Operational Best Practices

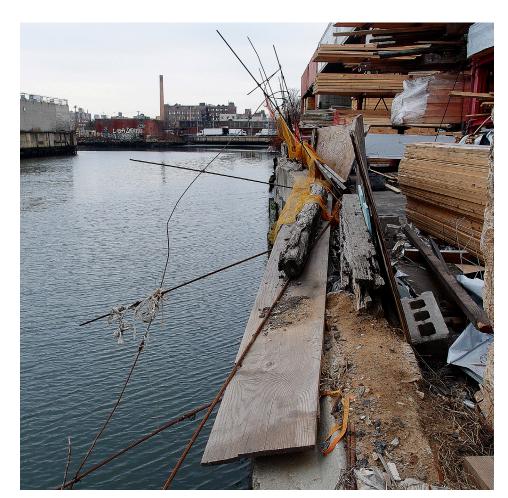
Preparedness planning is a key component of resiliency for any business. This is particularly true for New York City's industrial businesses, many of which have significant investments in vehicles, equipment, and inventory that can be moved out of harm's way with proper foresight and planning. The experience of industrial businesses during and following Hurricane Sandy reinforced the importance of operational strategies to minimize flood losses, and demonstrated the challenges that many existing businesses faced in entirely floodproofing facilities or locating outside of the floodplain.

Unlike physical mitigation and building retrofits, many operational strategies require minimal time or money and can prevent significant damage to businesses. These strategies do, however, require that a business evaluates its unique vulnerabilities, develops and maintains plans, and regularly trains staff members to execute emergency plans when the business is faced with a potential hazard. The following steps outline key actions to help ensure that businesses continue to operate during and after a flooding emergency.

Step 1 Assess the Hazards

Businesses should consider how potential emergencies, such as flooding or transportation disruptions, may affect their ability to function efficiently. For example, if a power outage may affect the ability to pump fuel, businesses that rely on fuel to operate should consider whether manual pumping mechanisms or backup power systems could be installed to maintain operations. NYC Emergency Management's resource **NYC's Risk Landscape: A Guide to Hazard Mitigation** provides an overview of the primary hazards and potential impacts affecting the city.

The FIRMs are the first step for businesses to understand their flood risk. These can be accessed from NYC Flood Maps. For real-time weather information, forecasts, and warnings, businesses should consult NYC Severe Weather or the National Weather Service and stay informed about local emergencies through Notify NYC.

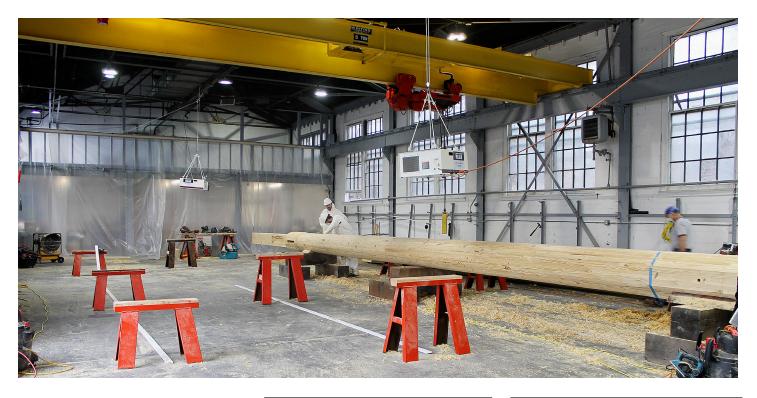


Step 2 Plan to Stay in Business

Planning before a disaster can help businesses return to operations more quickly, or even avoid interruptions altogether. Businesses should start by taking the following steps:

- Identify operations that are critical to business functions and recovery. Determine which staff, materials, procedures, contacts, and equipment are absolutely necessary to keep the organization operating.
- Make a list of the most important contacts and clients, and plan ways to communicate with them during and after a disaster.
- Coordinate with vendors, suppliers, and other organizations and people that the business depends upon.
- Keep copies of important records that may be needed to rebuild the business in a portable container that is both waterproof and fireproof. Digital records should also be updated and saved on the cloud or an off-site computer. A second set of these records should also be stored at an off-site location.
- Review preparedness plans annually.
 Just as the business changes over time, so do preparedness needs. When hiring new employees, or when there are changes in how the company functions, plans should be updated and staff informed of changes.
- Businesses are encouraged to enroll in the Corporate Emergency Access System (CEAS). CEAS authorizes essential employees to access restricted areas following an emergency.
- Preparedness plans should also note key actions to take if the business is damaged. This includes taking photographs of the building, equipment and contents from different angles, and documenting details about any damaged equipment or inventory that can later be used to support insurance claims.

Businesses should assess potential flood risks through preparedness planning and take steps to protect inventory.



Core investments can be suspended from the ceiling or elevated to avoid flood damage.

Step 3 Communicate with Staff

Employees are a business's most valuable asset. It is important to talk to employees often about what to do before, during, and after a flooding emergency. Businesses should consider establishing a call tree, an email alert, or a call-in voice recording to communicate with employees. When creating a plan, employees' special needs should be considered. Businesses should also encourage employees to prepare for emergencies at home. One of the best methods to ensure a company's recovery is to provide for its staff's well-being.

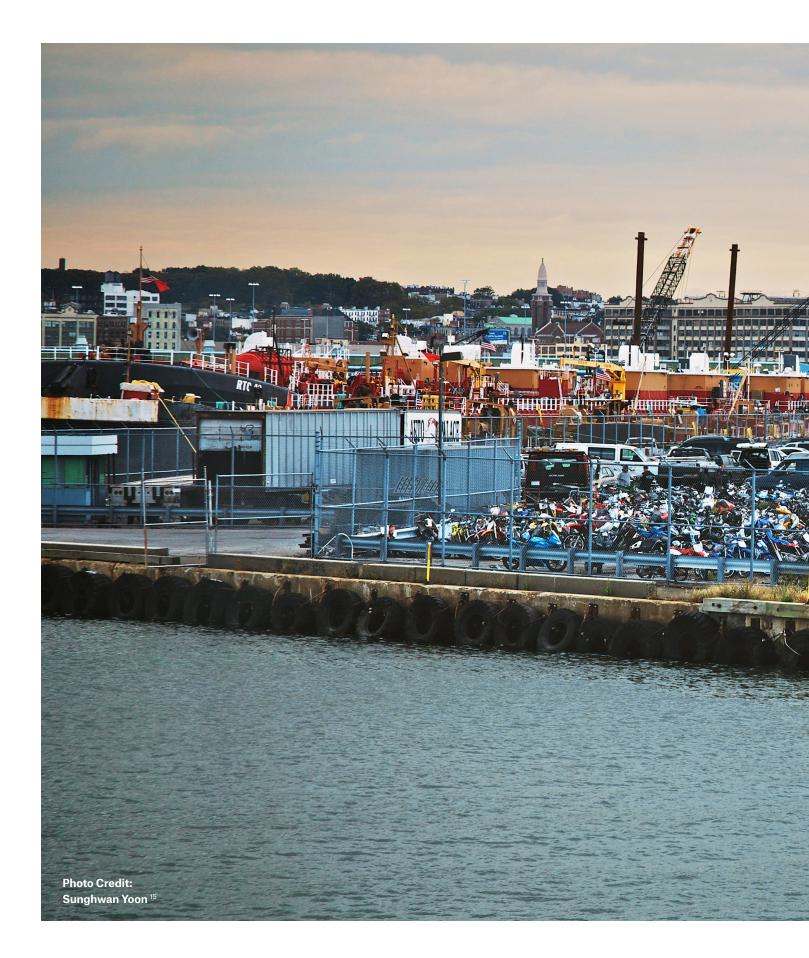
Following disruptions, preparedness plans and protocols should be evaluated and revised based on lessons learned. Many industrial businesses require a day or two to fully prepare for flooding, which may include relocating vehicle fleets, moving equipment to higher elevations on-site or to different locations, securing and adequately sealing hazardous materials, removing electrical components from equipment, and communicating with clients and vendors to alter delivery schedules. Staff should be aware of their responsibilities when floods are predicted, and trained to accomplish tasks that are not within their normal range of duties, such as installing deployable flood panels.

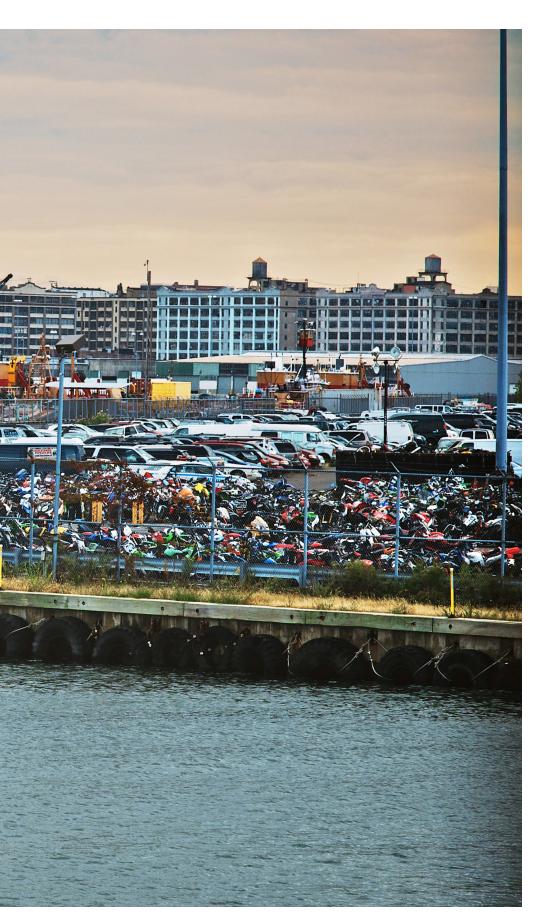
Step 4 Protect Core Investments

Facility preparedness plans should identify physical and virtual assets that are essential to business operations and take steps to prioritize protection of these core assets. For physical machinery and equipment, the business should document a process to obtain replacements or replacement parts if the equipment is damaged. Every organization depends on utilities such as electricity, gas, telecommunications, and sewers. Preparedness plans should identify steps that should be taken if these services are disrupted.

Protecting data and information technology systems is also a key component of business continuity. Backups of all critical information (e.g., vendor lists, payroll, leases, and insurance policies) should be created, updated regularly, and stored in a safe location off-site.

At regular intervals, businesses should review insurance coverage, and understand what the policy or policies cover. Businesses should consider expanding insurance to include coverage for direct and indirect costs associated with a disaster. Examples of indirect costs include business interruption/continuation policy insurance, business income insurance, and extra expense insurance.





Step 5 Know How to Respond

Every business should have an emergency action plan. This plan focuses on alerting employees to an emergency or an evacuation, the method for reporting emergencies to local officials, and evacuation plans. Businesses should regularly conduct evacuation drills and other emergency exercises.

Emergency action plans should consider opportunities to reduce interruptions by coordinating with other businesses or organizations. For example, industrial businesses may consider developing relationships with other businesses to share generators, assist with the installation of flood barriers or equipment relocation, or even arrange to temporarily rent other business's facilities in the event of flood damage.

For information about hurricane evacuation zones and additional information to prepare for coastal storms, businesses should visit the Know Your Zone website maintained by New York City Emergency Management.

More Resources for Businesses:

- Join Partners in Preparedness to receive additional support and resources to prepare for business interruptions.
- Learn more about personal preparedness from **Ready New York.**
- Join CorpNet to receive current information about emergencies to enhance awareness and aid decisionmaking.
- Learn about various types of insurance from the Insurance Information Institute.
- Prepare for cybersecurity risks with the U.S. Department of Homeland Security's United States Computer Emergency Readiness Team.
- Avoid chemical spills during flooding by following spill prevention recommendations from the NYC Department of Environmental Protection.

