



## **Regional Emergency Evacuation Transportation Coordination Annex**

### **Excerpt – Overview**

This page intentionally left blank.



## Regional Emergency Evacuation Transportation Coordination Annex

### OVERVIEW OF THE REVISED REGIONAL EMERGENCY EVACUATION TRANSPORTATION COORDINATION (REETC) ANNEX

The Metropolitan Washington Council of Governments (COG) adopted the Regional Emergency Coordination Plan (RECP<sup>SM</sup>) on September 11, 2002. Included in the RECP<sup>SM</sup> was a Regional Emergency Support Function (R-ESF) #1 – Transportation chapter, as well as a Regional Emergency Evacuation Transportation Coordination (REETC) Annex. R-ESF #1 and the REETC Annex addressed regional emergency transportation issues, with the R-ESF #1 having an overall perspective, and the REETC Annex focusing particularly on events that might involve evacuation or other protective actions for the population.

A new update of the REETC Annex was undertaken from April 2003 to March 2004. The revised REETC Annex represented an improvement over the September 2002 edition by incorporating the following features:

- An increased level of involvement of federal, state, and local emergency management agency personnel, bringing their vital perspectives into the document
- An improved structure to address how regional emergencies often begin, unfold, and evolve, and strategies to address incident evolution and periods of uncertainty in that evolution
- Better integration with associated protective actions planning, including public warning and education strategies and human behavioral considerations
- More technical detail in the transportation analysis, with better supporting information, databases, and Geographic Information System (GIS) files
- Lessons learned in real incidents, as well as input generated by a series of scenario-based emergency transportation planning workshops held in conjunction with the REETC Annex update process.

The revised REETC Annex follows the standard RECP<sup>SM</sup> chapter outline:

- An “Introduction” section, including a listing of participating agencies and overview of the REETC Annex.
- A “Policies” section, describing the relationship of the REETC Annex to participating agency actions.

- A “Situations” section, examining twelve situations critical to emergency transportation planning.
- A “Concept of Coordination” section, addressing how R-ESF #1 will coordinate (similar to a “concept of operations”).
- A “Responsibilities” section, including systems responsibilities and “essential elements of information” to be shared with R-ESF #5 (Information and Planning).
- A “Preparedness Cycle” section, addressing maintenance of regional readiness on REETC Annex issues.

Following the main text of the REETC Annex, there are three extensive appendices:

- Appendix I contains a set of emergency through route and Metrorail maps, resulting from coordination that took place during revision of the REETC Annex, and reflecting the maps and routings designated by and under the purview of the District of Columbia, Maryland, and Virginia Departments of Transportation and the Washington Metropolitan Area Transit Authority. It was noted in developing the Annex that routes to be used in emergencies are not fixed in advance; rather, they should be identified by officials as safe and appropriate to use according to the nature of the regional emergency.
- Appendix II is a review of findings from technical analysis on potential impacts of successful demand management and public messaging strategies on the region’s transportation system during an emergency.
- Appendix III contains sets of worksheets to provide structure to transportation agency coordination during regional emergencies, including detailed (filled-in) worksheets resulting from workshop discussions held during the REETC Annex update, other sample (filled-in) worksheets addressing several different types of regional emergencies, and a set of blank, ready-to-use worksheets that transportation agencies may utilize in emergencies to guide interagency communications.

### **Revision of the REETC Annex to Reflect Stages or Chronology of a Regional Incident**

The REETC Annex follows the same format as the other components of the existing RECP<sup>SM</sup>, with revised and improved details. These details address *communications strategies* among transportation stakeholders; *systems management strategies* to get the optimum performance out of roadways and transit in the evacuation or other emergency; and *demand-oriented strategies* to encourage prioritization of use of transportation infrastructure by those who most need it. The structure has been revised to reflect the typical chronology or evolution of an incident and its key stages. These stages may be summarized as:

- Discovery of an incident
- Initial transportation reaction and advice
- Convening of transportation representatives (R-ESF #1)
- Convening of regional decision-makers (R-ESF #5 [Information and Planning])
- Agency follow-through actions, and advice to the public (R-ESF #1 through R-ESF #5 to R-ESF #14 [Media Relations and Communications Outreach])
- Continuance and updates
- Recovery or re-entry actions.

The REETC Annex focuses on transportation coordination during a major emergency involving evacuations or other protective actions, and addresses both components.

Transportation coordination issues examined included transportation system and demand management strategies; communications among transportation agencies; and essential elements of information to be provided to the emergency managers and regional decision makers in R-ESF #5 (Information and Planning).

Workshops held during revision of the Annex examined transportation coordination that might take place during specific scenarios, including a potential explosion at Ronald Reagan Washington National Airport, an ice storm, and a complete, extended closure of the Metrorail system. These workshops provided opportunities for stakeholders to probe the effectiveness of regional emergency transportation communication and coordination activities and interactions, such as which agency might take the lead to initiate regional transportation coordination; timing of potential conference calls; and how critical information for transportation management will be obtained and shared.

Protective actions issues associated with emergency transportation were also examined in developing the Annex and in the workshops. These included advance public education; clear warning systems giving appropriate guidance and continuous updates; coordination across jurisdictions, functions, and all levels of government for message content; consideration of special populations such as schools, nursing homes, hospitals, and correctional facilities; and pet or animal considerations in evacuations.

### **The REETC Annex and Communications**

Incidents can affect a large portion of the Washington, D.C. region, with many agencies involved. Even in smaller incidents the impact often will become widespread, especially if they occur at a critical location such as one of the bridges over the Potomac River. It is necessary to recognize early that a local incident may have a widening impact, and that an informed stakeholder should take the lead on shepherding the regional transportation coordination and communications process. Since many incidents affect the entire metropolitan area,

or large portions of it, timely communications are vital inter-jurisdictionally and inter-functionally.

September 11, 2001 was a watershed event in cementing the perception that participants must deal with major incidents as a region, in addition to individual responses. Technology has enabled instant communications, resulting in increased expectations for communicating. One important regional response to 9/11 was to form the means and method for inter-jurisdictional and inter-agency communications and coordination. As a means, COG developed the Regional Incident Communications and Coordination System (RICCS<sup>SM</sup>). As a method, COG developed the Regional Emergency Coordination Plan (RECP<sup>SM</sup>), of which the revised REETC is an important component.

The primary functions of the RICCS<sup>SM</sup> are to support emergency notifications and interagency conferencing. Text messages can be sent to appropriate recipients' pagers, cell phones, or e-mail. Conference calls among key regional decision makers and responders in various function areas can be convened quickly (30 minutes). Such conference calls enable regional incident assessment, coordination of decisions, and crafting of common messages to the media and public. RICCS<sup>SM</sup> supports interagency communications. Information is provided by member agencies (not a new, independent source of information). The Regional Emergency Coordination Plan (RECP<sup>SM</sup>) provides the framework for and structure of the coordination that can be done via the RICCS<sup>SM</sup>.

### **Communications Responsibilities**

Challenges have remained in the transportation sector even after establishment of the RECP<sup>SM</sup> and the RICCS<sup>SM</sup>. Enabling and ensuring inter-agency coordination in major incidents has remained a challenge, particularly during “non-transportation” incidents that secondarily impact transportation conditions. Recognizing that an incident has become a regional incident, especially if there is a significant level of uncertainty about the nature of the incident, remains a challenge for member agency personnel. Personnel busy with incident response have also had to shoulder the additional burden of inter-agency communications, and this has been a challenge from a resource and time perspective. There is no designated authority or staff to shepherd regional interagency transportation communications on a unified, metropolitan-wide basis. All such communications depend upon existing agency staff to add interagency notifications and communications to their already demanding emergency duties. Options for strengthening communications capabilities within the transportation sector were examined during the course of revising the REETC Annex to address this staffing challenge:

- Improving the effectiveness of the current “voluntary” coordination through training and exercises

- Further exploring potential technical improvements, particularly interagency database integration
- Increasing the specificity of the current “voluntary” coordination, perhaps through an agency-by-agency duty rotation cycle
- Creating and funding a dedicated staff to undertake a specialized function of regional transportation information sharing. For example, metropolitan New York-New Jersey-Connecticut has such an institution, called TRANSCOM.

Stakeholders expressed a variety of support, concerns, or objections on all three of these potential approaches, with regard to effectiveness, cost, or institutional complexity. In particular, the cost and cost-effectiveness of establishing a dedicated staff in a new TRANSCOM-like institution was of great concern to many participants. How best to strengthen regional transportation communications and coordination remains a key issue which needs to be addressed by the region.

### **Key Public Communications and Warning Considerations**

Studies and discussions leading to this revised edition of the REETC Annex indicated that advance public education and clear, consistent, and timely messaging during an incident have a significant impact on people’s behavior in an emergency situation. If people are informed in advance about the different kinds of incidents that might occur, and on how to best prepare for and react to these incidents, they are more likely to act both in their own self-interest and in the overall public interest in effectively managing the emergency.

Case studies and extensive research and experience with civilian responses to emergencies suggest that achieving public compliance with emergency warnings and recommended actions is a major effort, requiring advance public education, careful pre-crafting of messages, and timely and repeated dissemination of unambiguous messages by credible sources over multiple channels of communication. Experience has shown that people are generally reasonable and cooperative when they are given adequate information about an emergency, which underscores the importance of getting official information out as quickly as possible, and updating it regularly.

In emergencies, the “first instinct” of fleeing or evacuating may be exactly the wrong thing to do. It may be safer to stay in place. Advance education on appropriate responses to emergency situations, and good and timely public communications in the event of an emergency are among the most critical components of effective emergency management procedures.

## Transportation System Impacts of Communications and Demand Management

In the process of developing this REETC Annex, analysis has been undertaken to test the level of impact that communications and demand management might have on the region's roadway system in an emergency. Appendix II of the REETC Annex shows maps and detail from this technical analysis.

The greatest potential for improvement of flow on the region's roadways, according to the analysis, lies in a reduction of demand (e.g., number of trips). This reinforces the concept that education and messaging to the public not to drive if not necessary for safety reasons may be the best course of action during an emergency. Even moderate levels of compliance with the "if you are safe, stay where you are" message can help alleviate projected congestion and improve flow for both persons evacuating from danger as well as responder vehicles. Analysis conducted during the update of the REETC Annex suggested decreases in travel times by as much as 50% for some critical evacuees, especially in the critical first 30 minutes of a regional incident, when emergency responders and people fleeing danger are most in need of travel.

Demand reduction strategies may offer the possibility of best facilitating the needed transportation response to an emergency, could be developed in the near future, and could be implemented without the large capital expenditures and long construction periods associated with transportation system capacity increases. Additionally, information developed in conjunction with the REETC Annex may help transportation agencies to identify bottlenecks, and in turn to identify which transportation system capacity improvements could further improve levels of service under emergency conditions.

### Summary

Revision of the REETC Annex provided an opportunity to strengthen regional emergency transportation coordination, and to identify areas where further strengthening is needed. The need for more extensive public education well before an emergency takes place was made clear, as was the need to have a concerted, coordinated protective actions-focused regional effort to address public information, outreach, and timely messaging during an incident. A need was also identified for continuing planning to strengthen regional emergency communication and coordination in the transportation sector, focused in particular on the management of inter-agency communications, and communications with the public, on a real-time basis during a regional incident.



## Acknowledgments

The March 2004 update of the REETC Annex was advised by the R-ESF #1 – Emergency Transportation Work Group, chaired by the Honorable David Snyder of the City of Falls Church, Virginia. Annex development was also supported by a number of committees, participants, consultants and staff. The consultant team of the Louis Berger Group, Inc., BMI-SG, Inc., Caliper Corporation, and independent consultants supported development of the Annex, with particular thanks to principal author Deborah Matherly and consultant David McMillion. COG staff project management was provided by Andrew Meese for transportation aspects, and by Vincent Sakovich for protective actions aspects. The time and interest of Chairman Snyder and the many Emergency Transportation Work Group participants, representing transportation, emergency management, public safety, federal, and other agencies, were greatly appreciated.