Type of Project	Description of Services Provided	Project Location
Heavy Rail	Performed financial and schedule audits for the Los Angeles County Transportation Commission on metro subway projects. Reviewed project budgets, contractor schedules, construction manager monthly progress reports, and advised the County of potential cost overruns, schedule delays and reporting deficiencies.	California
Heavy Rail	Priced and negotiated change orders for the Bay Area Rapid Transit District on a \$65 million train control contract. Evaluated entitlement, prepared schedule analyses, wrote findings of fact, and negotiated change orders.	California
Heavy Rail	On behalf of the owner, developed issues packages, chronologies, and narratives regarding delays associated with the installation of communications systems on the London Underground project. Analyzed issues and schedule delays associated with the design and installation of new communications systems. Developed an as-built critical path schedule for delay analysis.	England
Heavy Rail	Provided support to management team including schedule review and development of working schedules and subnetworks for claims purposes on the \$90 million NYC Time Square Rehabilitation Project. The schedule was cost and resource loaded and contained 2,823 activities.	New York
Heavy Rail	Assisted Amtrak in preparation and presentation of claims against defendant EPC contractor under the Federal False Claims Act on the installation of a high speed rail from Boston to New York. Client asserted that defendant contractor had improperly billed the government for substantial amounts that did not represent actual increased costs to the contractor, but were rather the result of gross miscalculations of alleged increased costs due to scope changes, schedule impacts of changes and resulting acceleration costs. Claims were settled prior to trial with the contractor agreeing to withdraw over \$25 million of invoiced amounts.	Northeast U.S.
Heavy Rail	Provided support to management team including schedule coordination, review and development of Baseline CPM Schedule for the \$62 million New York Avenue Metrorail Station. The project consisted of the construction of a new "drop in" metro station, including all track work and connections.	Washington, D.C.

Type of Project	Description of Services Provided	Project Location
Light Rail	Provided Project Management Oversight for the Long Beach-LA Light Rail Transit Project in Los Angeles. Worked on the review, definition, creation and implementation of project control policies, procedures, systems, methods, reporting, data acquisition and organizational interfaces.	California
Light Rail	Prepared monthly progress reports and schedule updates for the preliminary engineering and final civil design of the \$600 million Central Florida Light Rail Transit System in Orlando. Developed detailed civil design, construction and system-wide interface schedules.	Florida
Light Rail	Assisted design-build contractor with developing a 12,000 activity, cost loaded rolling wave schedule for the Southern New Jersey Light Rail Transportation Project. The work involved preparing a CPM schedule for a \$605 million project that involved the design and construction of a 45-mile commuter rail transit line between Trenton and Camden, along an existing rail corridor.	New Jersey
Railroad	Performed schedule delay analyses and prepared expert and rebuttal reports for the general contractor in claims against the owner on the Amtrak Northend Electrification Project from Boston to New Haven.	Connecticut & Massachusetts
Railroad	Provided scheduling support to the estimating team for the \$77 million Highbridge Yard Maintenance Facility. Developed pre-bid schedule and aided in the development of Baseline CPM Schedule. The project consisted of the construction of a 62,000 SF rail car maintenance facility (ten car lengths) with two tracks and the installation of associated maintenance and repair equipment. The facility also included an additional 8,300 SF of office space and employee locker rooms located on the second floor. Other project components include the construction of 35,000 feet of track along with 32 switches and electric substation, as well as an employee station.	New York
Railroad	Prepared an owner/operator's claim against a major railroad for causing delays and cost overruns during the construction of fiber optic communications systems along the railroad's right-of-ways. Developed schedule delay analysis of each of the right-of-ways along which the fiber optic cable was installed in trenches. Identified detailed daily documentation that identified railroad interference or lack of support for the installation of the work.	Various Midwest & Northeast States

Type of Project	Description of Services Provided	Project Location
Roads, Highways and Bridges	Assisted a general contractor in formulating a strategy to develop a claim against the Arizona Department of Transportation arising from the construction of a new four-lane highway bridge located in a mountainous region. Both approaches to the bridge were characterized by "side-hill" cuts.	Arizona
Roads, Highways and Bridges	Provided CPM scheduling on the Molton section of the \$800 million San Joaquin Hills Transportation Corridor project in Irvine. This project had over 100 new CIP bridge structures, miles of driven piles, retaining walls, and storm drains, in addition to over 1 million CY of cut/fill earthwork. The Molton Section "Working Schedule" included 1,544 activities.	California
Roads, Highways and Bridges	On behalf of the contractor, performed an analysis of cost overruns associated with the construction of a heavy haul road in Alberta.	Canada
Roads, Highways and Bridges	Performed CPM scheduling, pay application, and dispute resolution services for the owner of the E-470 Public Toll Road Project in Denver. Tracked and monitored the general contractor's 5,500 activity CPM schedule that was cost and resource loaded. Provided effective pay application payment services by verifying and approving work performed by the general contractor. Performed various special studies regarding disputed pay items as well as the calculations of projected future value of interest for disputed work. Successfully worked with the contractor's schedulers to develop an effective procedure for schedule updates and changes.	Colorado
Roads, Highways and Bridges	Provided schedule delay and damages analysis for the general contractor on a highway improvement project.	Colorado
Roads, Highways and Bridges	Evaluated a contractor's claim for disruption and delay as well as the increased costs associated with the installation of underground utilities and street modifications for an infrastructure improvement project.	Colorado
Roads, Highways and Bridges	Defended against claims brought by the contractor on the 19th and 20th Streets HOV Project for the Denver RTD. Analyzed and rebutted plaintiff's claim, prepared alternative quantum calculations, prepared an Expert Report, assisted in discovery and deposition preparation, and provided expert testimony during arbitration proceedings.	Colorado

Type of Project	Description of Services Provided	Project Location
Roads, Highways and Bridges	Prepared project schedule for the general contractor on a highway construction project, analyzed delays, and prepared written reports for time extension requests to project owner. Testified in arbitration.	Colorado
Roads, Highways and Bridges	Assessed a claim from the Colorado Department of Transportation, owner of the Eisenhower/Johnson Tunnels, each two-miles long, two-lane Interstate Highway 70 regarding an alleged defective admixture used in the fabrication of tunnel wall tile panels. Made recommendations for and developed detailed arguments, based on cause and effect, for causes other than a defective product as the primary cause of the tile panel distress.	Colorado
Roads, Highways and Bridges	Independently interpreted specific representations made in the bidding/contract documents regarding the subsurface soil/rock interface within zones to be excavated for improvements to an existing metro Denver, Colorado Interstate highway interchange in support of the contractor's claim for differing site conditions.	Colorado
Roads, Highways and Bridges	Independently interpreted specific and implied representations made in the bidding/contract documents and the contractor's pre-bid site investigation regarding drainage conditions to be reasonably expected, and then compared those representations to a collection of drainage reports and other related data available to the owner and not made available to the bidders nor the contractor during construction, all in support of the contractor's claim for misrepresentation and superior knowledge by the owner, the city of Louisville, Colorado.	Colorado
Roads, Highways and Bridges	Determined the responsible party for the cause of a viaduct collapse, occurring during construction, onto existing Interstate Highway 25 in Denver, Colorado, and testified at trial in Federal Court.	Colorado
Roads, Highways and Bridges	Served as a sole arbitrator in a dispute between a prime (general) contractor and a grading subcontractor who were engaged in the construction of a highway project located near Dillon, Colorado. The issue involved was the subcontractor's alleged abandonment of the contract and the value of the work subsequently taken over by the prime contractor.	Colorado

Type of Project	Description of Services Provided	Project Location
Roads, Highways and Bridges	Assisted an owner's construction manager in the analysis of schedule delay and productivity loss claims submitted by a design-build contractor for the engineering and construction of a roadway project in Colorado. Parties settled prior to arbitration.	Colorado
Roads, Highways and Bridges	Performed an analysis of a delay and disruption claim on the engineering and construction of a causeway project located in Tampa.	Florida
Roads, Highways and Bridges	Prepared a schedule delay analysis for an underground piping subcontractor. Designated as a CPM scheduling expert. Claim settled in negotiations after preparation of an Expert Report.	Florida
Roads, Highways and Bridges	Prepared a contractor's baseline and update schedules on the \$100 million Palm Beach International Airport Interchange. Preparation of contractor's claim against owner due to unforeseen conditions, owner delays, and productivity issues.	Florida
Roads, Highways and Bridges	Analyzed a claim asserted by a general contractor who was engaged in the construction of a cable-stayed bridge main span and high-level approaches across Tampa Bay. Issues included delays caused by late completion of an earlier contract (performed by others), multiple design changes, and resulting delays and cost impacts.	Florida
Roads, Highways and Bridges	Analyzed claims asserted by two separate (bridge and roadway) general contractors who were engaged in the construction of an interchange of two interstate highways and a toll road located in Broward County, Florida. Issues involved included coordination between the two contractors, earthwork balances, alleged design defects, and the resulting delays and cost impacts.	Florida
Roads, Highways and Bridges	As part of the claim scheduling team, provided support documentation, presentation, and negotiation for a \$30 million claim on the \$400 million Boston Central Artery Project "Big Dig."	Massachusetts
Roads, Highways and Bridges	Analyzed a claim asserted by a general contractor who was engaged in the construction of a new bridge across the Missouri River near St. Louis and St. Charles Counties. Issues involved included the unanticipated presence of boulders in the river bed and the resulting delays and cost impacts.	Missouri

Type of Project	Description of Services Provided	Project Location
Roads, Highways and Bridges	Analyzed a claim asserted by a general contractor who was engaged in a two-lane widening of an existing bypass road and a median strip. The existing two lanes were required to be in continuous operation during the new construction near Fulton, Missouri. Issues involved were alleged mis-represented existing utility lines, material imbalances, and alleged delays and cost impacts.	Missouri
Roads, Highways and Bridges	Analyzed a claim asserted by a general contractor who was engaged in the superstructure fabrication and erection for a new three-lane continuous cantilever truss bridge across the Missouri River, located in Jefferson City, Missouri. Issues involved included steel surface and edge treatment in preparation for painting, bolt and nut approvals and failures, the shop drawing submittal and approval process, inspection and testing, and delays and cost impacts.	Missouri
Roads, Highways and Bridges	Analyzed a claim asserted by a general contractor who was engaged in the construction of a two-mile long bridge approach ramp built primarily from material hydraulically dredged from the adjacent Missouri River in St. Louis County. Issues involved included allegedly unanticipated boulders in the material to be dredged and the resulting delays and cost impacts.	Missouri
Roads, Highways and Bridges	Evaluated a termination settlement proposal submitted by a general contractor who was engaged in the construction of a cable-stayed bridge across the Mississippi River, located just south of Cape Girardeau, Missouri. Following discovery of a differing site condition under a mid-river caisson, the State terminated the construction contractor for "the convenience of the State." (A separate specialty contractor was subsequently contracted by the State and spent two years grout-modifying the foundation rock under the affected caisson). Prepared an alternative termination settlement proposal for the State, which became the basis for settlement with the contractor.	Missouri
Roads, Highways and Bridges	Evaluated a claim asserted by a general contractor who was engaged in the construction of a seven-mile highway by-pass involving earthwork, drainage and a bridge. The project was located just to the south of Poplar Bluff, Missouri. The issues involved included alleged earthwork material balances and resultant delays and cost impacts.	Missouri

Type of Project	Description of Services Provided	Project Location
Roads, Highways and Bridges	Analyzed a claim asserted by a general contractor who was engaged in construction of a bridge across the Missouri River east of Kansas City, Missouri. Issues involved included weather and river stage delays and unanticipated buried timbers under a proposed abutment.	Missouri
Roads, Highways and Bridges	Analyzed a claim asserted by a general contractor who was engaged in construction of a ten-mile, four-lane, highway located in Jefferson County, Missouri, characterized by deep rock cuts and unclassified fills. Issues involved included an alleged change in sequencing of the work and resulting delays and cost impacts.	Missouri
Roads, Highways and Bridges	Evaluated a claim asserted by a general contractor who was engaged in the construction of a three-mile roadway, drainage structures, retaining walls, and bridge abutments. The project was located in Kansas City, Missouri. The issue involved was alleged earthwork material imbalance, and alleged resultant delays and cost impacts.	Missouri
Roads, Highways and Bridges	Evaluated a claim asserted by a general contractor who was engaged in the construction of a seven-mile, two-lane highway located in the northern Ozark Mountains, west of Branson, Missouri. The issue involved was an alleged differing site condition regarding the boundary depth between soil-like and rock-like materials to be excavated, each of which allegedly required totally different means and methods of construction.	Missouri
Roads, Highways and Bridges	Provided cost and CPM scheduling services on a City of Las Vegas Traffic and Communication project. Developed and monitored resource-loaded completion schedules for the remaining work. Performed a retrospective CPM schedule analysis to prove change order impacts to the critical path of the project. Used activity-based costing techniques to appropriately allocate extended corporate and project overhead costs due to a 6-month suspension period. Performed productivity studies and provided resource and cost projects used for cash flow and cost-to-complete purposes. Successfully performed change order pricing and negotiations (\$750K) with the owner for numerous design impacts.	Nevada
Roads, Highways and Bridges	Developed the Baseline CPM Schedule for the \$76 million Route 18 Extension Section 2A Highway Project.	New Jersey

Type of Project	Description of Services Provided	Project Location
Roads, Highways and Bridges	Provided support to management team including schedule coordination, review and development of Baseline CPM Schedule for the \$87 million Roosevelt Avenue/74th Street Reconstruction project. The schedule was resource loaded with 3,200 activities.	New York
Roads, Highways and Bridges	Developed and maintained updates of the Baseline CPM Schedule for the \$230 million Brooklyn-Queens Expressway (BQE) Project. Provided schedule expertise, project administration, coordination, analysis, and negotiation of all time-related issues. The schedule was resource loaded with 2,840 activities.	New York
Roads, Highways and Bridges	Developed the Baseline CPM Schedule for the \$136 million FDR Drive Reconstruction Project. The schedule was cost and resource loaded with 2,344 activities.	New York
Roads, Highways and Bridges	Analyzed a claim asserted by a general contractor who was engaged in the rehabilitation of a two-deck vertical lift bridge and construction of two land approaches. The project was located in downtown Portland, Oregon. During construction, the lower level of the bridge required continuous bridge operation for railroad traffic. The upper level was to be used, after reconstruction, for both light rail and highway traffic. Issues involved included unknown characteristics of the existing steel, design changes, and the resulting delays and cost impacts.	Oregon
Roads, Highways and Bridges	Provided contract/entitlement analysis and prepared a detailed as-planned and as-built schedule analyses for the contractor on a highway construction project in Pennsylvania. Assisted the contractor to prepare a recovery schedule to mitigate construction delays caused by differing site conditions.	Pennsylvania
Roads, Highways and Bridges	Prepared claim analysis on a SC DOT project regarding delays and cost claim associated with equipment charges.	South Carolina
Roads, Highways and Bridges	Served as chairman of a three-member Dispute Review Board panel for a contract segment of Interstate Highway 90 across Mercer Island, Washington. The contract work required construction of roadway and paving, exit ramps and bridges, utility relocations, lighting and signage, and concrete roof covers (for noise abatement and to be subsequently landscaped) over the roadway segments.	Washington

Type of Project	Description of Services Provided	Project Location
Roads, Highways and Bridges	Provided litigation support and expert witness testimony (at deposition), including determination of recoverable damages related to the construction of a national forest access road.	Wyoming
Roads, Highways and Bridges	On behalf of the Wyoming Department of Transportation, evaluated the contractor's delay and extended overhead claims on a structural steel bridge and anchored retaining wall project. Evaluated whether or not there was a reasonable basis for terminating the contractor.	Wyoming

The projects listed above were performed by our consultants in a lead/key expert role for Long International or for other consulting firms.