



Essentials of DOT EM program:

- Comprehensive, systematic, coordinated program that is both a daily business requirement and a strategic enterprise-wide risk management responsibility.
- Programmatic approach focused on outcomes, impacts & consequences rather than on specific hazards.
- Supports all phases of emergency management:
 - Prepare assess risks and potential impacts along with planning and exercising plans to address those risks.
 - Mitigate identify and implement adaptations to reduce consequences.
 - Respond identify and implement critical tasks to be done and activate resources required.
 - Recover restore services, repair damaged infrastructure, and support resumption of community social and economic activities.

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Overall structure to support EM varies but all

- Organization-wide policy setting for agency and to support state needs.
- Structure and resources to support EM operations.
- Deployment, coordination and management of EM personnel and resources for agency and mission essential functions.
- Ability to address different levels of emergencies from local to state to multistate and national events.
- Training on plans and EM roles on an annual or greater frequency, with participation of other states, state agencies and community.

An effective emergency management program is:

- Comprehensive considers all threats, hazards & impacts, all phases from preparedness & mitigation to response & recovery, and all stakeholders with focus on equity and underserved groups.
- Progressive anticipates future disasters and takes protective, preventive and preparatory measures to build resilience.
- Collaborative and Integrated creates and sustains relationships among agency personnel and other agencies to ensure a unity of effort.
- Coordinated works to achieve a common purpose and supportive activities.
- Flexible uses creative and innovative approaches to challenges.

Agency Action Step

Develop and maintain an EM culture:

- Be intentional about EM. Have an EM program manager or executive-level EM champion to drive the culture & gain agency-wide buy-in.
- Promote the importance of EM through leadership. Make EM a core part of the agency's work.
- Establish a shared understanding of the agency role in EM.
- Recognize the role everyone at the agency plays in EM criteria. Encourage cross-disciplinary teams and be proactive.
- Provide training on both the importance of EM and how to implement EM at the agency.
- Establish agency EM performance measures.

Overcome major challenges to EM programs:

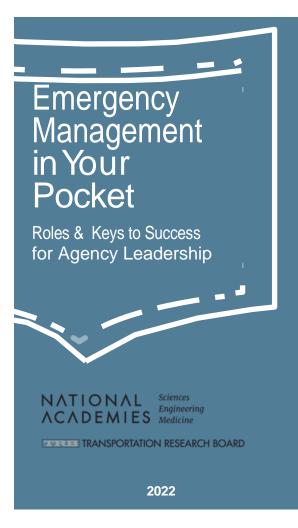
- Take an expanded, full-cycle view of EM and its role in resilience. Ensure the benefits of EM are recognized.
- Recognize that EM is a shared responsibility that requires the involvement of everyone in the agency and external partners. Enhance information flows and dialogues to create necessary partnerships.
- Spotlight good EM practices and identify opportunities to incorporate effective EM approaches in agency.
- Explain how preparedness and investment in EM can reduce costs, save lives and keep the transportation system functioning. Identify common causes that garner support from others inside and outside the agency.

Establish a path for EM program maturity:

- Integrate EM into current agency processes such as maintenance & operations, planning and project development.
- Formalize After Action Reviews and track follow-up actions to ensure SOPs are updated and approaches are modified based on lessons learned.
- Tie EM funding to a strategic plan that includes funding needs over the long term that adapts to changes in weather patterns, hazards, and technology.
- Engage community and interstate partners to jointly develop plans and EM implementation procedures for resilience of multimodal critical transportation systems.
- Institutionalize EM workforce development. Establish EM training requirements and frequency of training.

Emergency Management is:

- A continuous process by which agencies manage all hazards to avoid or reduce the impact of disasters resulting from the hazards.
- An all-phase effort. Mitigation and preparedness phases are vital for minimizing and/or removing hazards prior to an incident response and recovery.





Agency Leadership Role:

- Success in emergency management is a result of emphasis by top leadership.
- Be a champion for EM –promote its importance and ensure that everyone at agency recognizes role they play in EM.
- Develop an EM culture at the agency with engaged professional staff who are actively improving activities and procedures.

Agency Leadership Keys to Success:

- Prepare yourself. Know what events are likely to occur and the system sensitivity to different types of events.
- Provide clear direction with priorities and goals that support a culture of preparedness.
- Understand DOT capabilities and resources and how they can help in an emergency.
- Support and motivate the EM team. Provide funding commensurate with other obligations.
- During an emergency be visible, be empathetic, advocate for the agency, overcommunicate, see the "big picture" and make corrections to your plan when necessary.

Emergency Manager Role:

- Responsible for implementation of all phases of EM: preparedness, response, recovery and protection/mitigation.
- Advocate for the EM program and the importance of EM at the agency
- Build and maintain relationships at the agency and with outside agencies and community organizations.
- Liaison to all state-level emergency planning and transportation representative to ESF-1.

Emergency Manager Keys to Success:

- Know what the agency needs to do before, during and after an event.
- Promote and facilitate teamwork. Develop and maintain relationships with key operational staff.
- Be prepared. Understand what people, resources and assets may be needed for every type of event an agency may encounter. Have people and resources ready in advance.
- Communicate up, down and across.
- Recognize the contribution of others.

This handout is supplemental to NCHRP Research Report 1093: An Emergency Management Playbook for State Transportation Agencies (NCHRP Project 20-116). The full report can be found by searching on the report title on the National Academies Press website (nap.nationalacademies.org).

Agency Action Steps

Encourage collaboration throughout the agency and with agency/community partners:

- Strategic, innovative relationships can lead to smoother, coordinated responses and improve recovery.
- Build on existing relationships within and outside of agency. Maintain and share contact lists.
- Conduct joint exercises and training sessions and explore other coordination options with regional, state, local, and tribal working groups, task forces and planning organizations.
- Co-locate staff in common spaces and exchange staff liaisons with key partners.
- Identify common information and data needs and facilitate the sharing of information within and outside of agency.

Take advantage of existing data and measures to establish performance measures:

- Determine comparable data metrics that can be used to help quantify EM results and benefits.
- Use measures that can be translated into meaningful terms and actions
- Focus on quality over quantity. Measure what is most important. Look for performance indicators that provide then most valuable information.
- Track current level of preparedness and identify efforts making a difference.

Recognize role of EM in resilience:

- Responding and recovering more quickly after an event and having resources readily available to quickly restore services and repair/replace damaged elements/structures increases system resilience.
- Apply lessons learned from previous events to improve current agency practices and evaluate and update plans.
- Incorporate flexibility and versatility in agency practices and operational decisions to improve responsiveness and resilience.
- Explore technology and new materials for use in EM, exploring innovations in communications and situational awareness, and using materials that can better address current and future conditions.

Sustaining Success:

- Find ways to measure progress and success.
- Document EM processes, update based on learnings, and review yearly at minimum.
- Ensure supportive systems, resources and infrastructure are in place.
- Establish a training program so EM becomes a practiced part of agency operations.