Welcome to Project Phoenix 2:0 The Recovery –

Supported by the U.S. Department of Commerce, Economic Development Administration, and in coordination with emergency management staff from our six-county region, the Tampa Bay Regional Planning Council is once again in the forefront by providing an educational resource that facilitates collaboration between local governments and businesses in the arena of community preparedness.

Businesses play a critical role in immediate and long-term recovery after large-scale disasters. Project Phoenix 2.0: The Recovery assists the business community and government agencies to coordinate and prepare for catastrophic events. Your participation in this event, and the actions that you take to prepare yourself, your family, and your businesses for hurricane season, strengthens the resilience of the Tampa Bay region.

Thank you for your leadership.

Sean Sullivan
Executive Director
Tampa Bay Regional Planning Council
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Project Phoenix 2.0: The Recovery

Project Phoenix 2.0: The Recovery is a facilitated exercise designed to examine critical issues and capabilities of the Greater Tampa Bay area small business community and emergency management agencies as they recover from a hurricane scenario. The exercise is divided into four modules: One Day After, One Week After, One to Six Months After, and One Year After.

- Recovery
- Community Resilience, Operational Communications, and Economic Recovery

Participating Organizations

Tampa Bay Regional Planning Council

Points of Contact

- Sarah Vitale, AICP, TBRPC Project Manager, Sarah@tbrpc.org
- Benny St. John, Critical Integrated Solutions, Exercise Director, Phone: (850) 532-0443, BSt.John@Crilutions.com

Project Phoenix Website

www.tbrpc.org/phoenix

Additional Preparation Resources

www.tampabayprepares.org
The Exercise Planning Team is the key to a successful exercise. The planning team for *Project Phoenix 2.0: The Recovery* represents key stakeholders and is responsible for developing a realistic scenario and asking questions that will drive discussion and build relationships between exercise players.

The Exercise Planning Team for the Project Phoenix 2.0 exercise is made up of staff from the Tampa Bay Regional Planning Council, representatives from the six counties within the region, and staff from the exercise contractor, Critical Integrated Solutions. Representatives from local emergency management agencies and small businesses have been consulted to add realism to the exercise actions.
The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

- **Players**
  Players are personnel who have an active role in discussing their real-world roles and responsibilities related to the issues and hazards presented during the exercise. Players respond to the situation presented based on current plans, policies, and procedures and discuss or initiate actions in response to the simulated emergency.

- **Facilitators**
  Facilitators guide exercise play and are responsible for ensuring that participant discussions remain focused on exercise objectives. They are responsible for making sure everyone feels included in the conversation and has the opportunity to participate. They also provide additional information and resolve questions as required.

- **Evaluators/Notetakers**
  Evaluators/Notetakers assigned to each table are responsible for observing and documenting all key decisions, innovative ideas and discussion points made throughout the exercise to identify strengths and areas for improvement related to exercise objectives.

- **Observers**
  Observers view selected segments of the tabletop exercise from a designated observation area and must remain within the observation area throughout the exercise. Observers do not directly participate in the exercise. However, they may support the development of player responses during the discussion by asking relevant questions or providing subject matter expertise.

- **Support Staff**
  The exercise support staff includes individuals who perform administrative and logistical support tasks during the exercise (e.g., registration, catering, etc.).
The following exercise objectives describe expected outcomes for Project Phoenix 2.0: The Recovery exercise. The objectives are linked to core capabilities, which are distinct critical elements necessary to achieve the specific mission area(s). The objectives and aligned core capabilities were defined by the Exercise Planning Team.

<table>
<thead>
<tr>
<th>Exercise Objective</th>
<th>Core Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase the understanding of small business and business organizations of how local governments respond to hurricanes and how recovery proceeds.</td>
<td>Community Resilience</td>
</tr>
<tr>
<td>Improve communication between local governments and the business community.</td>
<td>Operational Communications</td>
</tr>
<tr>
<td>Increase understanding of emergency managers of the problems facing small businesses in a major hurricane.</td>
<td>Economic Recovery</td>
</tr>
<tr>
<td>Discuss how to return economic and business activities (including food and agriculture) to a healthy state and develop new business and employment opportunities that result in an economically viable community.</td>
<td>Economic Recovery</td>
</tr>
</tbody>
</table>
Assumptions and Artificialities

In any exercise, assumptions and artificialities are necessary to complete play in the time allotted and/or to account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise and should not permit these considerations to undermine their participation.

Assumptions

Assumptions constitute the implied factual foundation for the exercise and, as such, are assumed to be present before the exercise starts. The following assumptions apply to the exercise:

- The exercise is evaluated. Although individual organizations and participants are not graded, exercise evaluators will assess the collective performance of participating organizations in terms of their capabilities, plans, and discussions based on the objectives.
- The exercise scenario is plausible, and events occur as they are presented.
- Exercise players will use existing plans, policies, procedures, and resources to conduct recovery planning and operations.
- Participants may need to balance exercise play with real-world emergencies. Real-world emergencies take priority.

Artificialities

During this exercise, the following artificialities apply:

- The scenario is plausible, and events occur as they are presented.
- There is no “hidden agenda” nor are there any trick questions.
- The scenario assumes certain player actions as it moves through each phase. Players should first discuss the actions stipulated by the scenario. However, players are welcome to engage in “what if” discussions of alternative scenario conditions.
- Damages are estimates based on the Federal Emergency Management Agency's (FEMA) modeling program HAZUS-MH and combines science, engineering and mathematical modeling with geographic information system (GIS) technology to estimate losses of life and property—and shows those losses on a map.
The Project Phoenix 2.0: The Recovery exercise will consist of four facilitated modules that focus on recovery of the small business community. Each module features a scenario overview and facilitated discussions. Exercise facilitators will provide an overview of the scenario. Next, players will engage in facilitated discussions surrounding a set of discussion questions that are organized according to the exercise objectives. Discussions focus on key actions, activities, and decisions that each player would perform given the specific scenario conditions.

- **Module 1** focuses on short-term recovery operations one day after landfall.
- **Module 2** focuses on short-term recovery operations one week after landfall.
- **Module 3** focuses on long-term recovery operations one to six months after landfall.
- **Module 4** focuses on long-term recovery operations one year after landfall.

**Video** is a key component of the Hurricane Phoenix 2.0 exercise. The exercise will utilize videos in two different ways.

First, two videos are used to simulate the hurricane starting with a short trailer video that introduces Hurricane Phoenix, and then a longer simulation video that follows the structure of: Hurricane Phoenix forming, small businesses throughout the Tampa Bay region getting prepared, the moment of impact, and finally the aftermath. The simulation videos end with an overwhelming sense of damage; in essence, it ends asking, “How do we begin to recover?” The exercise then builds off this sense of urgency to create a captive audience as we progress into the modules.

Following the simulation videos, the exercise will transition into real stories. The next four videos will feature real small businesses that experienced first-hand the direct hit of a Category 5 hurricane. The stories will parallel the timeline of the exercise by highlighting the “aftermath” between Module 1 and Module 2, then the “digging-out” process in Module 3, and end with businesses in “recovery” in Module 4. To wrap up the exercise on a hopeful note, a final video will again feature these small business owners to hear advice and encouragement directly from them. They share their firsthand suggestions and recommendations on how to prepare now, so that whenever a Hurricane Phoenix does come, the Tampa region is ready.

**Moderated Discussion** will take place at the end of each module. At the end of each module in this Situation Manual, you will find questions for emergency managers to ask small business owners and vice versa. The focus (and real value for this exercise) is on creating a discussion, promoting communication and understanding on how to be better prepared and more resilient. The exercise is designed to be delivered in groups broken out by county. To accomplish this, exercise information and assumptions have been tailored for each county, so small business owners and emergency managers from each county will sit across from other people from their county, deal with impacts for their county, and solve problems in their county.
One of the primary purposes of this exercise is to make small businesses and emergency managers more familiar with the challenges facing each other. The exercise has four modules, consisting of a scenario and questions targeted for business owners and emergency managers in each module. The questions are designed to identify issues that each group will be dealing with at that point in time. Because of this structure, the exercise can be used with any segment of the community within the six-county region.

There is no penalty if you don’t have time to answer all of the questions. Be prepared to share the highlights of your discussion with the rest of the exercise participants. A notetaker will be assigned to each table to help moderate the discussion as needed.

Exercise participants will also be provided a Participant Feedback Form. While key issues and observations will be elicited throughout the exercise during general discussions, individual players are asked to complete the feedback form to ensure all perspectives on exercise play are captured.

EXERCISE GUIDELINES

The modules, and associated discussion questions, support achievement of the exercise objectives by initiating discussion, facilitating decision-making, and assisting participants in their arrival of appropriate response outcomes based on the exercise scenario. Participants will be acting in real-world roles when considering the scenario, offering observations and discussing decision-making processes. This approach allows the discussion to focus on situations within a moving timeline, and for participants to contribute to the discussion from the perspective of their role in this scenario. The facilitator will ensure that the scenario moves along at an appropriate pace and that all participants have an opportunity to contribute throughout the exercise.
PLAYER GUIDELINES

The following player guidelines apply to this exercise:

- This exercise will be held in an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, are expected.
- Players should respond to the scenario using their knowledge of current plans, capabilities, and insights derived from relevant training.
- Players should not focus on the details of the scenario, but rather on the “big picture” concepts depicted. The scenario information is intended only to stimulate conversation and not represent all information that would be available in a real-world incident. Treat the scenario as plausible, assume events occur as presented, and accept the scenario information as the full extent of information available to the players at the time.
- Decisions are not precedent-setting and may not reflect an individual organization’s final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions. Creativity is encouraged.
- Issue identification is not as valuable as suggestions and recommended actions that could improve recovery efforts. Focus on problem-solving and identification of solutions, whether structural, program-based, or policy-oriented.
- There is no “hidden agenda” nor are there any trick questions.

EXERCISE EVALUATION

Evaluating an exercise of this nature with evaluators and exercise evaluation guides, which include small business owners, provides challenges when writing an After-Action Report/Improvement Plan as contributions and tracking are voluntary. An alternative is to assign notetakers to individual tables (as appropriate) and are responsible for observing and documenting all key decisions, innovative ideas and discussion points made throughout the exercise to identify strengths and areas for improvement related to exercise objectives. In this case, these notes can be included in an Executive After Action Summary Report which documents innovative ideas and collective areas of improvement recommendations. Evaluation of the exercise should be based on the participant’s ability to address exercise-specific objectives and aligned capabilities. Evaluation provides an objective overview of participant discussion during the exercise and identifies key issues and strengths related to the exercise objectives. Accurate, systematic, and practical evaluation is an essential component of a successful exercise.
FEMA created Community Lifelines to reframe incident information, understand and communicate incident impacts using plain language, and promote unity of effort across the whole community to prioritize efforts to stabilize the lifelines during incident response.

A lifeline enables the continuous operation of critical government and business functions and is essential to human health and safety or economic security.

Lifelines are the most fundamental services in the community that, when stabilized, enable all other aspects of society to function.

Lifelines are the integrated network of assets, services, and capabilities that are used day-to-day to support the recurring needs of the community.

When disrupted, decisive intervention (e.g., rapid service re-establishment of employment of contingency response solutions) is required to stabilize the incident.

More info on Lifelines can be found at: [www.fema.gov/lifelines](http://www.fema.gov/lifelines)
Community Lifelines: Assigning a Condition

Did the incident disrupt services to survivors provided by lifeline component capabilities?

Yes

Is there a clear understanding of the extent of the disruption and impact to response and survivors?

No

Green

Yes

Are there requirements and solutions identified and is there a plan to deliver the solutions? Significant limiting factors may inhibit response.

No

Grey

Yes

Has a solution to the disruption been identified, and has it been converted into a plan of action, resourced, and implemented? Some limiting factors may inhibit response.

No

Red

Yes

Are critical lifeline services available to survivors and responders?

Yes

Green

No
### Natural Disaster Impact

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Impact Percentage</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>40%</td>
<td>Of small businesses won’t reopen</td>
</tr>
<tr>
<td>One Year Later</td>
<td>25%</td>
<td>More small businesses will close</td>
</tr>
<tr>
<td>Two Years Later</td>
<td>90%</td>
<td>Of small businesses will fail within two years of a disaster, according to the SBA</td>
</tr>
</tbody>
</table>

Source: Federal Emergency Management Agency (FEMA) and U.S. Small Business Administration (SBA)
Hurricane Phoenix is a fictitious storm created to simulate the effects of a worst-case scenario. The National Weather Service (NWS) Forecast Office in Ruskin have designed a storm with a track and intensity that would devastate the entire Tampa Bay region. The NWS generated National Hurricane Center advisories, local hurricane statements, and data files that simulate the hurricane’s location and intensity from its formation in the Caribbean Sea, through landfall in Pinellas County, to the hurricane’s exit from the east coast of Florida into the Atlantic Ocean. The maps and information presented in this packet are based upon the files simulated by NWS Ruskin and Critical Integrated Solutions.

The simulated parameters of Hurricane Phoenix were input into HAZUS-MH, the risk assessment tool that uses the Federal Emergency Management Agency (FEMA) standard methodology to measure the effects of real and simulated hazard events like hurricane winds and flooding. As one might expect, a storm of the size and strength of Hurricane Phoenix would create almost unthinkable damage to the area’s homes, businesses, infrastructure, overall economy, and social systems that are currently in place. The goal of this exercise process is to develop strategies that will help the Tampa Bay region small business community to recover and rebuild after such a devastating catastrophe.
<table>
<thead>
<tr>
<th>OCTOBER 7</th>
<th>A tropical depression forms west of the Lesser Antilles, moving generally west.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTOBER 9</td>
<td>The depression reaches tropical storm strength named Tropical Storm Phoenix.</td>
</tr>
<tr>
<td>OCTOBER 10</td>
<td>Phoenix reaches hurricane intensity south of Jamaica forecast to strengthen slightly as it moves generally west and west-northwest into the Yucatan Straits. The storm is forecast to be over open water in the central Gulf of Mexico in five days. The entire eastern Gulf coast from New Orleans to the Florida Keys is on the edge of the five-day error cone.</td>
</tr>
<tr>
<td>OCTOBER 12</td>
<td>The Tampa Bay region’s hurricane preparation kicks into high gear as the forecast track turns more to the east with each National Hurricane Center (NHC) forecast/advisory.</td>
</tr>
<tr>
<td>OCTOBER 13</td>
<td>Hurricane Phoenix approaches the Yucatan Straits as a Category 2 storm. A Hurricane Watch is posted for a large stretch of the west central coast of Florida with the 11 a.m. NHC advisory. The forecast track shows a recurving of the storm back to the north northeast after it enters the Gulf of Mexico. Phoenix is forecast to be a Category 5 storm approaching the west coast of Florida in two days. Tampa Bay is now at the center of the bull’s-eye for the hurricane’s forecast landfall.</td>
</tr>
<tr>
<td>OCTOBER 14</td>
<td>A Hurricane Warning replaces the Watch, starting with the 5 a.m. NHC advisory. Phoenix has brushed the western tip of Cuba, and is moving north-northeast into the open waters of the Gulf. Sustained winds have reached 120 mph. Tropical-storm force winds reach coastal sections of Manatee and Pinellas counties just before midnight and spread inland through the morning of the 15th.</td>
</tr>
</tbody>
</table>
At daybreak, Phoenix is a strong Category 4 hurricane with 150 mph sustained winds. The center of the storm is just over 100 miles southwest of St. Pete Beach, moving toward the Tampa Bay area. Hurricane-force winds reach the coast around 8 a.m. Seas start the day a foot or two above the normal tide level, but rise 5-10 feet by mid-morning.

Phoenix continues to intensify through the morning. By 11 a.m., sustained winds reach 160 mph as the wall of the 45-mile wide eye enters the mouth of Tampa Bay. The center of the eye makes landfall at Indian Rocks Beach just before noon.

Storm surge is 11 feet by now. By late afternoon, structural damage is caused by wind alone, windborne debris, or trees that fall onto building roofs. Most windows are blown out of high-rise structures.

The hurricane holds a steady course to the northeast as it decimates the entire Tampa Bay area. The storm weakens slowly after landfall. By 5 p.m., the center of Phoenix is located in eastern Hernando County. Sustained winds are still 130 mph. Hurricane-force winds continue in Tampa until around 7 p.m. That’s around 10 straight hours of sustained winds greater than 74 mph. Phoenix accelerates to the northeast during the evening, exiting the east coast of Florida around midnight at St. Augustine. Sustained winds are 105 mph as Phoenix enters the Atlantic.
Overnight, Hurricane Phoenix, a Category 5 hurricane, made landfall and Citrus, Hernando, Hillsborough, Manatee, Pasco and Pinellas counties have experienced life-threatening rain, wind, and storm surge. Forecasters issued severe flood warnings, and region-wide evacuations were carried out. The storm has knocked out communications, television and most radio stations. Enormous amounts of debris have damaged critical infrastructure, blocking roadways and delayed emergency response. Many people are displaced or missing from their homes and dependent upon shelters. Emergency managers are being asked about the status of “Critical Lifelines” as they struggle to piece together a common operating picture.

The radio and social media are reporting estimate tides of 9-12 feet above normal. Storm surge has completely overtopped barrier islands from Longboat Key to Clearwater Beach. The storm pushed a massive volume of water into Tampa Bay, surge levels climbed to at least 20 feet above normal at St. Petersburg, 23 feet at Oldsmar, 24 feet at Apollo Beach, and 26 feet above the normal tide level near Downtown Tampa. Storm surge pushes water from the bay up the Hillsborough, Alafia, Lower Manatee, Braden, and Manatee Rivers and the Tampa Bypass Canal, flooding areas well inland.
Sunshine Skyway, Gandy Bridge, and Howard Frankland Bridge that traverse Tampa Bay and the Courtney Campbell Causeway sustain either structural damage or have their approaches washed away by water and waves. For a time on the afternoon of the 15th, the parts of central St. Petersburg and Mid-Pinellas County that are not inundated by storm surge become two islands, each surrounded by water on all sides.

It is anticipated that the region (and beyond) has suffered severe infrastructure damage, population displacement, and devastation to the community as a whole. Severe economic hardship is anticipated. Social media is reporting catastrophic damage to MacDill Air Force Base and the Port Tampa Bay. Flooding is a major concern for the Greater Tampa Bay area.

Thousands of individuals require temporary housing services as they are unable to return to their residences. Some tourists remain in hotels. Generators are the primary means of power as electricity and gas infrastructure viability are to be determined; many residential and business areas took heavy, if not devastating damage. All residents are being asked to stay at home as the status of highways/roads, bridges and other critical lifeline services are being inspected or viability determined. Due to debris and power lines down, you are unable to travel.

Many homes and businesses are damaged or destroyed overnight. Each county has the following estimated levels of destruction:
## INITIAL DAMAGE ESTIMATES BY COUNTY

<table>
<thead>
<tr>
<th>County</th>
<th>Total Commercial and Residential Structures</th>
<th>% Damaged</th>
<th>% Without Electricity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrus</td>
<td>160,076</td>
<td>22.7% moderate</td>
<td>25%</td>
</tr>
<tr>
<td>Hernando</td>
<td>175,057</td>
<td>49% severe</td>
<td>49%</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>873,711</td>
<td>61% total loss/destroyed</td>
<td>90%</td>
</tr>
<tr>
<td>Manatee</td>
<td>292,332</td>
<td>26.8% moderate</td>
<td>75%</td>
</tr>
<tr>
<td>Pasco</td>
<td>438,958</td>
<td>52.7% total loss/destroyed</td>
<td>100%</td>
</tr>
<tr>
<td>Pinellas</td>
<td>758,244</td>
<td>72.7% total loss/destroyed</td>
<td>100%</td>
</tr>
</tbody>
</table>

Across the region, economic damage will be catastrophic. Businesses will need an incredible amount of resources and help to recover and begin to rebuild. Many of these business owners will first have to focus on recovering their homes and ensuring their families are safe and secure before they can begin to think about recovering their business. This time lapse before beginning recovery means that thousands of businesses will never reopen, and thousands more will fail during the first year after the disaster.

For those businesses that do recover, the recovery process will bring resiliency to the company, its industry and its neighborhood. This will ensure a faster recovery for the business and the community after future disasters.
CHECK OUT THE DAMAGE IN YOUR AREA

In order to get a better idea of the damage in your area, go to this link, www.tampabayregion.org/phoenix-impacts, click on the magnifying glass in the top left hand corner and enter your address in a format similar to: 7400 4th Street North, Sunlit Cove, Saint Petersburg, Pinellas County, Florida, 33702, United States of America (this may autofill as you type). Once you have located your address, on the top right you can toggle to see wind or surge data based on modeling for Hurricane Phoenix.

https://www.floridadisaster.org/knowyourzone/
As a team, please determine the status of your local lifelines at this point in the exercise.

Emergency Manager Questions for Small Business Owners

1. What are priorities of small business owners at this point?
2. What were you able to do in preparation for Hurricane Phoenix?
3. What are your immediate actions after the disaster?
4. Do you have a disaster plan? If so, is it updated regularly? If not, what steps could you take to put one together?
5. Do you have any safe space to shelter if an emergency happened during the work day?
6. If not, do you have a plan in place to make sure your employees are able to shelter somewhere safely?
7. What guidance did you provide to your employees before the storm’s landfall?
8. Do you maintain an emergency contact lists for the board, staff, vendors, and other key contacts? Where are these lists located?
9. Do you have key documentation on your business – tax files, insurance information, protected employee documentation, customer lists and more – stored off-site or in a cloud to access after a disaster?
10. Do you have your technology and other expensive equipment safeguarded from flooding, electrical surges, or other damage? Or do you have a plan to move it to a safe location?
Small Business Owner Questions for Emergency Managers

1. What are the priorities of Emergency Management at this point?
2. What actions did you take in preparation of the storm?
3. How will I know when it’s safe to go check on my business?
4. Do I need to report damages to my business to someone?
5. What is the role of the Emergency Operations Center?
6. Is there someone in the Emergency Operations Center that represents businesses?
7. With large-scale communications outages, how do I, as a community member and small business owner, find out where I can get assistance?
A week after landfall, the region is just beginning to understand recovery efforts; schools remain closed. Shelters continue to be full, untold numbers of the population have left, at least temporarily. An influx of contractors has begun arriving, mostly construction related. Remaining residents are struggling to find the basic essentials to live day to day. Flood waters have receded, and some have been able to return to their homes; however, many individuals’ homes have been rendered uninhabitable. Media coverage of recovery efforts has been critical of ongoing challenges in providing housing. While utilities have been partially, on a limited basis, restored, most local businesses have not yet been able to reopen, and the local economy is still suffering heavy losses.

The initial priority of the state and local emergency managers for the private sector will be to reopen critical private sector businesses and facilitate efficient logistical measures to allow food, care and clothing items into the disaster zones. Most hospitals in the community are closed because of wind damage or flooding and emergency managers have struggled to establish locations for temporary medical facilities in most communities.
Debris continues to block major highways and fuel is scarce. Compounding the fuel problem is news that the Port Tampa Bay’s fuel offloading facilities have been damaged, and it is unknown how soon service can be restored. Emergency managers know that getting the business community back on its feet will aid the community in both its short and long-term recovery. The most important private sector businesses will be those involving health and medical care; food, water and ice; clothing; pharmaceuticals; gas and other fuel; and lumber, tarps and other building materials to begin repairs. If emergency managers can help get these critical businesses back open, then the businesses can begin to directly help the community recover. For example, if a small business can start selling water to people that need it, that provides income for the small business and its employees and frees up the time of first responders who can focus on critical infrastructure recovery instead of manning water stations. Getting the economy back up and running is critical to community recovery.

### LIFELINE STATUS ONE WEEK AFTER LANDFALL

<table>
<thead>
<tr>
<th>County</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Citrus</strong></td>
<td>Almost 36,000 residential and commercial structures are still without electricity. Storm surge has begun to recede, and portions of US 19 are now open. PODS and shelters are open. As water has receded in the west the rivers in the east side of the county began to rise and the county began preparations for river flooding.</td>
</tr>
<tr>
<td><strong>Hernando</strong></td>
<td>More than 78,000 residences and businesses still do not have electricity. Portions of US 19 are open. PODS and shelters are open. As water receded in the west the rivers on the east side of the county began to rise and the county EM office began preparing for river flooding.</td>
</tr>
<tr>
<td><strong>Hillsborough</strong></td>
<td>Power has been restored to about 20 percent of residences and businesses. The Port Tampa Bay has re-opened on a limited basis but damage to the equipment has halted offloading of petroleum tankers. Virtually all downtown businesses remain closed. The farms on the east side of the county are struggling to continue operations because workers have not come back since the storm.</td>
</tr>
<tr>
<td><strong>Manatee</strong></td>
<td>Nearly 200,000 residences and commercial structures are still without power. City buildings and Manatee State College have received major water damage and are unusable.</td>
</tr>
<tr>
<td><strong>Pasco</strong></td>
<td>Only about 10 percent of residences and commercial structures have had power restored. Officials are struggling to find thousands of Pasco County residents. Mobile home communities west of US 19 have been destroyed but search and rescue teams have found fewer than 100 bodies and less than 1,000 residents from those areas have shown up in local shelters.</td>
</tr>
<tr>
<td><strong>Pinellas</strong></td>
<td>About 10 percent of residences and commercial structures have power. Portions of the beachside communities remain isolated as storm surge washed away parts of the beach road. A lift station is out of service.</td>
</tr>
</tbody>
</table>
### Expected Damage to Essential Facilities (Wind) Throughout Florida

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Number of Facilities</th>
<th>Facilities Damaged</th>
<th>Percentage of Facilities Damaged</th>
<th>Facilities Not Functional</th>
<th>Percentage of Facilities Not Functional</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOC</td>
<td>129</td>
<td>35</td>
<td>27%</td>
<td>14</td>
<td>11%</td>
</tr>
<tr>
<td>Fire Station</td>
<td>1,856</td>
<td>695</td>
<td>37%</td>
<td>212</td>
<td>11%</td>
</tr>
<tr>
<td>Hospital/Medical</td>
<td>349</td>
<td>146</td>
<td>42%</td>
<td>78</td>
<td>22%</td>
</tr>
<tr>
<td>Police Station</td>
<td>818</td>
<td>329</td>
<td>40%</td>
<td>128</td>
<td>16%</td>
</tr>
<tr>
<td>School</td>
<td>3,904</td>
<td>1,677</td>
<td>43%</td>
<td>1,302</td>
<td>33%</td>
</tr>
<tr>
<td>All</td>
<td>7,056</td>
<td>2,882</td>
<td>41%</td>
<td>1,734</td>
<td>25%</td>
</tr>
</tbody>
</table>
First priorities in the week after the storm will be restoration of electrical power and cell phone service, along with water and other utilities that were damaged. Communities prioritize power restoration after a disaster to critical facilities such as hospitals, clinics, schools, and emergency operations centers. The timeline for small businesses to get their power restored will depend substantially on their proximity to these critical facilities. Nearby businesses generally have power restored much sooner than businesses on the fringe of a community and not bordering any critical infrastructure.

Disaster recovery is especially challenging for small business owners. Small business owners generally live in the community in which they operate their businesses and are likely experiencing damage to their homes and their businesses simultaneously. With an extreme number of homes damaged and destroyed affecting the majority of each county, safety and security at home is going to be the first priority of most business owners. The business recovery efforts may take a back seat for a short while, but getting the business back up and running is the only way to ensure long-term safety and financial security for most small business owners.

The Port Tampa Bay, Port Manatee and MacDill Air Force Base have all sustained heavy damage and are closed for damage assessments. At Port Tampa Bay, a billowing black cloud of smoke has lingered since a few days after the hurricane. The transmission line that moves gasoline from the port to a terminal that serves more than 50 percent of Florida has ruptured. Because of debris, damaged equipment and concerns that other tanks may be leaking dangerous chemicals such as anhydrous ammonia, crews have not tried to extinguish the flames.

Infrastructure challenges are huge. Emergency operations centers, fire and police stations, hospitals and other medical centers, and schools are damaged. Roadways and bridges must be inspected before travel can resume. Business owners and employees with families must adjust to potential delays in school being in session for weeks or months at a time.

GETTING HELP FOR HOMEOWNERS

Any resident who has disaster-related damage should start by registering with FEMA at DisasterAssistance.gov. FEMA has grants of up to $35,000 available for people with disaster-related damage, but the average is about $3,000 to $5,000, according to FEMA officials. FEMA funds can also be used for transitional living expenses, but some small business owners said they were turned away.

Separately from small business loans, the SBA also also provides loans for individual homeowners. By applying, homeowners could be eligible for up to $200,000 to repair or replace their residence at a below-market fixed rate and another $40,000 loan for personal property damaged in the hurricane. This is separate from SBA small business loans.
PROJECT PHOENIX 2.0: THE RECOVERY

DISCUSSION QUESTIONS

- As a team, please determine the status of your local lifelines at this point in the exercise.

![Lifelines Icons]

- **Emergency Manager Questions for Small Business Owners**

  1. What are your priorities at this point in recovery?
  2. What kind of assistance do you plan to provide your employees after a disaster? Can you help them with lost wages, housing, medical needs or even mental health needs through an Employee Assistance Program? If not, do you know resources to refer them to?
  3. How do you conduct a damage assessment on your business? Have you identified another business location that could house your business if there is long-term damage?
  4. What would you communicate to suppliers to ensure your business has items needed for recovery and sustainability? What if your suppliers have been impacted by the storm?
  5. What partnerships have you cultivated in the community, such as with other businesses, government, Chamber of Commerce and nonprofits? How can they help?
  6. Do you have insurance on your business? Do you know what and how much, dollar-wise you are covered for? When was the last time you reviewed your policy? Does your company have vehicles required to complete your work? What is your plan to protect the vehicles and or continue your work if the vehicles are damaged?
  7. How would you communicate with customers post-disaster on if your business is open, running at regular capacity or capability, has moved to a new location, etc.?
Small Business Owner Questions for Emergency Managers

1. What are emergency management priorities at this time?
2. What programs exist at the state level that can provide additional resources (financial and technical) to the small business community? At the federal level?
3. How does your plan outline restoring and improving the resilience and sustainability of the small business community?
4. During your recovery planning process and recovery plan development, who is involved to support the needs and concerns for small business?
5. What governmental or non-governmental organizations are involved in the planning process?
When does short-term recovery become long-term recovery?

» When stores and other businesses re-open?
» When schools re-open?
» When government offices re-open?
» When shelters close?
» When streets are open to travel?
One month after landfall, some counties in the region have begun to grasp the scope of recovery efforts; for other counties, the damage is so devastating they may take up to six months to have a plan to rebuild.

Some schools have consolidated and are back in session, others are closed for the foreseeable future due to heavy damage. Employees are hard to find, and the cost of available housing has increased. Small businesses are having a hard time finding employees even if they have been able to overcome storm damage. Some homeowners have been able to return to their homes; however, some individuals’ homes have been rendered uninhabitable and makeshift shelters are a common sight. The priority of many small business owners is where they are going to live or how they are going to repair their damaged homes.

Media coverage of recovery efforts has been critical of ongoing challenges in providing housing. While utilities have been partially restored, many local businesses have not yet been able to reopen, and the local economy is still suffering losses. There is speculation that MacDill Air Force Base may close permanently. The Port may take three years before it becomes fully operational, which has cascading impacts on availability of fuel and affects many businesses since the Port is a major importer and distribution center of supplies and goods.

The Department of Children and Families is reporting that Baker Acts are on the rise. The Baker Act allows for involuntary examination (what some call emergency or involuntary commitment), which can be initiated by judges, law enforcement officials, physicians, or mental health professionals for those that are a danger to themselves or others. This is similar to what has been seen in other disasters as individuals deal with the trauma and disruption to their lives.

The Florida Department of Health has recently sent in a Disaster Behavioral Health Assessment Team, and the initial impression from the team is that while the community as a whole is stable, there is a need for both long and short-term mental health needs, especially among children.
## POWER OUTAGES AND DURATION

<table>
<thead>
<tr>
<th>County</th>
<th>Structures (Residential + Commercial)</th>
<th>Outages after one month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrus</td>
<td>160,076</td>
<td>5,715</td>
</tr>
<tr>
<td>Hernando</td>
<td>175,057</td>
<td>12,500</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>873,711</td>
<td>112,301</td>
</tr>
<tr>
<td>Manatee</td>
<td>292,332</td>
<td>31,312</td>
</tr>
<tr>
<td>Pasco</td>
<td>438,958</td>
<td>62,690</td>
</tr>
<tr>
<td>Pinellas</td>
<td>758,244</td>
<td>108,289</td>
</tr>
<tr>
<td>All</td>
<td>2,538,302</td>
<td>332,807</td>
</tr>
</tbody>
</table>

## RESIDENTIAL IMPACTS

<table>
<thead>
<tr>
<th>Counties</th>
<th>$ Structural Value*</th>
<th>Structural Losses*</th>
<th>Combined Loss Ratio</th>
<th>Average Level of Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citrus</td>
<td>$11,655</td>
<td>3,745</td>
<td>32.1%</td>
<td>Severe</td>
</tr>
<tr>
<td>Hernando</td>
<td>$14,207</td>
<td>8,995</td>
<td>63.3%</td>
<td>Destroyed</td>
</tr>
<tr>
<td>Hillsborough</td>
<td>$161,525</td>
<td>101,415</td>
<td>62.8%</td>
<td>Destroyed</td>
</tr>
<tr>
<td>Manatee</td>
<td>$45,443</td>
<td>15,979</td>
<td>35.2%</td>
<td>Severe</td>
</tr>
<tr>
<td>Pasco</td>
<td>$44,291</td>
<td>29,553</td>
<td>66.7%</td>
<td>Destroyed</td>
</tr>
<tr>
<td>Pinellas</td>
<td>$153,382</td>
<td>127,392</td>
<td>83.1%</td>
<td>Destroyed</td>
</tr>
<tr>
<td>All</td>
<td>$430,503</td>
<td>287,080</td>
<td>66.7%</td>
<td>Destroyed</td>
</tr>
</tbody>
</table>

*Values in 1000s
<table>
<thead>
<tr>
<th>County</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Citrus</strong></td>
<td>More than 5,000 residential and commercial structures are still without electricity. Most major roads are now clear. Crystal River High School, Middle School and Primary Schools have re-opened in the past week. Citrus Memorial hospital is scheduled to re-open within the next two weeks. As life returns to normal on the west side of the county, the Withlacoochee River continues to flood in the eastern part of the county. Shelters and PODS have been set up in that area. Thousands of people are still unaccounted for. Most are believed to have left the area.</td>
</tr>
<tr>
<td><strong>Hernando</strong></td>
<td>More than 12,000 residences and businesses still do not have electricity. More than two-thirds of all structures in the county have been destroyed. All four hospitals in the county received severe damage in the hurricane. None have as of yet re-opened their facilities. Temporary medical facilities have been set up in the parking lots of each. Temporary classrooms have also been set up to resume classes. School buildings are not expected to be re-opened for at least six months. As in Citrus County, PODS and shelters have been opened in the eastern part of the county to assist residents affected by river flooding.</td>
</tr>
<tr>
<td><strong>Hillsborough</strong></td>
<td>More than 700,000 residences and businesses are still without power. Almost two-thirds of all structures in the county have been destroyed. Most downtown businesses remain closed. Many farms on the east side of the county are closed because workers have not come back since the storm. The ones that remain open have consolidated operations to utilize available workers. Several small hospitals have re-opened, as have a few schools, but temporary medical facilities and classrooms will be needed for at least a year.</td>
</tr>
<tr>
<td><strong>Manatee</strong></td>
<td>Just over 10 percent of the nearly 300,000 residences and commercial structures have power. The county appears to be the least impacted of the six counties with just over a third of its structures destroyed. A few schools have re-opened and high schools are using split schedules to accommodate additional students from closed schools. Hospitals are either re-opened or near re-opening.</td>
</tr>
<tr>
<td><strong>Pasco</strong></td>
<td>About 15 percent of residences and commercial structures have had power restored. Officials are struggling to find thousands of Pasco County residents. Two thirds of all structures in the county have been destroyed. Like Hernando and Citrus counties, PODS and shelters are set up in the eastern part of the county for residents affected by flooding. Temporary medical facilities will be phased out in the next 30 days. Temporary classrooms are expected to remain for a year or more. Almost 900 businesses in the county are not expected to re-open.</td>
</tr>
<tr>
<td><strong>Pinellas</strong></td>
<td>About 15 percent of residences and commercial structures have power. Over 80 percent of all structures in the county have been destroyed. Though it received extensive damage, Tropicana Field and the area around it has been set up as a shelter, POD location and general operations center. Temporary medical facilities and temporary classrooms are expected to remain for at least a year. County officials are struggling to re-open beach hotels and other facilities due to lack of water and sewer systems.</td>
</tr>
</tbody>
</table>
Some time has passed, and most small business owners will have resolved their personal recovery and begun to focus on their businesses. However, the businesses likely to reopen the quickest will not be family-owned small businesses but national chains with large support teams and emergency plans in place. In most communities, Walmart and Publix will reopen before the locally-owned grocery store; pharmacies at CVS and Walgreens will reopen before the local neighborhood pharmacy. These corporations are well-prepared for disasters and can send in teams of professionals from other states to help with rebuilding, restocking, and reopening. Many times, these corporations have emergency management staff working directly with the state to ensure a smooth recovery.

The businesses that suffer the most are the small local businesses that typically have no disaster plan and no outside team of professionals that can come to the rescue during trying times. It’s been discovered that many business owners and citizens don’t carry property insurance on their properties because of the cost or age and condition of the building. Without an insurance check on the way, they might not qualify for a Small Business Administration disaster loan or other state or federal programs.

Small businesses will be struggling to reopen during this phase, and some will be making the decision to stay closed, depending on individual circumstances. Financial hardship may be the toughest challenge to overcome for a business owner. Owners need to replace ruined inventory, fix physical damage, pay wages, and pay to replace lost equipment. These expenses can add up and many businesses will not have the cash reserves to cover them.

Fortunately, there are options available to aid small businesses struggling with recovery. Businesses can take advantage of state loan programs, especially the Florida Small Business Emergency Bridge Loan Program, which will provide emergency short-term, interest-free loans in small amounts, generally up to $50,000 or $100,000, depending on the industry and the disaster. These loans are meant to provide a “bridge” until property insurance payments or long-term loans from the federal Small Business Administration are paid. The loans must be repaid to the state out of the proceeds received from these other, more long-term sources. Delays in insurance proceeds, and SBA loans, are extremely common and cause difficulty in paying back state bridge loan programs.
One misconception among business owners is there are grant programs that can help during recovery. There are grants available for nonprofits and human services groups for recovery, but there are not readily available grants for business recovery. Most programs are loans that must be paid back, although many are very low or no interest and offer a substantial time frame for repayment.

Keeping employees is another strain during this time. Depending on the length of time your business is closed, employees may begin working elsewhere, leaving your business with workforce needs once it reopens. This challenge is particularly present in the service industry where job skills are transferrable. Employees of closed businesses will find open positions at businesses who were resilient enough to survive the disaster unscathed. Businesses can slow employee flight after a storm if they have saved enough reserves and are capable of paying lost wages. However, supporting those employees can be a struggle. In Florida’s Panhandle, many individuals were dealing with multiple traumas and challenges after Hurricane Michael – from lost wages or jobs, to lost and damaged homes, to loss of daycare or school for young children, making recovery a financial, emotional and psychological issue.
As a team, please determine the status of your local lifelines at this point in the exercise.

Emergency Manager Questions for Small Business Owners

1. Some employees who are able to come to work are showing signs of extreme stress, suspected overuse of alcohol and drugs, anxiety, depression and potentially Post Traumatic Stress Disorder. Do you have any programs available to you to assist these family or staff members?
2. How could your business leverage local, state and federal resources for long-term recovery?
3. Could you manage to wait the length of time to get a state loan or federal loan to get your business back up and running?
4. Do you know your community’s priorities and how your business recovery plan may fit into those priorities?
Small Business Owner Questions for Emergency Managers

1. Which organization has the lead role for monitoring the community’s economic viability to include small business? Who in the community is involved?
2. What local funding or programs exist for private and non-profit business recovery and who is responsible for managing these?
3. During your recovery planning process and recovery plan development, who is involved to support the needs and concerns for small businesses?
4. What programs exist at the state level that can provide additional resources (financial and technical) to local small business or non-profit organizations? At the federal level?
5. What resources and programs are available to support the development and implementation of sustainable recovery strategies that you can or do leverage?
6. What programs are available to help with stress induced behavioral health issues?
A year after landfall, the region is continuing recovery efforts; schools are back in session, and residents have largely returned to work. Rebuilding efforts are robust, while residents are still working through insurance issues.

Small business loans through the Small Business Administration are trickling out slowly to the small business community, but those that have survived are frustrated. MacDill Air Force Base will remain open and is also in the process of rebuilding and expected to be fully mission capable in the next three to four years. Media coverage of recovery efforts are now reporting stories of successes and failures over the past year of the recovery efforts. While utilities have been largely restored, some local businesses have not yet been able to reopen, and the local economy is still suffering losses.
Many businesses may just be getting back on their feet after waiting months for SBA loans to be approved and not having any other available sources of operating income. Others may be trying to reopen after being closed for up to a year. Some of these businesses that are still closed may have been forced to change locations and get reestablished in a new part of town or a new city completely.

If a business was leasing its space, it will likely have the opportunity to find a new location to lease in some place that survived the storm. However, long-term recovery can be much more difficult for businesses that owned their own facility. These businesses are having to go through the process of reconstructing their facilities, sometimes from the ground up. Rebuilding is critical but incredibly difficult after a major storm due to labor shortages mixed with higher than usual demand.

After Hurricane Michael, many businesses in the Florida Panhandle, including national franchises, took more than a year to rebuild and reopen. Others closed completely and new businesses took the opportunity to open in their place. Some business owners that needed to rebuild could not come up with the money to rebuild especially considering high construction costs for a significant period of time after the disaster. The labor issues plaguing the construction industry will also affect various other industries.

After Hurricane Michael, the labor market was so tight that restaurants began to increase starting minimum wages to almost $15 an hour just to attract workers. It is much easier for a large national chain to provide and support these increased wages than a small business with no outside resources.

During Hurricane Michael, 25 federal and 29 state agencies responded to one of the country’s most powerful storms. In addition to state and federal agencies, the local governments, community leaders, voluntary and faith-based organizations and private sector partners contributed to hurricane recovery efforts.

The U.S. Small Business Administration approved 12,730 low-interest disaster loans to homeowners, renters and businesses for more than $644.7 million.
Nearly $496.6 million in Public Assistance grants approved for Hurricane Michael-related reimbursements to state and local governments and certain nonprofits, including:

- $283.2 million for debris removal (32.9 million cubic yards of debris removed).
- $181 million for emergency protective measures.
- $32.4 million for permanent repair work.
- Under a mission assignment from FEMA, the U.S. Army Corps of Engineers installed 7,800 blue roofs, enabling families to live in their homes while making permanent repairs.
- FEMA deployed staff to support survivors before, during and after Hurricane Michael made landfall. At the height of the response in mid-November, more than 1,220 federal employees were assisting with response efforts.

While the above numbers reflect the counties in the Panhandle, what do you imagine the Tampa region’s numbers would be?
As a team, please determine the status of your local lifelines at this point in the exercise.

Emergency Manager Questions for Small Business Owners

1. How could your business leverage local, state and federal resources for long-term recovery?
2. Discuss the different survival and success rates of the following scenarios:
   a. Business property completely destroyed
   b. Business property damaged but not destroyed, major damage inside to technology, equipment and files
   c. Business property (outside) damaged, minor damage inside
   d. Business property with little to no damage, surrounded by other damaged businesses (for example, flooding or roof damage)
3. One year later, will your staff and business be back to where it was before the damage occurred. Do you have the financial resources to weather a one-year recovery period (or more)?
4. One year later, will your business be prepared to bring new business and employment opportunities to the community?
5. What do you see as a model for successful business recovery?
6. Discuss the different recovery rates for small businesses in various industries: retail, restaurant, agriculture, for example.
Small Business Owner Questions for Emergency Managers

1. Does the county have a vision for what the community will look like?
2. What mitigation efforts is the county making to reduce future hurricane impacts?
3. What is the county doing to promote renewal and growth of small businesses?
4. Which department/organization has the lead role for monitoring the community’s economic viability to include small business? Who in the community is involved?
5. What local funding or programs exist for private and non-profit business recovery and who is responsible for managing these?
6. During your recovery planning process and recovery plan development, who is involved to support the needs and concerns for small businesses?
7. What programs exist at the state level that can provide additional resources (financial and technical) to local small business or non-profit organizations? At the federal level?
8. What resources and programs are available to support the development and implementation of sustainable recovery strategies that you can or do leverage?
Five preparation steps the Red Cross recommends for all small business owners:

1) **Purchase essential safety equipment:** Standard items include fire extinguishers and smoke detectors, first-aid kits and defibrillators. Other necessary items include wood, fasteners, radios, batteries, water, and waterproof containers for important documents. However, businesses may also need industry-specific supplies for disaster safety. Employees must be able to easily access and use these tools.

2) **Plan emergency communications:** Every business needs to communicate with emergency officials, employees, suppliers, vendors and customers in the event of a disaster. Useful tools include an emergency number, a calling tree, and text.

3) **Prepare evacuation routes and shelter:** Make a plan for getting everyone from your facility to a safe location. Be sure to consider the needs of employees with disabilities and medical conditions.

4) **Back up essential business data:** Identify records and documents necessary for core business functions and store them securely using data backup tools. Many people wait until a disaster strikes their business before they begin backing up data. In other words, they have to lose their data first, or be really close to someone who has. But learning the hard way isn’t good business practice, and it’s unnecessary.

5) **Develop a continuity of operations plan:** In the event of a disaster, a business needs a path to follow to maintain or regain operations. Steps include spelling out the most critical business functions and which staff is responsible for them, and planning how the business will resume operations if the facility is damaged or unusable.
BUSINESS TIPS FOR RECOVERY

» Implement your disaster plan; assess damage and determine if a backup location is needed.

» Execute your communications strategy to ensure employees, suppliers, customers and media are getting facts.

» Document damage with photos, file an insurance claim and track your recovery.

» Provide employee support and assistance.

» Connect with chambers of commerce, economic development, local and state government, and others that can help you recover.

» Document lessons learned, and update your disaster recovery plan.

VIDEO: WRAPPING UP