areas needing improvement.

### 5.8.2 Departmental Emergency Operations Center

While not every emergency is significant enough to activate a local EOC, any number of scenarios may require interagency coordination of transportation resources. For this reason, some communities establish a DOC to coordinate some combination of public transit, human service transportation, student transportation, and paratransit services.

In practical terms, the agency with the most robust facility is the best host for a DOC. Each participating transportation agency sends a representative and support staff to the DOC, as may be required, and according to a predetermined plan. Paratransit will co-locate with other transportation providers to fulfill transportation requests under the agreed-upon command structure.

By co-locating and establishing common transportation objectives and strategies, a DOC helps improve communication, coordination, and cooperation among the transportation providers in a given locality. Activating the DOC normally occurs once the EOC has been activated. Once activated, the DOC is able to coordinate with the local or county EOC by assigning a representative to the EOC.

**Considerations**

- Larger transit authorities in urban/suburban settings have a dispatch or operations control center to serve fixed-route operations. The paratransit call and dispatch center typically operates independently from the fixed-route transit dispatch or operations control center.

- In rural/tribal settings, it is more common for fixed-route transit and paratransit operations to be co-located and for the paratransit ride scheduling and dispatching functions to be performed by the same people. Often, small transit systems only operate paratransit services in the form of general public demand response.

- Advance-notice events may provide the impetus to activate a transportation DOC to better manage transportation issues. However, to meet the emergency transportation needs of its own customers, paratransit may provide emergency transportation services outside of the DOC.
In no-notice events, the magnitude of the emergency will dictate whether there is a need to activate a DOC. Paratransit providers may operate through the DOC, or on their own, to meet the emergency transportation needs of their customers.

Due to various constraints, such as EOC location, member size, and member capacity, a large transit agency in the region may be selected as the transportation representative at the EOC. This agency can then communicate from the EOC to other transportation entities that are located at the DOC, including paratransit agencies.

**Effective Practices**

- In communities that activate a DOC, school buses are typically used to transport ambulatory evacuees; fixed-route transit vehicles are used for both ambulatory and non-ambulatory evacuees. Paratransit vehicles are used in areas where it is difficult to send a full-sized transit coach or based on the specific needs of individuals being evacuated.
- Comprehensive DOC plans include contingencies for relocating vehicles, drivers, and other transportation assets from partner agencies, in whole or in part, to the DOC facility.
- Often, paratransit provides emergency transportation for its customers, acting as its own DOC, and may or may not coordinate directly with the local or county EOC.
- Paratransit agencies that have a formal plan to staff a transportation DOC and formal thresholds to activate it are generally able to mobilize transportation resources more quickly and to coordinate more effectively with partner agencies.

**Strategy**

- The best strategy for managing transportation resources during an emergency response may be through a DOC. To maximize limited resources, a transportation DOC will often coordinate the emergency response activities of paratransit, public transit, school district transportation, and other transportation resources. Depending upon the nature of the emergency, your paratransit agency may be the sole participant, the lead participant, or a supporting player as part of a group of transportation providers working out of a single coordination and dispatch facility. Your agency should initiate discussions with emergency management and other transportation providers in the region as to when a DOC might be established, how a DOC would function in coordination with the EOC, and the role your paratransit agency would play.

**Tool: Departmental Emergency Operations Center**

- Hold meetings with other area transportation providers and emergency management to discuss the use of a transportation DOC to coordinate emergency response activities.
- If a DOC is to be established, ascertain which community transportation providers are to be included. Participating agencies could include paratransit providers, public transit, school transportation, human services transportation, and private transportation providers.
- Identify a host facility for a transportation DOC. This facility should be at low risk for disaster impacts and have the ability to house a command and control communication system, dispatch system, and agency representatives from all participating transportation providers.
- Identify the thresholds that will cause activation of the DOC and develop plans for relocating vehicles, drivers, and other essential transportation assets from paratransit and partner agencies to the DOC facility and/or staging areas.
- Develop clear roles and responsibilities for DOC-based resources.
**Resource for Urban/Suburban and Rural/Tribal Areas**

- *Information Sharing Guidebook for Transportation Management Centers, Emergency Operations Centers, and Fusion Centers*
  

  This site provides an overview of the mission and functions of transportation management centers, EOCs, and fusion centers. It focuses on the types of information these centers produce and manage and how the sharing of such information among the centers can be beneficial to both the day-to-day and emergency operations of all the centers. Challenges exist regarding the ability to share information, and the guidebook addresses these challenges and options for handling them.

**5.B.3 Staging and Pre-positioning**

Staging transportation resources close enough to the potential disaster impact zone for rapid response while keeping those vehicles out of harm's way can be a challenge. Paratransit management, working on its own or with emergency/incident management, needs to identify staging locations that complement transportation resource needs and emergency response objectives. Additionally, paratransit management may want to consider identifying safe locations for paratransit vehicles to congregate and await further instructions if the vehicles cannot get back to base. These locations can also be a temporary safe haven for paratransit vehicles with passengers onboard until shelter locations for passenger dropoff have been further determined. Coordination, cooperation, and negotiation may be needed to gain access to safe, secure, and strategically located staging locations.

In addition, paratransit vehicles should be fueled and prepared for effective mobilization in an emergency. Routinely preparing transit vehicles at the end of each service day can enhance paratransit emergency response capabilities if an emergency occurs during non-service hours.

**Considerations**

- Paratransit providers, in both urban/suburban and rural/tribal areas, often have not worked—either on their own or with emergency management—to identify locations where paratransit resources can be staged or pre-positioned prior to emergency deployment.
- Many urban/suburban paratransit providers have procedures to fuel and prepare vehicles at the end of each service day or overnight.
- Rural/tribal paratransit agencies’ procedures for fueling and preparing vehicles vary. Most fuel and prepare vehicles at the end of the service day; others fuel and prepare at the beginning of the day.
- Unlike no-notice emergencies, advance-notice emergencies provide the opportunity to stage and pre-position paratransit resources.

**Effective Practices**

- Many paratransit systems fuel and prepare vehicles on pull-in at the end of the day. This procedure maximizes the number of vehicles ready for service at any time, thereby reducing vulnerability to a variety of emergency scenarios.
- Some paratransit systems have contingency plans to park vehicles in lower-risk locations when disaster risks are elevated.
- Pre-identifying staging locations based on known hazards and threats can expedite paratransit emergency response capabilities.
- Some jurisdictions found it helpful to stage all transportation resources out of the most robust transit facility in an area and to use that facility for the transportation DOC.
Strategy

- Fleet readiness, including pre-fueling vehicles, can greatly enhance timely response to emergencies. When planning for reacting to local emergencies, your agency may determine on its own whether there is a need to stage or pre-position equipment. In the case of community emergency response, emergency management will provide information and direction on staging locations.

Tool: Staging and Pre-positioning

- Develop and enforce a policy for fueling and preparing paratransit vehicles at the end of each service day to ensure the maximum number of vehicles are ready to be put into service at any time, whether in normal or emergency operations.
- Assess the vulnerability of existing transit facilities and vehicle storage areas to likely safety hazards and security threats.
- Validate your vulnerability assessment with emergency management to ensure that your resources are out of harm’s way.
- Identify alternative facilities for storing paratransit vehicles during high-risk periods.
- Work with emergency management to develop strategies for pre-positioning paratransit vehicles for timely disaster response mobilization.
- Secure permission to stage paratransit vehicles at preferred staging locations.
- Train essential paratransit staff on preparing, staging, and pre-positioning procedures.

Resource for Urban/Suburban Areas

- Emergency Support Function 1—Transportation Annex
  This EOP Annex directs the organization, mobilization, and coordination of transportation services and resources during and following an emergency or disaster in the King County, Washington, region.

5.C Operations

5.C.1 Service Continuity

Depending upon the size/scope of an emergency, paratransit may need to suspend normal service while identifying strategies to meet the essential life-supporting transportation needs of its customers. Furthermore, paratransit may be requested to provide transportation resources to emergency management in response to a community-wide emergency. Factors guiding service suspension and restoration include wind speed, weather and road conditions, magnitude of events, local emergency proclamations, guidance from emergency management or first responders, and whether fixed-route transit or school bus transportation is cancelled. Upon service suspension, a plan should also be developed regarding when to transition back to normal service.

When regular paratransit services are suspended, paratransit must communicate with customers and partner agencies that are depending on scheduled transportation services while clearly defining its mission and role with emergency management. If paratransit holds back a significant portion of its vehicles and drivers in an attempt to serve the essential transportation
needs of its customers, community-wide emergency response capabilities can be affected. This type of decision needs to be discussed with emergency management before an emergency occurs.

Another service continuity issue involves paratransit customers displaced by events. They may be on a vehicle when an emergency occurs and unable to continue to planned destinations or they may have been dropped off “in system” and are waiting for paratransit to pick them up. Ideally, customers would be returned to their homes or other points of origin. However, since this may not always be possible, these passengers become a temporary ward of the paratransit provider. Paratransit providers may need to coordinate with their partner agencies for assistance in providing temporary emergency shelter for paratransit customers. Further, paratransit may need to rely on emergency management and other organizations such as the American Red Cross to set up and staff reception centers, shelters, and other care facilities for displaced paratransit customers.

**Considerations**

- Paratransit service in urban/suburban and rural/tribal settings is improved when formal thresholds for service suspension and restoration have been established.
- Many paratransit agencies in urban/suburban and rural/tribal settings are making service continuity decisions on a case-by-case basis rather than planning beforehand.
- Paratransit providers in urban/suburban environments may follow the criteria of large transit, fixed-route providers for service reduction and restoration and thus reduce or restore service in sequence with fixed-route service.
- Transportation providers in rural/tribal areas often personally know their customers and their travel patterns and therefore may have a better understanding of the impact of service continuity decisions.
- Many paratransit providers have not adequately addressed the issue of caring for paratransit customers who are “in system” at the time of a no-notice emergency.
- When a paratransit agency also runs vanpools and worker service routes, it is important that the agency document passenger manifests with passenger cell phone numbers and work phone numbers so these passengers can be contacted in an emergency to alert them to changes in service.
- Paratransit agencies in urban/suburban or rural/tribal settings that have a coordinated plan to support paratransit emergencies and community evacuations—while still meeting the non-emergency medical transportation needs of regular customers—are significantly more resilient.

**Effective Practices**

- Setting clear guidelines regarding continuity of service helps paratransit managers support the response to paratransit emergencies as well as to community emergencies.
- Agreements between paratransit and emergency management that primarily focus paratransit emergency operations on meeting the needs of existing customers enable paratransit to carry out its primary mission while allowing emergency management to concentrate on the emergency needs of the general public.
- By clearly communicating service continuity plans with emergency management, paratransit may be able to retain resources to support the medical transportation needs of regular customers without negatively impacting broader community emergency response and recovery operations.

**Strategy**

- Decide upon realistic and practical thresholds for suspending service, and develop strategies for reconstitution or startup of service. An important service suspension consideration is ensuring you can continue to meet the needs of your regular customers while providing support for a community emergency response, if requested.
Tool: Service Continuity

- Establish thresholds for the temporary suspension of paratransit services due to emergency conditions. Share this protocol with partner agencies, emergency management, and other key stakeholders.
- Assess your database of regular paratransit customers to identify those who may require life-sustaining transportation, such as trips to dialysis centers, and develop plans to determine how these needs can continue to be met by your agency, or other entities, during emergencies.
- Initiate discussions with emergency management on the number and type of paratransit resources you are able to provide in support of a disaster response, considering the critical transportation needs of regular paratransit customers.
- Consider strategies for meeting the needs of regular paratransit customers who are in system when an emergency occurs. This may require designating emergency dropoff locations and developing MAAs with social service agencies or other transportation entities.
- Develop a plan for service startup after suspension. Consider a tiered startup strategy that allows your agency to gradually return operations to full service.
- Ensure that all paratransit staff are trained on protocols for service suspension and reconstitution.

Resources for Urban/Suburban and Rural/Tribal Areas

- **Emergency Drop Points Form**
  This excerpt from the HSP template in Appendix F of TCRP Report 86: Public Transit Security, Volume 10 provides instructions and a form for developing pre-designated safe locations to drop off transit passengers in the event of an emergency.

- **Sample Emergency Protocol for Transit System Shutdown**
  This resource outlines actions to be taken by transit system personnel when, based on pre-established thresholds and triggers, a system shutdown becomes necessary.

- **Requirements for Alternate Work Sites Worksheet**
  A worksheet from TCRP Report 86/NCHRP Report 525, Volume 8: Continuity of Operations (COOP) Planning Guidelines for Transportation Agencies for recording the requirements for alternate work sites by essential function. Requirements include personnel, special needs, power, communication, and space.

- **Alternate Work Site Options Worksheet**
  A worksheet from TCRP Report 86/NCHRP Report 525, Volume 8: Continuity of Operations (COOP) Planning Guidelines for Transportation Agencies for recording information on alternate work sites that may also be used to track MOUs, leases, occupancy and cooperative agreements, and contracts with other entities for facility use.

- **Alternative Facility Identification/Certification Form**
  http://bussafety.fta.dot.gov/show_resource.php?id=4145
  A resource from Caltrans Transit Emergency Planning Guidance Technical Appendices used to record the address and point of contact information for alternative facilities a transit agency has contracted to use in the event of an emergency.
- **Emergency Service Contingency Policy**

  This example excerpted from “Guidance for Paratransit Emergency Planning” provides guidance on closing normal paratransit operating services in the event of a regional, city-wide, or federal disaster that affects service conditions.

### 5.C.2 Emergency Dispatching

Many paratransit providers rely on computer-based scheduling and dispatch systems for day-to-day operations. Some of these systems depend on Internet access and all rely on electricity, making them vulnerable to disaster. Since these systems provide command and control for vehicle deployment, dispatching becomes problematic when these systems are inoperative.

Having a backup generator to run computers, communication equipment, and emergency lights increases confidence that a dispatch center will always be available in case of an emergency. In the event the building itself is damaged, paratransit providers need a dispatch system that can be moved along with staff to an alternate dispatching facility.

Maintaining hard copies of customer contact lists, driver manifests, and other essential records supports operational continuity when technology fails.

#### Considerations

- Urban/suburban paratransit agencies frequently have multiple facilities located throughout their service areas and can shift dispatching responsibilities between facilities, if needed.
- Paratransit agencies in urban/suburban areas often have backup dispatching systems and generators to provide backup power. Most rural/tribal paratransit providers do not have backup generators.
- Some urban/suburban paratransit systems have mobile dispatch units that can operate remotely.
- Computer-based scheduling systems are widely used by paratransit agencies in urban/suburban and rural/tribal areas. Many rural/tribal systems have not addressed the issue of emergency dispatch capabilities.
- In emergency events where advance notice is possible, paratransit providers may have an opportunity to activate contingency or backup systems, or to relocate the dispatch function out of the potential impact area.
- In no-notice emergencies, if an agency does not have a backup dispatch system, paratransit drivers may have to make service decisions on their own without a clear picture of the overall situation.
- In the event that paratransit vehicles cannot respond to an emergency due to lack of an operating dispatch function, emergency response vehicles, such as ambulances, may be required to transport paratransit customers. Using emergency response vehicles for paratransit transportation expends valuable resources potentially needed for life-supporting services.

#### Effective Practices

- Testing the ability to run a computer-based dispatch system remotely from a computer network, or re-booting a “crashed” system from an off-site backup, prepares paratransit to dispatch remotely from an alternative facility or a mobile command center.
- Printing driver manifests and maintaining hard copies of contact lists and other essential records enables paratransit to revert to manual dispatching at any time.
- During a disaster, both incoming and outgoing communication with customers is likely to significantly increase. Paratransit providers should take measures to prepare their dispatchers to efficiently address the surge.
• Establishing a dedicated mobile command vehicle capable of dispatching and operating under almost any condition is another strategy that enables paratransit to carry out its emergency response missions. Smaller paratransit operators sometimes utilize a radio-equipped paratransit vehicle or administrative vehicle for emergency dispatching purposes.

**Strategy**

• Consider establishing backup dispatching capabilities in case your primary dispatching system becomes inoperable. The lack of an alternative dispatch methodology will affect your agency’s ability to provide regular service and significantly diminish your agency’s effectiveness to respond in an emergency.

**Tool: Emergency Dispatching**

- Explore avenues to obtain a backup generator to run computers, communication equipment, and emergency lights during a power outage.
- Develop a plan for manual dispatching. This may include maintaining hard copies of customer contact lists, driver manifests, and other essential dispatch materials that will support operational continuity when your normal dispatch function is inoperable.
- Identify alternative facilities or mobile command centers from which the dispatching function could be performed under emergency conditions.
- Consider strategies for running your dispatch operation manually utilizing a handheld radio or operating from a radio-equipped vehicle.
- Consider use of satellite phone technology or some other small, portable communication platform.

**Resource for Urban/Suburban Areas**

- **Communication Technologies**

  This excerpt from the “Guidebook on Technologies for Disaster Preparedness and Mitigation,” written by Dr. Satyabrata Sahu under a consultancy assignment given by the Asian and Pacific Centre for Transfer of Technology, deals with a broad range of communication technologies that could have wide-ranging potential applications at various stages of disaster management.

**Resources for Rural/Tribal Areas**

- **Advanced Mobile Communications for Emergency Management and Crisis Response**

  This paper, written by Michael Bowman, PhD, Murray State University, discusses a robust yet affordable mobile communications system, which Murray State University and its research partners prototyped, demonstrated, and operated, that is particularly well suited for field operation in rural environments and small communities. Work progressed beyond demonstrations to deployments with first responders for actual emergencies and initial sales of the systems.

- **Joint Council on Transit Wireless Communications**

  The Joint Council on Transit Wireless Communications was established in 2009 in response to the results of TCRP Project C-18, “Strategic Plan for Meeting Transit Industry Wireless Communications Needs.” Under the project, a strategic plan for transit industry wireless commu-
communications was developed through a collaborative effort with APTA, CTAA, and other industry representatives. One of the transit industry goals identified in the resulting strategic plan is the creation of a joint council to implement the strategic plan. The Joint Council, which was initially funded through TCRP and NCHRP, works to capture all aspects of the passenger transportation industry. Because the wireless communications needs of the more traditional “transit” industry substantially overlap with the needs of other passenger transportation service providers, the Joint Council provides a place to address these shared interests and to engage crucial partner organizations including FTA, DHS, FCC, TRB, and TCRP. To meet the wireless communications goals of the transit industry, it will be important to maintain an ongoing exchange with these partner organizations.

5.C.3 Individuals Needing Evacuation Assistance

5.C.3.a Identifying and Locating Individuals

Knowing who may need evacuation assistance and where they are located at the time of an emergency is a universal challenge. Some communities have voluntary registries. However, research indicates that people with access and functional needs often do not self-identify or only subscribe to such registries as an added assurance when in fact they have other means of transportation and are unlikely to use the service. Other problems with registries include keeping the database up-to-date and the fact that many who need assistance may not be home when an emergency occurs. Additionally, use of a registry may imply an unrealistic promise of rescue.

Because of these issues, many emergency managers are finding ways to leverage existing databases rather than establishing a special registry. Because Health Insurance Portability and Accountability Act (HIPAA) considerations may prevent sharing of databases with emergency management, interagency agreements with paratransit, in-home health services, adult protective services, senior nutrition programs, and disability service providers may provide a vehicle by which to share information and coordinate response activities during emergencies.

Considerations

▪ Identifying individuals who require evacuation assistance is challenging in both urban/suburban and rural/tribal environments. Emergency management is often aware of the location of resident care centers but unaware of people living in private residences throughout the community who may need assistance. Paratransit customer databases can help bridge that gap before, during, and after disasters.
▪ Due to the size and scope of operations, it is likely that paratransit agencies in rural/tribal environments know the personal situations and travel patterns of individuals who may be in need of evacuation assistance.
▪ In advance-notice emergencies, it is sometimes possible for emergency management to solicit requests for pickup from individuals requiring evacuation assistance.
▪ No-notice emergency response is often hampered by loss of communication systems that enable individuals to request evacuation assistance.

Effective Practices

▪ Some paratransit providers have mass notification systems that use customer database information to send messages by text, phone, or email to warn customers of imminent risks and to provide guidance on how to access evacuation assistance.
▪ Coordination between emergency management and resident care centers to encourage sheltering in place when possible may relieve stress on the residents, the facility, and paratransit providers. However, sheltering in place will require significant preparation.
5.C.3.b Level of Need

It is difficult for emergency management to know the specific needs of individuals requiring evacuation assistance, whether residing alone or within resident care centers. Failure to fully assess the medical and psychological conditions of evacuees may result in paratransit being dispatched to transport individuals requiring a higher level of care than paratransit drivers are trained or qualified to deliver. Alternatively, ambulances may be dispatched to transport individuals who could readily be transported by paratransit, thereby unnecessarily burdening emergency medical services resources.

Considerations

▪ Paratransit agencies are usually well aware of the access and functional needs of their own customer base. This is especially true in rural/tribal settings.
▪ Emergency situations in urban/suburban and rural/tribal settings can affect paratransit customers in ways that necessitate a higher level of transportation care. Such customers include people with cognitive disabilities who become anxious or agitated by emergency incidents as well as passengers with medical conditions that are worsened by disaster impacts.
▪ Advance-notice events may allow more time to gather intelligence about evacuees and plan for the most appropriate mode of transport.
▪ No-notice emergencies are more likely to create situations where paratransit is asked to transport individuals who are not regular customers, as well as people whose care needs may exceed the normal care levels expected of paratransit drivers.

Effective Practices

▪ Successful emergency response protocols include coordination with public health officials and/or on-scene responders to determine the best mode of transportation based on physical, psychological, or medical needs of evacuees. Alternatives typically include ambulances or non-emergency medical transport, or having a medical professional accompany the passenger on a paratransit vehicle.
▪ Use of Non-Emergency Stretcher Transport (NEST) can reduce the emergency demand for paratransit vehicles and ambulances.
▪ When evacuating individuals from resident care centers, it is important that medical records accompany the evacuees. Staff supporting evacuations at reception centers or shelters will need these records to properly care for evacuees. An effective practice is to have personal care attendants accompany evacuees and transport their medical records and adaptive equipment.
▪ Paratransit providers should provide clear communication to customers on emergency transportation capabilities and limitations. Transporting special equipment, such as motorized wheelchairs/scooters, excess oxygen tanks, etc., can place significant demand on paratransit resources and the customer must be made aware of the implications of that demand. Also, customers must be made aware of any limitations on emergency transportation for family members, caregivers, and pets.
▪ Paratransit providers should consider the possibility of recruiting and training volunteers to serve as on-vehicle aides. These aides can be extremely helpful in assisting the driver, particularly when individuals being evacuated have a higher level of physical or psychological needs than the driver is trained to handle. These aides can be potentially recruited out of the ranks of healthcare professionals and human service agencies.
▪ Paratransit providers should coordinate with resident care centers to develop evacuation protocols, including appropriate facility emergency pickup points.
▪ When evacuating large numbers of people to various locations, marking paratransit vehicles with color-coded signs and providing evacuees with corresponding color indicators such as wristbands or cards will help ensure that people will board the correct vehicle and arrive at the appropriate destination.
Strategy

- Paratransit providers can assist emergency management in identifying and locating people with access and functional needs that may require evacuation assistance. While emergency management may know the locations of resident care centers, it may have limited knowledge about the travel patterns and personal residences of people living independently in the community who may need evacuation assistance. The paratransit customer database and the provider’s understanding of customer needs can be extremely helpful to emergency management.

Tool: Individuals Needing Evacuation Assistance

- Consider developing an alert notification system capable of contacting paratransit customers by text, telephone, and email to warn them of hazards or threats and provide direction on how to obtain evacuation assistance.
- Have systems, such as text, telephone, or email, for regular paratransit customers to contact your paratransit agency to request evacuation assistance for advance-notice emergencies.
- Strategize on ways to identify and meet customer evacuation needs after a no-notice emergency.
- Participate in meetings with emergency management and other agencies to discuss methodologies for identifying and locating people with access and functional needs that have a high probability of requiring evacuation assistance.
- Collaborate with emergency management and emergency medical services personnel to ensure appropriate transportation resources are dispatched to meet the medical needs of evacuees. One option is to have personal care attendants ride with evacuees aboard paratransit vehicles and transport passenger medical records.

Resources for Urban/Suburban and Rural/Tribal Areas

- Health Information Privacy: Disclosures for Emergency Preparedness—A Decision Tool
  This link is to a US Department of Health & Human Services website decision tool to help in determining how the HIPAA Privacy Rule applies to disclosure. This tool focuses on the source of the information being disclosed, to whom the information is being disclosed, and the purpose of the information being disclosed.
- Planning Evacuation for Vulnerable Populations
  This article from the October 2007 Kansas Trans Reporter newsletter addresses locating and transporting vulnerable populations during a community emergency.
  This report describes how to create a communication process to reach vulnerable populations regarding their transportation options in emergencies. The toolkit provides a guiding framework and tools for constructing a scalable, adaptable communication process built on a network of agencies from public, private, and non-profit sectors. Together, these partners will form interconnected communication channels with the ability to carry out the function of emergency communication not necessarily possible by working alone.
  This project provides an all-hazards emergency evacuation guide for transportation and emergency management agencies that identifies, reviews, and integrates a range of resources necessary for state transportation agencies to plan, train, exercise, and execute all-hazards emergency evacuations. The primary audiences are those at the state and local level who are responsible for planning (and execution or support) of an evacuation within a state, including but not limited to transportation, public safety, and emergency management. The guide will be of interest to other entities involved in support of evacuations, including transit, para-transit, advisors on access and functional needs, fire and rescue, law enforcement, public works, and health and human services, as appropriate, to be able to mobilize evacuation resources and make well-considered tactical decisions. The guide is designed to be applicable on a state, multi-state, or cross-jurisdictional border basis.

- **Define, Locate, and Reach Special, Vulnerable, and At-Risk Populations in an Emergency**
  This workbook from the US Department of Health & Human Services describes a process that will help planners to define, locate, and reach at-risk populations in an emergency.

- **Planning and Preparedness—Overview**
  Chapter 3 of the FHWA “Evacuating Populations with Special Needs” discusses the challenges for emergency evacuation planning and preparedness such as identifying special needs populations, planning “with” versus planning “for” people with special needs, training, medical needs, shelters, and the role of transportation agencies.

- **Assisting Special Needs Populations During Disaster Response**
  Excerpts from FTA’s “Disaster Response and Recovery Resource for Transit Agencies,” published in 2006, provide information on how transit agencies can assist special needs populations during disaster response.

- **Disaster Preparedness in Federal Legislation, Regulations, Policy**
  Chapter 2 of FHWA's “Evacuating Populations with Special Needs” provides a list of existing laws, as of 2009, related to special needs populations. Of special note is (1) the Stafford Act that established the Presidential disaster declaration system, which triggers federal financial and resource assistance to eligible states and local authorities through FEMA, and (2) the Pet Evacuation Transportation Standards Act that requires all cities and states to have a pet plan in place to receive FEMA funding.

- **Transportation and Emergency Preparedness Checklist**
  This checklist from the National Consortium on Human Services Transportation is to assist in the emergency planning process and to ensure safe and appropriate transportation for transportation-dependent populations, including the elderly, persons with disabilities, and individuals without access to personal transportation in an emergency situation.

- **Sensitivity to Passengers' Special Needs Is Especially Important During an Emergency**
  http://bussafety.fta.dot.gov/show_resource.php?id=3865
  This article from the April 2008 *Kansas Trans Reporter* newsletter describes easy-to-use procedures for assisting persons with disabilities during emergencies as well as in routine encounters.

- **Communication Needs**
  http://bussafety.fta.dot.gov/show_resource.php?id=4164
  Chapter 4 of FHWA’s “Evacuating Populations with Special Needs” provides information for transportation personnel on how to better communicate with people who have lim-
ited English proficiency, who speak other languages, and who have a disability that affects communications.

5.C.4 Mobilization

Before responding to critical incidents or emergency service requests, your paratransit agency may have to call in additional staff while on-duty drivers complete existing service requirements. Emergency plans should account for the time needed to drop off existing passengers and/or bring in off-duty drivers. It is helpful to have a strategy that assists in estimating how long it will take to mobilize paratransit services in the event of an emergency and what paratransit resources are available at various times of the day and night.

Depending on the time of day, paratransit providers can usually mobilize relatively quickly. This excludes the delivery of “in-system” passengers who cannot be returned home or to their points of origin.

Up-to-date call-down lists for mobilizing staff are an essential component to any emergency response plan. These lists should be available in the offices, cars, and homes of paratransit managers and supervisors. Understanding who will be available to respond and what their roles and responsibilities will be establishes a solid framework for paratransit emergency mobilization, whether in regards to meeting the needs of customers or participating in a community-wide emergency response.

Considerations

▪ In urban/suburban and rural/tribal paratransit operations, it is a challenge to estimate how many employees will report for duty during a community emergency. Paratransit providers large and small may experience a lower percentage of staff reporting to work than the planning process anticipates.
▪ In urban/suburban and rural/tribal paratransit operations where reporting for duty during an emergency is a required condition of employment, the reporting percentage is historically higher.
▪ In jurisdictions where paratransit service is contracted, there are sometimes greater resources to support emergency response since paratransit contractor companies may be able to tap into resources from their other paratransit operations across the region.
▪ Advance-notice emergencies provide opportunities to consider service continuity issues and to put staff on standby to support incident response. No-notice emergencies are particularly challenging since they may affect a paratransit provider’s ability to communicate with off-duty staff to request they report for work.
▪ Limitations on paratransit drivers can possibly be addressed by creating MAAs with external pools of drivers, such as the National Guard or public works employees. These backup drivers will have to be trained on the operation of paratransit vehicles and can be particularly effective as relief drivers to allow regular paratransit drivers to get rest during emergencies.

Effective Practices

▪ Paratransit providers with formal plans for mobilizing their resources during an emergency response, as well as strategies to accurately anticipate which staff will be able to report to work, have a much stronger track record of success in emergency response.
▪ Keeping a roster of employee personal cell phone numbers and emails can assist paratransit agencies in contacting employees with requests to report to work during an emergency, as well as provide redundant communication with employees when they have been mobilized during an emergency.
Strategy

- Have a plan for quickly mobilizing paratransit resources in an emergency and include a course of action for a staffing surge. An important part of this plan is to be able to accurately assess the number of staff that will report to work during an emergency and the length of time it will take to mobilize staff.

Tool: Mobilization

To effectively mobilize staff:
- Identify key personnel expected to report to work for an emergency response.
- Ask essential personnel to sign a volunteer list to serve during emergencies or explain why they are unable to do so.
- Develop and maintain a call-down list to mobilize staff in an emergency. Call-down lists should be available in the offices, cars, and homes of paratransit managers, supervisors, or other responsible staff.
- Consider establishing a message line where all employees can call for assignments during emergency events or identifying a community radio station that staff can tune into for information or instructions regarding emergency response assignments.
- Issue standing orders regarding where to report during an emergency if telephone and radio systems are inoperable.
- Estimate the amount of time it will take to mobilize staff and vehicles and plan accordingly. If your agency is assisting in community emergency response, provide emergency management with this information as well.
- Have vehicles prepped and ready to pull out.
- Have plans to shelter essential staff and family members at transit facilities, if necessary.
- Have agreements with neighboring transit properties, the National Guard, first responders, or other resources to augment paratransit staff in times of need.

Mobilization guidelines for community emergency response:
- When emergency management/incident management requests paratransit resources, it should provide the following information:
  - Mission task number
  - Staging area location
  - On-scene contact
  - Recommended route, road closures, and road condition information
  - If available, the number of persons requiring transportation assistance
  - Destination location
  - Special needs or requirements
- Paratransit dispatch should notify appropriate paratransit staff in a manner consistent with the agency's incident notification policy, and provide emergency management with an estimated time of arrival that is as soon as is practical.
- Paratransit needs to ensure that the vehicles it dispatches are insured, fueled, in good working condition, and appropriate for the requested mission.
- Paratransit should track all time and costs associated with deployment of vehicles, operators, and other support personnel.
- Paratransit dispatch needs to maintain communication with IC regarding paratransit resource mobilization activities.
Resources for Urban/Suburban Areas

- **Template Call-Down List and Instructions**
  This resource is adapted from a form located on the Salt Lake City Community College Risk Management website.

- **Sample Emergency Call-Down List and Procedure**
  A call-down list from the San Luis Obispo County, California, website.

- **Sample Worksheet for Trip Times**
  Annex 4 of FHWA’s “Evacuating Populations with Special Needs” is a worksheet to record such information as driver’s name, passenger count, date of trip, departure time, shelter location or receiving facility, passenger’s name, staging area location, service animal or pet, and beginning and ending mileage.

- **Transportation Needs During Activation and Operations**
  Chapter 5 of FHWA’s “Evacuating Populations with Special Needs” discusses mobilizing vehicles and vehicle operators, dispatch and tracking, and evacuation and reentry.

Resources for Rural/Tribal Areas

- **Sample Emergency Bus Mobilization Plan**
  This sample plan from the CTANW website is for coordinating the mobilization of bus resources in support of emergency activities. This plan is usually a part of the ESF-1 Transportation function within a county comprehensive emergency management plan.

5.C.5 Pets

In regular operations, all paratransit operators allow service animals onboard as required by the ADA, but most paratransit providers do not allow pets on board. Those agencies that do allow pets have policies that require dogs to be leashed and muzzled and other pets to be in a carrier before being brought onboard.

Many paratransit EOPs do not address transporting pets under emergency conditions. History clearly demonstrates that some people will not evacuate if they cannot take their pets with them, thus putting themselves at risk. Paratransit agencies can be very helpful when accommodating or transporting household pets, therefore motivating people to evacuate. Yet transporting pets without an appropriate cage or carrier, or without a leash and muzzle, could present a hazard to other passengers. There may also be health issues in terms of sanitation, animal diseases, or allergies.

During emergency operations, paratransit often waives policies prohibiting pets on vehicles. Some try to impose rules regarding carriers or crates, but in practice, these policies are often waived too, as many people do not own carriers for their pets. The issue of transporting pets during evacuation and subsequent reentry requires communication and coordination between paratransit providers, emergency management, humane societies, and other animal welfare agencies. Pre-planning is necessary to address the collection, transfer, housing, and care of animals.

Considerations

- The issue of pet transportation in emergency situations is gaining attention in both urban/suburban and rural/tribal settings.
• Issues surrounding pet evacuation typically require extensive pre-planning to address safety and security concerns, and therefore, advance-notice emergencies tend to be less challenging where pet transportation is concerned.

**Effective Practices**

• The success of community-wide evacuation activities has been significantly enhanced when emergency management and paratransit providers have jointly agreed to policies that address the emergency transportation needs of individuals accompanied by pets, while also protecting the safety of other passengers.

• Some paratransit providers designate certain vehicles to be used solely for the emergency transport of individuals with pets. Often these same providers have worked with emergency management or other key stakeholders to identify pet-friendly shelters and/or kennel facilities.

• Coordinating with animal care facilities to understand their care policies and capacity can be important, and this information should be communicated to customers and can help expedite customer evacuation transportation.

• Increasingly, emergency management agencies are co-locating shelters with kennel/animal facilities staffed by volunteers and veterinarians to help overcome this planning concern.

**Strategy**

• To be fully prepared to evacuate people during an emergency response, have a policy that addresses the transport of pets that are not service animals. This policy should consider passenger safety, operational safety, and the capabilities of reception centers or shelters for pet care.

**Tool: Pets**

- Participate in meetings with emergency management, humane societies, and other animal welfare agencies to discuss plans for evacuating people that own pets. Consideration should be given to:
  - The type of pets that will be allowed onboard paratransit vehicles.
  - Whether pets must be muzzled, leashed, or caged while on paratransit vehicles.
  - Whether certain paratransit vehicles will be assigned solely for the emergency transport of individuals with pets because of allergic and asthmatic reactions or other passenger health concerns.

- Collaborate with emergency management, humane societies, or veterinarians to identify pet-friendly shelters and/or kennel facilities.

- Develop a method to communicate paratransit pet transport and sheltering policies to potential evacuees. The information should include requirements for proof of vaccination; licenses, ID, and rabies tags on collars; leashes, muzzles, and crates or cages; and medicine/prescription needs.

- Plan for the possibility of transporting pets during reentry activities.

- Train paratransit drivers on the agency’s emergency pet transport protocols and procedures. Procedures should include methods for protecting passengers as well as drivers.

**Resource for Urban/Suburban and Rural/Tribal Areas**

• Animal Needs
  

  Chapter 7 of the FHWA “Evacuating Populations with Special Needs” discusses the wide variety of needs in handling, transporting, and sheltering animals during an evacuation.
Recovery

It could be argued that recovery is something paratransit agencies of all sizes do daily as part of normal operations. Schedulers and dispatchers arrange trips for the coming day, matching up vehicles and drivers. Vehicles come in off the road and are fueled, cleaned, maintained, and prepared to go back on the road again. Recovery depends on the right things happening in the right sequence.

Paratransit providers that experience a disaster event must have a plan for post-event recovery. The recovery phase starts after the immediate threat to human life has subsided. Recovery efforts involve getting paratransit employees back to work; re-establishing a reliable supply chain; inspecting and servicing vehicles; repairing or replacing essential equipment; and restoring power, communications, and computer systems. A significant effort to document damage to facilities, vehicles, or equipment will be needed to pursue cost recovery through insurance or liability settlements. Costs incurred during emergency response operations may be eligible for reimbursement through FEMA or state or county authorities, but only if carefully documented and verified.

6.A Reconstitution

6.A.1 Essential Life-Support Services

Providing life-sustaining medical trips, such as transportation to dialysis centers, is the top paratransit priority before, during, and after emergencies or disasters. Your paratransit agency may generally know which customers need life-sustaining medical transportation services, but you may not be certain where these customers are located at any given moment. Thus, your agency needs to plan as much as possible to provide essential life-sustaining transportation for pre-identified customers. This planning should include a system to track customer locations even though this may become a challenge during community emergencies when evacuees take up temporary residences and basic communications systems such as phones and the Internet are often disrupted.

If local medical facilities are closed due to adverse conditions or damage to their facility, trips may need to be scheduled to medical facilities outside of the area. Conversely, people who have been evacuated out of their areas of residence and into your jurisdiction may add to paratransit demand.

In an emergency, paratransit customers may find shelter at the very care centers, medical facilities, and senior centers with which paratransit normally works. Customers may also end up at emergency shelters established by the American Red Cross, Salvation Army, churches, or other voluntary organizations. Paratransit managers or supervisors may need to coordinate with
shelter providers to identify people with critical transportation needs and develop strategies for scheduling non-emergency medical trips more efficiently.

**Considerations**

- Lack of information regarding the medical needs of evacuees can result in paratransit providers being deployed to transport evacuees who may require a higher level of medical or psychological care than paratransit is able or qualified to provide. This is more likely in populated urban/suburban areas where the sheer number of people involved may become difficult to manage effectively.

- Paratransit providers should carefully document and track passenger information such as facility dropoff location and phone number, passenger personal cell phone number, passenger emergency contact information, and passenger functional equipment needs.

- In rural/tribal environments, paratransit is more likely to have an existing relationship with area residents that have access and functional needs. Also, the smaller number of customers makes these individuals easier to track and manage.

- In advance-notice events, customers may be able to schedule medical treatments in advance of the disaster and otherwise prepare to “weather the storm.”

**Effective Practices**

- Communities with disaster experience often establish a transportation group within the EOC to manage critical transportation needs. Incident managers may also establish a special advisor on the topic of access and functional needs. The paratransit agency representative is often tasked with one or both of these roles based on his or her knowledge of and experience working with the disability community.

- Some agencies will deploy paratransit staff to shelters to coordinate transportation needs with shelter managers. This type of face-to-face interaction can help establish better strategies for triaging medical trips between ambulance, paratransit, and public transit resources.

- Due to vehicle size, available floor space, and the wheelchair lift, paratransit vehicles can provide a practical solution for transporting essential life-supporting goods as well as people. As a result, in early stages of recovery, paratransit is sometimes pressed into service to transport ice, food, water, oxygen, medical supplies, and other essential goods.

**Strategy**

- Your paratransit agency’s commitment to its regular customers, and to the community at large, underscores the importance of sustaining essential life-support transportation services as long as possible during emergencies, as well as reconstituting suspended paratransit service as soon as possible after emergencies or disasters. When resuming service, your agency may also have to consider strategies to provide transportation outside your normal service area due to disaster impacts on local medical treatment facilities.

**Tool: Essential Life-Support Services**

- Identify regular paratransit customers that will need ongoing transportation for medical treatment, such as dialysis, during emergencies.

- Develop an operational plan for providing life-sustaining medical trips after an emergency occurs, and communicate that plan to affected paratransit customers.

- Contact medical service providers to learn of their strategies to continue essential life-support services during emergencies and provide them with your plans for continuing transportation for paratransit customers dependent upon medical care.
- Participate with community stakeholders in identifying alternative medical facilities where your agency can transport customers for treatment should regular facilities be shut down due to the impact of an emergency event.
- Share your emergency operations transportation plan with emergency management and emergency medical services, and discuss the life-sustaining transportation needs of people who are not normal paratransit customers.
- Coordinate with emergency management regarding shelter residents who require non-emergency medical transportation.

Resource for Urban/Suburban and Rural/Tribal Areas

- Prioritizing Trips
  http://bussafety.fta.dot.gov/show_resource.php?id=4182
  This excerpt from “Guidance for Paratransit Emergency Planning” presents examples of the trip-priority procedures of several agencies that were interviewed for a study on paratransit emergency planning.

6.2 Restoring Service

Restoration of service involves returning paratransit service delivery systems to their pre-emergency conditions. Elements critical to restoring service include facilities, vehicles, and information and communication systems. Depending on the severity of the emergency, service restoration may have to be addressed in stages, most likely concentrating on life-safety transportation issues first, and then ramping up service as mission-critical resources become available.

Considerations

- Urban/suburban transit systems are more likely to have established disaster recovery plans, although they may not consider issues unique to paratransit operations.
- Rural/tribal paratransit providers are less likely to have devoted time and effort to developing disaster recovery plans. As a result, they may find service restoration more challenging.
- In rural/tribal service areas, it is more likely that the paratransit providers know their customers and their travel patterns and, therefore, can more easily address restoration concerns.
- Advance-notice emergencies provide a window of opportunity to develop recovery plans before disaster strikes.

Effective Practices

- In community emergencies, many paratransit agencies rely on guidance from the EOC regarding when to resume service. In local emergencies, paratransit agencies often make that decision themselves.
- A common threshold for resuming regular paratransit service is the resumption of fixed-route transit services and school bus transportation.
- Paratransit managers have found that the situational awareness needed to make good decisions about service resumption depends a great deal on interagency communication, coordination, and cooperation.
- Most paratransit agencies will phase in service resumption, beginning with non-emergency medical trips, then adding additional service based on resource availability.
Strategy

- Advance planning for reconstituting paratransit service increases efficiency and resiliency when an emergency occurs or disaster strikes. Develop service restoration plans in coordination with other transportation modes and providers. This may involve entering into MAAs with industry partners. Share your service restoration plans with paratransit customers, partner agencies, and emergency management.
- Since normal procedures may be modified or suspended following an emergency, work priorities during the recovery phase must be communicated clearly and consistently to employees.

Tool: Restoring Service

Essential elements of a service restoration plan include:

- Establishing thresholds or criteria for service restoration.
- Determining when it is safe to resume service. For large-scale events, this decision should be made in consultation with emergency management, public safety agencies, and other government officials.
- Assessing operational capabilities, including considering the availability of staff; the disposition of vehicles and fuel; the operability of communication systems; and damage to dispatch, maintenance, and administrative facilities.
- Providing support for employees so they can return to work; this may include addressing both physical and psychological needs.
- Prioritizing how service will be phased in based on resource availability.
- Communicating with customers, stakeholders, and the general public about service restoration.

Communication strategies for service restoration include:

- Automated alert notification systems that send phone calls, texts, emails, or other electronic messages to subscribers.
- Pre-recorded service alert messages and informational updates as a keypad menu option or while waiting on hold.
- Phone calls to social service agencies and medical care providers.
- Targeted phone calls to let customers know about service resumption plans.
- Updates and service alerts on the agency website.
- Posts to Twitter, Facebook, YouTube, and other identified social media networks.
- News releases or other notifications to TV, radio, and print media.

Resources for Urban/Suburban and Rural/Tribal Areas

- Managing Transportation Recovery
  This excerpt from the USDOT “Recovering from Disasters: The National Transportation Recovery Strategy” resource provides recommendations on preparing for and managing the transportation recovery process.

- Frequently Asked Disaster Recovery Questions
  This excerpt from FTA’s “Disaster Response and Recovery Resource for Transit Agencies,” published in 2006, provides answers to some pertinent transportation questions about disaster recovery.
Reentry is the returning of people to the residences from which they were evacuated. Estimating the number and types of paratransit vehicles required for reentry service can be challenging. In addition to communication gaps that sometimes occur between shelter managers and paratransit providers, people staying in emergency shelters will often make their own transportation arrangements for reentry, skewing the numbers shelter managers are tracking.

Paratransit providers returning people home after disasters have encountered a variety of difficulties en route, including access hazards caused by disaster debris and a lack of power or other utilities that make homes habitable and safe. This issue is of particular concern for people with access and functional needs and can be largely prevented through better interagency coordination.

Another important consideration when planning for reentry is a method for documenting who has been transported and the location and time of the dropoff, as this information can be essential for emergency managers as well as the families and friends of those utilizing paratransit services.

**Considerations**

- Reentry is a challenge in urban/suburban and rural/tribal environments.
- In the rural/tribal setting, there may be a greater propensity to initiate reentry before infrastructure is fully restored. This, combined with greater distances of travel, can be a significant concern for people with access and functional needs.
- Due to the size and scope of operations, it is more likely that paratransit personnel in rural/tribal environments understand the support needs of their customers.
- Evacuees from advance-notice emergencies are more likely to have identified their own sources of transportation and are less likely to need the support of paratransit during reentry.

**Effective Practices**

- Close coordination between emergency management and transportation agencies, including paratransit, helps alleviate some of the resource management challenges involved with mobilizing for reentry.
- Close coordination between paratransit and public utilities, public works, fire and rescue, law enforcement, and human service agencies helps relieve some of the challenges of reentry, particularly for people with access and functional needs.
- Assigning two employees to paratransit vehicles can help reentry operations significantly. One staff member is able to maintain passenger manifest information and provide personal assistance, while the other concentrates on operational safety.
- In cases where local paratransit resources are not fully operational or are overwhelmed by demand, drivers and vehicles from neighboring jurisdictions can be used to augment local paratransit resources.

**Strategy**

- Pre-planning and close coordination between paratransit, emergency management, public utilities, public safety, law enforcement, and shelter managers will help alleviate problems often associated with reentry, particularly as it relates to people with access and functional needs.
- During reentry, your paratransit agency may find it necessary to track the identity of customers, as well as the location and time of each passenger pickup and dropoff, and then share this information with emergency management at the conclusion of reentry missions.
Tool: Reentry Concerns

- Confirm with emergency management and other appropriate entities that all utilities are working properly.
- Confirm with emergency management, first responders, and human service agencies that paths of ingress and egress are clear for people with mobility limitations.
- Confirm with emergency management, first responders, and other appropriate entities to ensure sanitation and the general livability of residences.
- Confirm with emergency management and other appropriate entities that food and water is available and spoiled food in the home can be properly disposed of.
- Identify with key external stakeholders an appropriate process for returning service animals and pets.
- Empower paratransit drivers to make determinations about whether passenger dropoff locations are safe for their riders.
- Identify alternative dropoff strategies when paratransit drivers determine that reentry to a residence is unsafe.
- Ensure a clear understanding between paratransit and law enforcement staffing control points on the need for paratransit vehicles to access neighborhoods.
- Ensure a clear understanding between paratransit and law enforcement staffing control points on the need for human service and health services personnel to access neighborhoods.

Resource for Urban/Suburban and Rural/Tribal Areas

- Reentry and Return to Readiness
  Chapter 8 of FHWA’s “Evacuating Populations with Special Needs” discusses the issues that need to be addressed before and during reentry, and also post-event.

6.C Post-Disaster Service Assessment

Disasters can radically affect the demand for paratransit services and require your agency to alter hours of service, days of service, and areas served. Long-term recovery can be hampered if your agency is unprepared to adjust to possible new service demands.

Increases in the demand for paratransit services may be temporary as disaster victims recuperate from injuries or identify resident care centers that curtail their travel needs. Changes in demand for services may also be long-term due to migration patterns caused by the disaster. Paratransit agencies must be flexible in their approach to managing increased demand.

Considerations

- Changes in service demand are partly a function of the magnitude of a disaster. The larger the disaster, the greater the change in riding patterns.
- Disasters tend to have a more significant effect on travel patterns in urban/suburban areas, as current residents relocate and new residents move in.
- Rural/tribal areas tend to experience fewer changes in demographics and demand than urban/suburban environments, but with fewer resources, rural paratransit agencies can find it more difficult to adapt to such changes.
Effective Practices

▪ APTA, CTAA, and some state DOTs have established registries that allow transit systems to volunteer to assist other transit agencies during or after emergencies. Many paratransit providers have relied on these programs to temporarily augment capacity, utilizing drivers and vehicles from other transit agencies across the region.

▪ Some paratransit agencies have instituted an expedited paratransit eligibility certification process or temporarily waived eligibility certification requirements in order to meet the increased demand for paratransit services during recovery.

Strategy

▪ The possibility of an increased demand for paratransit services following a disaster underscores the need for a post-disaster service assessment. This demand may necessitate expanded days and hours of service, alteration of normal routes, and, if your agency is not a provider of general public demand-response service, a temporary waiver or expediting of paratransit eligibility certification.

Tool: Post-Disaster Service Assessment

☐ Conduct a post-disaster transportation needs assessment.
☐ Share the results of this assessment with emergency management and other partner agencies to gather input and support.
☐ Meet with essential staff to assess how an increase in paratransit service demand would affect operations and discuss how changes in service delivery models could be accommodated.
☐ If you are not a general public demand-response provider, develop an expedited paratransit eligibility certification process or temporarily use presumptive eligibility to better meet post-disaster transportation needs.
☐ Initiate post-disaster paratransit operations based on need, available resources, and the temporarily re-engineered service delivery model.
☐ If necessary, explore ways to augment the existing fleet and staff, utilizing resources offered through your state DOT, CTAA, and/or APTA.

Resource for Urban/Suburban and Rural/Tribal Areas

▪ Post-Disaster Service Assessment—Del Norte EF-1 After-Action Report

This report from the CalACT website details the disaster response activities of Del Norte County transportation during the tsunami of March 2011 and documents strengths and areas for improvement in the Del Norte County transportation emergency management system.

6.D Restitution

6.D.1 Post-Crisis Counseling

A significant post-crisis consideration is whether employees are ready and able to return to work. Emotional stress, physical injury, loss of loved ones, loss of property, and disruption of normal routines may limit the availability and energy of essential paratransit personnel. Restitution plans need to include the availability of therapy or counseling services for employees traumatized by an emergency.
Considerations

▪ Urban/suburban paratransit systems are more likely to have Employee Assistance Programs (EAP) to support crisis-counseling needs. On the other hand, it can be more difficult for larger agencies to foster the informal peer support that can also help alleviate post-traumatic stress.
▪ Rural/tribal systems tend to rely on informal peer support more than formal EAPs, although many have identified local counseling resources for employee referrals. There is no substitute for professional counseling or other supportive interventions for employees suffering from post-traumatic stress.
▪ Post-traumatic stress tends to be more prevalent after no-notice emergencies and disasters than after advance-notice emergencies where individuals can prepare themselves and their loved ones for the challenges they may face.

Effective Practices

▪ Agencies that make employee support part of their emergency planning efforts have found that a high percentage of their staff reports for work both during and after an emergency.
▪ Agencies that provide employee support as part of their emergency planning effort report higher employee retention rates following serious accidents, emergencies, and disasters.

Strategy

▪ When developing plans for restoring paratransit assets to their pre-emergency conditions, it is vital that paratransit managers consider the needs of their most essential asset: paratransit human resources. Ensure that all paratransit employees have access to some type of therapy or counseling to help them deal with any psychological trauma brought about by an emergency or disaster.

Tool: Post-Crisis Counseling

To mitigate the psychological effect of an emergency on paratransit staff:
❑ After an initial crisis period during which overwork may be necessary, develop procedures to ensure that employees take sufficient time off.
❑ Set limits on work hours and train managers to monitor their staff for irritability, erratic behavior, inattentiveness, and other signs of exhaustion.
❑ Provide adequate staffing for additional disaster relief and recovery responsibilities.
❑ Ensure that no one employee is wholly responsible for essential tasks and therefore unable to take time off to rest and recuperate.
❑ Since leaders are especially prone to overwork, monitor one another and set a positive example for staff.

Post-crisis counseling considerations:
❑ Provide informal opportunities in the workplace for paratransit staff to share their experiences. To recover from severe stress, people need to talk about what they have gone through and compare their reactions with those of others.
❑ Provide an opportunity for a group meeting of paratransit staff facilitated by an EAP counselor or other mental health professional.
❑ Provide employees with procedures for scheduling post-crisis counseling appointments, as some employees may need more personal assistance in resolving problems arising from a disaster.
Resources for Urban/Suburban and Rural/Tribal Areas

- **Managing After a Disaster**
  
  http://bussafety.fta.dot.gov/show_resource.php?id=4143

  A disaster creates unusual challenges for management if staff are suffering from its effects. Emotional stress, physical injury, bereavement, loss of property, and disruption of normal routines may limit the availability and energy of employees. The suggestions in this excerpt from Chapter 6 of “Handling Traumatic Events—A Manager’s Handbook” are general principles that can help a business structure disaster response.

- **Airport Cooperative Research Program (ACRP) Report 22: Helping Airport and Air Carrier Employees Cope with Traumatic Events**
  

  This report provides insight and practical guidance to address the difficult emotional and psychological implications in response and exposure to traumatic events. These traumatic events can be the result of human-made accidents, acts of terrorism, or natural disasters that have occurred at, in the vicinity of, or resulting from the operation of an air carrier at an airport.

6.D.2 Documenting Damage

It is a standard practice to fill out a report following a paratransit vehicle collision with facts carefully documented, statements noted or recorded from witnesses and those involved, and photos taken of the scene and relevant damage. Along these same lines, damage to buildings, facilities, equipment, or vehicles related to an emergency event or disaster response needs to be accurately documented and reported for risk management, insurance, and cost recovery purposes.

Any work-related personal injuries need to be reported and processed through the worker’s compensation system, the agency’s risk management function, and other internal administrative reporting processes as appropriate.

Insurance may cover costs for buildings, facilities, equipment, and vehicles damaged in a natural disaster event. Local government may provide additional blanket liability coverage if losses were incurred under its authority. Though there are typically additional forms and reporting requirements, state and federal government may provide additional coverage for uninsured and underinsured losses suffered during a state or federally declared emergency.

Considerations

- Paratransit agencies that are part of a government entity in urban/suburban environments are often self-insured. Urban/suburban paratransit agencies that are managed separately or contracted to a service provider will typically carry their own insurance.
- Some urban/suburban or rural/tribal systems may be part of a state-wide insurance pool or other group insurance consortium that increases the risk pool and helps defray costs.
- Some rural/tribal systems buy insurance policies that have a high deductible, making the policy affordable but devastating to the agency if it is involved in a catastrophic event.
- Contracted paratransit service providers may not share the same liability limits as government-entities and may not be eligible for state and federal disaster aid.

Effective Practices

- Transit and paratransit agencies with robust risk management and system safety programs have established mechanisms to accurately document accidents, incidents, and damage incurred during emergencies or disasters and the subsequent emergency response.
Strategy

- Encourage staff to maintain logs of their actions during an emergency. In the recovery phase, compile an overall summary of actions that details key statistics of services rendered. Commit the chronological timeline of events to writing.
- Immediately debrief all personnel involved with emergency operations to capture details about the events, activities, and difficulties encountered. Ensure that staff does not feel intimidated to report the truth about events that occurred. Conduct a more systematic debriefing within two weeks of the incident. The resulting assessment of response and recovery actions will provide valuable information for you to modify your EOP.

Tool: Documenting Damage

- Inspect and inventory facilities, equipment and rolling stock.
- Notify insurance providers of paratransit resource losses that occurred during the emergency.
- Provide information on the condition of paratransit assets to the state DOT or the FTA and notify them if additional assets are required to resume normal operations.
- When appropriate, provide emergency response and recovery cost details to emergency management as soon as possible so that all opportunities for local, state, and federal reimbursement can be pursued.

Include the following topics in staff debriefings:
- Effective and ineffective elements of leadership and decision making
- Tasks that were carried out successfully during the response
- Tasks that were not handled correctly in the response and actions that were performed needlessly
- Communication challenges and breakdowns
- Problems encountered and possible solutions for future events
- Innovations and strategies that should be employed in the future

Include the following topics in after-action reports:
- A brief overview of the incident
- A synopsis of your incident goals and objectives
- Documentation of vehicle, facility, and equipment use, and activities performed by all departments during response and recovery
- Documentation of losses and any necessary repairs or maintenance
- An assessment of what went right and what went wrong
- Strategies to improve response and speed recovery in the future

Resource for Urban/Suburban and Rural/Tribal Areas

- Emergency Recovery Documentation—After-Action Reports, Debriefing, and Assessment

  This excerpt from the “Guidebook for Emergency Management Planning for Texas Transit Agencies” discusses what should be included in AARs and the topics for debriefings. It also provides a form to record information on vehicles/equipment used during an emergency.
6.D.3 Reimbursement

Following large-scale emergencies or natural disasters, state officials will make a formal disaster declaration and request federal aid if recovery costs exceed the combined resources of local and state governments. If a presidential declaration is made, the way is cleared for federal resources and funding to support recovery efforts.

To be eligible for reimbursement, paratransit providers should be NIMS compliant and have accurate records of emergency response mission assignments that were formally directed by the EOC. There should also be an MOU in place with emergency management regarding the provider’s disaster roles and responsibilities, particularly if the service provider is a quasi-governmental or non-governmental agency. If the above standards are not met, the paratransit provider may not be eligible for reimbursement it might otherwise have been entitled to for vehicles, fuel, staff, and other resources used during emergency response activities.

Reimbursement challenges are often greater when contracted paratransit services are involved in emergency response. The contractor normally will comply with service requests from the controlling agency, and such requests are usually billed at prevailing rates. However, if the controlling agency is not reimbursed for monies it has paid out to a contractor, this can negatively affect its budget and possibly hinder its ability to support normal operations in the future.

Considerations
- Both urban/suburban and rural/tribal paratransit providers should proactively work with emergency management to develop systems that ensure eligibility for federal, state, and local disaster relief funds for paratransit resources utilized during a community emergency response.

Effective Practices
- In locales where paratransit and emergency management communicate and plan ahead, paratransit providers have established cost-accounting systems that enable them to provide fully allocated cost/hour and cost/mile expenses for resources used during emergency response and recovery. Providers that have carefully documented all mission assignments and related tasks improve their position in the reimbursement process.
- Many state DOTs provide guidance to paratransit systems on federal and state reimbursement requirements.
- While local government is the normal conduit for disaster aid, in certain cases, state agencies and national associations have stepped in on behalf of transit and paratransit agencies experiencing difficulty receiving state and federal reimbursement.

Strategy
- Reimbursement for the services your paratransit agency provides in support of community emergency response efforts may come from the local government based on existing agreements, state and federal disaster aid programs, and/or insurance.
- Be familiar with requirements, processes, and documentation necessary for reimbursement, such as FEMA’s Stafford Act. Capturing the required documentation should be integrated into emergency procedures, as necessary. To ensure you understand all reimbursement documentation requirements, you are encouraged to coordinate with the state DOT, state emergency management agency, local FTA region, and other key stakeholders.
- To be eligible for disaster cost reimbursement, have a signed agreement with emergency management that details your agency’s emergency response roles and ensure that services were delivered in accordance with mission assignments coming from the EOC and were performed within the “incident period,” as defined in formal disaster proclamations. Formal agreements should detail deployment protocols as well as reimbursement strategies.
Tool: Reimbursement

FTA, in its “Disaster Response and Recovery Resource for Transit Agencies,” provides the following information on paratransit post-disaster reimbursement.

- There is broad flexibility under FTA planning and capital funding programs for states, metropolitan planning agencies, and transit authorities to spend FTA funds for emergency preparedness and response planning and capital security projects, including security training for personnel and conducting emergency response drills under their discretionary planning and research programs and their program management oversight program. FTA is also able to hire contractors to provide assistance to transit grantees in disaster areas for some support activities such as transit planning, transit operations support and technical assistance, and engineering and project management support.

- The Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Stafford Act) supports state and local governments and their citizens when disasters overwhelm local resources. This law establishes a process for requesting and obtaining a Presidential disaster declaration, defines the types and scope of assistance available under the Stafford Act, and sets the conditions for obtaining that assistance. Under the Stafford Act, states can request assistance from FEMA to provide emergency transit services that are necessary to help an area respond to and recover from the damaging effects of a disaster. In addition, FEMA assistance is available to transit authorities to help replace or build transit buses, equipment, and the facilities that have been damaged or destroyed during a disaster.

- Most states have an emergency management plan that establishes a framework through which local governments prepare for, respond to, recover from, and mitigate the impacts of a wide variety of disasters that could adversely affect the health, safety, and/or general welfare of the residents of their jurisdictions. State emergency plans provide guidance to state and local officials on procedures, organization, and their responsibilities in providing an integrated and coordinated response. State emergency plans often provide procedures for the reimbursement of services provided during disaster response and recovery.

Resources for Urban/Suburban and Rural/Tribal Areas

- Incident Management Overview
  This diagram, excerpted from the USDOT document “Recovering from Disasters: The National Transportation Recovery Strategy,” presents a brief overview of the federal disaster declaration process, incident management, and financial assistance.

- FEMA and FTA Disaster Funding Information
  This excerpt from Chapter 3 of FTA’s “Disaster Response and Recovery Resource for Transit Agencies,” published in 2006, provides information on funding that FEMA and FTA can provide toward disaster response activities.

- Possible Funding Sources for Paratransit Agencies for Emergency Preparedness
  This resource outlines possible funding sources for transit agencies to enhance their operational capabilities in reference to safety, security, and emergency preparedness concerns.

- Disaster Declaration Process
  This resource outlines protocols for disaster declaration at the federal, state, and local levels.
## Glossary and Acronyms

<table>
<thead>
<tr>
<th>Term</th>
<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Access and Functional Needs</td>
<td>AFN</td>
<td>Additional needs before, during, and after an incident in functional areas, including but not limited to, maintaining independence, communication, transportation, safety, support, and health care. Individuals in need of additional response assistance may include those who have disabilities, who live in the community or resident care centers, who are elderly, who are children, who are from diverse cultures, who have limited English proficiency or are non-English speaking, or who are transportation disadvantaged.</td>
</tr>
<tr>
<td>After-Action Report</td>
<td>AAR</td>
<td>Documents that assess performance during disaster exercises and disaster incidents. After-action reports document successes and shortcomings and provide an improvement plan for resolving identified gaps.</td>
</tr>
<tr>
<td>Americans with Disabilities Act</td>
<td>ADA</td>
<td>Enacted in 1990, this law prohibits private employers, state and local governments, employment agencies, and labor unions from discriminating against individuals based upon disability and mandates accessibility of public facilities and public information.</td>
</tr>
<tr>
<td>American Public Transportation Association</td>
<td>APTA</td>
<td>A national association composed of public and private organizations that work to strengthen and improve public transportation and ensure availability and accessibility to all Americans in communities across the country.</td>
</tr>
<tr>
<td>California Association for Coordinated Transportation</td>
<td>CalACT</td>
<td>The largest state transit association in the US with nearly 300 members, dedicated to promoting professional excellence, stimulating ideas and advocating for effective community transportation.</td>
</tr>
<tr>
<td>Term</td>
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<tr>
<td>Center for Urban Transportation Research</td>
<td>CUTR</td>
<td>Established in 1988 within the University of South Florida, CUTR provides high-quality, objective transportation expertise in the form of technical support, policy analysis, and research support that translates directly into benefits for its project sponsors.</td>
</tr>
<tr>
<td>Centers for Disease Control</td>
<td>CDC</td>
<td>A major operating component of the US Department of Health and Human Services committed to protecting health and promoting quality of life through prevention and control of disease, injury and disability.</td>
</tr>
<tr>
<td>Chemical, Biological, and Radiological</td>
<td>CBR</td>
<td>A host of hazards requiring the response of hazardous materials technicians to help isolate and mitigate the risk.</td>
</tr>
<tr>
<td>Commercial Driver’s License</td>
<td>CDL</td>
<td>Licenses issued by the states, with minimum standards set by the federal government, to improve highway safety by ensuring that drivers of large trucks and buses are qualified to operate those vehicles and to remove unsafe and unqualified drivers from highways. Transit drivers have an additional “passenger endorsement” requirement.</td>
</tr>
<tr>
<td>Community Transportation Association of America</td>
<td>CTAA</td>
<td>A national association of organizations and individuals committed to removing barriers to isolation and improving mobility for all people.</td>
</tr>
<tr>
<td>Community Transportation Association of the Northwest</td>
<td>CTANW</td>
<td>A network of traditional and non-traditional providers of transportation services to the public. The Association headquarters are in Olympia, Washington.</td>
</tr>
<tr>
<td>Congregate and Residential Care Facilities Consumable Medical Supplies</td>
<td>CRCF, none</td>
<td>A type of senior community from independent living to various kinds of assisted living. Includes, but is not limited to, catheters, ostomy supplies, gloves, bandages, and padding. These supplies are usually disposable and used by one person.</td>
</tr>
<tr>
<td>Continuity of Operations Plan</td>
<td>COOP</td>
<td>A plan that outlines steps that an agency will take in the event a disaster interrupts business.</td>
</tr>
<tr>
<td>Department of Homeland Security</td>
<td>DHS</td>
<td>Established in the aftermath of 9/11, a cabinet-level department in the US government charged with securing the nation from security threats.</td>
</tr>
<tr>
<td>Department of Transportation</td>
<td>DOT</td>
<td>A state government agency charged with facilitating mobility within the state.</td>
</tr>
<tr>
<td>Departmental Emergency Operations Center</td>
<td>DOC</td>
<td>Established by a department or like jurisdiction to coordinate the emergency response activities within its purview.</td>
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<tr>
<td>Term</td>
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<tr>
<td>Durable Medical Equipment</td>
<td>(none)</td>
<td>Includes, but is not limited to, wheelchairs (multiple types), canes, white canes, walkers, shower chairs, toilet chairs, raised toilet seats, oxygen equipment, nebulizer tubing and machines, and speech-generating devices.</td>
</tr>
<tr>
<td>Emergency Operations Center</td>
<td>EOC</td>
<td>Established by a city, county, state, or federal oversight agency to marshal resources and facilitate interagency communication and coordination.</td>
</tr>
<tr>
<td>Emergency Operations Plan</td>
<td>EOP</td>
<td>Document that describes who will do what, as well as when, with what resources, and by what authority, before, during, and immediately after an emergency.</td>
</tr>
<tr>
<td>Emergency Support Function</td>
<td>ESF</td>
<td>The grouping of governmental and certain private-sector capabilities into an organizational structure to effectively coordinate and manage response activities needed to save lives, protect property, restore essential services and critical infrastructure, and assist individuals and communities to return to normal function.</td>
</tr>
<tr>
<td>Employee Assistance Program</td>
<td>EAP</td>
<td>An employee benefit program that is intended to help employees deal with personal problems that might adversely impact their work performance, health, and well being.</td>
</tr>
<tr>
<td>Federal Communications Commission</td>
<td>FCC</td>
<td>An independent US government agency established in 1934 that regulates interstate and international communications by radio, television, wire, satellite, and cable in all fifty states, the District of Columbia, and US territories.</td>
</tr>
<tr>
<td>Federal Emergency Management Agency</td>
<td>FEMA</td>
<td>An agency within the US DHS charged with supporting citizens and first responders to build, sustain, and improve US capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.</td>
</tr>
<tr>
<td>Federal Highway Administration</td>
<td>FHWA</td>
<td>An agency within the US Department of Transportation charged with improving mobility on the nation's highways through national leadership, innovation, and program delivery.</td>
</tr>
<tr>
<td>Federal Transit Administration</td>
<td>FTA</td>
<td>An agency within the US Department of Transportation that provides technical and financial assistance to local, state, and public transit agencies; monitors performance and compiles statistics; and makes recommendations to the administration regarding US mass transit concerns.</td>
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<tr>
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<tr>
<td>Government Emergency Telecommunications System</td>
<td>GETS</td>
<td>A White House-directed emergency phone service provided by the National Communications System that provides emergency access and priority processing in the local and long-distance segments of the public switched telephone network.</td>
</tr>
<tr>
<td>Hazard and Security Plan</td>
<td>HSP</td>
<td>A plan that sets out procedures for maintaining safe and secure transportation operations and service environment for passengers, employees and volunteers, and the surrounding community.</td>
</tr>
<tr>
<td>Health Insurance Portability and Accountability Act</td>
<td>HIPAA</td>
<td>Enacted in 1996, HIPAA provides federal protections for personal health information and improves the portability and continuity of health insurance coverage.</td>
</tr>
<tr>
<td>Homeland Security Exercise and Evaluation Program</td>
<td>HSEEP</td>
<td>A capabilities-and-performance-based exercise program that provides a standardized methodology and terminology for exercise design, development, conduct, evaluation, and improvement planning.</td>
</tr>
<tr>
<td>Homeland Security Presidential Directive 5</td>
<td>HSPD-5</td>
<td>Serves to enhance the ability of the United States to manage domestic incidents by establishing a single comprehensive National Incident Management System.</td>
</tr>
<tr>
<td>Homeland Security Standards Panel</td>
<td>HSSP</td>
<td>A part of the American National Standards Institute, charged with identifying existing consensus standards or, if none exist, assisting the US DHS and those sectors requesting assistance to accelerate development and adoption of consensus standards critical to homeland security.</td>
</tr>
<tr>
<td>Immediate Actions</td>
<td>IAs</td>
<td>Suggested quick-response procedures that may help prevent or mitigate a terrorist or violent criminal act.</td>
</tr>
<tr>
<td>Improvised Explosive Device</td>
<td>IED</td>
<td>A homemade bomb constructed and deployed in ways other than in conventional military action.</td>
</tr>
<tr>
<td>Incident Action Plan</td>
<td>IAP</td>
<td>An oral or written plan containing general objectives reflecting the strategy for managing an incident that may include identifying operational resources and assignments, attachments that provide direction, and important information for management of the incident for the operational period.</td>
</tr>
<tr>
<td>Incident Command Post</td>
<td>ICP</td>
<td>The physical location of the tactical-level, on-scene incident command and management organization located near or in the immediate vicinity of an incident site or co-located with the Incident Base. In a FEMA response, this is normally the Joint Field Office (JFO).</td>
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<tr>
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<tr>
<td>Incident Command System</td>
<td>ICS</td>
<td>A standardized, on-scene, all-hazards incident management approach.</td>
</tr>
<tr>
<td>Incident Objectives</td>
<td>(none)</td>
<td>Statements of guidance and direction necessary for the selection of appropriate strategies and the tactical direction of resources. Incident objectives are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. Incident objectives must be achievable and measurable, yet flexible enough to allow for strategic and tactical alternatives.</td>
</tr>
<tr>
<td>International Association of Emergency Managers</td>
<td>IAEM</td>
<td>A non-profit educational organization dedicated to promoting the “Principles of Emergency Management” and representing those professionals whose goals are saving lives and protecting property and the environment during emergencies and disasters.</td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>LEP</td>
<td>Individuals who do not speak English as the primary language and who have a limited ability to read, speak, write, or understand English.</td>
</tr>
<tr>
<td>Local Emergency Planning Committee</td>
<td>LEPC</td>
<td>Non-operational, quasi-governmental bodies, usually at the municipal level, that identify and catalog potential hazards, identify available resources, mitigate hazards when feasible, and support emergency preparedness.</td>
</tr>
<tr>
<td>Memorandum of Understanding</td>
<td>MOU</td>
<td>Document describing a bilateral or multilateral agreement between parties. A prime vehicle for “contracting” between government agencies.</td>
</tr>
<tr>
<td>Mission Assignment</td>
<td>(none)</td>
<td>A work order issued by FEMA Operations to another federal agency directing completion of a specific task that is used to support federal operations in a Stafford Act major disaster or emergency declaration.</td>
</tr>
<tr>
<td>National Communications System</td>
<td>NCS</td>
<td>A single unified communications system that assists the President, the National Security Staff, the Director of the Office of Science and Technology Policy and the Director of the Office of Management and Budget in (1) the exercise of the telecommunications functions and responsibilities and (2) the coordination of the planning for and provision of national security and emergency preparedness communications for the federal government under all circumstances, including crisis or emergency, attack &amp; recovery and reconstitution.</td>
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<tr>
<td>National Cooperative Highway Research Program</td>
<td>NCHRP</td>
<td>Created in 1962 as a means to conduct research in acute problem areas that affect highway planning, design, construction, operation, and maintenance nationwide. Administered by the Transportation Research Board.</td>
</tr>
<tr>
<td>National Incident Management System</td>
<td>NIMS</td>
<td>A comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines. It enables seamless coordination to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life and property and harm to the environment.</td>
</tr>
<tr>
<td>National Response Framework</td>
<td>NRF</td>
<td>Presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies.</td>
</tr>
<tr>
<td>Non-emergency Medical Transportation</td>
<td>NEMT</td>
<td>Transportation services to people who need medical support but are medically stable. Trips to dialysis are a common form of non-emergency medical transportation in the United States.</td>
</tr>
<tr>
<td>Non-emergency Stretcher Transport</td>
<td>NEST</td>
<td>The transportation of a person with non-emergency medical conditions in a supine position in a vehicle designed, constructed, or reconstructed for the purpose of safe conveyance.</td>
</tr>
<tr>
<td>Office for Domestic Preparedness</td>
<td>ODP</td>
<td>Operates within the Directorate of Border and Transportation Security and has the primary responsibility within the executive branch of government for the preparedness of the United States for acts of terrorism. (It was formerly the Office for State &amp; Local Domestic Preparedness, Department of Justice.)</td>
</tr>
<tr>
<td>Public Information Officer</td>
<td>PIO</td>
<td>The communication coordinator or spokesperson of an agency whose primary responsibility is to provide information to the media and the public, as required.</td>
</tr>
<tr>
<td>Resident Care Centers</td>
<td>(none)</td>
<td>Licensed care facilities, congregate facilities, residential facilities, nursing homes, assisted living facilities, group homes, and intermediate care facilities.</td>
</tr>
<tr>
<td>Security-Sensitive Information</td>
<td>SSI</td>
<td>A category of sensitive but unclassified information obtained in the conduct of security activities whose public disclosure would harm transportation security or reveal privileged or confidential information.</td>
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<tr>
<td>Term</td>
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<td>Definition</td>
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<tr>
<td>Transit Cooperative Research Program</td>
<td>TCRP</td>
<td>TCRP is funded by the public, through the FTA, and is governed by an independent board. Day-to-day management of the TCRP is the responsibility of the Transportation Research Board of the National Academies.</td>
</tr>
<tr>
<td>Transportation Security</td>
<td>TSA</td>
<td>Component of the US DHS charged with protecting the nation's transportation systems to ensure freedom of movement for people and commerce.</td>
</tr>
<tr>
<td>Unified Command</td>
<td>(none)</td>
<td>An Incident Command System application used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated members of the Unified Command to establish their designated Incident Commanders at a single Incident Command Post and establish a common set of objectives and strategies and a single Incident Action Plan.</td>
</tr>
<tr>
<td>Urban Area Strategic Initiative</td>
<td>UASI</td>
<td>A funding area of the US DHS aimed at coordinating preparedness efforts and building response capacity of the multiple jurisdictions within the thirty-one highest-threat/highest-density urban areas in the United States.</td>
</tr>
<tr>
<td>US Department of Transportation</td>
<td>USDOT</td>
<td>Cabinet-level department of the US government charged with ensuring fast, safe, efficient, accessible, and convenient transportation systems that meet vital national interests and enhance the quality of life.</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>AAAE</td>
<td>American Association of Airport Executives</td>
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<td>AASHTO</td>
<td>American Association of State Highway and Transportation Officials</td>
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<tr>
<td>ACI–NA</td>
<td>Airports Council International–North America</td>
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<tr>
<td>ACRP</td>
<td>Airport Cooperative Research Program</td>
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<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
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<tr>
<td>APTA</td>
<td>American Public Transportation Association</td>
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<tr>
<td>ASCE</td>
<td>American Society of Civil Engineers</td>
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<tr>
<td>ASME</td>
<td>American Society of Mechanical Engineers</td>
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<tr>
<td>ASTM</td>
<td>American Society for Testing and Materials</td>
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<tr>
<td>ATA</td>
<td>American Trucking Associations</td>
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<tr>
<td>CTAA</td>
<td>Community Transportation Association of America</td>
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<tr>
<td>CTBSSP</td>
<td>Commercial Truck and Bus Safety Synthesis Program</td>
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<tr>
<td>DHS</td>
<td>Department of Homeland Security</td>
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<tr>
<td>DOE</td>
<td>Department of Energy</td>
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<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
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<tr>
<td>FAA</td>
<td>Federal Aviation Administration</td>
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<td>FHWA</td>
<td>Federal Highway Administration</td>
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<tr>
<td>FMCSA</td>
<td>Federal Motor Carrier Safety Administration</td>
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<tr>
<td>FRA</td>
<td>Federal Railroad Administration</td>
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<tr>
<td>FTA</td>
<td>Federal Transit Administration</td>
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<tr>
<td>HMCRP</td>
<td>Hazardous Materials Cooperative Research Program</td>
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<tr>
<td>IEEE</td>
<td>Institute of Electrical and Electronics Engineers</td>
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<tr>
<td>ISTEA</td>
<td>Intermodal Surface Transportation Efficiency Act of 1991</td>
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<tr>
<td>ITE</td>
<td>Institute of Transportation Engineers</td>
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<tr>
<td>NASA</td>
<td>National Aeronautics and Space Administration</td>
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<tr>
<td>NASAO</td>
<td>National Association of State Aviation Officials</td>
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<tr>
<td>NCFRP</td>
<td>National Cooperative Freight Research Program</td>
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<tr>
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<tr>
<td>NHTSA</td>
<td>National Highway Traffic Safety Administration</td>
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<td>NTSB</td>
<td>National Transportation Safety Board</td>
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<tr>
<td>PHMSA</td>
<td>Pipeline and Hazardous Materials Safety Administration</td>
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<tr>
<td>RITA</td>
<td>Research and Innovative Technology Administration</td>
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<tr>
<td>SAE</td>
<td>Society of Automotive Engineers</td>
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<tr>
<td>SAFETEA-LU</td>
<td>Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)</td>
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<td>TCRP</td>
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<tr>
<td>U.S.DOT</td>
<td>United States Department of Transportation</td>
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