

## Appendix C

### Methodology for Prioritizing Projects for Funding

The Division has developed a point-based priority ranking methodology to evaluate recommended projects. The methodology is consistent with Section 252.385, F.S., and the Division's hurricane evacuation shelter survey guidelines. Factors that were considered in the retrofit proposal review process were regional and local (county) hurricane evacuation shelter space deficit; facility design, construction and location considerations; proposed hurricane evacuation shelter type (general population, special/medical needs, or pet-friendly); maximize use of State funds/cost-effectiveness; ownership and shelter use availability of the facility; etc. See Appendix D for an example of the 2020 Project Priority Worksheet. The factors considered for priority ranking this year are generally consistent with those used in previous *Shelter Retrofit Reports* (SRR). Three exceptions are noted: 1) additional emphasis has been placed on special/medical needs shelters (SpNS); 2) additional points for counties lacking adequate pet sheltering facilities and 3) additional emphasis on retrofitting facilities designed and constructed to the most recent building codes and standards. Projects carried over from the 2019 SRR were reevaluated on changes in the shelter deficits (region and/or county, if any), and on additional information provided in updates from the counties.

The hurricane evacuation shelter space deficit information used for this report was published in the 2020 SESP. The 2020 SESP determined that seven out of ten regions had no hurricane evacuation shelter space deficits; the exceptions being Central Florida (RPC 6), Tampa Bay (RPC 7), and Southwest Florida (RPC 8). However, even though there may be sufficient cumulative capacity within regions, many individual counties still have deficits. The 2020 SESP determined that only four regions of the State have adequate special needs spaces. The remaining six regions have deficits. Therefore, scoring items are necessary for both regional and county SpNS deficits.

The combined maximum score of all four shelter space deficit-based items is 400 of a total maximum of 715 points.

In prioritizing projects, the Division based its ranking scores on the criteria described below. If the desired information in a given line item was not provided, and could not be readily determined from other sources, no points were allocated, except as otherwise noted. In some cases, certain criteria were considered no go and the facility excluded from recommendation. The no go designation was only given when a condition existed that could potentially exclude the building as a shelter, such as the presence of uncertified long span roof, unreinforced masonry walls or storm surge flooding. The following is a listing of the specific criteria used by Division staff to rank each project based upon information provided with each project proposal.

#### **Proposed project is located within an RPC Region with a deficit of General Population Hurricane Evacuation Risk Shelter Space (Maximum of 100 points):**

Section 252.385(3), F.S., directs that priority be given to regions of the State where shelter deficits are greatest. Regional hurricane evacuation shelter space deficit data was provided by the 2018 SESP. A maximum of 100 points was given for those facilities that are located in regions with the

most severe shelter space deficits (< 14.9 sf of floor space per evacuee). Lesser points were given to retrofit projects in regions with less severe deficits.

**Proposed project is located within a County with a deficit of General Population Hurricane Evacuation Risk Shelter Space (Maximum of 100 points):**

Though regions are the highest priority in ranking, evacuations are generally local with emergency managers recommending that evacuees travel tens of miles instead of hundreds. County hurricane evacuation shelter space deficit data was provided by the 2018 SESP. A maximum of 100 points was given for those facilities that are located in a county with a severe shelter space deficit (<14.9 sf of floor space per evacuee). Lesser points were given to retrofit projects in counties with less severe deficits.

**Proposed project is located within an RPC Region with a deficit of Special/ Medical Needs Shelter (SpNS) Hurricane Evacuation Risk Shelter Space. (Maximum of 100 points) and or pet friendly (Maximum of 50 points):**

The 2018 SESP identified that even when there may be sufficient general population shelter space, there may still be a deficit in SpNS. Therefore, this new item has been added to place priority on this type of retrofit project. Regional hurricane evacuation shelter space deficit data was provided by the 2018 SESP. A maximum of 100 points was given for those facilities that are located in regions with the most severe shelter space deficits (< 44.9 sf of floor space per person with special needs (PSN) evacuee). Lesser points were given to retrofit projects in regions with less severe deficits.

**Proposed project is located within a County with a deficit of Special/Medical Needs Hurricane Evacuation Risk Shelter Space (Maximum of 100 points):**

Though regions are the highest priority in ranking, evacuations are generally local with emergency managers recommending that evacuees travel tens of miles instead of hundreds. The 2018 SESP identified that even when there may be sufficient general population shelter space, there may still be a deficit in SpNS. Therefore, this new item has been added to place priority on this type of retrofit project. County hurricane evacuation SpNS space deficit data was provided by the 2018 SESP. A maximum of 100 points was given for those facilities that are located in a county with a severe SpNS space deficit (< 44.9 sf of floor space per PSN evacuee). Lesser points were given to retrofit projects in counties with less severe deficits.

**Building Ownership and Availability for use as a Public Hurricane Evacuation Risk Shelter (Maximum of 50 points):**

A maximum of 50 points was allocated, depending on ownership and availability status. Lesser points were given to retrofit projects that may have limitations on their public shelter availability during a disaster. Public facilities receive the highest priority based on their availability. Public facilities are generally those that are subject to inclusion in the Division's public hurricane evacuation shelter survey program. Private facilities, such as religious, civic or fraternal organizations' multi-purpose buildings, private schools, arenas, stadiums, convention or conference centers were recommended for retrofit based upon local need for public shelter space, previous history as a public shelter and/or existing written agreements and endorsement by the local

emergency management director. Full availability means that, during a declared local State of emergency and upon request by local emergency management, the public shelter function will take priority over all other activities.

**Numerical increase in shelter capacity due to proposed Retrofit Project. (Maximum of 75 points):**

A maximum of 75 points was allocated based on numerical increase in shelter hurricane evacuation risk shelter space capacity. The maximum amount of points were given to projects creating >500 spaces. Lesser points were given to projects creating less additional spaces. No points were allocated for shelter spaces already in the inventory. This item serves to maximize use of State funds.

**Cost-effectiveness of Project(s) (Maximum 50 Points):**

A maximum of 50 points was allocated if the average total cost per shelter space was <\$350. If not, then zero points were allocated. A maximum of 50 points was allocated depending on the average cost per space of the proposed project; i.e., cost-effectiveness. This was based on the total proposed cost divided by the total quantity of hurricane evacuation risk shelter spaces gained. If the number of spaces, or costs, could not be determined, no points were allocated. This item serves to maximize use of State funds.

**Age of Building (Maximum of 50 Points):**

A maximum of 50 points were allocated if the building was built after the year 2000. If the building was built before the year 2000, then zero points were allocated.

**Flood Hazard and Building Design and Construction Criteria (Maximum of 90 points):**

The Division recommends that all hurricane evacuation shelters be reviewed for consistency. Critical building envelope features (exterior wall and roof construction, percentage of glass in exterior walls, long span roof, etc.), year built to determine design wind code requirements, presence of interior core area or storm room, and other construction factors must be included in the decision to utilize the building as a hurricane evacuation shelter and establish its priority for retrofitting. There is only nominal value to installing window protection systems on a shelter building if there are other “weak links” that are limiting factors for the building’s hurricane performance. Storm surge and rainfall are also important factors when reviewing and prioritizing a building as a potential hurricane evacuation shelter.

A maximum of 90 points were allocated based on how well the given facility is demonstrated to conform to guidelines after completion of the proposed retrofit. These criteria are used to maximize the hurricane safety provided by a specific retrofit project.

- A. A maximum of 30 points was allocated based on what Sea, Lake and Overland Surges from Hurricanes (SLOSH) or Storm Surge evacuation zone the facility is in. Presence of the facility in a Category 1/Tropical Storm or Category 2 surge zone is a no go and excludes the project from recommendation. The point system used for this item is generally consistent with Section 1013.372(1), F.S., that exempts educational facilities from the public shelter design criteria if located within a Category 1, 2, or 3 Evacuation Zone.

- B. A maximum of 30 points was allocated based on the National Flood Insurance Program (NFIP) Flood Insurance Rate Map (FIRM) flood zone (as established in the most recently published FIRM). If this information was not provided, no points were allocated. Generally, buildings in FIRM zones with an “A” designation received very limited or no points. Recommendations for projects in A zone may require detailed justification. Exception was given to those counties (such as Miami-Dade and Collier) whose populations live in areas that are extremely flat and provide very limited natural drainage.
- C. A maximum of 30 points was allocated based on the building construction parameters. Here the building’s structural and envelope characteristics are very important. Structures are evaluated to shelter people during a severe windstorm or major hurricane. Typically, unreinforced masonry walls, flat lightweight roofs over uncertified long spans, pre-engineered metal buildings, lack of load-path connectors, etc. will disqualify a building from consideration. The points are also allocated based on the building’s wind design code. Building’s designed and constructed to the Florida Building Code (2003-present) are expected to perform better than those designed and constructed to older less-modern codes. Lesser points were given to retrofit projects designed and constructed to modern wind codes and standards of the 1990’s and early 2000’s. If the building’s wind code is unknown or from an edition prior to 1989 then zero points were allocated.