



**weather.com**

**THE WEATHER CHANNEL FORUM**  
**POLICY ISSUES IN HURRICANE PREPAREDNESS**  
**AND RESPONSE**

**A workshop developed by the**  
**ATMOSPHERIC POLICY PROGRAM**  
**AMERICAN METEOROLOGICAL SOCIETY**



---

---

# **RESPONSE STRATEGIES**

## **POSITION PAPERS**



weather.com

**THE WEATHER CHANNEL FORUM  
POLICY ISSUES IN HURRICANE PREPAREDNESS  
AND RESPONSE**

**A workshop developed by the  
ATMOSPHERIC POLICY PROGRAM  
AMERICAN METEOROLOGICAL SOCIETY**



---

---

**RESPONSE STRATEGIES PANEL**

**Primary Focus Questions**

- 1. What additional forecast products or services could assist in making the response decisions?**
- 2. How can the media assist more effectively in conveying important response information to the public?**
- 3. What policy changes at the federal, state, and local levels would enable more effective hurricane response decisions?**

**Response Strategies: Position Paper**  
**Earl J. “Jay” Baker**  
**Department of Geography, The Florida State University**

**Storm Surge is Still the Greatest Threat**

The threats to public safety from wind and inland flooding in hurricanes are real and must not be overlooked. However, the only hazard that has the realistic potential to kill hundreds or even thousands of victims in a single event is storm surge. Attention directed at wind and inland flooding should not detract from efforts addressing storm surge. Likewise, there are subgroups of coastal populations who have special response problems that deserve attention in hurricane preparedness. If a massive loss of life occurs in a hurricane in the United States, however, it probably will not be because a “special-needs” population failed to respond adequately. It is more likely to be because a substantial portion of the general public failed to respond appropriately. The nation must continue to refine its efforts aimed at preventing large loss of life from storm surge in coastal communities at large. When hurricane Andrew made landfall in south Dade County, Florida, in 1992, 30% of the residents of beach areas a short distance to the north in Dade and Broward Counties were still in their homes. Less than a third of the residents of North Carolina’s Outer Banks have evacuated in any of the hurricane threats posed to that area during the past decade, including Floyd in 1999.

**People at Greatest Risk Need to Understand It**

General knowledge about hurricanes is not a good predictor of whether at-risk residents will evacuate. Belief that one’s own residence would be unsafe in a hurricane is a good predictor, and that is where public information activities should focus. Many residents of barrier islands believe their homes would be safe even in major hurricanes, and the problem is worse among occupants of surge-prone mainland locations. The public needs to be told why some people need to evacuate and why others do not and who falls into each group in various situations.

This needs to occur before a hurricane threatens, as part of long-term public education and during an actual threat as part of official evacuation notices. The two best predictors of whether people evacuate are their perception of personal vulnerability and their belief that officials have told them to evacuate. Alert stages such as watches and warnings are more important for agency and media response than for public response. The public responds to instructions, and public officials need to explain the rationale for instructions being issued and then to make those instructions as explicit and as useful as possible. The term “low-lying area” is not explicit enough to be helpful.

Most people still rely on local television more than any other source of information. Officials should make color-coded, large-scale evacuation zone maps available to local television stations and explain how they can and should be used by the stations during a hurricane threat to inform residents of the need to evacuate. In most locations, less than 10% of residents rely on the Internet to any extent for hurricane information, and only about 20% use it at all. Local Web

sites can, however, be used as an effective means of providing information to local media that, in turn, can be disseminated to the public.

### **Too Many People Leave from Safe Areas and Too Many Evacuees Go Too Far**

Although the greatest problem facing coastal communities is getting people out of areas likely to experience dangerous flooding from storm surge, there are corollary problems of having too many people leave from safe locations and having evacuees travel farther than necessary. Having more people than necessary on roadways during an evacuation increases the time required to complete the evacuation and to clear the roads. Congestion makes it more difficult to get people at greatest risk to safety and increases the likelihood of a storm arriving with traffic still on roadways.

In Floyd the so-called “shadow evacuation” was substantial in some locations—people leaving from areas not being advised or ordered to evacuate. In some instances, residents mistakenly thought official evacuation notices included their locations. In other cases, residents mistakenly believed their homes were unsafe. After Floyd, more than 25% of the residents of noncoastal counties bordering coastal counties said they thought storm surge or waves from Floyd would have made their homes unsafe if Floyd had struck the nearby coast. The same activities discussed above that are aimed at ensuring that people in high-risk storm surge areas understand why they need to evacuate should also help others to comprehend why they do not.

Evacuation route congestion is also complicated by evacuees traveling farther than necessary to reach safety. Evacuees from barrier islands often travel through other areas of their community that are not being told to evacuate and proceed onto interstate highways on which they drive 200 miles to a location farther inland. In Floyd (and Opal and Andrew) many of those people spent many unhappy and potentially dangerous hours more than they had anticipated traversing those distances. Evacuees need to be made aware, once again, why residents living in some areas need to leave their homes while those living in other areas do not. They then need to be made aware of the respective risks of getting on the highway and trying to leave town versus the risks of staying with a friend or relative in one of those neighborhoods of their own community not being told to evacuate.

The public responds better to information and instruction from public officials than officials sometimes expect. To a considerable degree officials can affect who leaves, when they depart, and where they go. Messages and means of disseminating them need to be designed well in advance of an actual threat to be most effective, however.

### **Someday an Evacuation Will Fail**

One of these days, something will go wrong in an evacuation and tens of thousands of people will remain in areas vulnerable to severe storm surge flooding and waves when a major hurricane actually arrives. The problem could arise from too few people leaving from areas told by officials to evacuate, or it could result from traffic snarls keeping people from being able to get out of the dangerous areas.

At least as likely, though, the problem will result from a dramatic, unforecasted change in track, intensity, or forward speed of the storm, and public officials will have placed too much

confidence in prior forecasts. The weakest link in current evacuation plans in most locations is the failure by public officials to employ evacuation decision-making systems that adequately incorporate forecast uncertainty. There is too much reliance by officials on the forecast and on watches and warnings. There is too little use and comprehension of probabilities and other expressions of forecast uncertainty. The National Weather Service needs to explore ways to help public officials to develop decision-making schemes that systematically incorporate measures of forecast uncertainty.

### **Coastal Communities Need Plans for Refuges of Last Resort**

Nevertheless, a situation will still develop someday in which many people remain in highly vulnerable coastal areas with a storm approaching and no chance to get out of the area. All coastal communities need to ascertain the steps that a trapped population could take to maximize their likelihood of survival in such circumstances and to develop plans for implementing those actions. In most places, the steps will include going into multistory buildings outside the breaking-wave storm surge zone. Those buildings are often called refuges of last resort. This option is not a good one, but it is preferable to having thousands of people in their own homes, five feet above sea level, with a 15-foot storm surge arriving.

## **Response Strategies: Position Paper**

**Walter S. Maestri**

**Director, Jefferson Parish, Louisiana, Department of Emergency Management**

Clotile Boudreaux, the mama of the nine Boudreauxs, just called the Jefferson Parish Emergency Operating Center to ask which route she should take to evacuate from her house trailer along the Grand Cheniere leading from Grand Isle to Thibodeau so as to escape the ravages of Hurricane Georges. Her call was preceded by a call from Thibeau Jones, a blind man, aged 80, who needs transportation to the Parish “special-needs” shelter. Ralph Simoneau also called to inform us that someone should pick up his mother and take her to safety because he is evacuating with his cat, and his mother and his cat do not get along, so he is taking his cat to safety and leaving us his mother. There are also more than 25 callers holding to speak to someone in the Jefferson Parish EOC, because their situation is also unique, they feel, and they deserve special consideration.

Response strategies at the local level in any weather emergency revolve around the specific hazards affecting the community and the picayune issues of the citizens. It is imperative that forecasters and reporters keep these facts in mind.

Emergency planners need specific products related to explicit locations and conditions, and they need them quickly. Forecasters, especially those based in the National Weather Service’s regional and local offices, should make themselves familiar with the topography, geography and special features of their locales and must adapt the information coming from the national centers to the local situation. They must remember that emergency planners are hoping to use the information they provide to make very pragmatic decisions that effect the lives and property of the Boudreauxs, Joneses and Simoneaus in their communities.

In this regard, there are two issues that continue to trouble local emergency managers. The first concerns the “pure science and facts” that meteorologists, especially those attached to the major forecasting services, often are tempted to offer. Specifically, these scientists often offer their forecasts with the certainty of mathematicians. And then, only in the fine print, do they indicate the conditions that must prevail if their “facts” are to prove true. Often those providing this scientific information to the public do not mention these limiting conditions. Under this scenario, important technical data and possible real weather conditions meant for discussion and debate by local and regional decision makers and other meteorological experts are communicated as fact to the public. The result is mass confusion.

The second issue stems from the “media events” that potential disasters have become. Most local television and radio outlets begin 24-h coverage the moment a hurricane watch goes up and the competition for viewers/listeners begins. Because of the nature of this programming, a new competition emerges between and among the media-based meteorologists to be first with the specific track of the storm being forecasted. In these instances, anything resembling the forecast error bands provided by the National Weather Service is often ignored or forgotten. In my own community, a fierce competition exists between several of the local meteorologists as to who will predict the actual storm track first. This is further complicated because each of these local

forecasters has his/her own loyal following, and rather than pay attention to the emergency managers whose directions must follow the full implications of the official forecasts, many citizens follow the predictions of their favorite. If, per chance, the local guru is predicting that the storm will not make landfall nearby, then rather than evacuate, the disciples stay put. This decision could have disastrous consequences.

Now, in no way do I want to interfere with the competitive urges of the American media. It seems only logical, however, that a caveat be issued with each prognostication. That caveat must, at the least, include the official forecast offered by the National Weather Service, including the ranges of possible forecast error. Reporters must also recognize that it is not only the “eye” of the hurricane that causes devastation. Where the “eye” makes landfall is often much less important than which communities will be impacted by the right, front quadrant of the storm. This is especially relevant when tidal surge forecasts are being offered.

Everyone in this endeavor must always remember that we are responsible for the lives and property of many in our communities. Therefore, all the caveats and possible other interpretations, understandings and conclusions must be considered.

These two issues—“over scientization” and “the first with the track”—must be addressed by those entrusted with the lives and property of their neighbors. The reality is that we are all—emergency managers, reporters and forecasters—burdened with this trust.

# **Policy Changes Needed to Optimize Hurricane Preparedness and Response Strategies: A Local Perspective**

**John D. Wilson**

**Director, Lee County Public Safety**

## **Background**

Ensuring effective hurricane response requires a number of inputs from the weather service, the media, and emergency managers. From the weather service, emergency managers and elected officials need to know where the storm is heading, how fast it is moving, and how strong it may be when it gets there in order to foster timely evacuations. The media play the pivotal role of relaying warning and evacuation information to those at risk as well as educating them to their risk before the emergency takes place. Emergency managers need to know response times both to evacuate those at risk and to prepare for evacuation and must have plans and procedures in place to carry out effective response measures.

This triparty effort faces even greater challenges today from a public that chooses to focus many of its activities in hurricane-prone areas. Increasingly, people live or conduct economic activities in low-lying coastal areas or live in housing that historically has not fared well from the impacts of hurricanes. Longer evacuation times loom on the horizon that force emergency managers to evaluate not only the traditional regional impact of hurricane response but also interstate impacts. These evacuation time increases also seem to cancel out any advances made in improving the certainty of forecasting hurricanes. Safe shelter areas in coastal communities fail to keep up with the potential demand. The age of computer access to information has fostered the concept of “Internet Time”—a concept that has not translated well to the gap between the expectations and reality of moving hundreds of thousands of evacuees long distances when threatened by a major hurricane.

As this workshop meets to evaluate and to recommend policy changes that address these challenges, this paper examines measures that could improve response strategies. The paper presents recommendations to the following questions:

1. What additional forecast products or services could assist in making response decisions?
2. How can the media assist more effectively in conveying important response information to the public?
3. What policy changes at the federal, state, and local levels would enable more effective hurricane response decisions?

## **Additional Forecast Products**

***Consider furnishing wind forecast information to assist in helping to initiate and to complete evacuation operations.*** Such information could include the expected onset and duration of sustained winds and when tropical storm-force winds would affect the area. This information

would help in adjusting when to initiate traffic management plans and when to initiate refuge-of-last-resort plans.

***Consider a regional focus in meteorological products furnished to emergency managers.***

Currently, warning of the population focuses on points along the coast, usually a known city. Probabilities of a hurricane strike also center on these points. When a major or catastrophic hurricane threatens the United States, however, the uncertainty still inherent in the hurricane forecast requires a regional perspective. Many coastal communities now look at the 36-hour-or-longer period as the point where decisions about what protective actions should be taken. In addition, many states have prepared regional evacuation scenarios to account for the hurricane's impact and the forecast uncertainty requiring "over warning" of areas. A probability product identifying which region of the country (as defined by the hurricane evacuation studies funded by FEMA, NOAA, the U.S. Army Corps of Engineers, and others) is at higher risk may be extremely useful in fostering effective decision making and response.

**Media Assistance**

***For the TV media, help balance the reality of the "30-second" sound bite with the need to educate uninformed residents of their risk.*** All too often, the time that most coastal residents think about their risk to hurricanes is when the storm is at their doorstep. More time devoted to informing of their risk, where to go, and what to do at this time would be extremely valuable to emergency managers. Using the crawl systems on the TV screen to convey time-sensitive information about shelter openings and road closings would also be helpful.

***For the radio and newsprint media, consider supporting community or regional joint information centers.*** Many communities lack the resources to convey public information effectively over an extended period of time. Some communities also feel they receive reduced media coverage because they are on the fringe of a media market. Using joint information centers would allow communities to make better use of their information resources through pooling. Using the technology of "meet-me" conference calling would also allow media resources with limited staff to take part in emergency information briefings without having to be there.

***Initiate earlier-morning broadcasting times in potential hurricane threats.*** One of the most important decisions made by public officials is when to close schools and offices because of the threatening storm. Traditionally, officials announce this decision at the 10 or 11 P.M. newscasts in markets where the broadcast media go off the air after the late shows. Scheduling newscasts starting at 4 A.M. would allow emergency managers and other officials to wait to this time to announce school or business closings with more certainty about what the storm might do.

***Obtain information for evacuees about what is happening in their hometown.*** Major hurricane evacuations now require coastal residents to move inland, often to areas covered by different media markets. These residents find it difficult to obtain information about their home areas. Linking to coastal or state emergency operation center or joint information center Web sites in coastal areas may help in getting this information to inland areas.

## Policy Changes

***If we have to “over warn” threatened areas, must we also “over evacuate” them?*** The regional and multistate hurricane evacuation studies conducted over the past 20 years have given us an overall picture of our nation’s hurricane risk. However, they have focused on “worst-case” scenarios to define this risk based on the SLOSH numerical computer model results. Emergency managers, in turn, have developed decision-making tools to respond to these scenarios. Have we now placed too much emphasis on the “worst-case” scenario because of the uncertainty inherent in the hurricane forecast and our concern over operational liability? Is it now time to link an area’s historical experience with hurricanes to these risk scenarios in our hurricane evacuation studies?

***Reduce the effect of “shadow” evacuations.*** Related to the above point is people evacuating from areas who do not need to. Part of the solution lies with better public awareness of the need to stay at home in homes that are suitably constructed and protected from missile impacts and that are not subject to flooding. It may also be helped by examining the way we convey risk. For example, some areas of the country identify their storm-surge threat risk to minor hurricanes with green or blue colors on maps—colors that normally convey a sense of “safety.” On the other hand, areas threatened by major hurricanes are shown in yellow and red, colors that are associated with danger or caution. Perhaps those colors should be reversed to encourage the most exposed to flooding to leave and not to encourage people living further from the surge threat to evacuate also.

***Is “survivable” better than “safe?”*** The past decade has seen a significant loss in the number of “safe” hurricane shelter spaces in coastal and inland areas. Although shelter usage by evacuees is not high, the resultant publicity over the effort to identify these spaces (or lack thereof) may convey a sense of insecurity about the safety of all the community’s buildings. This perception may lead to more people evacuating than should. Because few buildings meet the safe definition as currently defined without significant public subsidy, would it also be prudent to develop a building standard based on the ability to survive the storm? Along with this is the need to provide some incentive for private and public building owners to furnish their buildings as shelters.

***Improve the ability to monitor and to convey time-sensitive evacuation information to those travelling the highways.*** Freeway incident management programs offer a way to implement measures to make smarter and more efficient use of current highway systems. Plans for such systems in coastal states should consider its use in monitoring large-scale hurricane evacuations. This could include making funding available to buy or install electronic variable-message traffic signs that can be remotely programmed from a local emergency operation center or traffic management center to convey up-to-the-minute travel and shelter information. Placing the NOAA Weather Radio frequency band in radios of vehicles purchased in the United States would also be helpful.

***Include the prospect of lane reversal movement in the design of limited-access highways.*** If large numbers of people moving from coastal to inland areas are to continue, then should we not consider making limited-access highways more conducive for large evacuation movements? This approach could include increasing the highest design hour standard to which the road is built, provision to use the highway’s shoulder as an extra lane on those segments where additional capacity is necessary, designing access across the highway’s median to reduce potential congestion points, movable gates

on exit/entrance ramps to improve traffic management of lane reversal movements, and measures to improve the safety of motorists going in the direction opposite to normal traffic.

***Develop or revisit current highway shelter signage policies.*** Some states may not allow permanent “flip-up” signs showing shelter locations on limited access highways. Still others may not have policies in place on signing for lane reversal operations.

***Enact policies that limit the need to evacuate large numbers in the first place.*** This is the prevention-through-mitigation step that requires policy examination on many fronts. Florida recently passed a statewide building code that addresses missile impact protection for homes in hurricane-prone areas. This will certainly help to reduce the numbers having to evacuate as coastal areas continue to grow; should other states follow suit? Adequate storm water management and prevention efforts are also in order to address the rising death toll from inland flooding. Policies may also be needed that examine the need to require new development, particularly mobile homes and other traditionally vulnerable forms of housing, to help to pay for evacuation and shelter impacts they cause to programs responsible for their hurricane safety. Even policies governing the way governments generate revenue for services may have to be examined to see if they encourage growth in coastal areas to cover the costs of providing general government services without increasing taxes.

# **Policy Changes Needed to Optimize Hurricane Preparedness and Response Strategies: A State Perspective**

**Eric L. Tolbert**

**Director, North Carolina Emergency Preparedness Division**

## **Background**

Emergency managers and elected officials, especially at the local and state levels, risk their careers each time hurricanes threaten their jurisdiction. Americans are highly mobile today, and the influx of new residents (especially retirees) into coastal communities at rates exceeding 5% per year is not uncommon. With this influx come increased expectations for protective services and decreased knowledge of the environment, hazards, and risk. Considering the likelihood of a hurricane threatening southern coastal regions at least once every five years, 25% of the population will likely not be knowledgeable of the risk and precautionary measures.

In addition, communities that are ill equipped to manage this rapid growth can experience many other challenges to optimum hurricane preparedness:

- ?? increased population with special medical needs having greater reliance on government and service providers for basic services,
- ?? increased non-English-speaking population that cannot effectively receive disaster preparation and protective action instructions,
- ?? increased encroachment of residential and commercial structures in high-hazard areas,
- ?? increased competition for financial resources to provide public disaster preparedness education and capabilities,
- ?? decreased oversight and quality controls in new housing construction resulting in less-disaster-resistant structures and vulnerable population,
- ?? decreased effectiveness of infrastructure to provide pre-/postdisaster essential services (highways, communications, medical facilities, water/wastewater treatment facilities, etc.), and
- ?? decreased proximity to family support systems and thus increased reliance on government and nonprofit organizations for support services.

In addition to the negative consequences of community growth on hurricane preparedness, technological advances have contributed to unrealistic beliefs that hurricane forecasting has reached pinpoint accuracy. Thus, public officials in communities that implement protective actions and then are not severely impacted are often chastised for the inconveniences and losses of revenue. Likewise, citizens commonly criticize their public officials when these “unnecessary” evacuations are more difficult than expected: people “trapped” in evacuation traffic for hours, lack of hotel accommodations, inadequate public shelters, and lack of sanitary/convenience facilities to accommodate the increased traffic.

All these conditions have created an environment that necessitates maximum interagency and intergovernmental coordination, cooperation, and communication to manage public expectations and to protect public safety. Likewise, collaboration with the private sector, including business interests and the media, is absolutely critical to success.

## Primary focus questions

1. *What additional forecast products could assist in making response decisions?* No recommendations.
2. *How can the media assist more effectively in conveying important response information to the public?* A frequent recommendation from hearing-impaired and non-English-speaking population is the need for interpreters, non-English literature, and real-time closed captioning. Because emergency information is predominately provided through the media, increased commitment by the media to support these needs is vital.

Increased public education by government and broadcast meteorologists on the capabilities and limitations of hurricane forecasting is desperately needed to provide citizens with a greater understanding of the hazard and protective-action decision-making processes.

3. *What policy changes at the Federal, state, and local levels would enable more effective hurricane response decisions?* Emergency managers typically have to “shop” the various elements of the National Weather Service for comprehensive meteorological data to prepare for the possible consequences of hurricanes (coastal surge, inland flooding, inland winds, etc.). For example, the emergency manager may have to secure information provided by the National Hurricane Center, Local NWS offices, River Forecast Centers, and so on to secure all the details required to develop a comprehensive protective action strategy. The “Hurricane Liaison Team” has proven to be a valuable asset in facilitating this communication but will not likely be capable of providing the full range of services needed when dealing with multistate, multiregional, or simultaneous events.

Increased commitment of financial resources at all levels to upgrade communication technology is desperately needed. Video and audio teleconference bridges have proven to be an effective medium for intergovernmental coordination, but lack of equipment standardization and briefing protocols has limited the full utilization of this capability

Because media coverage of major disasters is now “real time” and worldwide in scope, increased uniformity in terminology, maps, and displays by public officials would be advantageous. Simple variations in evacuation order terminology (mandatory, voluntary, etc.), especially between contiguous jurisdictions, can add to public confusion and delays in reaction.

## **Florida's Governor's Hurricane Task Force Report**

**Steve Decker, Emergency Coordination Officer**

The final report presented to Florida's governor is focused on the four critical elements of the evacuation process: 1) decision making, 2) traffic management, 3) shelter management, and 4) communications management or emergency public information. The report identifies the elements quite simply because they all must work together to move evacuees safely and quickly from harm's way. For this workshop, I will focus on the fourth element, communications management, and address the "Primary Focus Questions."

The report focuses on four phases available to communicate to the evacuee or potential evacuee.

**Phase one** is when the potential evacuee is still at home and can use all of the media available to him/her such as the Internet, television, and/or radio.

**Phase two** is providing information to the evacuee while he/she is in his vehicle. This includes radio (both commercial and state owned), and traffic control devices.

**Phase three** is getting information to the evacuee in shelters, at a relative's home, or in a motel that explains when it is appropriate to go home, the status of the storm, road conditions, and other pertinent information.

**Phase four** is informing the evacuee when it is time to go home, how to get there, and what to expect as far as the reentry process.

There are several efforts under way and four recommendations to the governor to achieve successfully the four phases.

**Recommendation Number 22** states that the Department of Community Affairs, Division of Emergency Management, will improve the amount and availability of emergency information through the Internet. This is being developed and will be on line by 1 June 2000. It is very user friendly, because the potential evacuees go to the site and input their zip codes. The site informs the evacuee as to the need to evacuate because of storm surge, provides the nearest shelter information, and describes the simplest evacuation route to take to that shelter. The key here is letting the users understand that they may not need to evacuate.

**Recommendation Number 23** states that the Department of Community Affairs, Division of Emergency Management, will create a procedure that specifically addresses the details on emergency public information, to include the lead agency responsibilities.

**Recommendation Number 24** states that the Department of Community Affairs, Division of Emergency Management, will identify local public information capabilities through local radio, television, and other media opportunities.

**Recommendation Number 25** states that the Department of Community Affairs, Division of Emergency Management, will develop public service announcements to explain the results of the governor's Task Force report. This is important because the State of Florida is in the planning process for reverse laning of several routes, but the governor has stated that this is a tool that should only be used for potentially catastrophic disasters, more specifically, preparing for a landfall of a category-4 or -5 hurricane.

The bottom line of the report is clearly that the evacuation is more than a traffic management process. All elements must be involved. As well, we need to encourage people not to evacuate unless they are in a storm surge area or in a manufactured home such as a mobile home. Then if they must evacuate, travel a short distance. It was stated as "travel 3 miles instead of 300 miles."

Relating to the Primary Focus Questions for Response Strategies, the only additional forecasting products or services that would aid us with the evacuation process would be a more accurate "crystal ball." Just knowing a more pinpointed location of impact would greatly assist with pinpointing evacuations.

However, the media assistance is critical and they can be a great benefit. First, the media should coordinate with state and local officials and only broadcast their consistent messages. Perhaps the media could encourage folks not to evacuate unless they are in a storm surge area or in a mobile home. Then, if they must evacuate, travel a short distance to a shelter. Explain that if they decide to travel a long distance to evacuate, there will be long delays. Media must work closely with state and local officials and ensure consistency in the messages.

The state of Florida has a very proactive process of decision making. There are no policy changes needed, other than those depicted in the governor's report.