



# Evacuation Planning

## Special Report & Survey Results

## DomPrep Survey

# Evacuation Planning

Prepared by John Contestabile, Former Engineering & Emergency Services, Maryland Department of Transportation; Summarized by John F. Morton, DP40



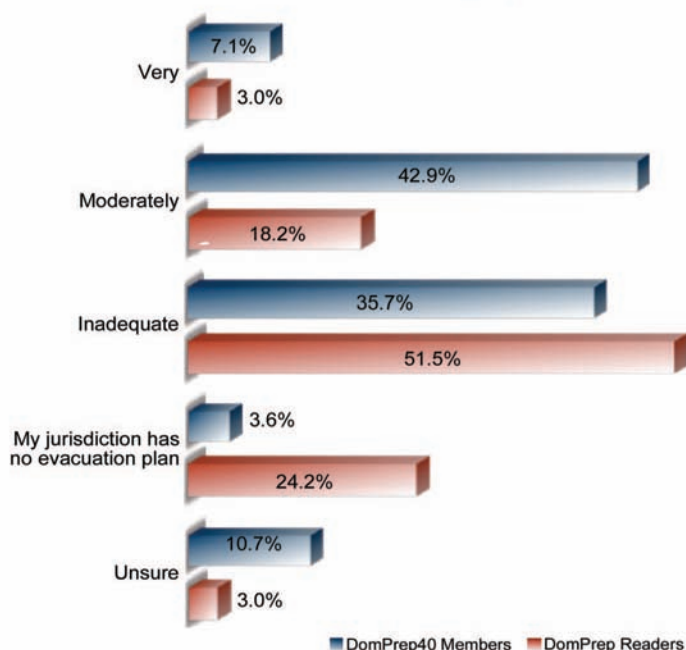
DomPrep has surveyed the DomPrep40 and DomPrep Journal readers for their opinions on the nationwide progress of evacuation planning. In 2006, when the U.S. Department of Transportation (DOT) and U.S. Department of Homeland Security (DHS) evaluated and reviewed the Gulf Coast states' catastrophic-hurricane evacuation plans, they found a number of areas in need of improvement – in the multi-jurisdictional identification of weaknesses in specific plan elements, for example. We wondered: Is that still the case?

DomPrep40 member John Contestabile (pictured), the assistant program manager for homeland protection at the Johns Hopkins University's Applied Physics Lab, has been among those who want to find out and drafted this survey. As the former director for engineering and emergency services at the Maryland Department of Transportation, he has for many years had a vital professional as well as personal interest in getting the evacuation details right.

"Evacuation plans are an essential component of almost every major disaster," Contestabile pointed out as he prepared our survey. But "inevitably," he continued, citing numerous after-action reviews, "they seem to go badly." At all levels of response, and responsibility, the federal, state, and local jurisdictions of government are required to develop effective evacuation plans and to have those plans in place before, not after, disaster strikes. This is not an easy task, he acknowledged. A major evacuation "is a multi-jurisdictional/multi-agency drill." Also, because more grant funding has been allocated in recent years to interoperable communications "and to the acquisition of other 'gear' – not in itself a bad thing, to be sure – one wonders ... how many jurisdictions are where they need to be on comprehensive evacuation planning?"

Because so many hurricanes hit various areas of Florida each and every year, that state is one that seems to be reasonably proficient in planning for, and carrying out, major evacuations. "But," Contestabile has asked, "could this be more the result of practice than planning? And how many

In your opinion, how mature and comprehensive are your own jurisdiction's evacuation plans?



### The DomPrep40

The DomPrep40 is an interactive advisory board of insider practitioners and opinion leaders who have been asked to offer advice and recommendations on pertinent issues of the day. Focusing primarily on all-hazard preparedness as well as response and recovery operations, they will be challenged to provide quantifiable feedback that will be shared with the DomPrep audience.

### DomPrep40 Members

**John Morton**  
Strategic Advisor

**James Augustine**  
Chair, EMS & Emergency Department Physician

**William Austin**  
Chief, West Hartford Fire Department (West Hartford, CT)

**Ann Beauchesne**  
Vice President, National Security & Emergency Preparedness Department, U.S. Chamber of Commerce

**Joseph Becker**  
Senior Vice President, Disaster Services, American Red Cross

**Robert Blitzer**  
Former Chief Domestic Terrorism/Counterterrorism Planning Section, National Security Division, FBI

**Bruce Clements**  
Public Health Preparedness Director, Texas Department of State Health Services

**John Contestabile**  
Former Director, Engineering & Emergency Services, Maryland Department of Transportation

**Craig DeAtley**  
Director for Institute for Public Health Emergency Readiness

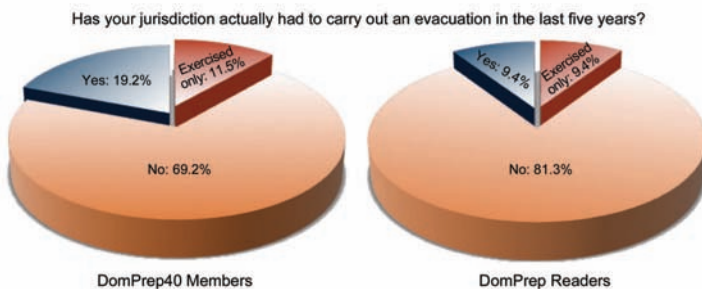
**Nancy Dragani**  
Former President, National Emergency Management Agency (NEMA), Executive Director, Ohio Emergency Management Agency

other jurisdictions [throughout the country] can say they have that same level of experience needed to do evacuation planning properly?"

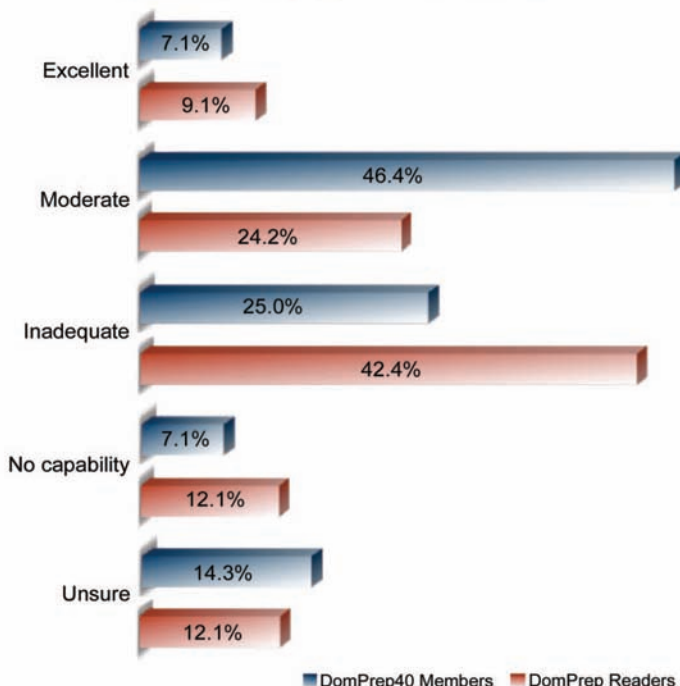
**Key Findings:** In general, DPJ readers were more skeptical of the progress of evacuation planning than were the DP40. Evacuation planning may be progressing in many states, but still seems oriented to vehicular paradigms. Nonetheless, it is somewhat surprising that transportation agencies are not more widely represented as lead agencies in the development of evacuation plans. Moreover, at least some state plans may need to "mature" by, among other things, expanding the "special categories" of likely evacuees that should be included in the plans – the state's (or community's) transit-dependent and prison populations, for example.

### Following are the complete survey results:

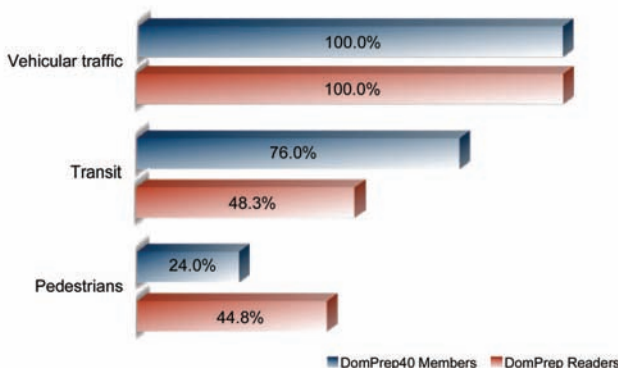
About half of the DP40 said that their jurisdictions have "very" or "moderately" mature and comprehensive plans, but over 35 percent say that those plans are "inadequate."



How adequate is your jurisdiction's ability to monitor, in real time, the progress of an evacuation?



Check any/all of the following modes of transportation that your plan addresses



### DomPrep40 Members

**Warren Edwards**  
Major General USA (Ret.), Director, Community & Regional Resilience Institute (CARRI)

**Katherine Fuchs**  
Deputy Chief FDNY Emergency Medical Services Command

**Ellen Gordon**  
Member, Homeland Security Advisory Council and Naval Postgraduate School Center for Homeland Defense Security

**Kay Goss**  
Former Associate Director, National Preparedness Training & Exercises, FEMA

**Steven Grainer**  
Chief, IMS Programs, Virginia Department of Fire Programs

**Jack Herrmann**  
Senior Advisor, Public Health Preparedness, NACCHO

**Cathlene Hockert**  
Continuity of Government Planning Director, State of Minnesota

**James Hull**  
Vice Admiral USCG (Ret.), former Commander, Atlantic Area

**Harvey Johnson, Jr.**  
Vice Admiral USCG (Ret.), former Deputy Administrator & Chief Operating Officer, FEMA

**Dennis Jones, RN, BSN**  
Executive Consultant, Collaborative Fusion Inc.

**Robert Kadlec**  
Former Special Assistant to the President for Homeland Security and Senior Director for Biological Defense Policy

**Neil Livingstone**  
Chairman & CEO, Executive Action

**James Loy**  
Admiral USCG (Ret.), former Deputy Secretary, DHS

**Adam McLaughlin**  
Preparedness Manager, Port Authority of NY & NJ (PATH)

However, over half of DomPrep readers responding said their jurisdictions' plans were inadequate, and another quarter said their jurisdictions had no plans. The results between the two groups are significantly divergent, with readers harboring a greater skepticism.

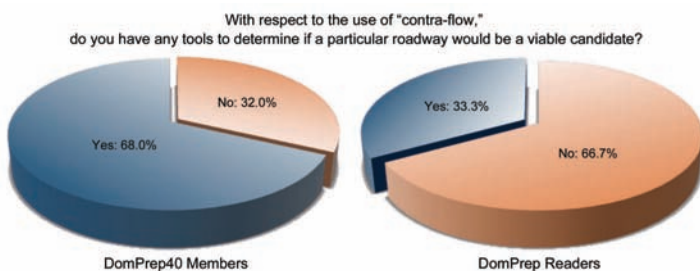
Just under 70 percent of the DP40 said their jurisdictions have not conducted an evacuation in the last five years. Yet over 80 percent of DPJ readers replied in the negative, validating our initial assessment based on the DP40 results that actual evacuation experience is widely lacking.

About half of the DP40 said their jurisdictions have an excellent or moderate real-time ability to monitor an evacuation. But over half of DomPrep readers said their jurisdiction's monitoring ability is inadequate or non-existent. Again, the assessment from the field is more downbeat.

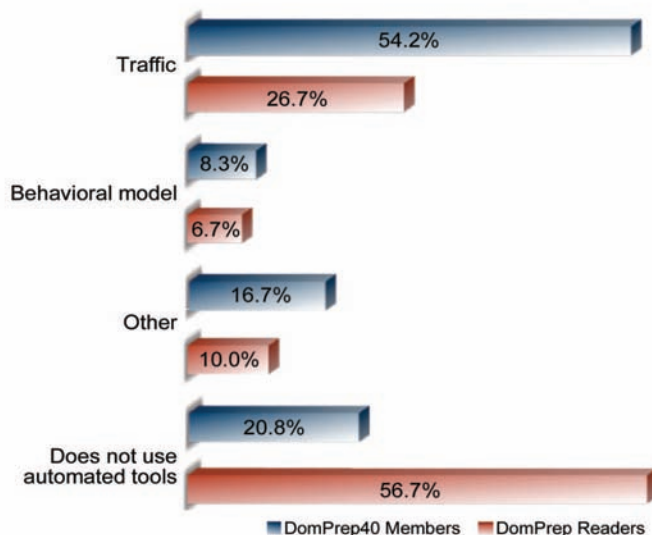
Perhaps not surprisingly, both groups felt plans addressed vehicular traffic well. They were less confident of plans for transit and pedestrians, although on this question readers were more positive than their colleagues in the DP40.

The DP40 and readers agreed on contra-flow. In both sets, just over two-thirds said their plans have the tools needed for determining candidate contra-flow roadways. This result validates our initial assessment that those jurisdictions whose contra-flow considerations should be updated and expanded can look to other jurisdictions to find working examples of the tools needed.

While four out of five DP40 members indicated their belief that their jurisdictions used automated tools to plan evacuations, more than half of DomPrep readers said their jurisdictions do not use such tools. They differed also on the weight placed on traffic data sources. Only one in four readers said that was the case. For the DP40, it was over half. As for behavioral models, the low response in both groups seems to indicate that they might have been written off or simply not considered.



With respect to the possible use of automated tools to plan an evacuation, which data sources do those tools rely on?



## DomPrep40 Members

### Vayl Oxford

Former Director, Department of Homeland Security's Domestic Nuclear Detection Office (DNDO)

### Joseph Pennington

Senior Police Officer, Houston Police Department

### Joseph Picciano

Deputy Director for Preparedness, NJ Office of Homeland Security & Preparedness

### Stephen Reeves

Major General USA (Ret.), former Joint Program Executive Officer for Chemical & Biological Defense, DOD

### Albert Romano

Senior Vice President, Homeland Security, Michael Baker Jr. Inc.

### Jeff Runge

Former Chief Medical Officer, Department of Homeland Security

### Richard Schoeberl

Former Executive, Federal Bureau of Investigation & the National Counterterrorism Center

### Dennis Schrader

Former Deputy Administrator, National Preparedness Directorate (NPD), FEMA

### Robert Stephan

Former Assistant Secretary of Homeland Security for Infrastructure Protection

### Joseph Trindal

Former Director, National Capital Region, Federal Protective Service, Immigration & Customs Enforcement (ICE)

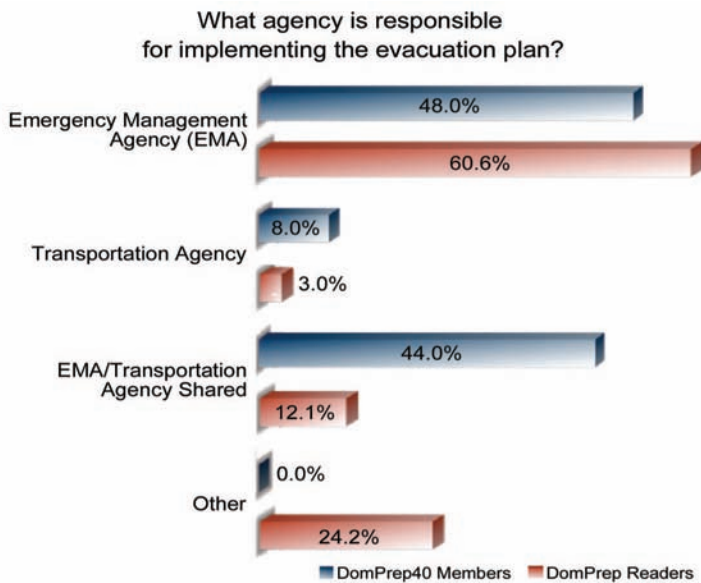
### Theodore Tully

Director, Trauma & Emergency Services, Westchester Medical Center (Westchester County NY)

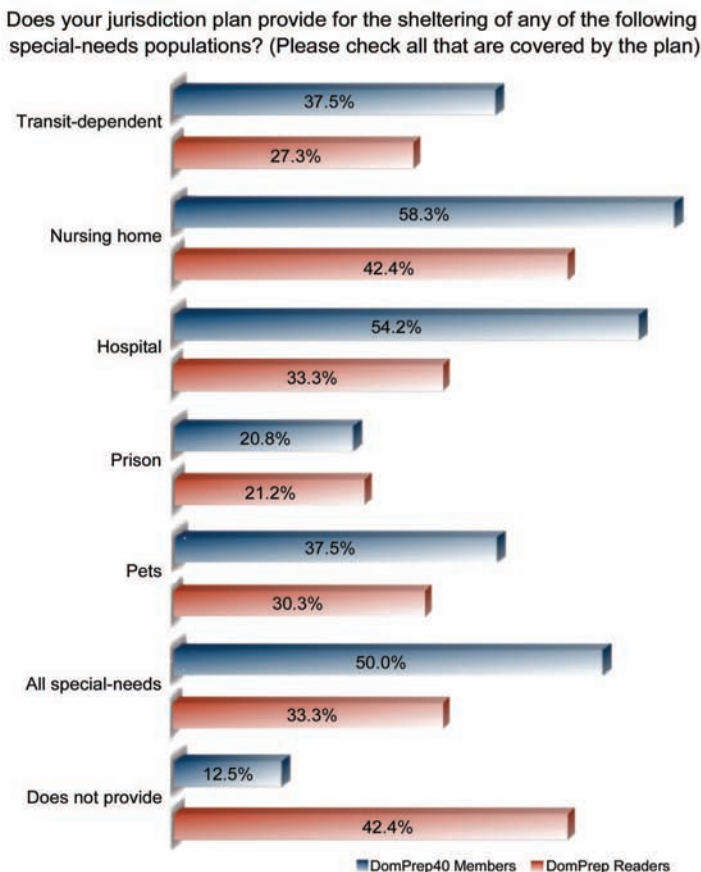
### Craig Vanderwagen

Former Assistant Secretary for Preparedness & Response, U.S. Department of Health & Human Services

The DP40 said Emergency Management and Transportation Agencies have the evacuation lead, with 48 percent saying that their jurisdictions have made their emergency management agencies responsible for evacuation plans; 44 percent said that emergency management shared the responsibility with transportation. Readers, on the other hand, at over 60 percent, said it was an EMA responsibility. Another significant divergence of opinion.



On sheltering for special-needs populations, here again, readers responded more negatively. Just over 42 percent of DomPrep readers said their plans do not provide for special-needs populations. Only 12 percent of DP40 members said their plans failed to provide for such populations. As for all categories of special-needs populations, only a third of readers said they are covered, whereas for the DP40 it was fifty percent. For both groups, transit-dependent and pet populations came up a little short, though – and prison populations were largely ignored, with just over 20 percent of readers and DP40 members saying that prison populations are included in their jurisdictions' evacuation plans.



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