



Homeland
Security

Office of Emergency Communications (OEC)

Regional Support and Priority Telecommunications Services

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OEC Regional Coordination

May 13, 2014

OEC's Mission

OEC supports and promotes communications capabilities used by emergency responders and government officials to keep America safe, secure, and resilient.



OEC Regional Coordination

OEC's regional coordination program strengthens emergency communications and response capabilities across Federal, State, local, tribal and territorial governments through trusted relationships, collaboration, knowledge sharing, and program development.



Regional Coordination Activities

OEC's subject matter experts are assigned across the nation to coordinate at regional and local levels across the country.

- Assist with regional operable and interoperable communications planning for day-to-day operations
- Special event and crisis communications coordination
- Provide subject matter expertise and liaison with the communications and information technology industries and Information Sharing and Analysis Centers
- Support to Federal response and recovery of commercial communications, wireline, wireless, satellite and broadcast infrastructures
- Provide emergency response and recovery assistance supporting communications coordination



OEC supports the National Response Framework (NRF)

Emergency Support Function (ESF)	Primary Agencies
1 Transportation	Department of Transportation
2 Communications	Department of Homeland Security , FEMA
3 Public Works and Engineering	Department of Defense - U.S. Army Corps of Engineers / FEMA
4 Firefighting	Department of Agriculture – U.S. Forest Service
5 Emergency Management	Federal Emergency Management Agency
6 Mass Care, Housing, and Human Services	Federal Emergency Management Agency
7 Resource Support	General Services Administration, FEMA
8 Public Health and Medical Services	Department of Health and Human Services
9 Urban Search and Rescue	FEMA, U.S. Coast Guard, National Park Service, Department of Defense
10 Oil and Hazardous Materials	Environmental Protection Agency, U.S. Coast Guard
11 Agriculture and Natural Resources	Department of Agriculture, Department of the Interior
12 Energy	Department of Energy
13 Public Safety and Security	Department of Justice
14 Long-Term Community Recovery and Mitigation	Departments of Agriculture, Department of Homeland Security, Housing and Urban Development (HUD) , Small Business Administration (SBA)
15 External Affairs	Federal Emergency Management Agency



NRF communications partners



Resident Members

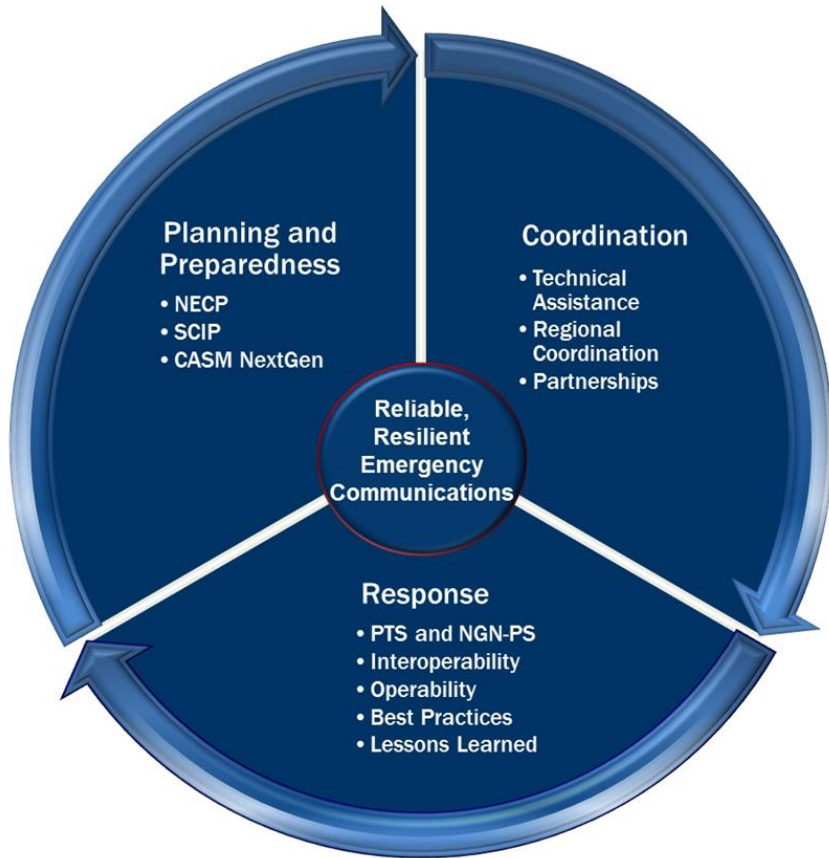
Non-Resident Members



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OEC Support Pre/During/Post Event



- Coordination with industry
- Interoperability support
- Infrastructure characterizations
- Priority Telecommunications Services



Coordination with industry

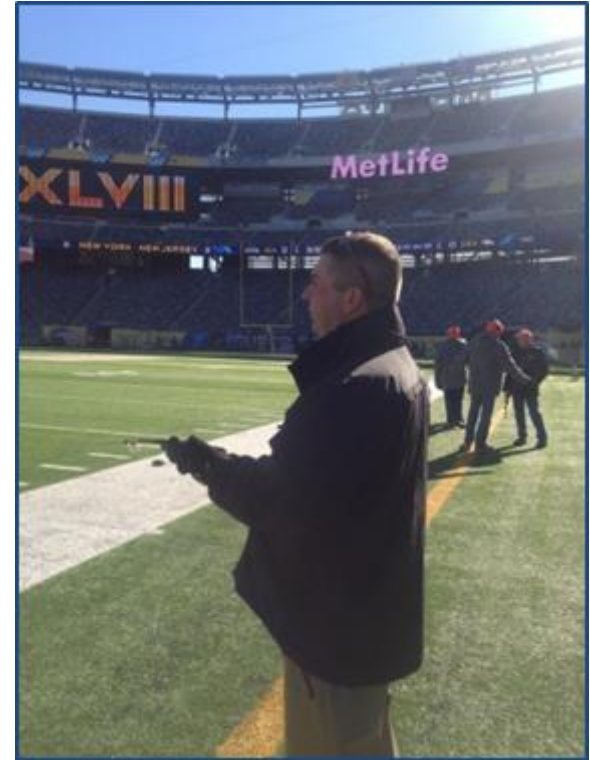
Critical services operate on commercial infrastructure that is owned/operated by industry.

- Ensure service providers know what *you* consider critical
- Know *their* “Plan” for restoring those services
- Understand if/how you can facilitate the effort
- Access, fuel and security vital to response and recovery
- Consider inviting key providers to work in your EOC
- Plan for alternate communications in emergencies



Interoperability Support

- OEC's regional support team has existing relationships with communicators at Federal, State, tribal, territorial and local levels and have been involved with interoperability planning (SCIPs/TICPs, etc)
- Regional representatives are available to assist in implementing plans leading up to and during events



OEC provided regional support for emergency communications planning and coordination for Super Bowl XLVIII at MetLife Stadium



Infrastructure characterizations

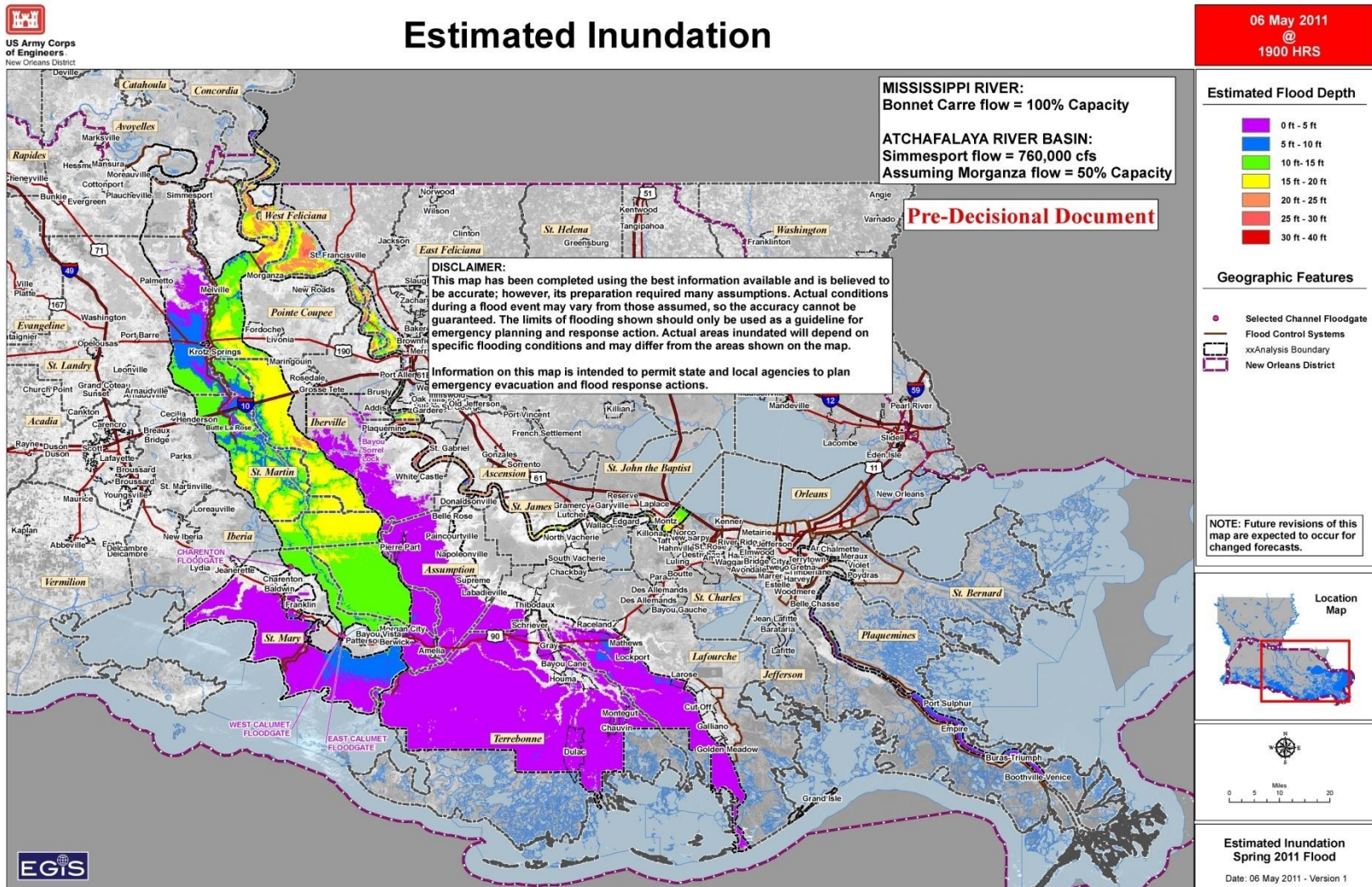
OEC's regional support team has access to communications operational analyses to help identify potential impacts of disasters and other large scale events.

- Show affected/at risk infrastructure in a given area
- Graphically depict commercial infrastructure
- Proprietary information, not releasable to public
- Available upon request to Federal and State partners



Example: Morganza Spillway Critical Infrastructure Analysis

- The Morganza Spillway has only been used once, back in 1973.
- The southeast corner of the spillway is about 30 miles northwest of Baton Rouge, LA.
- The adjacent map from the Army Corps of Engineers shows the estimated inundation area for the spillway release.



Source: US Army Corps of Engineers

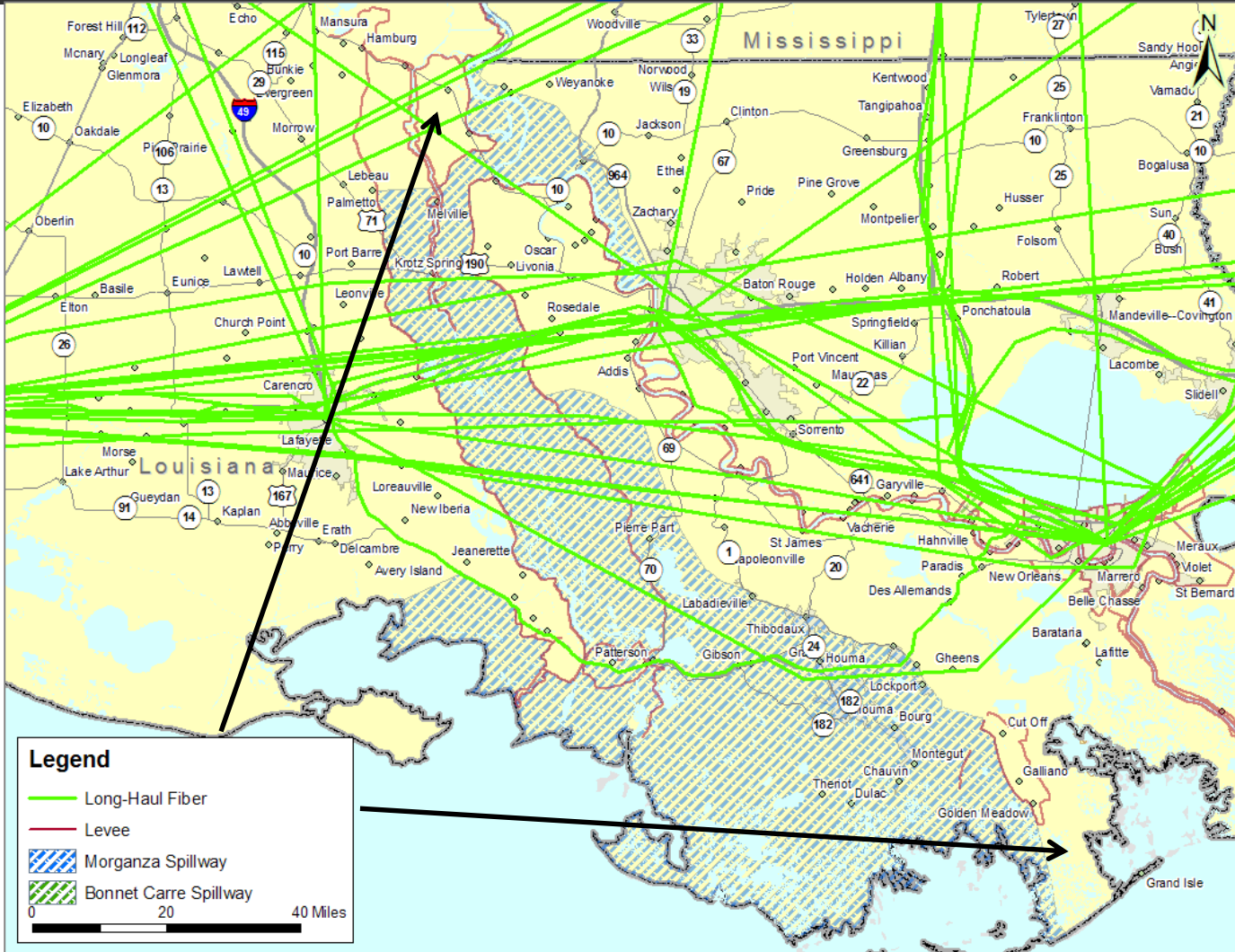


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Expected Flood Inundation Areas – Wireline Telecommunications – Long Haul Fiber

There are 22 carriers that own long-haul fiber that intersect with the Morganza Spillway.

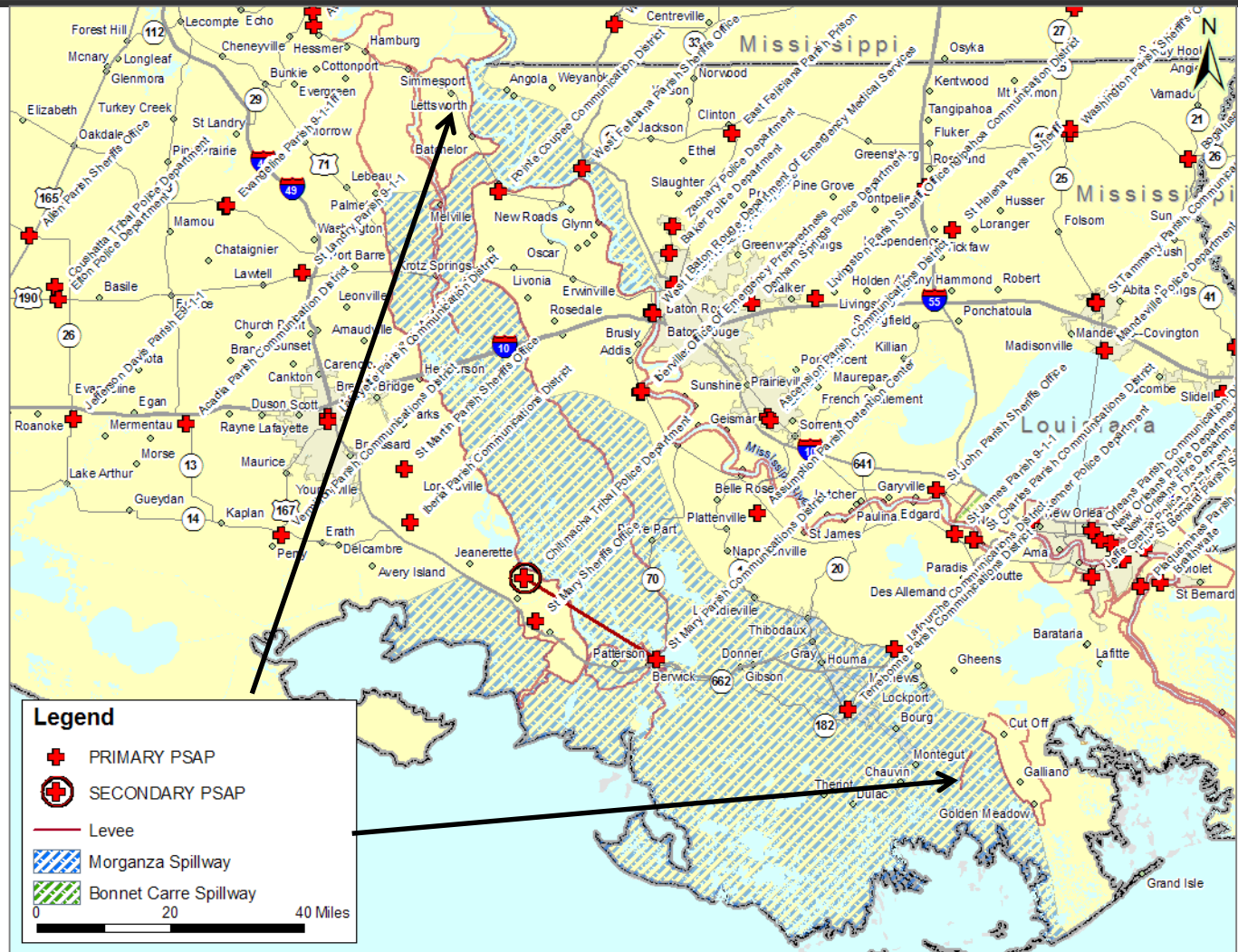


Telecommunications data extracted from Telcordia's LERG (Local Exchange Routing Guide) datasets



Expected Flood Inundation Areas – Wireline Telecommunications – PSAPs

- This analysis demonstrates which PSAPs could be affected by flooding in the area.
- This report can be used for disaster planning either before or during an event

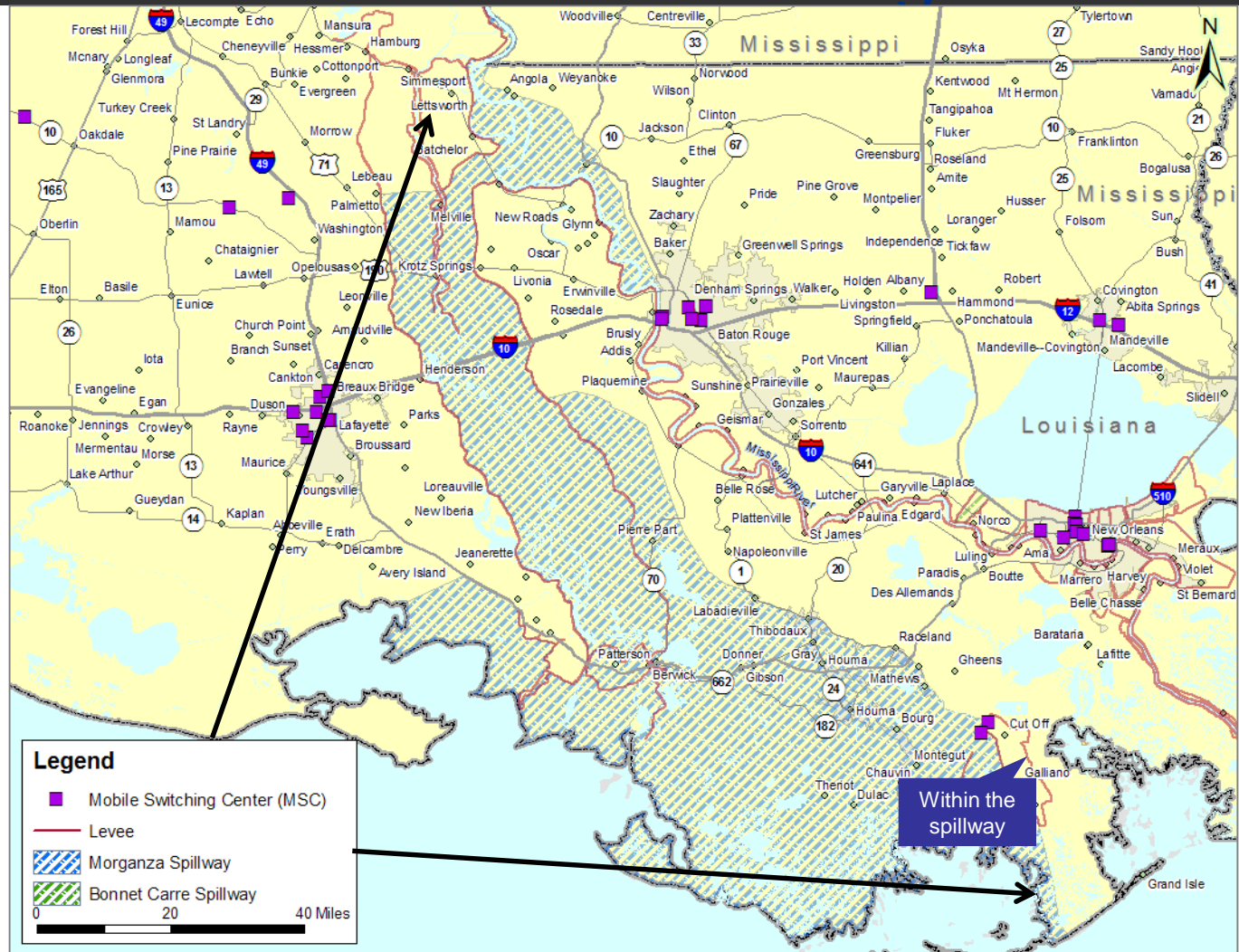


Telecommunications data extracted from Telcordia's LERG (Local Exchange Routing Guide) datasets



Expected Flood Inundation Areas – Wireless Telecommunications Mobile Switching Centers

- One MSC is within the expected inundation area. Several more may be susceptible to river flooding.
- Loss of MSCs may disrupt the ability for wireless calls to be connected and may prohibit cellular telephone users from moving seamlessly between wireless towers.

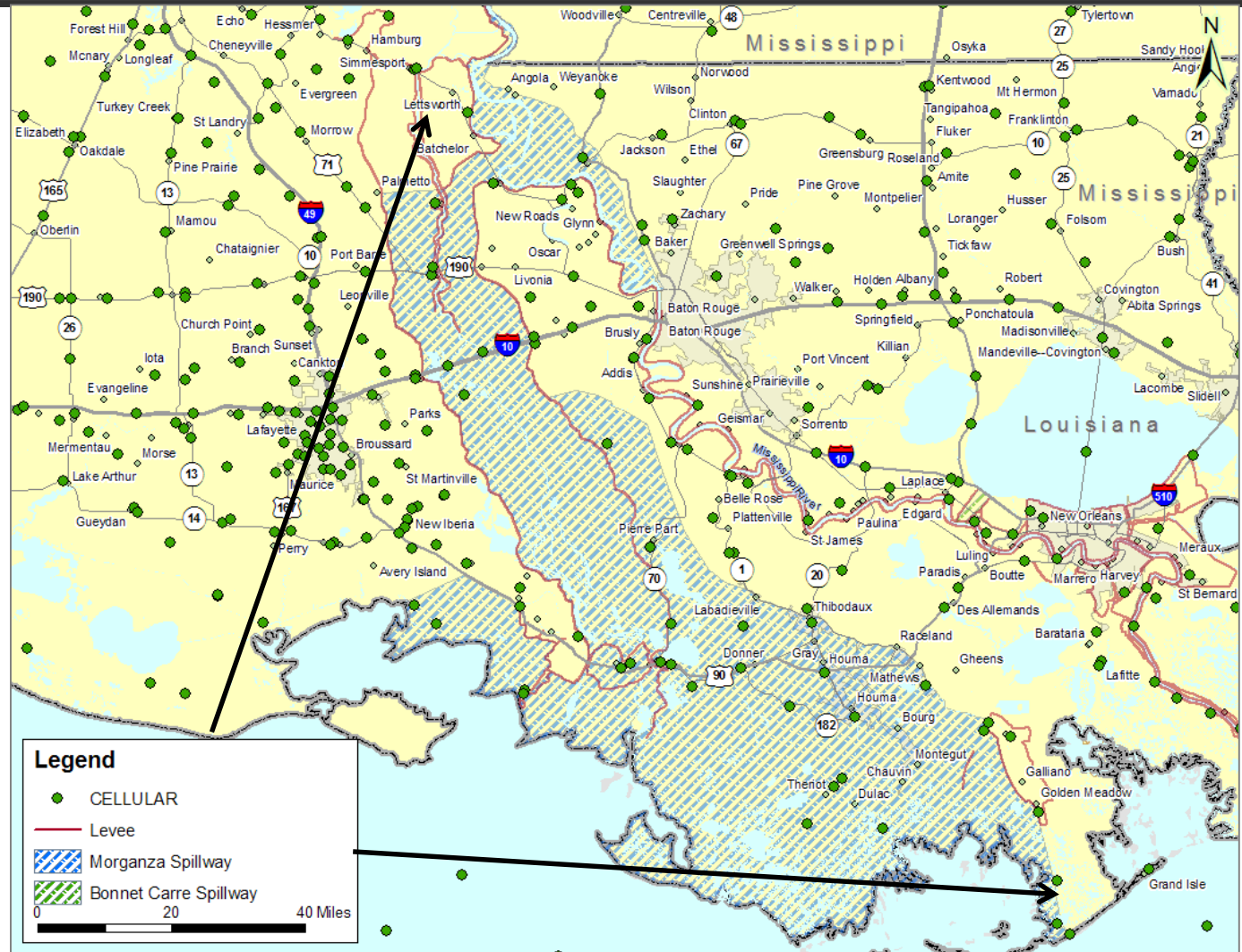


Telecommunications data extracted from Telcordia's LERG (Local Exchange Routing Guide) dataset



Expected Flood Inundation Areas – Wireless Commercial Cellular Antenna Locations

- This analysis identifies which cellular antennas are located within the Spillway.
- Cellular antennas send and receive signals connecting mobile devices within the carrier's designated coverage area to the public switched network.



Wireless data extracted from Federal Communications Commission (FCC) Universal Licensing System



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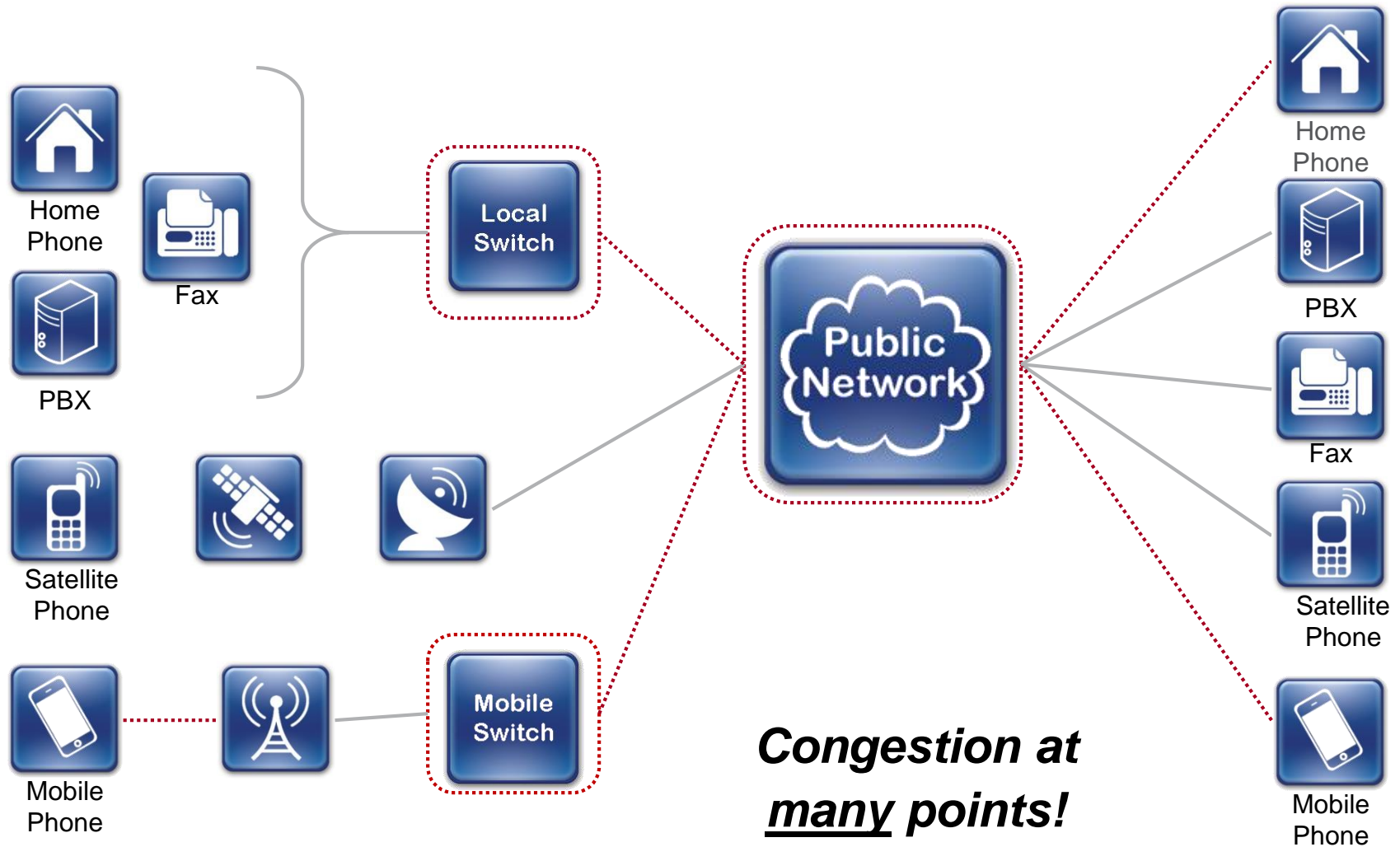
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Understanding network congestion

**“We’re sorry, our circuits are busy now.
Would you please try your call again later.”**



During an emergency mass calling causes network congestion



OEC Priority Telecommunications Services

Priority Telecommunications Services programs provide national security and emergency preparedness (NS/EP) and public safety users the ability to communicate on telecommunications networks during times of congestion.

- Government Emergency Telecommunications Service (GETS)
- Wireless Priority Service (WPS)
- Telecommunications Service Priority (TSP)

Government Emergency Telecommunications Service	
Office of Emergency Communications	
Name: Ira Anslow	Organization: PTS Program
Dial GETS Access Number	1-710-627-4387
After Tone, Enter Your PIN	<input type="text" value="0000 0000 0000"/>
When Prompted, Dial Destination Number	Area Code + Number



GETS: Solution for wireline congestion

GETS provides priority access to the landline networks when abnormal call volumes exist, providing enhanced call completion for critical personnel.

- GETS has historically provided over 90% call completion rates
- Over 95% of GETS calls were completed during hurricanes Isaac, Irene, and Sandy
- GETS can be used from virtually any landline telephone to provide priority for emergency calls
- There is no charge to enroll in GETS
- It provides priority queuing of calls over the landline network - not a separate system

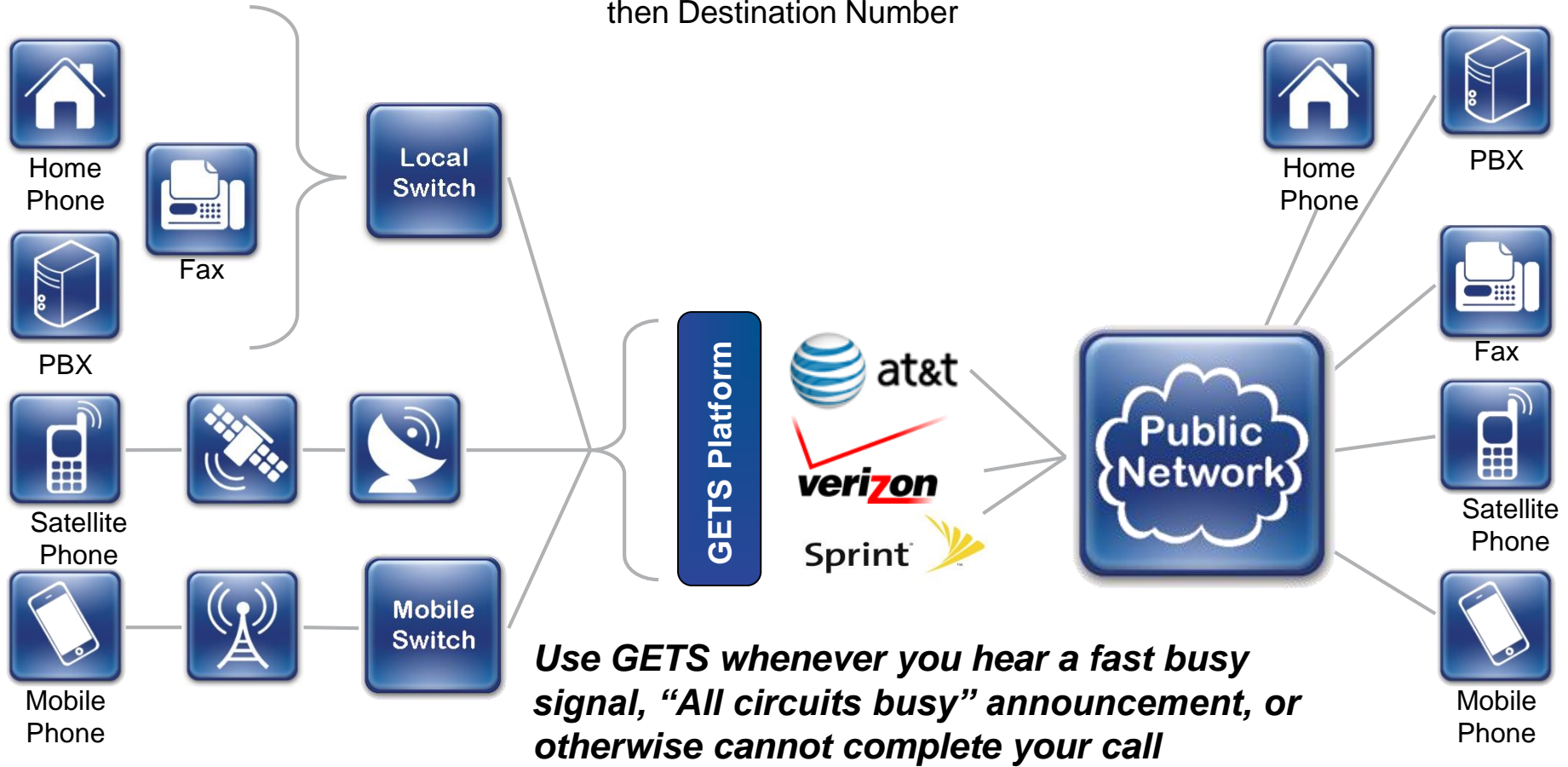


How GETS works

1. Dial GETS Access Number from any phone (1-710-627-4387)

2. Network routes call to a GETS Carrier. As you are prompted, enter your PIN then Destination Number

3. Network routes your call to the Destination Number



Use GETS whenever you hear a fast busy signal, "All circuits busy" announcement, or otherwise cannot complete your call



Making a GETS call

1. If you have a dial tone, dial GETS Access Number
2. Listen for tone, then enter your PIN (do not enter # after last digit)
3. Listen for voice prompt: "Please enter your destination number now."
4. Enter the destination number (omit the 1 before the area code – # cannot be toll free)
5. You will hear an announcement "You are using GETS, AT&T/Verizon/Sprint"
6. Network will route your call to the destination telephone number

Toll Free number for each GETS carrier (backup)

GETS Access Number

User Name and Organization

GETS	If you cannot complete your GETS call using 710-627-4387, try one of these alternate access numbers:	
	AT&T: 1-888-288-4387 1-877-646-4387 (IP Network) 1010 + 288 + 1-710-627-4387	Verizon: 1-800-900-4387 1010 + 222 + 1-710-627-4387
WPS	Dial *272 + Destination Number + <input type="button" value="Send"/>	
	From a Wireless Priority Service enabled phone	
24 Hour Assistance: For help or to report trouble, dial 1-800-818-4387 or 703-818-4387		Familiarization Calls: Make periodic GETS and WPS test calls to 703-818-3924
www.dhs.gov/getts www.dhs.gov/wps		US GOVERNMENT PROPERTY. If found, return to: DHS (Attn: NPPD/CS&C/OEC) 245 Murray Lane SW, Bldg. 410, MS 0615, Washington, DC 20598 WARNING: For Official Use Only by Authorized Personnel

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After Tone, Enter Your PIN	0000 0000 0000
When Prompted, Dial Destination Number	Area Code + Number

Toll Free User Assistance number (24x7)

Periods of silence are normal – particularly if call is queued during heavy congestion. Calls may take 30 to 90 seconds to complete

12 Digit (PIN) Personal Identification Number



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WPS: Solution for wireless congestion

WPS provides priority voice access to the cellular networks when abnormal call volumes exist, providing enhanced call completion for critical NS/EP personnel.

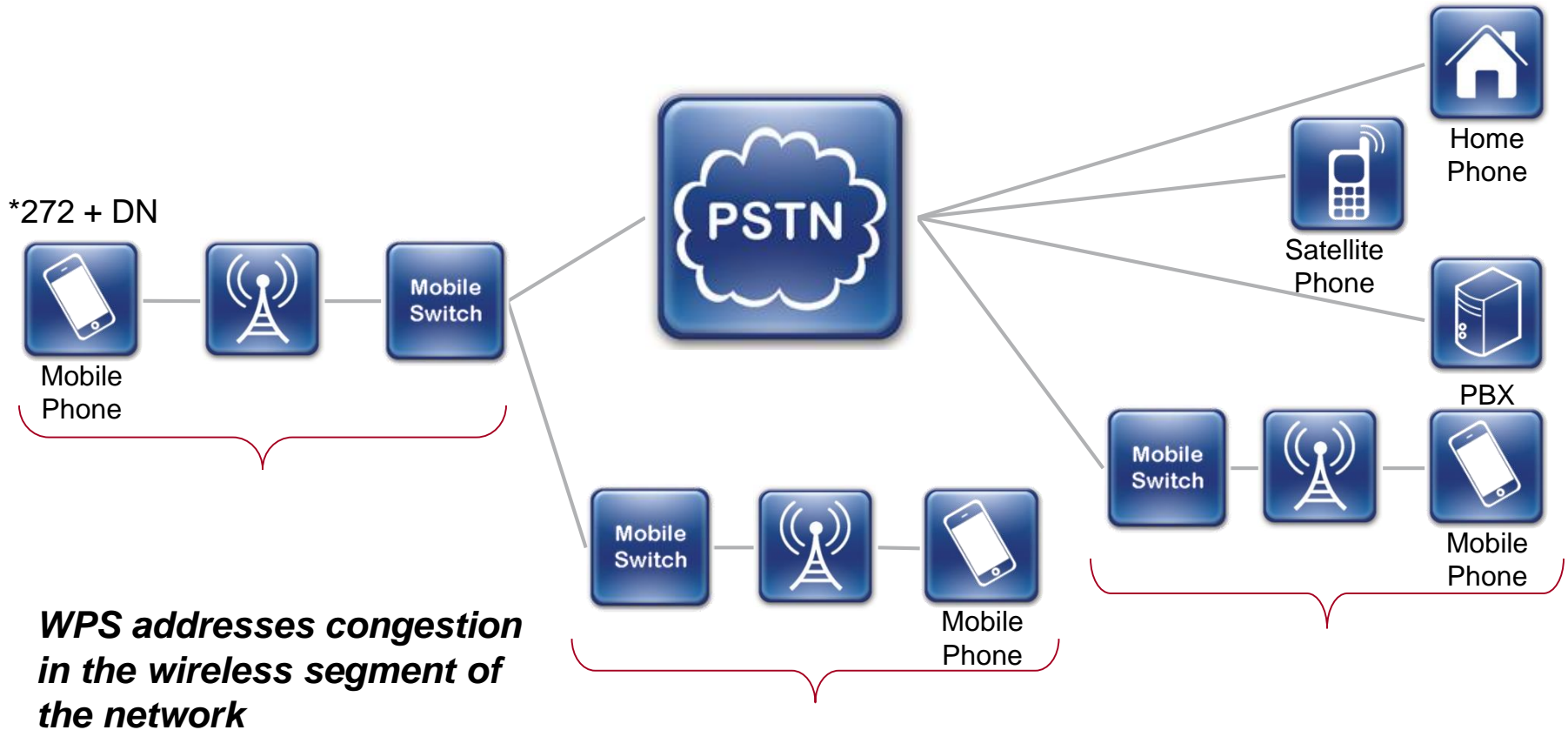
- WPS has historically provided over 90% call completion rates
- During Hurricane Sandy, over 98% of WPS calls were completed
- WPS is available on all the major cellular carriers and many regional cellular carriers
- WPS is an add-on feature and must be added to each applicable cell phone subscription
- Calls must be placed through the subscribed phone to receive priority access to the network




How WPS works

1. WPS is an add-on feature subscribed on a per-cell phone basis – works with existing cell phones in WPS equipped networks

2. To make a WPS call, enter *272 followed by the destination number then press SEND



Making a WPS call

1. Confirm you have radio signal 
2. Enter *272 + destination telephone number and push “SEND” key (example: *272 + 703 818 4387 + CALL)
3. Network will route call with priority to the destination telephone number

Audible alerts vary among carriers and mobile phone models

During WPS call set-up you may hear alternating periods of ringing and silence

Busy signal, announcement, or extended silence indicates call cannot complete



Screen messages vary among carriers and mobile phone models.

WPS calls show same screen messages as regular calls

While WPS calls are in queue screen message usually displays “Calling + Destination Number”

Periods of continuous ringing and/or silence may occur – particularly if call is queued at several points during heavy congestion. Calls may take 30 to 90 seconds to complete.



GETS and WPS applications

GETS and WPS can be used to supplement public safety communications during times of network congestion:

- Contact off-duty personnel on their home/cell phones
- Communicate with response personnel that do not have radio access (e.g. Red Cross, volunteers, utility companies)
- Discuss sensitive information that may not be appropriate for radio broadcast
- Maintain communications with leadership
- Access to teleconferencing capabilities



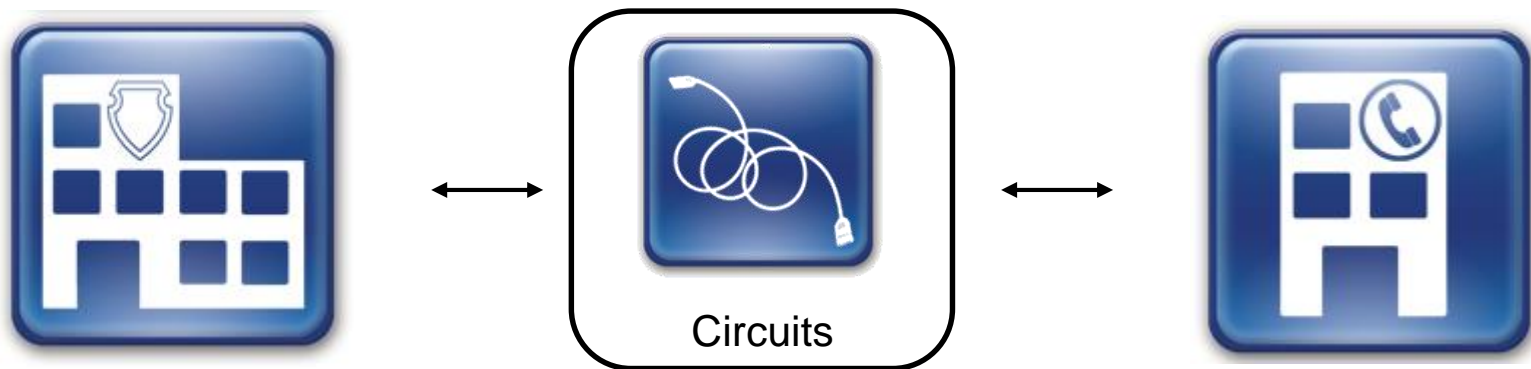
Next Generation Network Priority Services (NGN-PS)

- The NGN – PS program is working to ensure that priority service programs will continue to operate as the telecommunications networks evolve. Users will not notice any changes to the programs.
- NGN – PS is also developing new programs to support voice, text, and video priority on the Internet Protocol – based networks.



During an emergency critical circuits may experience outages

- Emergency Operations Center
- 911 Public-Safety Answering Point (PSAP)
- IT Center
- Critical Facilities
- Telecommunications Service Providers



Damaged facilities and service problems can disable communications!



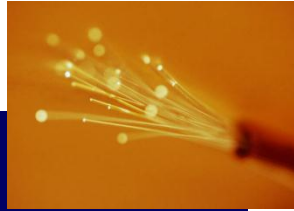
TSP: Solution for restoring damaged circuits or installing new circuits

- Established in November 1988 by FCC Report and Order FCC 88-341
- The FCC designated the Executive Office of the President as administrator of the TSP Program, who in turn, delegated its responsibilities to OEC
- TSP is a mandatory requirement for all FCC-regulated telecommunications companies
- Tariffs are approved by state utility regulators



TSP: Provisioning and Restoration

Provisioning



- TSP authorizes priority installation of new voice and data circuits
- Organizations must be registered with TSP before requesting priority installation

Restoration



- Organizations designate critical circuits to have priority repair and restoration if damaged.
- Circuits must be registered with TSP prior to requesting priority restoration



TSP applications

TSP is needed to provide priority repair and installation of critical voice and data circuits in many situations

TSP provisioning and restoration is essential for:

- Repair/replacement of damaged circuits at EOCs, hospitals, PSAPs, power facilities, government headquarters, financial institutions, etc.
- Priority installation of new circuits when needed to support operations such as disaster response and recovery, inaugurations, and large scale national security events.



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9/11 Terrorist Attacks

Cable Hut - Lower Manhattan September 2001



- TSP prioritized restoration of critical circuits supporting key infrastructure following the 9/11 terrorist attacks.
- The financial sector relied on TSP to prioritize restoration and installation of critical circuits supporting Wall Street.



Hurricane Sandy

East Coast Corridor- October 2012



- Heavy public calling out of area to families, friends, hotels, etc.
- Over 18,000 critical response and recovery calls were placed via GETS with over a 99% completion rate. Over 14,000 WPS calls were completed with a 98% completion rate.
- OEC processed over 200 TSP requests for priority provisioning and restoration to aid in response and recovery efforts.



Boston Marathon Bombing

Response and Recovery- April 2013



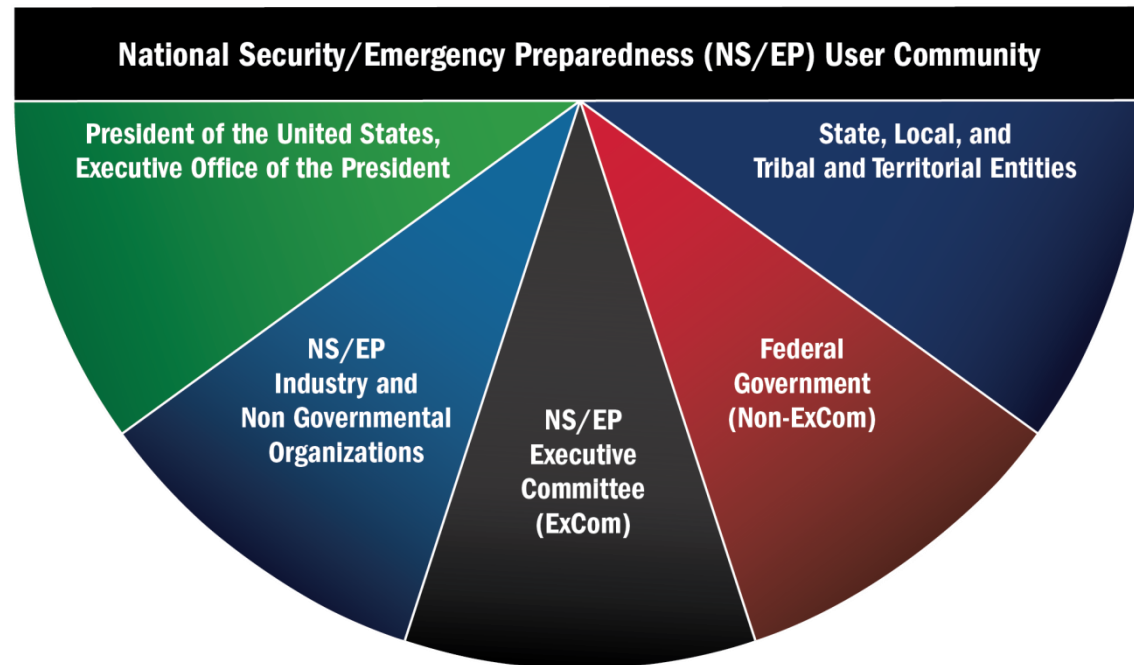
- Emergency responders used GETS and WPS when phone lines became congested in the first hours after the bombing.
- Over 280 critical response and recovery calls were placed via GETS with over a 99% completion rate.
- OEC expedited 152 WPS enrollment requests. 93% of calls made with WPS were completed.



Who is authorized to use priority services?

Organizations that support one or more of the following five national security and emergency preparedness (NS/EP) mission areas:

- National Security Leadership
- National Security Posture and US Population Attack Warning
- Public Health, Safety, and Maintenance of Law and Order
- Public Welfare and Maintenance of National Economic Posture
- Disaster Response and Recovery



Non-Federal users require OEC sponsorship



Who should enroll in priority services?

Organizations

- Cities/Counties/States/Districts
- Office of Emergency Management
- Police/Sheriff/Fire
- Water and Power, Telecom
- Public Works
- Irrigation Districts/Flood Control
- Public Health
- Financial Institutions
- Hospitals/Medical Services
- Transit Agencies
- Ports/Airports
- Utilities/Transportation and other Industries
- Search and Rescue
- School and College Districts
- Red Cross/Volunteer Agencies
- Critical Infrastructure Suppliers
- Other Agencies included in County Emergency Management Plans

Individuals

- Mayor, Council Members, Supervisors
- City Manager and staff
- CFO
- Media Relations
- OEM Management and staff
- Police/Fire Chiefs and staff
- Police/Fire Field Command
- Department Heads and staff
- Subject matter experts/trained specialists
- Individuals with an NS/EP role

Locations/Functions

- EOC Work Stations
- Back-up EOC
- City and County Operations Centers
- PSAPs (911 Center)
- Computer/IT Center
- Police/Fire Dispatch
- City/County Yards
- Remote Offices/Stations
- Power/Pump Stations
- Shelters
- Command Vehicles



Budgeting for priority services

GETS Cards

- There is no charge to enroll in GETS or to make calls to the familiarization line (703-818-3924).
- When making GETS calls, subscribers can be charged the equivalent of long distance phone rates. GETS calls are currently billed at a rate of 7 to 10 cents per minute (depending on carrier and other factors).

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When Prompted, Dial Destination Number	Area Code + Number

WPS Feature Activation

- AT&T, C Spire, Cellcom, SouthernLINC, Sprint, T-Mobile, and Verizon
- Per phone charge (not to exceed): \$4.50/month, \$10 one-time, 75 cents/min



Restoration TSP Tariff

- Request quote from carrier
- Averages \$100 one-time, \$3/month



Resources

For more information visit:

www.dhs.gov/gets

www.dhs.gov/wps

www.dhs.gov/tsp

For assistance setting up accounts:

DHS Priority Telecommunications Service Center

1-866-627-2255

Monday - Friday, 8 AM to 6 PM Eastern Time

Follow voice prompts for each service



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