GORDIAN®

When Disaster Strikes:

Minimizing the Financial Impact of Emergency Construction

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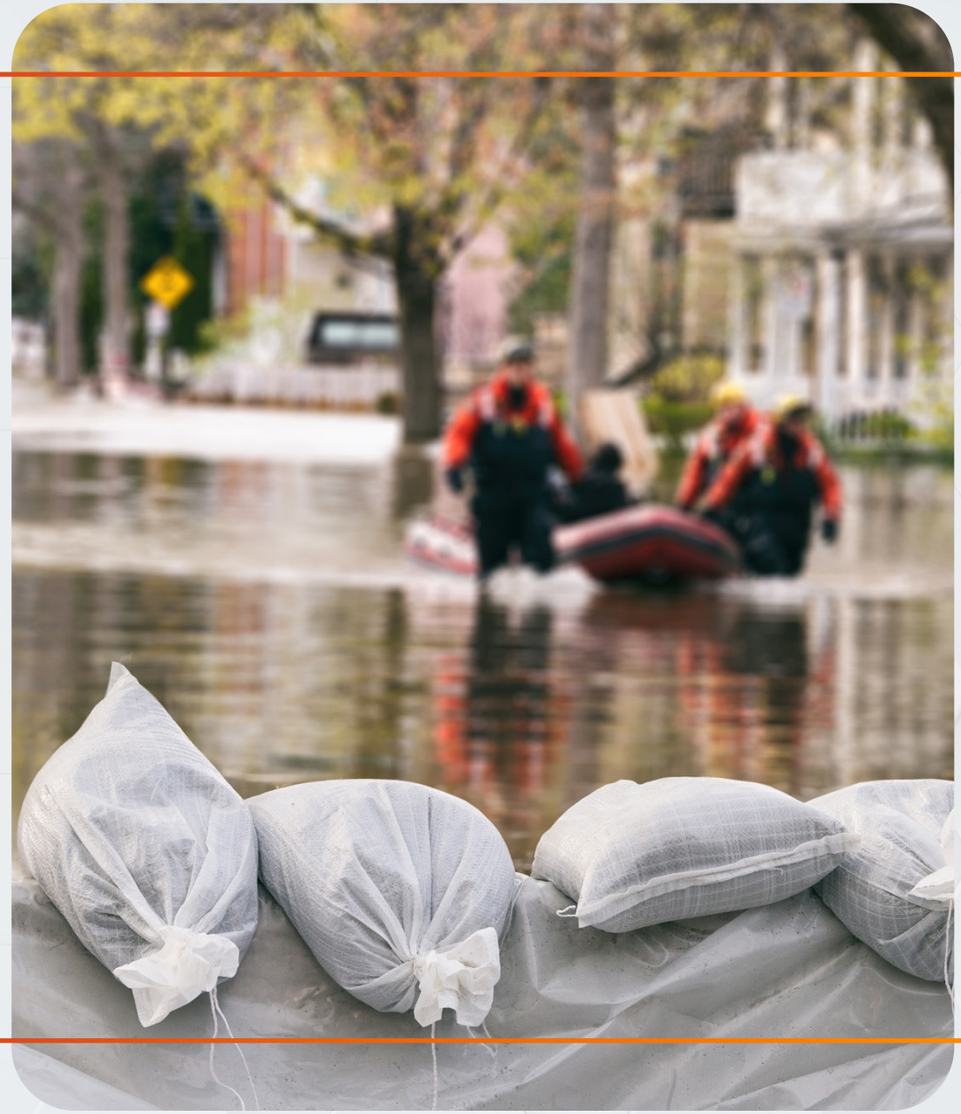
According to the National Oceanic and Atmospheric Administration (NOAA) and other reputable scientific organizations, extreme weather events are becoming more frequent and more devastating. Wildfires burn hundreds of thousands of acres in one region of North America while days of heavy rain pound another. Hurricanes and tornadoes level entire towns with minimal notice. Brutal heat and cold overwhelm communities. When examining the data, weather extremes are almost certain to escalate, leaving every part of the globe vulnerable.

Organizations that own and manage facilities and infrastructure must do everything in their power to prepare for climate emergencies and severe weather conditions. After disaster strikes is not the time to formulate an emergency response plan. Savvy leaders account for extreme weather in their facilities plans and employ responsive construction procurement strategies that enable work to begin immediately following an emergency.



The Cost of Disaster

Not only are extreme weather events growing more common, but they are also growing more costly. The NOAA estimates that since 1980, 378 weather and climate-related disasters have amassed over one billion dollars in damage each.

The 1980s saw 3.3 of these events per year, with an average annual cost of $21.6 billion, per the NOAA. Fast forward 40 years, and the United States suffers 13 billion-dollar disasters per year at an average cost of almost $98 billion. 2023 alone brought 28 billion-dollar disasters with $93.7 billion in damages. In all, costs from all billion-dollar weather events since 1980 have reached $2.69 trillion.

Costliest Natural Disasters in U.S. History

Hurricane Katrina (2005)	Hurricane Harvey (2017)	Hurricane Ian (2022)	Hurricane Maria (2017)
$186.3 Billion	$148.9 Billion	$112.9 Billion	$107.1 Billion

The Cost of Recovery

One reason natural disasters are so expensive is the cost of emergency construction work. Emergency repair rates are often far above standard labor costs, sometimes 50% to 100% more expensive. With facilities budgets under increasing strain, cost negotiations can be lengthy. And in the time it takes owners and contractors to hammer out a fair price, facilities conditions deteriorate.

Planning for Resilience

In response to the increasing frequency and costs of extreme weather events, organizations are focusing more of their planning efforts on facilities resilience. Broadly defined as fortifying a portfolio of physical assets or a single asset against disaster, resilience planning has evolved from an auxiliary exercise to an essential aspect of long-term facilities planning.

Business continuity is a major facet of facilities resilience. Executives, facilities leaders and other influential stakeholders must decide which assets should be the first to come back online following a disaster. Priorities will differ from one organization to the next. A local government, for example, may prioritize the resilience of fire stations, while a hospital may place keeping the ICU up and running at the top of their list.

Then there's the matter of long-term facilities resilience. Natural disasters and extreme weather patterns won't slow down anytime soon. Organizations must adapt to that reality. In regions where warmer temperatures are lasting longer, it may be prudent to examine whether existing HVAC systems can handle the additional load. Increased rainfall may inspire leaders to take a hard look at stormwater systems. Installing or upgrading emergency generators may be necessary to maintain continuity.

Facilities resilience is no longer an afterthought. Organizations must first make a concerted effort to plan for weather emergencies and changing climate conditions. Then, they must invest their resources accordingly.

Data: The Foundation of Resilience

Gordian assesses **>222M gross square feet** of facilities every year.

Any decisions that organizations make about optimizing asset resilience should have data to stand on. Grounding plans in current, accurate condition and performance metrics ensures plans are well-informed and defensible should they require funding to implement.

A Facilities Condition Assessment (FCA) can reveal asset vulnerabilities, clarify the severity of the deferred maintenance backlog and provide a reasonable estimate of replacement costs. The data uncovered by an assessment separates the signals from the noise, demonstrates the facts about asset conditions and helps communicate needs across the organization.

Gordian offers a variety of assessment options – some using our on-site assessors, others not – that empower organizations to collect data in a variety of ways. These assessments can be combined to fit within time and budget constraints. The data collected can then be plugged into our capital planning software so leaders can see the effects of their investments before they spend any money, enabling them to optimize their facilities resilience efforts.

Job Order Contracting (JOC): A Leading Construction Procurement Solution

Contrary to conventional wisdom, unexpected projects and emergency repairs don't have to come with an exorbitant price tag. Gordian's Job Order Contracting solutions rely on local, preset construction costs independently verified by our team of experts. JOC is ideal for emergency work and disaster response because it enables qualified, readily available contractors to spring into action without price negotiations and delays.

An indefinite delivery, indefinite quantity (IDIQ) project delivery method, JOC empowers organizations to complete many projects with a single, competitively-awarded contract. Available as a custom standalone contract or via purchasing cooperatives and interlocal agreements, Gordian JOC is a nimble, cost-effective way to tackle emergency work.

In 2023 alone, organizations completed more than **33,000 projects** with Gordian's Job Order Contracting.

Job Order Contracting (JOC): A Leading Construction Procurement Solution

Gordian JOC In Action

Here are a few ways organizations have deployed Gordian's Job Order Contracting solutions to respond to an emergency.

City of Atlanta

When a water main burst on a Christmas morning, city officials turned to their Gordian Job Order Contract to repair the pipe and mitigate water damage.

Waverly, Illinois

In just a weekend, a school in a rural district used a Gordian Job Order Contracting solution to repair failing ceiling tiles in the building's only cafeteria.

Monterey County (CA)

County leaders used Gordian JOC to clear wildfire debris from roads and ditches, remove and replace guardrails and road signs, and remove downed trees blocking roads that firefighters desperately needed to access.

Arizona Department of Transportation

After monsoon rains battered U.S. Route 89A, Gordian's Job Order Contracting was used to clear the highway, repair the pavement and erect flooding protection. Work was completed in six weeks.

Your Resilience Planning and Emergency Construction Partner

Natural disasters are unavoidable. But Gordian has the tools you need to prepare for and respond to them.

Our facilities assessments provide the data you need to make informed investment decisions and our Job Order Contracting solutions help you control costs of emergency work.

Before disaster strikes, and after it, Gordian is there for you.

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About Gordian

Gordian is the leading provider of Building Intelligence™ Solutions, delivering unrivaled insights, robust technology and comprehensive expertise that fuel customers' success during every phase of the building lifecycle. Gordian created Job Order Contracting (JOC) and the industry standard RSMeans™ Data. We empower organizations to optimize capital investments, improve project performance and minimize long-term operating expenses.