

## EXECUTIVE SUMMARY

Pursuant to section 252.385, Florida Statutes, the Division of Emergency Management (Division) annually publishes a shelter retrofit report which provides a list of facilities to be retrofitted for use as public hurricane evacuation shelters. Retrofitting is the modification of an existing structure to make it stronger and more disaster resistant. An example would be the installation of hurricane shutters on an existing building to protect doors and windows from wind-borne debris. Such measures bring the safety of public shelters up to established safety criteria and increase the availability of public hurricane evacuation shelter spaces in the State of Florida.

Since 1999 significant progress has been made toward reducing the deficit of safe public hurricane shelter space and meeting the American Red Cross' *Standards for Hurricane Evacuation Shelter Selection* (ARC 4496, January 2002). A total of 1,022,842 hurricane shelter spaces have been created through a combination of retrofitting and application of enhanced hurricane design and construction standards. Another 43,732 spaces (meeting ARC 4496 safety standards) are scheduled to be available to the public by June 2010. Additionally, an estimated 20,843 spaces are expected to be generated through retrofitting under specific appropriation 1496 (Fiscal Year 2009-2010).

In preparation of the *2009 Shelter Retrofit Report*, the Division reviewed a total of 488 projects submitted by county emergency management agencies in collaboration with other partner organizations (local American Red Cross chapters and school boards) that participate in hurricane shelter planning and operations. After careful evaluation of the proposed projects, the Division, by priority, recommends 187 projects for retrofitting. These projects alone will create an additional 69,465 ARC 4496 hurricane shelter spaces statewide at an estimated cost of \$11,777,884.

As the following table demonstrates, the increase in public hurricane shelter capacity has been achieved over the past 10 years. This is largely due to the availability of retrofit and mitigation-related dollars to fund these projects. Prior to 1999, the State lacked a dedicated funding source to meet the demands for public shelter space. Since 1999, however, the Governor and the Legislature have committed at least \$3 million annually to the State's retrofit program. Per section 215.559(2)(b), Florida Statutes, the Division is provided \$3 million per year to retrofit hurricane shelters as prioritized in published *Shelter Retrofit Reports*. This money is in addition to approximately \$38 million obligated by the Federal government. Table EX.1 summarizes the State's progress in eliminating the statewide deficit of needed public hurricane shelter space.

Year	Shelter Retrofit Report \$ Estimate	Shelter Retrofit Report Projected Spaces	Shelter Retrofit \$ 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	24,481	24,832	49,313
2006	\$19,088,154	54,415	\$3,000,000	13,820	36,074	49,894
2007	\$10,956,377	82,930	\$8,150,620	26,766	44,693	71,459
2008	\$13,432,213	85,997	\$0	0	96,628	96,628
2009	\$11,777,884	69,465	\$3,000,000	20,843	35,109	55,952
<b>Total</b>	<b>N/A</b>	<b>N/A</b>	<b>\$71,130,147</b>	<b>441,657</b>	<b>645,760</b>	<b>1,087,417</b>

Table EX.1 illustrates the sustained commitment by the Governor and State Legislature to eliminate the deficit of safe public hurricane shelter space. Pursuant to the adoption of House Bill 7121 (see Chapter 2006-71, Laws of Florida), the Legislature appropriated up to \$15 million to structurally enhance or retrofit public hurricane evacuation shelters. Currently, 43 projects are ongoing/completed and are expected to generate 26,766 spaces (see Appendix I & Appendix K). Specific Appropriation 1621X- \$3 million was used as a non-Federal cost share to Federal funds provided for the HB7121 shelter retrofit projects.

For Fiscal Year 2008-2009, no State Funds were appropriated for retrofitting of projects in the 2007 *Shelter Retrofit Report*. Instead, the \$3 million in retrofit funds were appropriated by HB 5001 to support installation of generators at selected special needs shelters. The generator installations were improvements to existing hurricane shelters, and needed to better protect Florida's most vulnerable citizens. The generators were installed to provide electrical power for necessary medical equipment, air-conditioning and other essential systems. The \$3 million was used to complete generator installation construction for about 2,000 shelter spaces. In total, HB 5001 will support generator installation construction for about 10,000 special need shelter spaces.

The Division's public hurricane shelter deficit reduction strategy focuses on five major components: 1) surveying hurricane shelter facilities in existing local inventories to identify unused space; 2) surveying facilities not currently listed in local inventories to identify additional capacity; 3) providing funding for cost-effective retrofit or other mitigation measures on existing

buildings that can provide additional shelter capacity; 4) incorporating hurricane shelter design criteria into new public building construction projects; and 5) reducing hurricane shelter demand through improved public information, education and behavioral analysis, and decreased evacuation need.

A very critical component of the strategy to increase the availability of “safe” hurricane shelter space is construction of new school facilities to comply with the Enhance Hurricane Protection Area (EHPA) requirements. Through construction of EHPA facilities, about 527,099 (See Table 2.1) hurricane shelter spaces have been added to the state’s inventory since 1995. Local officials also estimate that another 26,549 spaces will be added to the inventory by August 2010.

Since 1995 the State has made significant progress toward improving the safety and availability of public hurricane shelter space. The current capacity is about 70 percent of the 2010 estimated demand; per the *2008 Statewide Emergency Shelter Plan*. This has been accomplished through a comprehensive strategy of surveys, retrofitting, new construction and demand-reduction components. At the time of completion of the *2008 Statewide Emergency Shelter Plan*, Florida had 23 counties with a demonstrable surplus of public hurricane shelter spaces. The State’s efforts and commitment to reduce the shelter deficit has resulted in a demonstrable surplus of shelter space in the following five regions (or Regional Planning Councils (RPC)): RPC 1 (West Florida), RPC 2 (Apalachee), RPC 6 (East Central Florida), RPC 10 (Treasure Coast), and RPC 11 (South Florida). Based upon current trends, Figure EX.1 illustrates that Florida will significantly reduce or eliminate its deficit of public hurricane shelter space in or about 2016.

In sum, as the number of Floridians in areas vulnerable to hurricanes continues to grow, it is vitally important that construction of hurricane shelters and retrofitting of existing buildings be considered a priority. For the State to meet its goal of eliminating the hurricane shelter space deficit, the incorporation of the Enhance Hurricane Protection Area (EHPA) criteria into new construction, retrofitting of suitable existing buildings and continued use of new technologies must be accomplished. Full implementation of the Division’s shelter deficit reduction strategy will create a greater level of preparedness, a more efficient capability for responding to incidents and an increased ability to meet the needs of disaster survivors.

Figure EX.1. Graph of Florida's progress in reducing the hurricane shelter space deficit.

