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**APPENDIX**

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- Appendix III  Task Force Recommendations
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- Appendix V  Regional Evacuation Procedure
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- Appendix VIII  Regional Evacuation State Law Enforcement Staffing Assignments

Cover photos courtesy of the *Florida Times-Union*, Will Dickey, Staff Photographer, 9/15/99, and the Florida Department of Community Affairs
EXECUTIVE SUMMARY

Hurricane Floyd was the cause of the largest evacuation in Florida’s history. Although all of Florida’s citizens that needed to evacuate were able to do so without harm, an obvious need for improvement was echoed loud and clear. Florida citizens spent many hours on congested highways with inadequate guidance on where to go to seek shelter. The long evacuation travel times sparked questions as to the need and feasibility of reverse laning limited access facilities to reduce these times. To identify the needs and feasibility, Governor Jeb Bush directed state, local and private sector officials to complete a statewide hurricane evacuation study (see Appendix I for News Release). The Governor asked Walter Revell of H.J. Ross Associates, Inc. to chair the Governor’s Hurricane Evacuation Task Force (see Appendix II for members). The primary assignment of the Task Force was to identify the “need and feasibility” of reverse laning limited access facilities.

The Task Force quickly realized that the issue of reducing evacuation clearance times requires a multi-faceted approach, which may include the reverse laning of limited access facilities. To fully understand how complicated and detailed this process is, the Task Force first identified what had already been accomplished and how the evacuation process works. Pertinent information learned includes the following: evacuations are primarily a local agency function supported by the state agencies; a Florida Department of Transportation policy is in place to shut down all road construction on state roads and open all existing lanes prior to evacuations; and, there are seven existing Regional Evacuation Planning Regions through which evacuations are coordinated by state and local agencies. The report focuses on four main issues that can assist in making improvements in the overall evacuation process in Florida: 1) Decision Making; 2) Traffic Management; 3) Sheltering; and, 4) Emergency Public Information. The Task Force identified problems with some of these during the Hurricane Floyd evacuations. There was poor “ground level” (non-interstate) traffic management which resulted in congestion caused by vehicles entering and exiting the interstates, adequate numbers of shelters not being opened and advertised to the evacuating public, and limited emergency public information available for motorists.

The Task Force assigned the Traffic Management Team (see Appendix II) the task of gathering the “need and feasibility” information for reverse laning limited access facilities within Florida. The Traffic Management Team sought the needs information from the local agencies and coordinated with the adjacent states (Georgia and/or Alabama). The Traffic Management Team derived the feasibility information from the reverse lane plans for the seven identified routes that were developed by the Florida Highway Patrol and Florida Department of Transportation.

Through five multi-regional meetings, the Traffic Management Team identified seven limited access routes as a potential “need to reverse lane” to enhance regional evacuations. The local agencies agreed with reverse laning these routes but placed conditions on their use. They recommended such plans not increase the overall evacuation clearance times; move more
people in a shorter time; not be implemented without proper traffic control devices; and, ensure there be restrictions on using this option. The following seven routes were identified:

- Interstate 10 (east bound) - Pensacola to Tallahassee
- Interstate 10 (west bound) - Jacksonville to Tallahassee
- Interstate 4 (east bound) - Tampa to Orange County Line
- Interstate 75 (north bound) - Charlotte County to I-275
- Florida’s Turnpike (north bound) – Ft. Pierce to Orlando
- State Road 528 (west bound) – SR 520 to SR 417
- Interstate 75 (Alligator Alley) (east and west bound) - Coast to Coast

The reverse lane plans that have been recently completed illustrate it is feasible to implement such a strategy, given sufficient manpower and traffic control devices. The Florida Department of Law Enforcement is polling state law enforcement resources and is coordinating with the Florida National Guard to identify the additional manpower resources. The Department of Transportation is identifying the needed traffic control devices and how they will be acquired.

Hurricane Floyd caused shelters to be opened in non-threatened “host counties”. The host counties have been able to receive an 87.5% reimbursement of their expended funds to open and manage shelters in recent disasters. The 12.5% local match has become a major concern with a majority if the counties.

The Task Force has recommended that the reverse lane plans be accepted for seven routes, but has also included 22 other recommendations (recommendations are contained within the report and are listed in Appendix III) for actions in the following key areas:

- Preparedness
- Decision Making
- Traffic Management
- Sheltering
- Communications Management/Emergency Public Information

All agencies strongly agreed that reverse laning of any facility MUST be used only as a last resort when the conditions are dire. There are many less drastic steps that can be taken to avoid the situations experienced in Hurricane Floyd. This report will identify those less drastic steps.
INTRODUCTION

Florida's Extreme Hurricane Vulnerability

Hurricanes have been a commonly observed phenomenon in Florida since man first inhabited the peninsula. They were first documented by the Spanish explorers, many of whom died as a result of having their ships sunk by the arrival of unannounced hurricanes. Since 1884 when the National Weather Service first began to keep historical weather records, Florida has been impacted by over 150 minor and major hurricanes, and well over 260 tropical storms. Figure One graphically displays the past tracks of hurricanes and tropical storms impacting Florida in the 109 years from 1886 through 1995. According to the National Hurricane Center, Florida is the most vulnerable state in the nation to hurricanes, and has the highest predicted storm surges in the world, only to be exceeded by the nation of Bangladesh, which borders the Indian Ocean. Table One compares the average number of hurricanes to impact Florida per year with 1999’s events and those predicted for the year 2000.

This extreme vulnerability is compounded by the fact that Florida’s population grows by an average of 693 new residents a day. Of these, nearly 80% will choose to live in one of the state’s coastal counties, along with the other 78% of Florida’s population (11.5 million residents) already there. Over 7 million residents live within five miles of the coast. An amazing 6.13 million residents (Figure Two) live in areas predicted to receive a storm surge from a Category 1-5 hurricane. (See Appendix IV for the Saffir-Simpson Scale of Hurricane Categories). Such areas will be inundated with seawater based on the surge produced from hurricanes, a function of low barometric pressure and strong on-shore winds.

Because Florida is a peninsula providing the dividing line between the Atlantic Ocean and the Gulf of Mexico, Floridians do not have safe inland places to evacuate. No point of our state is more than 100 miles from the Gulf of Mexico or the Atlantic Ocean. Only those residents living in the Panhandle have an opportunity to evacuate to the inland safety of neighboring states. Even if there were inland sites to evacuate to, Florida's infrastructure has not kept pace with its rapid growth, which is a major limiting factor in our overall evacuation strategy. Add to this equation the number of retirees and people with special needs living in storm surge areas, and one can begin to appreciate our vulnerability, and the critical need to have effective emergency management plans and procedures in place to address what could be a life-threatening situation.

Hurricane Floyd Evacuation

On September 13, 1999, Hurricane Floyd threatened Florida as a massive Category 4 storm, equal in power to Hurricane Andrew (1992), but four times larger. The area of hurricane force winds extended well over 150 miles from the eye of the storm. Although the weather forecasters had confidence Hurricane Floyd would not make landfall in Florida, the close proximity of this potentially devastating storm was cause to order the largest peacetime evacuation in the history of our nation.

Ordering evacuations in Florida is not uncommon, given our dense population along the coast. Since the mid-1980's, the Department of Community Affairs, Division of Emergency
Management has undertaken the development of regional hurricane evacuation studies in order to provide critical emergency management data to state and local officials who must make decisions to evacuate. These studies have determined the extent of expected hurricane storm surge, the number of residents living in surge areas, the destination of where evacuees say they will go, evacuation routes, and public shelter locations. They have also calculated the amount of clearance time needed to safely evacuate vulnerable residents to places of greater safety. Based on these results, state and local emergency management officials can determine how much advance time will be needed to evacuate all vulnerable residents to safety, and plan accordingly.

Florida’s Department of Community Affairs has also developed operational plans to implement the Regional Hurricane Evacuation Studies on a statewide basis. The “Regional Evacuation Procedure” (see Appendix V) provides a mechanism to coordinate the various facets of an evacuation when it goes beyond the boundaries of an individual county.

Hurricane Floyd represented one of the worst-case scenarios for state and local emergency management officials. Floyd became a paralleling storm with immense power and size. Based on the various hurricane evacuation studies, 1.3 million residents lived in areas needing to evacuate. As the evacuation commenced, in excess of two million residents evacuated, causing an enormous strain on the carrying capacity of the evacuation routes. The increased number of evacuees is a result of a phenomena called “shadow evacuation.” This is the effect of non-threatened residents living in the “shadow” of the threatened population deciding that they too should leave.

Although the evacuations that occurred from Miami-Dade to Nassau Counties on the east coast of Florida were completed with no deaths or injuries, and within the predicted time frames (from the hurricane evacuation studies), many people experienced near gridlock on the major evacuation routes. Although such congestion had been considered in the hurricane studies and expected by emergency management officials, the lack of emergency information disseminated to the evacuees caused many to experience a heightened level of frustration and concern. This lack of information also kept them on the evacuation routes longer than necessary.

**Alternative Actions Needed**

Given these factors, it has become evident that the state must focus more attention on finding alternatives to evacuation as one of our primary means of providing protective actions to its citizens. If more residents can be encouraged to safely stay home in a house constructed to withstand hurricane force winds, or go to a neighborhood shelter instead of a shelter hundreds of miles away, the volumes of traffic on critical evacuation routes could be radically reduced. This would leave more room on such routes for those who truly need to leave and seek safety.

In addition, in those cases where it is appropriate, the State must be able to radically increase the carrying capacity of its limited access evacuation routes. This can be accomplished through planning and resource allocations to reverse lane such routes, or create a viable “third” lane over existing paved shoulders. Plans need to be developed, and resources must be pre-identified to make this a viable option for consideration by the Governor and his designated representatives during emergency situations.
This report represents the collective ideas and recommendations of the Governor's Hurricane Evacuation Task Force, and those local emergency management officials who attended and provided their comments at the five regional workshops sponsored jointly by the Department of Community Affairs, Department of Transportation, Florida Department of Law Enforcement, and the Florida Highway Patrol. The recommendations provided herein are designed to better assist our citizens by providing improved services to meet their needs within existing resources, and the use of higher technology.
Hurricane Prone? Shown here are the 151 hurricanes and 248 tropical storms that have hit or brushed the state from 1886 through 1995. Source: The FSU Beaches and Shores Reasearch Center

FIGURE ONE
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<th>Annual Average 1950 - 1990</th>
<th>1999</th>
<th>2000 Forecast</th>
</tr>
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<tr>
<td>Major Hurricanes (≥ 111 mph)</td>
<td>9.3</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Named Storms</td>
<td>5.8</td>
<td>8</td>
<td>7</td>
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Population Vulnerable to Storm Surge

- Total 1999 State Population 15.45 M

Source: Florida Division of Emergency Management, 1999

FIGURE TWO
Chapter 1
Overview
OVERVIEW OF EVACUATION ISSUES

Over the past 15 years, the Department of Community Affairs has been conducting regional hurricane evacuation studies. These studies have historically followed the regional planning councils’ boundaries, and have provided each county emergency management official with specific data to allow for the development of operational plans for evacuations, and other emergency management functions. These regional studies include an analysis of where the predicted storm surge from various categories of hurricanes, traveling at various speeds and directions, would strike. They also determine the number of residents living in surge areas that are vulnerable to storm surge. A statistical sampling of this population has determined their predicted behavioral patterns, in terms of evacuation. This assists emergency management planners to know how many people will be required to evacuate, and where they will go, either to a public shelter or to the home of a friend or relative.

Next, these regional studies determine the evacuation routes leading out of vulnerable areas, and the carrying capacities of each. When this is compared to the number of evacuees expected to use these routes, the clearance time is calculated. Clearance times represent the time needed to clear evacuation routes of all residents living in vulnerable locations for places of greater safety.

The evacuation studies were operationalized several years ago into the Regional Hurricane Evacuation Procedures. Realizing that massive evacuations have impacts beyond the counties or regions they emanate from, the Regional Hurricane Evacuation Procedure provides a framework for statewide coordination of all major evacuations. They have been used several times since their inception.

In addition to this, several years ago, the Department of Community Affairs, in coordination with the Florida Department of Transportation, conducted detailed analyses of the feasibility and expected gain produced through reverse laning of limited access routes. Initially, the Alligator Alley (I-75) and the Florida Turnpike were studied for reverse lane scenarios. The results are revealing.

The analysis determined that a 66% increase in carrying capacity would be realized on the Alligator Alley through the use of two additional, reverse flow lanes. The analysis also determined that a 40% increase would be realized by creating a third lane using existing roadway shoulders, with no reverse laning. The third lane option produced the greater increase in single lane capacity, but will not always be an option because of the limitations of current construction standards for shoulders.

The Florida Highway Patrol also studied the feasibility of reverse laning the entire length of the Florida Turnpike. Their analyses focused on the logistics of implementing such a plan. Although possible, implementation would take over 350 additional law enforcement officers. Their report cautions such uses based on the amount of time needed to get everything in place.
before using the reverse lanes, and the bottleneck it would create when all lanes were merged again at some point. Both plans were never implemented because of the inherent danger of running traffic in a reverse flow for extended periods of time. Yet, Hurricane Floyd clearly demonstrated the need to be able to use reverse lane evacuation routes, if such an option was deemed appropriate. The frustration on the part of evacuees viewing opposing lanes with virtually no traffic raises the ire of those caught in slow moving traffic. In some scenarios, it is no longer realistic to expect to be able to get everyone out of harm’s way before the arrival of tropical storm winds, which is the goal of county and state emergency management officials during evacuations.

**Lessons Learned**

There have been lessons learned from past events that, if implemented, can have an impact on reducing future evacuation clearance times. Hurricane Opal (1995), a land falling Category 3 hurricane in the Panhandle, clearly demonstrated the need to have a better traffic management plan in place. Thousands of residents along the coastline from Panama City to Pensacola evacuated inland as Hurricane Opal approached. Many sought to travel to Tallahassee, under the expectation of finding available hotel rooms or public shelters. Using Interstate 10 as the main evacuation route, evacuees found long traffic jams resulting from the numerous roadway improvement projects underway. This construction caused the constriction of two lanes into one in several locations. Evacuees were not diverted away from using Interstate 10, nor were they informed of the ongoing construction on the route. That we should be able to steer the evacuating traffic away from such constrictions and provide them with critical information was a major lesson learned.

Opal also highlighted the need to operationalize the regional hurricane evacuation studies. The Regional Evacuation Procedure does this by providing a strategy and procedures for all counties, regions, and state agencies to follow during a large-scale evacuation.

Hurricane Floyd (1999) demonstrated the need to have a better system in place to deliver emergency information to residents before they left home; while on the evacuation routes; while in shelters; and finally, when it was time to return to their homes. Floyd also demonstrated the need to have the availability of public shelters made known to the evacuating population through various means.

**Shelter Availability**

Florida has a critical shortage of public shelters. As of January 2000, the state is experiencing a 1.5 million public shelter space deficit. As a result of the 1992 Governor's Disaster Planning Review and Response Committee, chaired by Former Senate President, Philip D. Lewis, it was recommended the state determine the inventory of safe shelter space and eliminate its shelter deficit by 1998. In 1994, the State embarked on an aggressive program to identify additional shelter spaces, and evaluate the structural integrity of current shelter spaces. If more shelters are available, less people will need to evacuate, therefore reducing the congestion on the evacuation network. This is discussed in detail in Chapter 5 of this report.
The Department of Community Affairs has also identified existing facilities suitable for structural retrofitting. With improvements, such facilities could be used as public shelters. Although the list of shelters recommended for retrofitting has been updated several times in the past, the availability of funding has continued to hamper this process. This year, the Governor's proposed budget contains $18 million for shelter retrofit projects.

Lastly, through the Department of Community Affairs' Emergency Management Preparedness and Assistance Trust Fund, grant proposals designed to increase shelter availability have been given priority in the overall ranking of all grant proposals. Since its inception, the Emergency Management Preparedness and Assistance Trust Fund grant program has supported the upgrading of several shelters and the construction of new ones.

The availability of public shelters for evacuees is a critical function of the overall evacuation process. A proactive approach of ensuring non-impacted county shelters are made available for residents leaving impacted counties is critical. Problems must be overcome, the most notable of which is the use of school facilities in non-impacted communities as shelters. Without the availability of such shelter spaces, evacuees are forced to remain on evacuation routes for extended periods of time instead of being diverted to the first available shelter location.

There are four major areas that will improve the overall state evacuation process:

- **Decision-making**: Improving the process by which reverse lane evacuation routes would be planned for and used.
- **Traffic Management**: Recommending improvements for the overall management of evacuating traffic.
- **Shelter Management**: Enhancing the ability to provide adequate public shelter space for evacuees in all counties.
- **Emergency Public Information**: Providing evacuees with emergency public information during the pre and post evacuation process.
Chapter 2
Preparedness
Preparedness:

Background:

The Regional Evacuation Procedure at the state and local level is continually being improved to ensure the safe evacuation of residents. The process is a coordinated effort by many state and local agencies to address evacuations by coordinating state and local actions with respect to decision-making, traffic management, sheltering and emergency public information. The end results are operational plans and procedures that comprehensively address evacuation issues on a regional level and synchronize the efforts of numerous state and local agencies.

As part of the Regional Evacuation Procedure, the Department of Community Affairs, Division of Emergency Management has developed a process for decision-making to ensure that all counties are aware of, and can discuss, one another’s actions in response to an approaching storm. These procedures also ensure that key state agencies are kept informed of local evacuation status and needs. During a hurricane threat, every county in the state, regardless of the imminent risk posed by a particular hurricane event, will participate in a conference call with the State Emergency Operations Center and the National Hurricane Center. These conference calls, which are facilitated by the State Emergency Operations Center, allow potential at-risk and host counties to coordinate protective actions and to interact with State agencies regarding any resources that may be required in response to a particular hurricane threat. Once all counties, regions and state agencies have agreed to a unified course of action, the State Emergency Operations Center will designate host regions and direct key counties not under a specific threat to implement host sheltering procedures. The host shelter procedures address the opening of shelters, the management of incoming traffic and the dissemination of emergency public information. The regional evacuation procedures also require that the counties inform the State Emergency Operations Center regarding any changes to county/regional evacuation situations, particularly if the changes will have more than local impacts.

In addressing traffic management, the Florida Department of Transportation, the Florida Highway Patrol, the Florida Department of Law Enforcement and the Department of Community Affairs, Division of Emergency Management have been working closely with the Sheriffs, emergency management offices and the agency district offices within each region to eliminate inconsistencies in designated evacuation roadways across jurisdictional boundaries. Also as part of the process, a regional traffic management plan to address any local law enforcement/traffic management shortfalls or critical areas has been developed. These regional traffic management plans ensure that all designated evacuation roadways continue across county and regional lines and that each critical portion of the regional evacuation road network has the needed law enforcement assets and other resources necessary to manage traffic effectively.

The Florida Highway Patrol has developed a formalized procedure to collect and update road status information for every major evacuation route to the State Emergency Operations Center. This information will in turn be conveyed to the counties and to the public through various communications means. In a related effort, the Florida Department of Transportation is actively
improving its capabilities to monitor on a real-time basis the many traffic counters at strategic locations on many major evacuation routes. The Florida Department of Transportation is not only upgrading many of the counters in the roadbeds, but also improving the method by which those counters are polled and the information relayed back to the State Emergency Operations Center. This improved roadway monitoring capability will provide critical information to decision makers in the State Emergency Operations Center and be relayed to the counties for their benefit. The Florida Department of Transportation is also investigating the possibility of integrating the State’s numerous traffic-monitoring cameras into the real-time traffic counter polling and display system.

As part of the mass care portion of the Regional Evacuation Procedure, the Department of Community Affairs, Division of Emergency Management has also required that all counties and regions develop a host sheltering procedure. These procedures will identify regional and local responsibilities and implementation tasks relative to opening host shelters, managing the incoming flow of traffic from risk counties and the provision of emergency public information to the incoming evacuees. The host shelter procedures are required to be included in all county Comprehensive Emergency Management Plans.

In response to deficits of trained shelter managers in certain counties and regions throughout the State, the Department of Community Affairs, Division of Emergency Management is also in the process of training 1000 state employees to augment local staffing capabilities. This reserve of shelter managers could be directed to address local shelter staffing shortfalls in risk and host counties during hurricane events. The Department of Community Affairs, Division of Emergency Management is also working with local governments to encourage them to develop programs that utilize county and municipal employees to be trained and serve as managers/staff for shelter facilities within their jurisdictions.

With respect to addressing the huge deficit of “safe” shelter spaces in almost every county in the State, the Department of Community Affairs, Division of Emergency Management engineers have developed a methodology to assess the structural viability of public shelter facilities. The engineers and numerous counties have used this methodology, entitled the Model Hurricane Evacuation Shelter Selection Guidelines, to conduct thorough evaluations of the structural capabilities of any identified shelter facility. This effort will ensure that shelter facilities that comply with those guidelines are suitable to the minimum criteria for structural performance during major hurricanes, and will provide a reasonable degree of safety. Furthermore, the State is initiating an ambitious program to retrofit many facilities that are not compliant with the above guidelines, which will further increase the State’s inventory of “safe” shelter spaces.

The Department of Education, in a related effort to enhance the inventory of shelter spaces throughout the State, has developed the Public Shelter Design Criteria as part of their State Uniform Building Code for Public Educational Facilities Construction. In accordance with the Statewide Emergency Shelter Plan which is promulgated by the Department of Community Affairs, Division of Emergency Management every two years, new school facilities are being built throughout the state that include an enhanced hurricane protection area. These enhanced hurricane protection areas provide the same degree of structural reliability in a major hurricane as a facility that is compliant with the Model Hurricane Evacuation Shelter Selection Guidelines.
Currently 34 counties have completed 29 enhanced hurricane protection areas in new educational facilities and 65 are in the process of being constructed.

The Regional Evacuation Procedure also requires counties and regions to integrate their public information procedures and messages to inform and notify at-risk populations more effectively. The intent of this effort is to develop a clear, consistent and unified message that communicates to all recipients within a region, regardless of media coverage and jurisdictional boundaries, what areas are at risk and what the appropriate protective actions are.

Furthermore, the portion of the Regional Evacuation Procedure that addresses emergency public information is under revision. Emergency public information is the process whereby evacuees already in their vehicles and on the road are provided information that will have a positive impact on their evacuation or their arrival at a final destination. This information includes any positive or negative changes in road status, public shelter and hotel/motel availability, shelter locations or any other advisories that will elicit a desired response from evacuees already underway. Due to the complexity of reaching evacuees in their cars, an integrated approach that uses every possible method of communication must be employed, including variable message boards, flip down signs, radio stations, brochures at rest stops, direction from law enforcement/traffic control officers, low power AM radio transmitters and a myriad of other alternatives. All levels of government will need to work closely in developing and implementing regional emergency public information plans to insure that the information provided to evacuees on the road is accurate and timely.

The Department of Community Affairs, Public Affairs Office has been working closely with the Public Information Offices of other state agencies including the Florida Department of Transportation and Florida Highway Patrol to integrate their operations during hurricane evacuations. Under the Regional Evacuation Procedure, the Department of Community Affairs, Division of Emergency Management is also working closely with local public information officials to ensure that a consistent message is transmitted throughout the risk and host regions during a hurricane event and that effective emergency public information measures are in place. To that end, the Department of Community Affairs’ Public Information Office is in the process of meeting with all the counties in each region to document the current capabilities to provide emergency public information and any future needs.

Despite all the coordinated efforts among State agencies to deal with many of the problems brought to light by Hurricane Floyd and other Tropical Cyclone events, there is still room for improvement. Each new hurricane event provides new valuable lessons learned regarding hurricane preparedness.
As alluded to above, the State must improve its procedures for public information, especially with respect to changing people’s perceptions and expectations regarding hurricane evacuations. We are reasonably effective in communicating to those residents in risk areas about what they must do; now we must target those people that do not live in evacuation zones to ensure that they not evacuate unnecessarily and degrade our ability to get hurricane vulnerable populations out of harm’s way.

Approximately 1.3 million people in the State of Florida were directed to evacuate from Hurricane Floyd. However, over two million evacuees complied with those evacuation orders and the result was serious congestion on many evacuation routes throughout the state. Therefore, we must develop effective public information procedures to convince those residents that are not directly vulnerable to hurricane effects (site-built homes outside of surge and riverine flooding areas) to remain at home and shelter in place, regardless of the category of storm. We must also convince Florida residents and visitors that hurricane evacuations are very inconvenient and that travel times to reach intended destinations will be significantly greater than expected. This will require that all future public information messages and advisories issued by State and local officials 1) are explicit in directing who must evacuate, and who must stay, for a particular hurricane event; and, 2) are very forthright in explaining what those evacuees must do once they start their journey and what they can expect along the way.

Despite the considerable efforts of the above referenced State and local agencies to plan and prepare more effectively for hurricanes, hurricane preparedness must become a routine activity for every agency in state and local government. Hurricane preparedness is a year round process that requires careful planning and a continuous effort to implement, update and exercise those plans.

To cite some examples of relevant hurricane preparedness activities, every state agency can ensure that all employees are informed of their relative vulnerability to hurricanes, or any other natural or technological threat, and develop training to instill those hurricane preparedness concepts throughout the year. With appropriate training, many more state and local employees could serve as temporary shelter managers in their local areas with the appropriate training. Additionally, there are numerous State and locally managed facilities that could serve as public shelters, or at a minimum, provide a refuge for their own employees and families during tropical cyclone events. At a minimum, all State and local agencies must be required to develop plans to mitigate the impacts of hurricanes to their staff (procedures that allow workers to leave to prepare their homes), property (shutters and other structural reinforcements), equipment (vehicle protection contingency plans) and their data (backup procedures and redundant hardware and software). Given that most experts are predicting an increase in the frequency and intensity of hurricanes in the future, all government agencies must be required to develop and routinely test procedures that will allow them to sustain operations before, during and after a hurricane event (see Appendix VI for State Agencies “On-going” Preparedness Activities).
Recommendation #1: All State Agencies need to include hurricane preparedness in their outreach programs. [Executive Office of the Governor, State Agencies]

Comments:

Although, the State agencies have many positive on-going preparedness activities, they all need to reach out to the communities and their working partners. Hurricane preparedness must become a routine activity for every state agency. Hurricane preparedness is a year round process that requires careful planning and a continuous effort to implement, update and exercise emergency plans.
Chapter 3
Decision Making

Decision Making:

Background:

In an emergency, the State Emergency Operations Center (SEOC) serves as the communication and coordination “hub” for the state. Decisions are coordinated through statewide conference calls between the appropriate Emergency Support Function(s) (see Appendix VII for Emergency Support Functions) and the local agencies. The State Emergency Response Team and the local agencies jointly developed criteria to assist with the decision-making process. One of the critical criteria that must be considered is when an action must be implemented. Together, the State and local agencies created an action “time line” to assist with the decision process. That is, if an action is to be implemented, the decision to do so must be made at a specific time during the event. Criteria must be developed to implement a reverse lane plan, but one critical consideration must be given to the action “time line”.

The decision criteria to reverse lane a facility must include elements such as allowing for set-up time and adequate time to terminate actions before the arrival of tropical force winds. Size of storm and anticipated storm surge, path of storm, number of potential evacuees, and sheltering destinations are elements to be considered as well. Additionally, the local agencies must understand that reverse laning is well above the ongoing activities during an event. In fact, reverse laning will affect the programmed state resources identified to support the Regional Evacuation Plans, as there are just not enough personnel in the areas to staff both plans. Therefore, there must be a benefit to reverse lane and it must be measured in how much clearance time is actually saved (more people in less time). The local agencies stressed that for the seven routes identified a reverse lane plan should be available, but not implemented unless specifically warranted.

Recommendation #2: All major evacuations will be directed by the Governor through the State Emergency Operations Center. [Executive Office of the Governor, State Emergency Response Team]

Comments:

In this context, major evacuations are defined as larger than one county. In some events, this could be regional or multi-regional. The current management system and support structure at the State Emergency Operations Center has the ability to direct, coordinate and manage a major evacuation within the state of Florida.
**Recommendation #3:** Develop decision-making criteria to invoke a reverse lane plan.  
[Department of Transportation, Department of Community Affairs, Florida Department of Law Enforcement, Florida Highway Patrol, Impacted County Emergency Management Agencies]

*Comments:*

Working with the local agencies, the state agencies’ established Traffic Management/Law Enforcement Team must develop the decision-making criteria for implementation of a reverse lane plan. Such parameters as size of storm, anticipated path of storm, anticipated storm surge, number of citizens affected and set-up and de-mobilization times must be considered. This tool should not be considered for small storms such as Tropical Storms and Category 1 and 2 storms.

**Recommendation #4:** Develop a traffic model for each identified route to be reverse laned, to include ground level traffic management at the terminus of the reverse lane route.  [Department of Transportation, Department of Community Affairs, Impacted County Emergency Management Agencies]

*Comments:*

The local agencies very persistently stressed the importance of measuring the benefits of reverse laning and comparing it to the costs to implement. The costs to the local agencies is NOT in dollars and cents, but it is measured in the loss of predetermined state resource support (manpower and traffic control devices) for the regional evacuation plans that would then be allocated to the reverse lane plan. The areas that would be served by the reverse lane plans already have very high evacuation clearance times. The models must illustrate a significant reduction in those clearance times by moving more vehicles in less time. If the models do not illustrate this, reverse laning would not have a positive impact.

**Recommendation #5:** Determine manpower and resource requirements to implement reverse lane scenarios.  [Florida Department of Law Enforcement, Florida Highway Patrol, Department of Transportation, Florida National Guard]

*Comments:*

The Florida Highway Patrol and the Department of Transportation recently completed the reverse lane plans for the seven identified routes. The Florida Highway Patrol has identified manpower to implement these plans, which are beyond their capability to provide. The Florida Department of Law Enforcement, lead agency for Emergency Support Function 16, is identifying this additional manpower from other state law enforcement officers not traditionally used in traffic management. The Florida National Guard may also be needed to augment the manpower deficits. The preliminary estimates of the physical resources (barricades, electronic message
boards, signs, etc.) needed exceed current capabilities. The manpower and resource needs will require further investigations.

**Recommendation #6:** Develop an implementation timeline for reverse laning each of the identified routes from beginning to termination. [Department of Transportation, Florida Department of Law Enforcement, Florida Highway Patrol, Florida National Guard]

**Comments:**

The set-up time is determined by the time needed to mobilize and clear the lane being reversed. The traffic models should assist with determining a minimum beneficial operational time for reverse laning. The termination time is determined by the demobilization time before the arrival of tropical force winds (the time to open the road is constant; the arrival of tropical force winds is a variable). One additional factor would be the activation and lead time needed for use of the Florida National Guard. All of these factors must be considered when determining the timeline to implement a reverse lane plan.
Chapter 4
Traffic Management

Traffic Management

Background

Regional Evacuation Staffing Plans (see Appendix VIII for Law Enforcement Staffing Plan) have been in place and utilized by State, county and local officials to coordinate evacuations during hurricanes and other hazards for several years. These plans identify evacuation routes, critical traffic control intersections, law enforcement agencies and number of personnel to staff these intersections, clearance times and evacuee behavioral patterns.

During recent regional evacuation meetings held around Florida by the Governor’s Hurricane Evacuation Task Force, seven limited access roadways were identified by local officials for consideration to develop reverse lane implementation plans to enhance evacuation clearance times under certain conditions.

After these meetings, members of the Florida Highway Patrol and the Florida Department of Transportation prepared interim Operational Plans for Reverse Lane Operations on these roadways. During the planning process, equipment needs and traffic control staffing were identified.

The seven roadways and the number of law enforcement personnel required to staff reverse lane operations on these roadways are identified as follows:

<table>
<thead>
<tr>
<th>Roadway</th>
<th>Location</th>
<th>Personnel Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate 10</td>
<td>Pensacola to Tallahassee (Eastbound only)</td>
<td>155</td>
</tr>
<tr>
<td>Interstate 10</td>
<td>Jacksonville to Tallahassee</td>
<td>156</td>
</tr>
<tr>
<td>Interstate 4</td>
<td>Tampa to Orlando</td>
<td>210</td>
</tr>
<tr>
<td>Interstate 75</td>
<td>Sarasota to I-275 (Northbound Only)</td>
<td>209</td>
</tr>
<tr>
<td>State Road 91</td>
<td>(Florida Turnpike) Ft. Pierce to Orlando</td>
<td>77</td>
</tr>
<tr>
<td>State Road 528</td>
<td>SR-520 to SR417</td>
<td>20</td>
</tr>
<tr>
<td>Interstate 75</td>
<td>Alligator Alley (Broward to Collier Counties)</td>
<td>155</td>
</tr>
</tbody>
</table>

State Law Enforcement Officers and the Florida National Guard will staff reverse Lane Operations.

Recommendation #7: Recommend the acceptance of the seven identified reverse lane evacuation routes. [Executive Office of the Governor]
Comments:

Consistent with direction provided by the Task Force during the October 7, 1999 meeting only limited access roadways were discussed. Local officials identified these roadways during regional meetings sponsored by the Task Force indicating that reverse lane operations on these routes could possibly improve evacuation clearance times under certain conditions. Consideration of these routes was not unanimous as there were strong opinions on both sides of the issue. Local officials stated the following problems related to reverse lane operations:

- Ground transportation systems at the operation terminus cannot handle the large volume of traffic on the reverse lane.
- State law enforcement personnel will not be able to simultaneously staff the reverse lane operations and regional evacuation traffic control locations.
- A reverse lane operation removes that roadway from use by emergency vehicles responding to the affected area.
- Local officials prefer utilization of the emergency lane as a third lane to enhance clearance times prior to implementation of reverse lane operations.
- Local officials want traffic models for each of these routes to confirm increased clearance times prior to completion of Reverse Lane Plans.

At the January 13, 2000 meeting of the Task Force, the seven identified routes were unanimously approved after consideration of the identified local concerns.

Recommendation #8: Recommend the Department of Transportation enhance the emergency lanes (paved shoulders) of the seven identified roadways to use as a third lane in the correct direction of travel to increase evacuation clearance times. [Department of Transportation]

Comments:

During the regional meetings sponsored by the Task Force, local officials stated their preference to use the emergency lane (paved shoulder) as a third lane before reverse lane operations are implemented. Several of these roadways can support the use of the emergency lane (paved shoulder) as a third lane now, and others could be used with enhancements.

Recommendation #9: The Department of Transportation should proceed with procurement and installation of traffic control devices, highway markings and roadway modifications necessary to support reverse lane operations. [Department of Transportation]

Comments:
To be prepared for the 2000 hurricane season, the Florida Department of Transportation should proceed with procurement and installation of traffic control devices, highway markings and roadway modifications necessary to support reverse lane operations as soon as possible.

**Recommendation #10:** The Florida Highway Patrol needs to provide traffic control training to Department of Transportation employees, State Law Enforcement Officers and the Florida National Guard by the 2000 hurricane season or as soon as possible in 2000.  [Florida Highway Patrol]

*Comments:*

Reverse lane operations staffing will require utilization of personnel that exceeds the number of available State Law Enforcement Officers that traditionally wear a uniform and perform traffic management duties. To staff the reverse lane operations, State Law Enforcement Officers from agencies that do not routinely work on traffic management and members of the Florida National Guard will augment the uniformed state law enforcement officers tasked to provide traffic control duties. These additional officers and members of the Florida National Guard should receive traffic management training by the 2000 hurricane season or as soon as possible. All personnel participating in reverse lane operations should receive a safety briefing as well. Additional briefings should be received on an annual basis prior to the beginning of hurricane season.

**Recommendation #11:** Reverse lane operations should be tested during a field exercise to simulate the implementation and termination of all identified reverse lane routes.  [Department of Transportation, Department of Community Affairs]

*Comments:*

To test operational plans, deployment times, and equipment setup, a field exercise of reverse lane operations should be conducted on an annual basis. All participants in the actual operation will be involved in the field exercise.

**Recommendation #12:** For effective reverse lane operations a statewide common communication system is recommended.  [Executive Office of the Governor]

*Comments:*

Currently State law enforcement agencies in Florida do not have a statewide communication system. Half of the state utilizes the 800 MHz systems and the other half utilized a variety of radios and frequencies. During disaster response, lack of a common radio system hampers evacuation, response and recovery operations. Many times, valuable operational time is devoted
to locating radio equipment for responding emergency personnel. A common statewide radio
system would allow law enforcement officers, firefighters, emergency medical personnel,
Department of Transportation personnel and other responders to effectively communicate.

Recommendation #13: A command member of the Florida Highway Patrol should be the
incident commander for any reverse lane operation. [Florida Highway Patrol]

Comments:

To oversee implementation and effectively maintain reverse lane operations, it is critical that one
person be in charge. The Florida Highway Patrol shall designate a command level incident
commander to liaison with all participating agencies and insure that reverse lane operations are
conducted safely and efficiently.

Recommendation #14: The Florida Department of Law Enforcement and the Department
of Community Affairs will offer technical advice to any county that
has not developed a reentry plan. [Florida Department of Law
Enforcement, Department of Community Affairs]

Comments:

During recent disasters it was found that some counties had reentry plans in place to quickly
identify residents and business owners. This identification of individuals and vehicles allowed
quick recognition at security checkpoints and allowed them return to their property efficiently
when the area was safe. Waiting lines at security checkpoints were reduced. When Reentry Plans
are in place, reentry moves quickly and lessens the impact on residents and business owners. The
Department of Community Affairs has required that counties include a reentry plan as part of their
Chapter 5
Shelter Management

Shelter Management:

Background:

The State of Florida suffers from a statewide deficit of over 1.5 million “safe” public shelter spaces, which means that for most residents vulnerable to the effects of hurricanes the only alternative protective action is evacuation across county, regional and even state lines. These “unsatisfied” evacuees will add to the majority of evacuees that will normally choose to leave their county, region or state to stay with friends and family, or in hotels/motels. The regional shelter deficits are much more acute, no region in this state can accommodate all of the expected evacuees that will elect to use local public shelters. For Category 4 and 5 hurricanes, the shelter space shortfalls in the South Florida and Southwest Florida Regional Planning Council regions will add over 577,000 and 250,000 evacuees respectively to the already large numbers that will leave those areas. Only six counties in this state have more shelter capacity than the expected demand for their own residents and visitors. The result of these widespread shelter shortfalls is that 61 counties and every region in the State become net exporters of hurricane vulnerable populations, which will have negative implications for every major evacuation roadway in the state.

In response to the lessons learned during Hurricane Andrew, a post-disaster evaluation of evacuation and sheltering concerns by the Governor's Disaster Planning and Response Review Committee (Lewis Commission Report) identified the lack of adequate and appropriate shelter space as a critical planning issue. The Lewis Commission Report served as the driving force behind the passage of House Bill 911 in 1993 and the subsequent revision of Chapter 252, Florida Statutes. The new legislation stated that it was the intent of the legislature that Florida not have a deficit of safe shelter space in any region of the state by 1998 and thereafter.

The Department of Community Affairs, Division of Emergency Management has endeavored to eliminate the regional and statewide shelter deficit with a multifaceted program. This program includes the following: 1) construction of new facilities using public shelter design criteria; 2) surveying existing buildings, both public and private, to identify additional shelter capacity; and 3) where cost effective (and practical), support mitigation and retrofitting projects to increase shelter capacity.

Every two years the Department of Community Affairs, Division of Emergency Management is statutorily required to prepare a Statewide Emergency Shelter Plan that provides information on existing and future emergency shelter space requirements for each county. Local school boards and emergency management agencies use this information in planning for the construction of new school facilities that include Enhanced Hurricane Protection Areas constructed to the Public Shelter Design Criteria. This effort has resulted in the completion of 25 existing and the ongoing
construction of 65 new enhanced hurricane protection areas within educational facilities in 34
counties throughout the state.

In response to the above legislative mandate the Department of Community Affairs, Division of
Emergency Management, using the engineering and safety guidelines adopted by the American
Red Cross (Guidelines for Hurricane Evacuation Shelter Selection - ARC 4496, July 1992),
developed the Model Hurricane Evacuation Shelter Selection Guidelines. The ARC 4496
guidelines were developed under the auspices of the national American Red Cross (participants
which included engineers/architects from Clemson University, American Society of Civil
Engineers, Federal Emergency Management Agency, and others) to provide general guidance in
evaluating a structure’s vulnerabilities to hurricane effects. As the ARC 4496 is considered a
national consensus guideline, the Department of Community Affairs used it as the basis for the
Model Hurricane Evacuation Shelter Selection Guidelines, which have in turn been applied
statewide to define a “safe” shelter space.

To date, 31 counties (Bay, Brevard, Charlotte, DeSoto, Duval, Collier, Gilchrist, Glades, Hardee,
Hendry, Hernando, Highlands, Indian River, Lafayette, Lake, Lee, Leon, Liberty, Martin,
Miami-Dade, Nassau, Okeechobee, Orange, Osceola, Palm Beach, St.Lucie, Sarasota, Seminole,
Sumter, Suwannee, and Volusia) have been, or are being surveyed using the Model Hurricane
Evacuation Shelter Selection Guidelines. Additionally, the Department has provided training on
the Model Hurricane Evacuation Shelter Selection Guidelines process in over 25 counties so that
local building officials can also perform the surveys.

The Department of Community Affairs, Division of Emergency Management is required also to
prepare a Shelter Retrofit Report that recommends public shelter retrofit projects to the Governor
and the Cabinet. The counties provide information regarding the facility and the needed
structural improvements, and the Department of Community Affairs, Division of Emergency
Management prioritizes those projects according to benefit cost and other criteria. Until
recently, no specific appropriations by the Legislature were made to fund the recommended
projects. However, current fiscal year appropriations and other recent financial developments
will probably result in many retrofit projects being funded in the near future.

Additionally, the Department of Community Affairs is understanding various measures to reduce
shelter demand by: 1) developing public information efforts that encourage people to remain at
home, and shelter in place, if they are not specifically ordered to evacuate by emergency
management or elected officials; and 2) working with all agencies involved in residential
construction and building standards to encourage practices that are more resilient to hurricane
impacts or provide in-place shelter options. Mitigation alternatives such as safe rooms and
reinforced community centers in mobile home parks are expected to reduce the need for people
to evacuate or to seek public shelters in response to an approaching hurricane.

In November 1999, the Department of Community Affairs conducted a shelter summit to inform
and update legislators and state agency officials on statewide sheltering issues. The intent of the
summit was to educate all attendees regarding the numerous issues associated with providing
safe shelter spaces to the many hurricane prone residents in the State, as well as what measures
are currently underway to address the situation. The Summit also allowed the Department to
discuss important proposed sheltering legislation with lawmakers in order to gain their support for the 2000 Legislative Session. The Department is confident that substantive initiatives that will help resolve shelter funding and statutory issues are forthcoming during the upcoming year.

To address the operational issues of opening shelters in support of evacuations, the Department of Community Affairs, Division of Emergency Management has developed procedures as part of the Regional Evacuation Procedures. For counties that are in the average forecast error cone of the National Hurricane Center advisory track, or risk counties, shelters that comply with ARC 4496 and the Model Hurricane Evacuation Shelter Guidelines, or other “risk” shelters designated by county emergency management officials, will be opened. The State Emergency Operations Center, in concert with a decision to issue evacuation orders in those risk counties, will direct all other county emergency operations centers in the State to activate and will designate and officially task certain regions and counties to implement host evacuation procedures. This procedure will ensure a more pro-active and comprehensive statewide response to evacuations in counties and regions at risk from a particular hurricane threat.

Furthermore, to address regional shelter staffing shortfalls, the Department of Community Affairs, Division of Emergency Management is proposing to train 1000 state employees, Americorp volunteers, and others to act as shelter managers during hurricane events. These trained shelter managers could be moved to counties and regions with a shelter-staffing deficit prior to an impending large-scale evacuation event to augment existing staff capabilities. Nonetheless, the most effective method of addressing local shelter staff deficits is to encourage local governments to develop programs whereby county and municipal employees can serve as shelter managers. The Department of Community Affairs, Division of Emergency Management is working closely with county emergency management offices to increase local employee shelter staffing reserves.

**Recommendation # 15:** Recommend alternatives be found to offset the 12.5% local match requirement for expenses incurred by host counties.

[Department of Community Affairs, Executive Office of the Governor]

**Comments:**

When an event is declared a Presidential Emergency, or Disaster, there is a 75% Federal and a 25% non-Federal cost sharing. Historically, the State has provided a 12.5% match and required the local government to match the remaining 12.5%, except in demonstrated hardship cases. Many county officials believe that this requirement imposes financial hardship on those that may be tasked with opening host shelters, even though they are not expected to be impacted by a specific hurricane. The current arrangement creates a disincentive for non-risk counties to offer or comply with a host shelter directive and may lead to a deterioration of relations between State and local officials.
Recommendation # 16: Each county will develop host county plans, complete with ways to augment shelter staff. [County Emergency Management Agencies, Department of Community Affairs]

Comments:

All counties in the State are required to develop host shelter procedures as part of their Comprehensive Emergency Management Plan to address shelter staffing, traffic management and emergency public information issues. Counties should develop procedures to use county and municipal employees to augment existing shelter staff during risk and host shelter operations. Request for technical assistance to develop of revise host shelter plans will be coordinated by the Department of Community Affairs.

Recommendation # 17: Enact legislation to support enhanced liability protection for private facilities used as public shelters, and clarify those public facilities that can be used as shelters. [Department of Community Affairs, Executive Office of the Governor]

Comments:

This legislation will remove disincentives that make the number of private organizations reluctant to offer their facilities to local governments for shelters. Currently numerous private organizations such as churches are very reluctant to allow the use of their, in many cases substantial, facilities because of liability and reimbursement for damages issues. Clarification should be included within this proposed legislation to clarify which public facilities can be used as public shelters, i.e. community colleges, universities, state facilities, etc.

Recommendation # 18: Department of Transportation to coordinate with counties to place signage directing the public to shelters. [Department of Transportation, Department of Community Affairs, County Emergency Management Agencies]

Comments:

The Florida Department of Transportation should coordinate with counties on the placement of stationary flip down signs, as well as permanent and mobile variable message signs on state road right of ways before every hurricane season. The signs should provide directions to the nearest shelter locations from all evacuation routes, as well as address shelter space availability/status along those routes. Specific funding should be made available to the Department of Transportation on a yearly basis to ensure that signage placement is updated in accordance with local situation before each hurricane season. This appropriation should also address maintenance of stationary signage and the storage of mobile signage equipment. Pre-arranged signage plans to local shelters at all interchanges of one-way routes is crucial to the success of the operation.

Recommendation # 19: Investigate the use of military assets for sheltering on in-state bases. [Enterprise Florida/Defense Alliance]
Comments:

Numerous military bases throughout the State have large, structurally sound buildings that are suitable as shelters. Military commands have large staff assets that have been used in certain counties as shelter managers. The State should investigate the means by which that arrangement can be applied universally throughout the state. Structures on military installations are up to now an untapped shelter resource.

Recommendation # 20: All counties should activate their emergency operations centers to support major evacuations and provide hosts sheltering operations. [County Emergency Management Agencies, Department of Community Affairs]

Comments:

Florida currently has a 1.5 million public shelter space deficit. This has the twofold consequence of requiring evacuees travel outside of the impacted county to seek safety, and requiring extensive coordination with non-impacted counties to ensure all available shelters are open and adequately advertised. Activating all county emergency operations centers is essential for this coordination to occur. It is also essential non-impacted counties be available for arriving evacuees from threatened counties.

Recommendation # 21 All counties that open host shelters need to be automatically covered under the Governor’s Executive Order declaring a state of emergency. [Department of Community Affairs, Executive Office of the Governor]

Comments:

Doing this will help ensure these non-impacted counties can be reimbursed either from the Federal Emergency Management Agency or the State, who would seek reimbursement for the costs incurred by host counties.
COMMUNICATIONS MANAGEMENT - EMERGENCY PUBLIC INFORMATION

Hurricane Floyd identified a serious need in our overall evacuation process. For many years, the State has had an active emergency information and awareness program, evidenced through various severe weather awareness campaigns, and the development and airing of several public service announcements directed at educating the general public on overall issues on hurricane preparedness. Yet, as the 1999 hurricane season unfolded, it became obvious there was a critical need to provide direct, and specific emergency information for residents in the time frame immediately preceding an evacuation; during the evacuation itself; while in a shelter, hotel, or staying with relatives away from home; and, during the reentry process.

This process can be broken down into four distinct phases.

**Phase One:** This is the time before the potential evacuees leave their homes. A system of providing current emergency information over the Internet is needed. This would include information on available evacuation routes; shelter locations; general traffic information; the location of your home in relation to an area ordered to evacuate. This data would be driven by the zip code a person has. In addition, radio and television media outlets would broadcast pertinent information.

**Phase Two:** Communicating emergency information to the evacuee is critical. It will eliminate a high degree of frustration and provide sufficient information to direct evacuees to shelters or other destinations. This would be coordinated through Emergency Alert System broadcasts, AM-FM radio stations, variable messaging systems on evacuation routes; and information provided at all rest stops concerning shelter locations, hotel availability, and more. The better informed the evacuee is, the quicker they can exit the evacuation routes.

**Phase Three:** Once in a host county, emergency information must be disseminated to keep evacuees informed when it is appropriate to go home, the status of the storm, road status, and other pertinent information. This would be accomplished through the Internet, broadcast media, and a better means of direct communications with evacuees in public shelters.

**Phase Four:** When it is time to return home, the reentry process can be as difficult as the original evacuation. Therefore, the same methods of dissemination as in Phase Two will be used.

**Recommendation #22:** Improve the amount and availability of emergency information through the Internet. [Department of Community Affairs]
**Comments:**

Having the availability of critical emergency information through the Internet would assist in providing residents the data they need in order to leave their homes, or safely stay. The Department of Community Affairs needs to pursue a major upgrade of its current Internet site to include the provision of emergency management information by zip code for coastal county residents, including those hosted in public shelters.

**Recommendation #23:** Develop an annex to the Regional Evacuation Procedures for public information. [Department of Community Affairs]

**Comments:**

The current statewide procedures for coordinating a regional or multi-regional evacuation is through the Regional Evacuation Procedure, which has been developed in cooperation with the Florida Department of Transportation, the Florida Department of Law Enforcement, Florida Highway Patrol, Florida Department of Community Affairs, County Emergency Managers, and Florida Sheriffs. The Department of Community Affairs shall develop an annex to this procedure for the dissemination of emergency public information.

**Recommendation #24:** Identify local emergency public information capabilities. [Department of Community Affairs]

**Comments:**

In order to create a statewide, coordinated, emergency public information strategy, current local capabilities must be identified and integrated into this program. Many locales already have variable signage resources, agreements with local media outlets, and more. The State system should be designed to enhance these local capabilities, where at all feasible.

**Recommendation #25:** Develop video Public Service Announcements to explain the results of the Task Force and inform the public. [Department of Community Affairs, Department of Transportation]

**Comments:**

An effective means of making citizens aware of the overall evacuation process is through the airing of public service announcements. Such announcements should be developed to educate the public on the evacuation process and what to expect once on evacuation routes.
APPENDIX I

Press Release – Statewide Hurricane Evacuation Study
GOVERNOR BUSH ORDERS STATEWIDE HURRICANE EVACUATION STUDY

TALLAHASSEE - Governor Bush today directed state, local and private sector officials to complete a statewide hurricane evacuation study by the end of the year.

The Governor wants the Departments of Community Affairs, Highway Safety and Motor Vehicles, Law Enforcement, Military Affairs, and Transportation to work with local emergency management officials to determine the feasibility of converting the state's Interstate highways into one-way hurricane evacuation routes.

"We just completed the largest-ever evacuation in Florida of more than one million people - and we did it safely," said Governor Jeb Bush. "However, we are constantly looking at ways to improve our hurricane preparedness. This study will help us improve the effectiveness and efficiency of Florida's hurricane evacuation effort."

The Governor wants a thorough review of all the state's major choke points during evacuations and solutions to alleviating the traffic congestion. Governor Bush says that any significant changes in the state's evacuation process, such as the one-waying of Interstate highways, will require a tremendous amount of planning, preparation and lead-time to ensure the safety of the traveling public.

"We'll never have a transportation system that can easily accommodate an evacuation of the type we just had," said FDOT Secretary Tom Barry. "What this study will tell us is how to get the maximum use out of the transportation system that we already have in place."

The feasibility study will be chaired by former Florida Department of Transportation Secretary Walter Revell who is now Chairman and Chief Executive Officer of H.J. Ross Associates, Inc. in Coral Gables. In addition to working with state and local officials,
Revell will tap the expertise of the consultant engineering community to help complete the study by year's end.
APPENDIX II
Task Force Members
Governor’s Hurricane Task Force

Mr. Walter Revell, Chairman
Governor’s Hurricane Task Force

The Honorable Jim Sebesta
Senator, District 20

The Honorable Kelley Smith
Representative, District 21

Mr. Bob Burleson, President
Florida Transportation Builder's Association

Mr. Steve McGucken, Chairman
Florida Institute of Consulting Engineers, Transportation Committee
c/o URS Greiner Woodward Clyde

Mr. Frank Ryll, President
Florida Chamber of Commerce

Ms. Melissa Reboso, Attorney
Governmental Affairs

Mr. Leerie T. Jenkins, Jr.
Reynolds Smith & Hills, Inc.

Mr. Tom Barry, Secretary
Florida Department of Transportation

Mr. Frank Koutnik, Administrator
Department of Community Affairs
Office of Policy and Planning

Lt. Colonel Norman Redding
Plans Operations & Military Officer

Mr. Larry Gispert, Manager
Emergency Management
Hillsborough County

Mr. Robert 'Chip' Patterson, Division Chief
Emergency Management
Duval County
Mr. Tony Carper, Director
Emergency Management Division
Broward County

Mr. John Wilson
Public Safety Director
Lee County

Mr. Ed Williams
Mutual Aid Administrator
Florida Department of Law Enforcement

Lt. Colonel Billy Dickson
Deputy Director, Field Operations
Florida Highway Patrol

Sheriff Guy Tunnell, President
Florida Sheriff's Association

Police Chief Gary Grosser, President
Florida Police Chiefs’ Association

Mr. Tom Yeatman, Staff Director
Comprehensive Planning, Local & Military Affairs

Mr. Ken Morefield, Assistant Secretary for Transportation Policy
Florida Department of Transportation

Traffic Management Team

Mr. Ken Morris, Inspector
Florida Department of Law Enforcement

Mr. Michael Loehr, Response Section Administrator
Florida Division of Emergency Management

Mr. Mark Trammell, Captain
Florida Highway Patrol

Mr. Steve Decker, Emergency Coordination Officer
Florida Department of Transportation
Governor’s Hurricane Evacuation Task Force
Recommendations

Recommendation #1: All State Agencies need to include hurricane preparedness in their outreach programs.

Recommendation #2: All major evacuations will be directed by the Governor through the State Emergency Operations Center.

Recommendation #3: Develop decision-making criteria to invoke a reverse lane plan.

Recommendation #4: Develop a traffic model for each identified route to be reverse laned, to include ground level traffic management at the terminus of the reverse lane route.

Recommendation #5: Determine manpower and resource requirements to implement reverse lane scenarios.

Recommendation #6: Develop an implementation timeline for reverse laning each of the identified routes from beginning to termination.

Recommendation #7: Recommend the acceptance of the seven identified reverse lane evacuation routes.

Recommendation #8: Recommend the Department of Transportation enhance the emergency lanes (paved shoulders) of the seven identified roadways to use as a third lane in the correct direction of travel to increase evacuation clearance times.

Recommendation #9: The Department of Transportation should proceed with procurement and installation of traffic control devices, highway markings and roadway modifications necessary to support reverse lane operations.

Recommendation #10: The Florida Highway Patrol needs to provide traffic control training to Department of Transportation employees, State Law Enforcement Officers and the Florida National Guard by the 2000 hurricane season or as soon as possible in 2000.
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Recommendation #12: For effective reverse lane operations a statewide common communication system is recommended.

Recommendation #13: A command member of the Florida Highway Patrol should be the incident commander for any reverse lane operation.

Recommendation #14: The Florida Department of Law Enforcement and the Department of Community Affairs will offer technical advice to any county that has not developed a reentry plan.

Recommendation #15: Recommend alternatives be found to offset the 12.5% local match requirement for expenses incurred by host counties.

Recommendation #16: Each county will develop host county plans, complete with ways to augment shelter staff.

Recommendation #17: Enact legislation to support enhanced liability protection for private facilities used as public shelters, and clarify those public facilities that can be used as shelters.

Recommendation #18: Florida Department of Transportation to coordinate with counties to place signage to shelters.

Recommendation #19: Investigate the use of military assets for sheltering on in-state bases.

Recommendation #20: All counties should activate their emergency operations centers to support major evacuations and provide hosts sheltering operations.

Recommendation #21: All counties that open host shelters need to be automatically covered under the Governor’s Executive Order declaring a state of emergency.

Recommendation #22: Improve the amount and availability of emergency information through the Internet.

Recommendation #23: Develop an annex to the Regional Evacuation Procedures for public information.

Recommendation #24: Identify local emergency public information capabilities.
Recommendation # 25: Develop video Public Service Announcements to explain the results of the Task Force and inform the public.
APPENDIX IV
Saffir-Simpson Scale for Hurricane Categories
SAFFIR-SIMPSON SCALE
Hurricane Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition-Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Winds: 74-95 mph (64-82 knots) to 980 millibars</td>
</tr>
<tr>
<td>2</td>
<td>Winds: 96-110 mph (83-95 knots) 965 – 979 millibars</td>
</tr>
<tr>
<td>3</td>
<td>Winds: 111-130 mph (96-113 knots) 945 – 964 millibars</td>
</tr>
<tr>
<td>4</td>
<td>Winds: 131-155 mph (114-135 knots) 920 – 944 millibars</td>
</tr>
<tr>
<td>5</td>
<td>Winds: 155+ mph (135+ knots) &lt;920 millibars</td>
</tr>
</tbody>
</table>
APPENDIX V
Regional Evacuation Procedure
State of Florida  
Regional Evacuation Procedure

PURPOSE

This operational procedure will be used by state and county government organizations in the State of Florida to manage and coordinate multi-county, regional evacuations in response to any hazard which would necessitate such actions. This document defines the scope of procedure, details the concept of operations and assigns responsibility for implementation. Attachments to the document include hazard-specific annexes which incorporate operational checklists, forms and other aids needed for implementation of this procedure.

This procedure establishes a consistent operational methodology for the State of Florida and all political subdivisions therein to plan for and implement regional, multi-jurisdictional evacuations, regardless of the geographic area in which they occur. The availability of consistent state-wide procedures facilitates an adequate understanding on the part of all organizations and levels of government regarding their responsibilities during a regional evacuation, and establishes uniform operational techniques through which those responsibilities can be fulfilled.

AUTHORITY AND SCOPE

Authorities
This procedure is adopted as an operational element of the Florida Comprehensive Emergency Management Plan, developed in accord with Chapter 252, Florida Statutes, and is incorporated by reference thereto. As such, it is intended to be consistent with and supportive of the Comprehensive Emergency Management Plan, and to be implemented, when needed, with the same authorities under law as provided therein.

Scope
Implementation of this procedure is under the direction of the Governor, through the Florida Division of Emergency Management. It will be implemented through close coordination between the State Emergency Operations Center (SEOC) and local emergency management officials, for all hazards which may necessitate a multi-jurisdictional response including evacuation and sheltering operations.

Under various circumstances, the State Coordinating Officer may recommend to the Governor that a State directed evacuation is necessary. At the Governor’s direction, language may be included in the Governor’s Executive Order identifying mandatory evacuations and directing a coordinated, regional response among all State and local response agencies. State direction of the evacuation may occur when some or all of the following conditions are present:
In support of regional evacuations, response operations including sheltering, traffic management, and emergency public information may be required in areas not threatened by the hazard;

Multiple jurisdictions will utilize a limited number of regional evacuation routes necessitating central coordination and direction;

The threat will necessitate evacuation of large numbers of people, requiring the coordination of emergency operations among two or more counties;

The Governor has issued an Executive Order declaring a State of Emergency; and

The Florida Comprehensive Emergency Management Plan has been duly activated.

[Note: this list is not exclusive, rather it is intended to provide guidance as to when State-directed evacuations may be necessary.]

This procedure establishes a formal basis to guide state and county emergency service organizations in the execution of their responsibilities during a regional evacuation. It does not replace the authorities or responsibilities of county and municipal governments in Florida to develop, test, and implement evacuation plans within their own jurisdiction.

CONCEPT OF OPERATIONS

Overview
This section describes the concepts and provisions through which the SEOC and county EOCs within the effected region(s) will determine the need for, and implement, a regional evacuation. The concept of operations for this procedure provides guidance and structure for both the planning and implementation of regional evacuations. The procedure relies on effective preplanning for regional evacuations as well as the implementation of established plans accordingly.

Planning Assumptions
The principal assumptions underlying the concept of operations for a regional evacuation are as follows:

- Activation of this procedure will occur for all hazards which could necessitate evacuation and sheltering operations involving multiple counties. However, the need to implement certain aspects of the procedure, such as opening shelters in non-threatened areas or terminating evacuations and opening refuges-of-last-resort, may vary based on the specific hazard, degree of vulnerability, and projected area of impact.

- The evacuation of large numbers of people from vulnerable areas will stress the limited capabilities of roadways available for this purpose, potentially requiring substantial additional time to complete an evacuation. Consequently, a regional evacuation must be initiated as soon as feasible upon recognition of the threat, and must continue to function efficiently until completion.
• Regional evacuations will require a substantial level of personnel and equipment resources for traffic control, which could stress and/or exceed the capabilities of the individual threatened jurisdictions. Specific procedures may be developed regarding the pre-deployment of State, federal, and mutual aid personnel and equipment resources to multiple jurisdictions.

• Coordination between state and local agencies involved in the implementation of a regional evacuation will occur through exchanges of information regarding decision-making, protective actions, and resource coordination and deployment.

• The capacity of available public evacuation shelter facilities in and adjacent to the impacted region may be limited, potentially requiring the full use of all shelters within the evacuation region. A high level of coordination will be necessary to effectively communicate protective action and shelter information to evacuees.

• For certain hazards, large vulnerable populations and limited evacuation road networks may necessitate termination of regional evacuations prior to full completion and evacuees still at risk would need to be directed to refuges-of-last-resort as quickly as possible.

• The timeliness of a regional evacuation and the safety of the evacuees will be enhanced through local and state government efforts to provide complete management and control of the process from its start to its completion, including the release of public information, traffic and access control, and maximizing the use of public shelter resources. This procedure does not assume that any portion of the regional evacuation process will be conducted without use of this procedure and other state and local emergency management procedures.

• A regional evacuation will require expedited coordination of numerous jurisdictions to maintain an efficient and safe movement of evacuation traffic out of the impacted areas and to adequate shelter locations.

Operations
The staff of the SEOC and county EOCs will monitor hazardous situations as they develop. Regular conference calls will be held between the SEOC, potentially affected county EOCs (risk and host) and appropriate state and federal agencies as to the degree of threat to Florida and the potential for escalation. In addition, the SEOC will coordinate with local emergency management agencies as to whether the hazard will require coordination and implementation of protective actions including evacuations across multiple jurisdictions. If so, the SEOC and potentially affected county EOCs will begin implementation of the regional evacuation process.
Using all information available, the State and county EOCs will coordinate and reach consensus on the region(s) most likely to be impacted. The SEOC will then notify all counties potentially involved in the response, and request that the Governor declare a State of Emergency. Working together, the SEOC and the affected county EOCs will then initiate the regional evacuation in accord with the provisions of this procedure, including the pre-deployment of personnel and equipment resources, if applicable.

This operational concept also requires the State and county EOCs to monitor progress in implementation of the regional evacuation and to exchange information on an established time schedule to promote effective coordination by all involved jurisdictions. Through this procedure, the State and county EOCs will coordinate the efficient deployment of resources when needed, utilization of available evacuee shelter capacity, and effectively address modifications to evacuation routes, if necessary.

Activities Necessary to Support the Concept of Operations
In order to effectively implement a regional evacuation, this procedure requires pre-hazard planning by all parties, pre-event coordination, consistent implementation strategies, and post impact assessments. A general description of these activities is provided in Exhibit One.

| EXHIBIT ONE |
| An Overview of the Concept of Operations, Operational Phases and Applicable Time frame |

<table>
<thead>
<tr>
<th>Preparedness Phase</th>
<th>Stand-By Phase</th>
<th>Decision Phase</th>
<th>Evacuation Phase</th>
<th>Re-entry Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Regional procedure update</td>
<td>* Monitor progress of hazard</td>
<td>* Resource prepositioning</td>
<td>* Enhanced coordination</td>
<td>* Develop regional reentry plan</td>
</tr>
<tr>
<td>* Hazard-specific procedure update</td>
<td>* Conference calls</td>
<td>* Regional evacuation decision</td>
<td>* Monitoring of evacuation</td>
<td>* Post-event public information</td>
</tr>
<tr>
<td>* Pre-hazard public information program</td>
<td>* Assess vulnerability and decision times</td>
<td>* Pre-event public information</td>
<td>* Assess need to terminate</td>
<td></td>
</tr>
<tr>
<td>* Training and exercising</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Immediately preceding an event that may necessitate a regional evacuation, and under a State of Emergency declared by the Governor, the State will assist county response efforts through the pre-positioning of resources as stipulated in the hazard-specific annexes of this procedure. The counties of the affected region(s) will coordinate with the SEOC regarding the dissemination of appropriate public information.
During implementation, state and local response agencies will monitor the progress of the evacuation and exchange current information on the level of traffic on regional routes and the utilization of public shelter space. Ongoing public information will be provided through the broadcast media to inform the evacuees of any change in regional evacuation routes, the availability of hotel and public shelter space in host counties, and similar information.

After the threat has passed, the SEOC will coordinate with EOCs of the impacted counties to develop a regional re-entry traffic management plan. Post-event activities will also include a review and critique of the regional evacuation and associated procedures to determine the need for any modifications. The post-event critique should consider the need for more training or exercises to improve the capabilities of response personnel to implement this procedure.

**Pre-positioning of Necessary Resources**

Implementation of a regional evacuation will require substantial personnel, equipment and supplies at various locations along the evacuation routes and at facilities designated as risk and host shelters. Further, state and mutual aid resources necessary for initiating and sustaining the evacuation process may need to be pre-positioned prior to or concurrently with the Governor’s emergency declaration. Therefore, each hazard-specific annex will include procedures regarding the pre-deployment of resources, the state and local agencies involved, and the coordination process that will occur. The pre-positioning of all state law enforcement personnel in support of local traffic management plans will occur consistent with the State of Florida Regional Evacuation Law Enforcement Staffing Plan. Upon implementation of this procedure, the SEOC will instruct the responsible state agencies to pre-position resources as identified in the hazard-specific annexes or as agreed to during state-local coordination conference calls. Exhibit Two lists the types of pre-positioned resources that state and local agencies should consider in the development of evacuation procedures.

<table>
<thead>
<tr>
<th>Exhibit Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Positioned Resources to Support Regional Evacuations</td>
</tr>
<tr>
<td>Programmable electronic public information signs/displays</td>
</tr>
<tr>
<td>Local/small area radio broadcast stations</td>
</tr>
<tr>
<td>Wreckers, tow trucks, and other heavy equipment for clearing roadways</td>
</tr>
<tr>
<td>Gasoline tankers for replenishing fuel supplies at gas stations on regional routes</td>
</tr>
<tr>
<td>Ambulances, medical personnel</td>
</tr>
<tr>
<td>Shelter management personnel and supplies</td>
</tr>
<tr>
<td>Buses for transport of evacuees without other means</td>
</tr>
<tr>
<td>Sampling / testing equipment and personnel</td>
</tr>
</tbody>
</table>
Information Exchange
In order to effectively manage a regional evacuation, it is essential that every involved organization have timely and accurate information regarding the current characteristics of the evacuation, support operations, resource availability, and the hazard itself. To that end, a process for routine communications and coordination will be initiated by the SEOC and all involved county EOCs upon determining that a regional evacuation must be implemented.

The SEOC will ensure that each county in the state has available copies of the Disaster Snapshot forms provided in each hazard-specific annex. Immediately upon the decision to implement a regional evacuation, all affected counties will utilize the appropriate Disaster Snapshot form to communicate information to the SEOC at regular intervals. Examples of such information regarding evacuations could include:

- The characteristics of the hazard and associated events
- The designated evacuation area, initiation times and resource mobilization status
- The progress of resource pre-deployment
- The current status of regional evacuation routes
- The status of available public shelter and hotel/motel space by location
- Assessment of the need to terminate the evacuation prior to full completion
- Estimated time of evacuation completion
Managing Adjustments to the Regional Evacuation

During a regional evacuation, for a wide variety of unanticipated reasons, it may become necessary to adjust or modify procedures stipulated in the hazard-specific annexes. The most readily apparent reasons for such modifications could include, but not necessarily be limited to, the following:

- Changes in the direction or intensity of the hazard;
- Blockage or excessive vehicle congestion on a regional evacuation route;
- Filling of available capacity at public shelters and hotels/motels in host counties; and
- Anticipated failure to complete the evacuation prior to hazardous conditions impacting evacuees.

If alternative routes, actions or resource deployment can be pre-planned to address these possibilities, appropriate procedures will be included in the hazard-specific annexes. For other situations that cannot be anticipated during the planning of a regional evacuation, the SEOC will work with the affected county EOCs and all relevant agencies at the time to make adjustments in the regional evacuation in accord with the guidance provided in this section. In the event of a physical blockage of a regional evacuation route, the county EOC with jurisdiction will coordinate with the State and other counties, as necessary, to remove the blockage. If removal is not feasible, the SEOC will coordinate with all affected county EOCs to plan and implement alternative routing.

Host Response Operations

A regional evacuation will generate impacts outside areas immediately at risk and may necessitate the use of local resources in non-threatened counties to support the response. The SEOC will determine whether activation of response operations in designated host regions outside the immediate area of impact is necessary. If so, the SEOC, in conjunction with the Governor’s Executive Order, will direct the assistance of any or all local governments within Florida, and request as needed adjacent state emergency management agencies, to support the regional evacuation as follows:

1. The SEOC will designate, through a state mission, host regions to implement protective actions in support of evacuations in risk counties. All county EOCs within designated host regions will activate and prepare to initiate host response plans.

2. All counties within designated host regions will be included in the Governor’s Executive Order and all requests by the Governor for emergency disasters and major disaster declarations.

3. State ESF16 will coordinate traffic management issues with local law enforcement from all counties within host and risk regions.
4. In support of regional host response operations the SEOC shall, at a minimum, provide the following information to host regions every three hours or when warranted by the situation:

A. DOT real-time traffic counter data for roads within the host region or on all roads leading into the region;
B. Traffic Reports from State ESF16;
C. Any significant changes to the situation in adjoining counties that may have an impact on host sheltering operations;
D. Inclusion in all state-conducted evacuation coordination conference calls, Governor’s Executive Orders and declaration requests; and
E. The content of any public information released by state agencies.

5. Upon receipt of a state mission, each county within designated host regions will:

A. Coordinate host response activities including traffic management, host sheltering and public information with all counties within their designated region. Host response procedures will address:

1) **Traffic Management Plans**
   Identify specific actions to maintain a smooth flow from evacuation routes into the region to host shelters including:
   a) Traffic control points and the responsible agency for providing staffing and operational control;
   b) Barricade plans including location and staffing; and
   c) Potential one way / reverse lane operations.

2) **Shelter Operations Plans**
   Identify specific actions to address staffing and other host shelter operational requirements including:
   a) The possibility of refuge operations;
   b) Shelter manager / staff deficiencies;
   c) Any phased opening of host shelters within the region as a whole or within counties;
   d) Any resource or other operational shortfalls that will require state support.

1) **Public Information Plans**
   Identify specific actions for communicating emergency information to evacuees en route including:
   c) Host shelter locations, shelter openings and closings; and directions to the shelters from major evacuation routes;
   d) Ensuring hotel / motel capacity and status info is incorporated into emergency public information procedures;
e) Pre-developed messages and information for release to the media;
f) The placement of variable message signs and procedures for updating their messages;
g) The placement of portable radio transmitters and procedures for updating their messages;
h) Providing maps, fliers or other shelter information to local and state law enforcement / traffic control personnel, rest areas, and other key locations along major evacuation routes (restaurants, gas stations) both prior to and during the event;
i) The location and operation of host shelter information centers/staging areas; and

j) Integrating local county/EM public information operations and messages with local FHP/DOT District Public Information Officers

B. Coordinate refuge-of-last-resort procedures to address the possibility that evacuees may be stranded on evacuation routes within the host region;

C. Participate on all state-initiated evacuation coordination conference calls;

D. Exchange critical information to all counties within the region via regional conference calls. Relay host region information to the SEOC.

6. The designation of a Host Region Information Coordinator, preferably a representative with no direct operational responsibilities within the EOC in which they are located, is strongly encouraged.

7. All counties within host regions will provide the following information to the SEOC every three hours or upon significant changes to host region operations:

A. The designated host region information coordinator (if applicable);
B. The need for a SERT Liaison or additional personnel for the collection and dissemination of information;
C. Location, capacity and status of host shelters;
D. The location of all variable message signs, host shelter information or staging areas;
E. Any reports from local law enforcement of road conditions or status that may impact host sheltering; and
F. The resources needed from state agencies to support host response plans.

Completion of the Regional Evacuation
Using the Disaster Snapshot forms and coordination conference calls, all risk and host county EOCs will notify the SEOC of the estimated time of completion of the regional evacuation within the local jurisdiction, and subsequently, when the evacuation has been completed. Upon receipt of such information, the SEOC will notify all county EOCs within the impacted region accordingly.

Re-entry into the Evacuated Areas
Following a regional evacuation, the process for re-entry into the evacuated areas must be coordinated to ensure the safety of the public, protection of property, and effective response of the numerous organizations and jurisdictions involved. This procedure anticipates that the re-entry decision and traffic management will be a carefully managed process coordinated by the SEOC. Throughout the re-entry process, State Emergency Support Function (ESF) 16, Law Enforcement and Security, will facilitate coordination conference calls with state and local law enforcement and transportation agencies to include all risk and host counties. These calls will serve as a mechanism to coordinate the timing of re-entry into impacted jurisdictions and the resources necessary to support local efforts. In addition, State ESF 14, Public Information, will facilitate similar calls with state agency and county public information officers to coordinate the dissemination of consistent information to risk and host areas. Additional re-entry procedures are included in each hazard-specific annex.

Each county EOC will be responsible for making a determination that re-entry has been completed for its jurisdiction, and promptly informing the SEOC. Following receipt of information from all affected counties that the re-entry process is complete, the SEOC will notify every county EOC in the affected region of the date and time of completion.

RESPONSIBILITIES

Overview
The section describes the general responsibilities of the principal organizations and agencies expected to participate in the implementation of a regional evacuation pursuant to this procedure. The intent of this section is to explain only the general framework for accomplishing the tasks necessary to implement this procedure. Additional duties and responsibilities of individual agencies and organizations are defined in the hazard-specific annexes.

The Florida Division of Emergency Management
Each year, the Division of Emergency Management will coordinate with all counties to ensure that state and local agencies and organizations are adequately prepared to implement a regional evacuation. To assure this preparedness, the Division will undertake the following duties:

- Support state and local agency planning efforts through necessary meetings and training sessions, and ensure that each hazard-specific annex is current and valid;
• Solicit the involvement of other state agency representatives in the planning process where necessary;

• Fulfill the State's role in developing and presenting the necessary public information programs to support implementation of this procedure, promoting and assisting as needed the local public information programs;

• Review this procedure and provide training to appropriate SEOC staff;

• When appropriate, utilize the procedure during the annual state-wide hurricane exercise, nuclear power plant exercises, and other training opportunities to promote improved understanding of its operational concepts at the local level; and

• Ensure that all county EOCs and other agencies and organizations have an up-to-date copy of this procedure.

During the implementation period of a regional evacuation, the Division of Emergency Management shall have the following responsibilities:

• Coordinate with county EOCs to ensure that all toll booths, draw bridges, and other known impediments to facilitated traffic flow along regional evacuation routes have been removed, closed or otherwise addressed;

• Continually monitor the direction, intensity, and potential for escalation of the hazard;

• Continually compile information from each county EOC using the Disaster Snapshot forms;

• Provide State resources to assist in the implementation of the evacuation as requested or pre-designated in this procedure;

• Prepare and release appropriate public information in concert with county EOCs; staff the Florida Emergency Information Line and respond to inquiries from the affected population;

• Continually monitor the progress of the evacuation; determine if the regional evacuation will be completed prior to impact of hazardous conditions on evacuees or if changes to currently implemented procedures are indicated;

• Upon notification from one or more counties that a regional evacuation route has been blocked, develop corrective response(s) in cooperation with the county EOC(s) with responsibility for the affected portion of the route;
• If the evacuation is to be terminated prior to completion, secure the Governor's concurrence and instruct county EOCs to implement actions for termination; coordinate media releases and public information broadcasts with county EOCs to instruct evacuees to seek refuges-of-last-resort;

• Mobilize state response personnel to provide medical, search and rescue, transportation and shelter services, and other needed resources to impacted evacuees promptly after the hazard has passed;

• Assist counties where refuges-of-last-resort have been utilized in securing the necessary resources and personnel; and

• Take other such actions during regional evacuation implementation as may be indicated by the circumstances or on request of the county EOCs.

In order to determine the point of completion of a regional evacuation, the Division of Emergency Management will undertake the following duties:

• Using the Disaster Snapshot forms and coordination conference calls, identify the point when each involved risk and host county EOC has judged the evacuation within their jurisdiction to be complete

• Notify all county EOCs of the time of completion of the evacuation process, to initiate demobilization of appropriate personnel;

  • Issue appropriate public information regarding the completion of the regional evacuation, the shelters opened, etc.

Following utilization of this procedure for each regional evacuation, the Division of Emergency Management, working with the affected risk and host counties, will lead an after-action assessment of the event and regional evacuation operations to address the following:

• The effectiveness of this procedure and any indicated changes needed;

• The timeliness and technical validity of the decision to implement a regional evacuation;

• The adequacy of the personnel, equipment and supply resources available and the timeliness of their mobilization, as well as the responsibility for taking any corrective action;

• Any additional training and/or exercise needs in regional evacuation planning as indicated;
• The effectiveness of the public information utilized and the appropriateness of public behavior; and

• Any other circumstance or condition that indicates a need for modification of plans and procedures or the provision of additional resources.

Following such an assessment, the Division of Emergency Management will provide leadership and coordination to assure any corrective actions indicated are implemented in a timely manner.

County Agencies and Organizations, Other State Agencies
In order to maintain the capability of effectively implementing a regional evacuation, all State and local agencies and organizations that support emergency operations, working under the coordination of the SEOC and each county emergency management agency, will accomplish the following:

• Participate in and support, as appropriate, regional evacuation planning efforts;

• Provide information regarding the organization’s available personnel, equipment, facilities and supplies to facilitate the implementation of regional evacuations;

• Review appropriate state and local procedures to ensure adequate understanding of the organization’s responsibilities and commitment pursuant to each potential hazard;

• Integrate the responsibilities and operational concepts defined in the hazard-specific annexes into the organization’s other emergency plans and procedures;

• Provide and/or participate in training regarding the implementation of regional evacuation procedures;

• Maintain preparedness to implement the organization’s responsibilities when events necessitate or the Governor directs a regional evacuation to occur;

• Upon the Governor’s decision to implement a regional evacuation, conduct local operations to support the evacuation in accord with this procedure and other plans and procedures utilized by the county EOC; and

• Participate in after-action evaluations and assessments of this and other state and local procedures.

Maintenance of this Procedure
Annually, the Florida Division of Emergency Management, working through the designated Area Coordinator as needed, will take the following steps to ensure that this procedure is maintained:
• Ensure that regional evacuation planning meetings are convened and that, at a minimum, participants complete the following activities:
  ⇒ Review the existing regional evacuation procedures for all hazards to ensure continued accuracy and validity, and make any necessary modifications;
  ⇒ Review the availability of regional evacuation routes, public shelters and hotel/motel capacities for all hazards, and modify as needed;
  ⇒ Determine the need to develop additional procedures;
  ⇒ Ensure that training in this procedure has been made available locally to all relevant agencies.

• Consider simulated implementation of this procedure as a part of the annual state-wide hurricane exercise, nuclear power plant exercises, and other training opportunities;

• Modify this procedure and/or the hazard-specific annexes accordingly;

• Review all state level public information materials to ensure their adequacy to support and facilitate a regional evacuation anywhere in the state;

• Identify any state or federally sponsored construction projects that may significantly decrease the capacity of any designated regional evacuation route; coordinate with the involved agencies to evaluate and define feasible alternative actions in the event of an evacuation along that route; and

• Provide training for the SEOC staff in the use and implementation of this procedure.
APPENDIX VI

State Agencies On-going Preparedness Activities

Ongoing State Agencies Hurricane Preparedness Activities

Hurricane Preparedness

0. Sea, Lake and Overland Surges from Hurricane (SLOSH) Storm Surge Modeling
1. Storm tide mapping of Sea, Lake and Overland Surges from Hurricane (SLOSH) inundation limits
2. Hurricane Evacuation Studies including Behavioral Analysis and Clearance Time Determination
3. Hurricane Planning Course
4. Model Hurricane Evacuation Shelter Selection Guideline Training
5. Introduction to Hurricane Preparedness Course at the National Hurricane Center
6. Shelter Surveys in counties by Department of Community Affairs, Division of Emergency Management engineers
7. Annual Shelter Retrofit Report to recommend shelter retrofit projects to the legislature
8. Five Year Statewide Emergency Shelter Plan (prepared every other year) to determine which school boards must build enhanced hurricane protection areas because of shelter space deficit
9. Statewide Hurricane Exercise including a decision making tabletop exercise and a post-storm response/recovery exercise
10. Governor’s Hurricane Conference
11. National Hurricane Conference
12. Florida Emergency Preparedness Association (FEPA) Conference
13. State and Local Assistance Officials (SLA) Conference
14. Annual Regional Evacuation Procedures review and update meetings between state and local officials
15. Public Information Officers local meeting for the refinement of the emergency public information procedures in the Regional Evacuation Procedures
16. Periodic meetings (monthly, quarterly, etc.) between State agency headquarters and agency district office employees (Florida Department of Transportation, Florida Department of Law Enforcement and Florida Highway Patrol)
17. Project Impact/Sustainable Communities, Local Mitigation Strategies, Safe Room initiatives and other Hazard Mitigation efforts to limit the impacts of hurricanes on people and property and thereby reduce demand for evacuation and sheltering
18. Hazardous Weather Awareness Week Activities

Decision Making

0. Hurricane Planning Course
1. Introduction to Hurricane Preparedness Course at the National Hurricane Center
2. Statewide Hurricane Exercise including a decision making tabletop exercise and a post-storm response/recovery exercise
3. Annual Regional Evacuation Procedures review and update meetings between state and local officials
4. Governor’s Hurricane Conference
5. National Hurricane Conference
6. Florida Emergency Preparedness Association (FEPA) Conference
7. State and Local Assistance Officials (SLA) Conference

Traffic Management

0. Hurricane Planning Course
1. Statewide Hurricane Exercise including a decision making tabletop exercise and a post-storm response/recovery exercise
2. Annual Regional Evacuation Procedures review and update meetings between state and local officials
3. Governor’s Hurricane Conference
4. National Hurricane Conference
5. Periodic meetings (monthly, quarterly, etc.) between State agency headquarters and agency district office employees (Florida Department of Transportation, Florida Department of Law Enforcement and Florida Highway Patrol)
6. Bi-annual training to statewide law enforcement agencies on Disaster Response Management by the Florida Department of Law Enforcement.

**Sheltering**

0. Hurricane Planning Course
1. Model Hurricane Evacuation Shelter Selection Guideline Training
2. Shelter Surveys in counties by Department of Community Affairs, Division of Emergency Management engineers
3. Annual Shelter Retrofit Report to recommend shelter retrofit projects to the legislature
4. Five Year Statewide Emergency Shelter Plan (prepared every other year) to determine which school boards must build enhanced hurricane protection areas because of shelter space deficit
5. Statewide Hurricane Exercise including a decision making tabletop exercise and a post-storm response/recovery exercise
6. Governor’s Hurricane Conference
7. National Hurricane Conference
8. Florida Emergency Preparedness Association (FEPA) Conference
9. Annual Regional Evacuation Procedures review and update meetings between state and local officials
10. Project Impact/Sustainable Communities, Local Mitigation Strategies, Safe Room initiatives and other Hazard Mitigation efforts to limit the impacts of hurricanes on people and property and thereby reduce demand for evacuation and sheltering

**Public Information**

0. Hurricane Planning Course
1. Basic Public Information Officers Course
2. Statewide Hurricane Exercise including a decision making tabletop exercise and a post-storm response/recovery exercise
3. Governor’s Hurricane Conference
4. National Hurricane Conference
5. Florida Emergency Preparedness Association (FEPA) Conference
6. State and Local Assistance Officials (SLA) Conference
7. Annual Regional Evacuation Procedures review and update meetings between state and local officials
8. Public Information Officers local meeting for the refinement of the emergency public information procedures in the Regional Evacuation Procedures
9. Periodic meetings (monthly, quarterly, etc.) between State agency headquarters and agency district office employees (Florida Department of Transportation, Florida Department of Law Enforcement and Florida Highway Patrol)

**10. Hazardous Weather Awareness Week Activities**
APPENDIX VII
Emergency Support Functions

EMERGENCY SUPPORT FUNCTIONS

Disaster response resources are organized into 17 Emergency Support Functions (ESFs), which manage and coordinate specific categories of assistance common to all disasters. Each ESF is headed by a lead organization responsible for coordinating the delivery of goods and services to the disaster area, and is supported by numerous other organizations.

ESF 1

TRANSPORTATION
Provide or obtain transportation support.

Lead Organization: Department of Transportation.

ESF 2
COMMUNICATIONS
Provide telecommunications, radio and satellite support.
Lead Organization: Department of Management Services

ESF 3
PUBLIC WORKS AND ENGINEERING
Provide support in restoration of critical public services, roads and utilities.
Lead Organization: Department of Transportation.

ESF 4
FIRE FIGHTING
Support detection and suppression of wildland, rural and urban fires.
Lead Organization: Department of Insurance, State Fire Marshal.

ESF 5
INFORMATION AND PLANNING
Collect, analyze and disseminate critical disaster information to State Emergency Response Team members.
Lead Organization: Department of Community Affairs.

ESF 6
MASS CARE
Manage temporary sheltering, mass feeding and distribution of essential supplies for disaster victims.
Lead Organization: Department of Business and Professional Regulation

ESF 7
RESOURCE SUPPORT
Provide logistical and resource support to other organizations through purchasing, contracting, renting and leasing equipment and supplies.
Lead Organization: Department of Management Services

SF 8
HEALTH AND MEDICAL SERVICES
Provide health, medical care and social service needs.
Lead Organization: Department of Health.

ESF 9
SEARCH AND RESCUE
Locate lost persons and victims trapped in collapsed structures and provide immediate medical care.
Lead Organization: Department of Insurance.

ESF 10
ENVIRONMENTAL PROTECTION/HAZARDOUS MATERIALS
Respond to actual or potential hazardous materials discharges and other situations
threatening the environment.
*Lead Organization: Department of Environmental Protection.*

**ESF 11**

**FOOD AND WATER**
Secure bulk food, water and ice to support mass care needs.
*Lead Organization: Department of Agriculture and Consumer Services.*

**ESF 12**

**ENERGY**
Support response and recovery from shortages and disruptions in supply and delivery of energy resources.
*Lead Organizations: Department of Community Affairs, Public Service Commission.*

**ESF 13**

**MILITARY SUPPORT**
Provide military resources to support logistical, medical, transportation and security services.
*Lead Organization: Department of Military Affairs.*

**ESF 14**

**PUBLIC INFORMATION**
Disseminate disaster related information to the public.
*Lead Organization: Department of Community Affairs.*

**ESF 15**

**VOLUNTEERS AND DONATIONS**
Coordinate utilization and distribution of donated goods and services.
*Lead Organization: Florida Commission on Community Service*
APPENDIX VIII
Regional Evacuation State Law Enforcement Staffing Assignments

This Appendix is extremely long. The purpose of this document is to pre-designate state law enforcement staff to support regional evacuation. It is very detailed illustrating which state agency is assigned to very specific locations and recorded by county.

Due to its length and annual requirement to be updated it is not being loaded into this or any other state agency’s Web site.