

## I. INTRODUCTION

### Purpose

Pursuant to Section 252.385(3), Florida Statutes, the purpose of this publication is to present the Division of Emergency Management's *Shelter Retrofit Report*. The *Shelter Retrofit Report* provides the Division's list of facilities recommended to be retrofitted using local, state and federal funds to the President of the Senate, the Speaker of the House of Representatives and the Governor. This report also prioritizes facilities with specific projects and cost estimates which, when funded, will improve relative safety and reduce the hurricane shelter space deficit of this state.

### Shelter Retrofit Project Identification Procedure

County emergency management officials in cooperation with local American Red Cross (ARC) Chapters, school boards, and other public and private agencies provided the data used for the *Shelter Retrofit Report*. The Division recognizes that local officials are aware of under-utilized facilities and are in a position to make recommendations that will best serve their communities. In order to identify potential shelter retrofit projects for inclusion in this year's report, the Division provided general guidance for the development of proposals in a questionnaire-type format that the counties could use for project submittal. Accurate and conscientious completion of the questionnaire (see Appendix H) guided those that prepared the project proposals through the shelter selection and retrofit proposal development process.

The questionnaire was formulated to include sufficient information to determine if the facility could meet ARC hurricane hazard safety guidelines, clearly define the project(s) to be undertaken and their impact upon hurricane shelter capacity and safety, and explain the interrelationship of the proposed project(s) and local and regional shelter strategies. The guidelines are found in *MASS CARE -- Preparedness and Operations* (ARC 3031), and *Standards for Hurricane Evacuation Shelter Selection* (ARC 4496). The cost estimates were generally provided by local agencies, commercial contractors, or in some cases, "rules of thumb" (not the preferred procedure). Division staff then reviewed and ranked the projects.

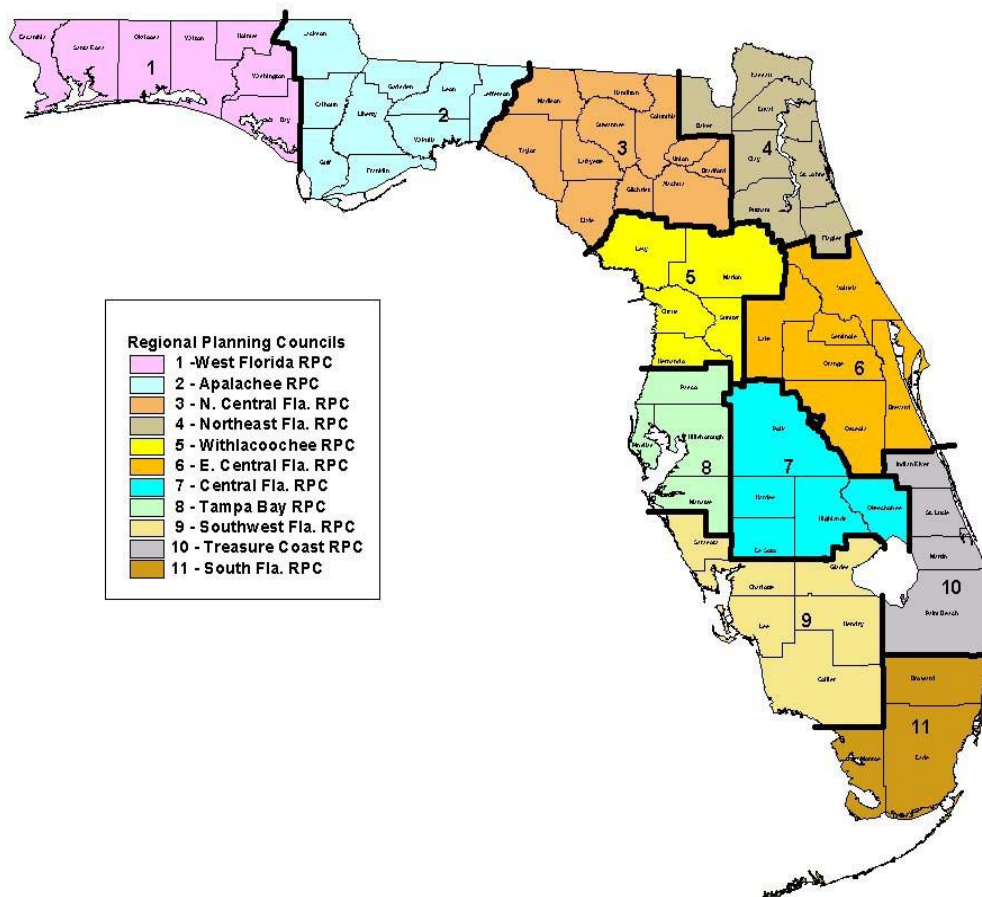
This Report also includes projects originally submitted in previous Shelter Retrofit Reports. Those projects were re-evaluated along with new projects submitted in 2006. In some cases, projects evaluated in the previous reports received different rankings in the 2006 report. This is due primarily to changes (i.e., changing regional/county deficits or updated costs) in the criteria used to prioritize projects. The criteria consists of the following:

- Regional and Local Shelter Deficit Reduction
- Structural and Hazards Vulnerability Review (ARC 4496)

- Mass Care and Infrastructure Review (ARC 3031)
- Shelter Capacity Increase, Building Ownership and Availability, and Cost-Effectiveness Considerations
- Other Considerations / Demonstration of Impact Upon the Overall Shelter Deficit Situation

For more details on each criteria item, see Appendix D: "Methodology for Recommendation of Projects for Funding." Figure 1.1 below shows a map of the Regional Planning Council regions across the State of Florida. These RPC regions are set up to help plan and coordinate planning for economic development, growth management, emergencies, and other regional impacts.

**Figure 1-1 – Regional Planning Councils**



**Summary of Annual Reports**

The retrofit projects recommended for consideration in this Report will, if funded, substantially improve state and local hurricane preparedness. Table 1.1, which is located on the following page, provides a brief summary of the State’s progress toward eliminating the deficit of hurricane shelter space since the *Shelter Retrofit Report* was first published in 1994.

Table 1.1

Historical Summary of Shelter Retrofit Report Progress (Estimates)						
Year	Shelter Retrofit Report \$ Estimate	Shelter Retrofit Report Projected Spaces	Shelter Retrofit Report \$ Allocated	Shelter Retrofit Report Spaces Gained	Other Spaces Gained (Non-Retrofit Report Projects)	Total Spaces Gained
1999	\$17,882,467	88,679	\$8,473,341	72,230	114,680*	186,910
2000	\$40,230,545	250,362	\$25,572,795	119,087	88,774	207,861
2001	\$31,385,308	119,905	\$5,233,731	20,574	34,039	54,613
2002	\$36,950,663	157,326	\$4,735,113	41,710	50,002	91,712
2003	\$33,339,100	137,985	\$2,464,547	33,381	53,373	86,754
2004	\$20,238,862	93,967	\$7,500,000	68,765**	67,556 ***	136,321 ***
2005	\$23,096,021	68,182	\$3,000,000	24481 ****	24,832	49,313
2006	\$19,088,154	54,415	\$3,000,000	13,820*****	36,074	49,894
2006A	N/A	N/A	\$15,000,000	23,736 <sup>a</sup>	N/A	23,736
Total	N/A	N/A	\$74,979,527	417,784	469,330	887,114 <sup>b</sup>

“2006A” represents funding via House Bill 7121.

<sup>a</sup> - 23736 is preliminary estimate of spaces gained from HB 7121 shelter retrofit projects (\$15mil at 35 projects)

<sup>b</sup> – 887,114 is sum of 863,378 (Table 2.2) and 23736

\* - Quantity shown is an estimate of pre-1999 local retrofit and new public school Enhanced Hurricane Protective Area (EHPA) construction estimates of shelter capacity gained. Capacities gained from other sources not available (or unreliable) on an individual year basis prior to 1999.

\*\* - Quantity shown includes spaces created via funding from HMGP DR-1306 = \$4,495,915.00 @ 36,397 spaces, and Fiscal Year 2004-2006 Appropriation 1467 = \$3,000,000 @ 32,368 spaces.

\*\*\* - The “Total Spaces Gained” quantity of 136,321 reflects the difference in the number of spaces reported by local emergency management offices between FY 2003-2004 and FY 2004-2006, and the “Other Spaces Gained” quantity is the difference between the “Total Spaces Gained” quantity and the “Shelter Retrofit Report Spaces Gained.”

\*\*\*\*- Quantity shown includes spaces projected to be created via funding from Fiscal Year 2005-2006 - Approp 1508= \$3,000,000 @ 24,481 spaces.

\*\*\*\*\* - Quantity shown includes spaces projected to be created via funding from Fiscal Year 2006-2007 Appropriation 1588 = \$3,000,000 @ 13,820 spaces.

As Table 1.1 illustrates, under the leadership of Governor Bush and the Florida Legislature, Florida has demonstrated sustained commitment to eliminating the deficit of safe public hurricane shelter space. From 1999 to 2005, almost \$57 million in federal and state funds have been committed towards retrofitting of suitable facilities. This created more than 380,000 spaces. This commitment supplemented local efforts to reduce public hurricane shelter deficits, and helped Florida be prepared to weather the extraordinary hurricane seasons of 2004 and 2005.

This early commitment also allowed Florida's hurricane shelter deficit reduction program to be ahead of the cost-escalation curve that is being experienced across the nation's hurricane prone regions. As an example, by selecting facilities that created the most space for the least cost, the Division was able to retrofit almost 140,000 spaces for about \$16 million using funds appropriated annually under s. 215.559(2)(b), Florida Statutes (Hurricane Loss Mitigation Program). The majority of these projects cost about \$75 to \$125 per space. Due to completion of the most productive and lowest cost retrofit projects, the current trend is now towards less spaces created at higher costs. Based on data from the past two years, hurricane shelter retrofitting costs per space increased by 12 percent in 2005, and for the 2006 grants there appears to be an initial increase of 70 percent over the average between 2001 and 2005. This trend is expected to continue so long as building materials, construction contractors, and window protection assembly manufacturers and installers are in high demand.

For Fiscal Year 2006-2007, Governor Bush proposed a Hurricane Preparedness, Response and Recovery emergency management initiative budget request and the 2006 Legislature responded by signing Government Budget Request House Bill (HB) 7121 into law on June 1, 2006 as Chapter 2006-71, Laws of Florida. The measure appropriates \$15 million to structurally enhance or retrofit public hurricane evacuation shelters, and directs the Division to establish a statewide grant application process. The grant application process generated 35 applications that, after determination of eligibility, could create 23,736 spaces at a total cost of \$15.6 million. The projects are expected to be initiated and completed over a 12 to 36 month period. Therefore, the hurricane shelter grants, in combination with other federal, state and local funds are expected to create about 150,000 spaces over the next two years.

Chapter 2006-71 also appropriates \$52.8 million to the Division to install permanent emergency power capacity at designated Special Needs Shelters (SpNS) to support air-conditioning, lights, life safety systems and medical equipment and directs that the emergency power system for the selected SpNS's be operational by June 1, 2007. This is an exceptionally challenging schedule, but once installed the generators will provide emergency power to support an estimated 28,645 SpNS spaces.

The Division coordinated with the local emergency managers to establish the candidate

list of SpNSs, and staff from the Division and the Department of Health (DOH) prioritized the candidate list. The criteria used in determining the priorities included the facility's location in a coastal or interior county, the magnitude of vulnerable general population in the Regional Planning Council (RPC) Region and county, the deficit of SpNS spaces in the county, the deficit of SpNS spaces in the Region, and the facility's status as meeting the Department of Education's "Public Shelter Design Criteria" (i.e., Enhanced Hurricane Protection Areas or EHPAs) or the ARC 4496 hurricane safety criteria. With the prioritization list completed and approved by Division Director Fugate, and Secretary Francois, DOH, with the concurrence of the Executive Office of the Governor, the installation process is moving forward. After completion of the installation, the facility owners must assume responsibility for operation, maintenance, repair and fueling of the emergency power system for a minimum of 15 years.