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LLIS.gov Resource Compilation For Hurricane Sandy

The LLIS.gov team has compiled various resources to help support the efforts and initiatives in preparedness, response, and recovery during Hurricane Sandy. These resources are topic-specific and have been analyzed and used for deployment purposes to help provide support during the hurricane.

Disaster Recovery Centers (DRC)

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GUIDANCE

- ***Open Source*: Florida SERT. Disaster Recovery Center Manager's Guide**
  http://www.floridadisaster.org/Recovery/documents/DRC_Pocket_Guide.pdf

  This pocket guide DRC states that "managers must be prepared to work in non-traditional conditions including but not limited to tents, without electricity, phone services, etc." It describes pre-set up, set up, layout, operations, and closeout.

IT CONNECTIVITY

- **AAR: Summer Storm 2012, City of Beckley, West Virginia After Action Report**
  https://www.llis.dhs.gov/docdetails/details.do?contentID=56428

  Beginning on the evening of June 29, 2012, the City of Beckley was impacted by a significant weather event, one that tested various aspects of its response and recovery efforts over the subsequent 11-day period. Communication issues that arose during this period:
  - One of the two main telephone PRIs located at City Hall failed due to loss of power and the absence of a backup generator;
  - Emergency/backup phone lines were not available at each department location when PRI failed;
  - Critical computer systems (payroll system, email, network login servers) located at City Hall failed due to loss of power and the absence of a backup generator;
  - Communications options were limited due to the loss of the email server for beckey.org, beckleypd.com, beckelyfire.com, and beckelymine.com;
  - There was no predetermined priority list for computer systems for shutdown or restoration;
  - Communications between the departments, and between departments and the administration could be improved through activation of the Beckley Area Command;
  - Reliance on cell phones for communications may not always be an option, as disasters tend to overload commercial carrier systems;
  - Provisions need to be made for non-fleet fuel requirements for critical personnel.

Recommendations:

- Install a backup generator at City Hall;
- Until the above is achieved, move critical servers to the IT Department where backup power exists;
- Maintain at least one non-VoIP phone line at each department location;
- Develop an agreed upon Critical System Priority List;
- Negotiate fuel contracts for disaster situations;
- Identify alternate fuel vendors and negotiate contracts for contingency use;
- Provide fuel options for non-fleet vehicles, or have fleet vehicle contingencies for critical personnel;
- Work to implement the Beckley Area Command as a fully functional communications center for department heads and city administration;
- Equip Beckley Area Command with necessary supplies to support its intended operations and emergency staffing;
- Investigate the possibility of acquiring and implementing a portable cell site to ensure continued cell phone functionality during similar emergency events;
- Evaluate and improve on-duty staff support plan, especially in the areas of portable bedding, food and water.

➢ **AAR: City of Nashua, New Hampshire, October Nor'easter After Action Report**
https://www.llis.dhs.gov/docdetails/details.do?contentID=55960

Shakespeare Road Communications Tower was inoperable for an extended period of time because of a generator failure and a loss of commercial power. Generator repair vendor was not able to repair site as they were busy with many other customers.

Recommendations:

- Determine backup vendors in the event the primary one is busy with other customers.
- Ensure that the vendor knows that communications towers are Critical Infrastructure and should be a restoration priority.

➢ **AAR (FOUO): Tropical Storm Irene: Western Massachusetts After Action Report/Improvement Plan, August 27-28, 2011**
https://www.llis.dhs.gov/displayContent?contentID=55962&milliseconds=1352396288996

Wireless phone communication, particularly in western Franklin County, has been cited as persistently inconsistent, which is especially troublesome during emergencies and/or when towns are cutoff from surrounding areas. The area is hilly, which makes wireless communication difficult.
Recommendation:
Towers in the western portion of Franklin County should be strengthened in order to handle intense weather events and increased demand on their services.

➢ **AAR (FOUO): Dane and Rock County Long Term Power Outage Interactive Tabletop Exercise After Action Report (AAR) And Improvement Plan (IP)**
https://www.llis.dhs.gov/displayContent?contentID=54967&milliseconds=1352397016650

In a long term power outage event there will be challenges including a sense of isolation impeding the ability to plan and prepare appropriately based upon limited information received due to the disruption of traditional methods of communication. Both county public safety communications centers (911) have generator power and have the capability to continue operations.

It was identified that amateur radio operator volunteers will be a critical component for communicating information and data when conventional communication methods are disrupted. Agencies that staff the EOC need to have an understanding of the capability of amateur radio services to communicate and set up operations at various locations to support communications.

While the participants believed dissemination of information would be critical the means to get the information to the public will have to be by word of mouth and through public safety patrol methods. In the scenario, limited cellular phone networks had varying access but priority systems such as using Government Emergency Telecommunications Service (GETS) and Telecommunications Service Priority (TSP) and Wireless Priority Services were not discussed.

Recommendations:

- Review emergency communications plans to ensure all forms of communication redundancies are included and include plans for communicating in an electrical outage.
- Procure auxiliary electrical generation for 211 call centers.
- Train EOC staff on the capabilities of ARES/RACES to provide emergency communication support.

- **AAR: Severe Flooding May 2010 After Action Report and Improvement Plan for the Metropolitan Government of Nashville and Davidson County**
  https://www.llis.dhs.gov/displayContent?contentID=52542&milliseconds=1352398199133

  Communications with the local office of the National Weather Service (NWS) was exceptional until the flood situation became a 72-hour, regional disaster. This situation soon caused limited availability of their key expertise to Metro Government decision makers. The same can be said of the US Army Corps of Engineers. Phone calls and voice mails were an inadequate form of communication most of the time. Critical information was often not shared and confirmed amongst the NWS, USACE and local government officials, as it should have been. Major flooding events in the future necessitate OEM to change its activation procedures and require attendance in the Metro EOC of high level personnel from both of these agencies to be able to communicate, in person with key local decision makers. The USACE and NWS are in agreement with Metro OEM as a formal Memorandum of Understanding amongst these agencies is scheduled for completion by the end of 2010.

- **Open Source: http://www.nationalterroralert.com/communications/**
  Emergency communications information. During emergencies – local, state, and national – the importance of our country's communications system, including telecommunications, broadcast, cable, and satellite systems, becomes clear. We use our phones to call 911 or to call our family members to make sure they are safe. We turn on our televisions and radios to get information updates.

  The following information will help you better understand what happens with our communications system during an emergency and how best to use the various components of our communications system during a crisis or disaster.

  - CB Radio
  - 49MHz Personal Communicators
  - Family Radio Service
  - General Mobile Radio Service
  - Amateur Radio

- **Open Source: http://www.lockergnome.com/mobile/2012/11/02/how-to-charge-your-phone-during-a-power-outage/**
  The enormous problem that could result from not being able to communicate via our cellphones. Once Sandy struck, however, and we were able to see the tremendous amount of damage, including the loss of life, destruction of homes and businesses, and the damage to cellphone towers, the importance

of this article was obvious. In fact, one thing that stood out about the importance of our cellphones was our dependence on them in any emergency situation. With this being said, how can we hope to keep them fully charged during such a catastrophic event so that we can use them if we need to call for help?

Solutions:

- One solution is to purchase a *juice pack*.
- Another option during a power failure is for you to charge your cellphone by using a power inverter that converts your vehicle's 12-volt DC power to 120-volt AC power.

ADDITIONAL RESOURCES

- ***Open Source*: All (Librarian) Hands on Deck. Librarians lead the way on the long journey to recovery and rebuilding**
  http://www.libraryjournal.com/article/CA6312522.html

  Librarians stepped up to the plate to rescue materials and meet the needs of thousands of uprooted evacuees from Hurricanes Katrina and Rita, providing space and internet connection.