

MEMORANDUM

AGENDA ITEM #12a

DATE:

MAY 5, 2008

TO:

COUNCIL MEMBERS

FROM:

STAFF

SUBIECT:

STATEWIDE REGIONAL EVACUATION STUDY PROGRAM - UPDATE

The following report provides an update on activities related to the South Florida Regional Planning Council's role in the Statewide Regional Evacuation Study Program (SRESP).

BACKGROUND

Council staff participates along with the other ten regional planning councils (RPCs) in the Statewide Regional Evacuation Study Program, funded through the Florida Division of Emergency Management (DEM). Phase I of the evacuation study consists of the following:

- A systematic enumeration and GIS mapping of the dwelling units, population, vehicles and socioeconomic characteristics for the three counties and the region, as well as the projected population
 within those areas in the years 2006, 2010 and 2015. (Demographic Analysis)
- A comprehensive analysis of the potential hazards to the South Florida region, including investigations of storm surge, tornadoes, flooding, hazardous sites, terrorism and nuclear facilities, and critical facilities inventory. (Hazards Analysis)
- A systematic investigation of the probable tendencies of potential future evacuees based on a detailed residential survey. (Behavioral Analysis)
- A regionwide inventory of existing public shelters and shelter capacity analysis, and geocoding of the data to create a statewide layer of shelter locations. (Shelter Analysis)
- Establishment of a regional evacuation transportation network which links existing county-level evacuation routes and any additional arterials/collectors in the region

In tandem with these activities, DEM is managing separate contracts for the production of updated Light Detection and Ranging (LiDAR) elevation data, and Sea, Lake and Overland Surge from Hurricanes (SLOSH) flood modeling.

Results from the SLOSH modeling will provide the data needed for RPCs to complete Phase II of the study. Phase II includes a vulnerability analysis (consisting of the delineation of the storm tide limits and the evacuation zones), identification of population-at-risk and evacuation populations, storm surge analysis of critical facilities and the evacuation transportation analysis. Products will include printed documents and digital data, including geographic information system (GIS) outputs.

Several of the RPCs have been designated as leads for development of the methodology for specific sections of the studies. South Florida Regional Planning Council staff is the lead for the demographic and land use analysis. In that role, Council staff has developed a set of guidelines for the collection of data for

demographic profiles for each county and each region, as well as for the collection of small-area data to support the transportation analysis required in Phase II.

ACCOMPLISHMENTS

As of the end of April 2008, Council staff undertook the following activities as part of the work on Phase I of the study for South Florida:

- Completed county demographic profiles for the three counties in South Florida, complete with block group maps from the 2000 Census and county summary tables from both the 2000 Census and the 2006 American Community Survey, highlighting characteristics of the housing units and the population of each county that are important for evacuation planning.
- 2. Finalized preparation of the regional demographic profile that summarizes the county profiles. The final version of the County and regional profiles were sent to the Division of Emergency Management on January 18, 2008, completing the first of the project deliverables.
- 3. Contacted each of the three counties to obtain small-area estimates of housing units, households and population in 2006, along with projections for 2010 and 2015. Currently, staff has received the requisite estimates and projections for traffic analysis zones for Broward County, and prepared maps showing areas where future growth is projected to occur. Staff is working with Miami-Dade and Monroe Counties to acquire similar data.
- 4. Acquired statewide inventories of mobile home parks, hotel/motel units, and updated county inventories of shelters, with their respective capacities.
- 5. Acquired updated digital future land use data for each of the three counties and prepared a regional future land use map based on summary categories agreed upon with other RPCs.
- 6. Coordinated with Emergency Management Directors from the three counties to include regional and county-specific questions in the Behavioral Analysis survey for South Florida.
- 7. Prepared a map that shows evacuation routes obtained from County Comprehensive Plans and a draft of regional evacuation routes to be used for the current study.
- 8. Reviewed proposed revisions to HB 1359 (FS 163.3178, re: the Coastal High Hazard Area) and provided comments.
- Outlined a strategy for filling demographic data gaps for some areas of the State of Florida.
- Presented a methodology to other RPCs at the Statewide Work Group meeting held on February 28th, 2008 for collection of Traffic Analysis Zone (TAZ) data.
- 11. Met with county emergency management agencies to provide SRESP updates, introduce templates for the Critical Facilities Inventory and Shelter Analysis, and coordinate data collection activities required to complete these deliverables.
- 12. Reviewed behavioral survey results prepared for the Withlacoochee region. Provided comments on the formatting, analysis and quantitative assumptions that will guide development of regional and statewide Behavioral Analysis products.
- 13. Reviewed transportation modeling proposal submittals in preparation for the Selection Committee evaluation on May 9, 2008.
- 14. Validated the critical facility inventory for Monroe County.
- 15. Met with Emergency Management Directors from Monroe, Broward, Palm Beach and Martin Counties to discuss alignment of the regional evacuation transportation network across neighboring regions.

OTHER ACTIVITIES

Behavioral Analysis. The 18,800 telephone interviews have been completed statewide and the data tables for the first region have been developed and distributed for review by regional council staff.

Transportation Analysis. Council staff has participated in several statewide coordination meetings to assist in the production of a Transportation Modeling Analysis RFP. The RFP Notice for the Transportation Modeling project was published in the FAW on February 29, 2008 with a response deadline of March 31-2008. The final version of the RFP is available on the NEFRC website at www.nefrc.org. The desired product is development of a transportation modeling framework, with choices of prototype models,

acceptable in accordance with FDOT criteria for the evacuation traffic analysis. Three proposals were received, and Council staff will participate in the selection process that is scheduled to begin May 9, 2008.

LiDAR Update. 100% of the LiDAR data has been collected, representing about 28,000 square miles across the State. Processing of the LiDAR data (cleaning, filtering, and verification) and preparation of the data for NOAA (i.e., removal of trees, buildings, radio towers, etc.) is currently underway. The full LiDAR and SLOSH project update is available on the Florida Department of Emergency Management website at www.floridadisaster.org/gis/lidar.

NEXT STEPS

Activities for the upcoming month include:

- An updated timetable prepared by the Statewide Coordination team, with revised deadlines for specific deliverables and end products to be delivered by June 2009. A legislative committee recommendation to continue funding into mid-2009 has been approved;
- Finalization of the template for shelters;
- Continued data processing for the critical facilities inventory;
- Initiation of the hazards analysis;
- Review of behavioral analysis data tables for the Southeast Region.

Additional information related to the Statewide Regional Evacuation Study Program can be found at www.sfrpc.com/sresp.htm. Please contact Loretta Cronk (lorenteedocuments/lorenteedocuments/www.sfrpc.com) or Richard Ogburn (rogburn@sfrpc.com) if you have any questions or need additional information.

Recommendation

Information only.