

Parking Structure Maintenance & Life-Cycle Extension Strategies

CTLGroup has been a pioneer in the evaluation, rehabilitation, and maintenance of parking structures. Our experts have developed the leading industry methodologies for condition assessment, repair, and restoration design techniques, and diagnostic methods for service life prediction. Our global portfolio of work encompasses over a 1,000 precast and cast-in-place, reinforced and prestressed parking structures, which have been recognized by numerous awards for excellence in repair design.

CTLGroup experts evaluate parking structures of all types and ages, providing expert condition evaluation and investigation, repair prioritization, and budgetary cost-estimating to assist owners with planning for construction and long-range maintenance. Our experts are also called on for highly specialized failure analysis and litigation support. Our multi-disciplined analytical approach includes:

Engineering Consulting & Troubleshooting

- Investigation, evaluation, analysis, and repair design
- Cause determination and litigation support
- Common functional and service life problems

Structural diagnostics & monitoring

- On-site behavior monitoring of facilities
- Nondestructive testing and vibration analysis
- Load testing
- Crack, defect analysis, and monitoring
- Structural integrity evaluation

Repair & Rehabilitation

- Maintenance program development
- Cost-effective repair solutions to counteract effects of age
- Development of programs to extend service life
- Structural strengthening upgrades
- Historic preservation and restoration
- Construction contract administration

Representative Projects

- **Capitol Complex Underground Parking Garage (IL)** Condition assessment, report, and repair recommendations
- **Kinzie Street Park Tower Parking Garage (IL)** Condition assessment and repairs recommendations
- **Major Retail Outlet Parking Structure Evaluations (MO)** Condition assessment, report, and repair recommendations
- **Tropicana Parking Garage Collapse (NJ)** Failure investigation
- **University of Illinois at Chicago, Paulina Street Parking Structure (IL)** Structural evaluation and repair design

