Resource Management for Providing Mass Care Services: An Innovative Tool for Estimating Shelter and Feeding Resources

SUMMARY
The Florida Estimated Mass Care Requirements Spreadsheet provides a standard and unified approach that state and county Mass Care officials, private sector partners, and non-governmental organizations can use in planning to estimate feeding and sheltering resources. The 2013 National Mass Care Exercise (NMCE), held in conjunction with the 2013 Florida Statewide Hurricane Exercise, provided the state Mass Care participants from across the nation the opportunity to test the effectiveness of the spreadsheet. The spreadsheet proved to be a “logical and methodical” planning asset for optimizing feeding and shelter resource utilization.

DESCRIPTION
The Florida Estimated Mass Care Requirements Spreadsheet provides Mass Care planners the ability to estimate the resources required to produce and distribute a set number of meals in a disaster area after a hurricane. The spreadsheet can also estimate sheltering requirements. Florida’s Mass Care staff developed the spreadsheet after realizing the need for a clear process and tool for estimating, documenting, and requesting resources to meet the anticipated feeding needs of residents. Using data from Mass Care responses to hurricanes throughout 2004 – 2005, Florida’s Mass Care planners built the estimation spreadsheet on real-world evidence, supporting requests for resources based on experience. The estimates in the spreadsheet serve as a “basis for discussion” and can be tailored to specific population needs.

The 2013 NMCE provided the Florida State Mass Care staff the opportunity to test the spreadsheet. Florida’s Mass Care Sheltering and Feeding Task Forces used the spreadsheet to estimate requirements in planning the response to a “triple threat” scenario of two hurricanes and a hazardous chemical spill. As a new capability, used for the first time in the 2013 NMCE, the spreadsheet was received positively overall.

The Florida Estimated Mass Care Requirements Spreadsheet
The spreadsheet contains formulas to calculate mass care resource estimates to fulfill the feeding and sheltering requirements during a disaster. The tool is divided into separate pages where planners can enter data into cells regarding population estimates, shelter demand, number of field kitchens, meal estimates, vendors, and meal distribution requirements. The separate pages are linked and contain formulas that return specific estimates on additional pages, such as the Summary Page. For example, data input regarding number of meals, percent of population affected by different storm intensities, and population estimates produces additional estimates regarding the number of field kitchens, vehicles, and fork lifts needed.
Figure 1 provides a partial view of the requirements spreadsheet. This view represents the Summary Page that is auto-populated once users input their data. The spreadsheet performs all the calculations to estimate the following on the Summary Page:

- Meals required for 14 days
- Meals available
- Production capacity of field and mobile kitchens and vendors
- Distribution capacity and requirements
- Meal storage capacity

The spreadsheet also contains a Functional Needs Resource Estimation Page that lists resources needed to support various functional needs such as wheelchairs and other mobility aids, items to assist with daily living needs, and assorted medical supplies. The spreadsheet calculates the projected number of resources needed based on the estimated number of people who will shelter. Identifying these resources allows planners to identify any gaps between available and needed resources. This information also enables planners to appropriately tailor FEMA Action Request Forms for assistance in obtaining resources. Figure 2 provides a partial view of the spreadsheet's Functional Needs Resource Estimation Page.

**APPLICABILITY**

The Florida Estimated Mass Care Requirements Spreadsheet provides a standard and unified approach that state and county Mass Care officials, private sector partners, and non-governmental organizations can use in planning to estimate resources required for feeding and sheltering individuals displaced by a hurricane. The value of the spreadsheet lies in its ability to provide a set of foundational estimates in Mass Care planning based on real-world experience. Using these estimates, the various government, private sector, and NGO entities can then make informed decisions on adjusting estimates as necessary for unique population needs.
REFERENCES

1 Interview with Michael Whitehead, Florida State Mass Care Coordinator. September 6, 2013

2 Ibid.


4 Interview with Michael Whitehead, Florida State Mass Care Coordinator. September 6, 2013

5 Ibid

6 Ibid

7 Ibid

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