Visual survey and condition assessment
- Documentation of existing conditions and scope of damage
- Laboratory and field testing of materials
- Assessment and evaluation of in-service performance
- Service life assessments
- Repair recommendations
- Cost estimating and capital reserve studies
- Prepurchase/presale assessments

Better solutions come from a better understanding of the problems. When presented with a new challenge, the first objective is to establish a baseline. WJE draws upon decades of experience to accurately decipher the conditions present and determine how they may contribute to present or future problems. WJE applies the lessons learned from over 125,000 projects to provide clients with a full picture of their structure’s or component’s condition. From visual assessments to complex service life modeling studies, WJE provides clients the answers they need.

From on-site surveys to field and laboratory testing, WJE takes a hands-on approach to condition evaluation. Our professionals utilize traditional access methods, such as lifts and swing stages, as well as rope access techniques and drone technology to visually assess structures of all sizes and configurations. With the use of data-collection tools—such as WJE Plannotate®, a tablet-based proprietary software application—WJE efficiently collects and annotates inspection data and shares those findings in real-time with other team members, who work to organize and analyze the information.

When additional information is needed, materials samples or building elements can be tested in the field or in WJE’s in-house laboratories. Using state-of-the-art testing equipment and laboratories, WJE professionals can determine everything from a material’s elemental composition and construction type to a component’s load capacity or cause of failure.

Based on a thorough understanding of a structure’s condition, WJE develops technically sound and tailored recommendations.
SERVICE PROFILE

Condition Evaluation

REPRESENTATIVE PROJECTS

- Amoco Building (now Aon Center) - Chicago, IL: Distressed marble panel investigation
- Bridge of the Americas - Panama City, Panama: Condition evaluation of major truss bridge using rope access techniques
- Gateway Arch - St. Louis, MO: Corrosion investigation of the stainless steel skin and interior
- Mathematics Tower and Science and Engineering Library - Columbus, OH: Investigation of masonry distress and evaluation of water management systems
- Miami-Dade County Courthouse - Miami, FL: Condition evaluation of historic terra cotta facade
- NBC Tower - Chicago, IL: Condition survey and visual inspection of roofing
- New York Public Library - New York, NY: Comprehensive evaluation of exterior for restoration
- The Pennsylvania State University, Old Main - University Park, PA: 3-D photogrammetry inspections of building facade using drones
- Port of Houston - Houston, TX: Development of manual for condition evaluation of port assets and execution of inspections of piers, wharfs, and other harbor-side structures
- Ritz-Carlton - San Francisco, CA: Facade and roofing condition evaluation
- Washington Monument - Washington, D.C.: Condition evaluation of earthquake damage using rope access techniques