walter p moore

Catastrophic (CAT) Event Consulting

About Us

FOUNDED

1931

Walter P Moore is an international company of engineers, architects, innovators, and creative people who solve some of the world's most complex structural and infrastructure challenges. Providing structural, diagnostics, civil, traffic, parking, transportation, enclosure, and construction engineering services, we provide solutions that are cost- and resource-efficient, forward-thinking, and that help support and shape communities worldwide.

We've designed some of the world's largest and most sophisticated projects. Complex engineering is in our DNA.

STAFF COUNT

700+

With 24 U.S. offices and six international locations, We routinely evaluate and repair structures in areas impacted by CAT events.

ENGINEERS

270+

The licensed professional engineers at Walter P Moore have one thing in common: a passion for what we do. In the face of challenges, we deliver.

Catastrophic Event Pre-Loss

Walter P Moore has more than 90 years of engineering design, consulting, and testing. Our team identifies structures at risk during catastrophic (CAT) events. We find unique, practical, and timely ways to implement improvements.

Our team consists of licensed professional engineers that are prepared to assist your property team. We work with brokers, underwriters, claims teams, and external partners to evaluate the risks in your property portfolio.

As part of our pre-loss services, we review property portfolios to identify areas of potential exposure to damage, failure, or collapse. Walter P Moore provides clients with the ability to protect their assets and guard against additional damage and lost revenue.

Pre-Loss Services

- → Multi-risk assessments
- → Asset management evaluation
- → Probable Maximum Loss (PML) studies
- → Flood and wind evaluations
- → Building code evaluation

Deployment / Catastrophic Event Post-Loss

With offices in North America, Central America, and India, we're used to responding to CAT Events such as hurricanes, wind, and flood events. Walter P Moore's in-house engineering experts mobilize within hours of a CAT event, whether man-made or weather related, to conduct damage surveys and report findings in a timely manner. We work with your team and business partners to create tailored, efficient, and detailed reports for claim resolution.

We focus on the structural integrity of the facilities we evaluate, and provide technical direction with regards to structural safety. When requested, we work with industry partners to provide additional evaluations, deployment, and oversight.

As with our pre-loss assessments, Walter P Moore's experts identify asset risk related to wind and flooding exposure during post-loss assessments. In times of unfortunate weather events, our clients look to us to help with creative mitigation solutions to get business up and running again.

Post-Loss Services

- → Cause & origin investigation
- → Post-loss evaluations
- → Dispute resolution support
- → Remediation design and repair
- → Third-party design review
- → Construction administration services

Event Responses

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STRUCTURAL FAILURES

Failures in the built environment range from performance failure due to hidden structural or enclosure-related issues to collapse from a catastrophic event. Minimizing risk and preventing further damage are our priorities after a CAT event. Walter P Moore provides forensic services to determine the cause of failure through analysis, field assessments, and testing. Additionally, we provide expert witness testimony for legal proceedings and insurance claims.

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CAT EVENTS

Walter P Moore has coastal offices with direct experience in recovering from intense hurricanes and flooding. Our clients look to us to help them with mitigation solutions such as flood doors, valves and special access, roof performance enhancements, and site planning. Our team of flood protection specialists collaborates to address water height probabilities, identify points of exposure, and use best design practices to protect structures.

Where to Find Us

Our technical staff includes licensed professional engineers that are industry-recognized experts in structural design, infrastructure improvements, and flood evaluations. We develop and train our engineers to understand the conditions surrounding losses after a major CAT event. Our team determines the best course of action for clients to resume normal business operations. We maintain certifications and licenses to assess structures for pre-loss evaluations and post-loss surveys.

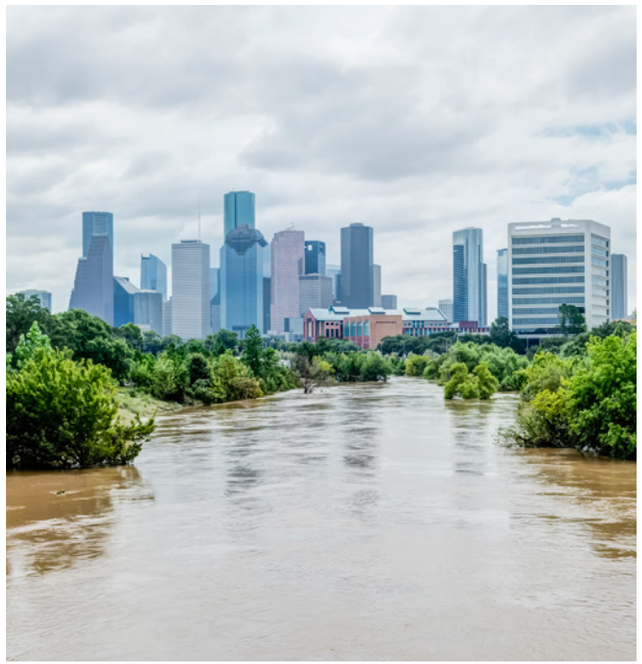
Walter P Moore is strategically located to respond to CAT events. Due to the nature of forensic services, we are organized to respond to our clients' needs within 12 to 24 hours upon notice of emergency. Depending on the project, this time may be reduced even further to address life-safety or other critical issues.

We are always on-call for our clients.

Catastrophic Response Projects

HURRICANE MICHAEL
FLORIDA PANHANDLE

In October 2018, Walter P Moore provided emergency response services following Hurricane Michael for the Oceaneering manufacturing facility in Panama City, Florida. At the site visit, we observed damage to structural and building enclosure systems. We provided our expert opinion on repair documents generated by others and provided consulting on the owner's behalf during construction of the enclosure repairs, including metal wall panel and roofing repairs. Periodic site observations were performed during construction to confirm compliance with contract documents and industry standards. Walter P Moore also evaluated the extent of structural damage of a Plateplus industrial building superstructure and provided repair recommendations for a quick recovery to operations.



HURRICANE HARVEY
HOUSTON, TX

During the flood event in the Houston Metro Area following Hurricane Harvey's landfall in August 2017, Walter P Moore was among the first responders that worked within days of rain cessation to assess flood damage to the city's government buildings, downtown performance venues, and underground parking structures. The most immediate response was required at City Hall and the connecting Annex Building. Walter P Moore determined the flood impact on the structures and safety concerns for emergency response crews. We are currently part of a recovery team to repair downtown buildings that experienced significant loss of structural and enclosure systems.

HURRICANE IRMA
SOUTHERN FLORIDA

In September 2017, Walter P Moore mobilized within days after Hurricane Irma to review the Care Center at Bentley Village in Naples, a retirement community for critical care patients that sustained widespread water infiltration. We provided the repair contractor with waterproofing repair recommendations, and the residents were able to move back in only 20 days following the hurricane. In addition, we provided an assessment for a 33-story office tower at 701 Brickell in Miami. We investigated interior water intrusion and designed façade sealant replacement on the top 10 levels and replaced the waterproofing membrane and topping slab on two terraces.

HURRICANE KATRINA
NEW ORLEANS, LA

In August 2005, Hurricane Katrina caused catastrophic damage along the Gulf coast, from Florida to Texas. Walter P Moore mobilized to assess structural damages to the Mercedes-Benz Superdome, Smoothie King Center (formerly New Orleans Arena), and several downtown parking garages where the water was still receding. As the National Guard was still conducting emergency operations, Walter P Moore received a state-level government authorization to work in curfewed zones.

Key Experts

Gabriel Jimenez, PhD, PE, PEng, SE, FSEI
As Executive Director of Walter P Moore's Diagnostics Group, Gabriel ensures the quality of our forensic engineering services for pre- and post-loss CAT events. He has been heavily involved in determining the strategy for our response to Hurricanes Katrina and Harvey. Gabriel was named a Fellow of the Structural Engineering Institute and received his doctorate in Civil Engineering (Structures) from the University of Minnesota. He is a licensed engineer in 12 U.S. states and three Canadian provinces.

Chris Pinto, PE
Chris has extensive experience evaluating and repairing structures with a variety of functions—from government facilities to major sports venues to airports to residential and commercial buildings—as well as providing litigation support services and consulting for emergency and disaster response. In structural investigations, Chris examines each facet of collected data to discover patterns in causality that inform corresponding solutions. He is a licensed engineer in New York and 11 additional U.S. states and earned a Master of Science in Civil Engineering from Drexel University.

Dan Barbuto, PE
Dan focuses on forensics and property insurance claims. He has over 11 years of experience in the field of forensic engineering, with deep expertise in various modes of testing and assessment. His extensive experience with catastrophic loss event assessments includes hailstorms, tornadoes, hurricanes, fires, and earthquakes. At the University of Illinois at Urbana-Champaign, Dan completed a Master of Science in Civil Engineering. He is a licensed engineer in Texas and three additional U.S. states.

Webb Wright, PE, RRO
Webb has 20 years of experience related to structural engineering and forensic analysis, building enclosure moisture management, roofing systems, and below-grade waterproofing. He was part of our Hurricane Irma emergency response team in 2017. In addition to being a licensed engineer in Florida, Mississippi, Alabama, and three additional U.S. states, Webb is a Registered Roof Observer. He earned a Bachelor of Science in Civil Engineering from the University of Central Florida.

Andy Yung, PE, CFM
With 27 years as an engineer, planner, and hydrologist, Andy's projects include hydrology, hydraulics, master drainage studies, channel modifications, watershed impact analyses, detention facility designs, and dam safety analyses. He has provided technical and peer review for federal flood damage reduction projects. Andy holds a Bachelor of Civil Engineering from Georgia Tech. He is a Certified Floodplain Manager, as well as a licensed engineer in Texas, Louisiana, and Georgia.

Javier Balma, PhD, PE
Javier is a NACE-certified Cathodic Protection Technician and designs corrosive material protection systems for structures exposed to harsh environmental conditions, including those affected by CAT events. Javier received his Doctor of Philosophy and Master of Science in Civil Engineering (Structures) from the University of Kansas, as well as a Licentiate in Civil Engineering from the University of Costa Rica. He is a licensed engineer in Florida, Puerto Rico, and three additional U.S. states.

Luis Buitrago, PE
Skilled in performance-based seismic design in México and Central America, Luis has spent almost a decade focused on the design of commercial, residential, and industrial facilities for the private and government sectors in Panama. He has experience with catastrophic loss event assessments including hurricanes, floods, and earthquakes. Luis obtained his Bachelor of Science in Civil Engineering from the Technological University of Panama and a Master of Civil Engineering (Structural/Geotechnical) from the University of Arkansas. He is also a licensed engineer in Panama.

Matt Wagner, SE
With two decades of experience, Matt is a recognized subject-matter expert in forensics with specific expertise with insurance carriers, restoration, failure investigations, and litigation support. He is skilled at assessing and designing repairs for steel, concrete, precast concrete, masonry, and heavy timber in a variety of building types. Matt earned a Bachelor of Science in Civil Engineering from the University of Cincinnati, and a Master of Science in Civil Engineering, Georgia Institute of Technology. He is licensed professional engineer in nine U.S. states and a structural engineer in Illinois.

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