

Capabilities Statement
Deloitte Financial Advisory Services LLP

FTA – Project Management Oversight Services (FTA-08-PMOC)

The Capital Projects Consulting (CPC) practice of Deloitte Financial Advisory Services LLP (Deloitte FAS) is composed of dedicated industry professionals backed by the resources and critical mass of our national support groups. These industry-trained practitioners have significant industry experience and many have advanced degrees and certifications in engineering, architecture, accounting, business, and law. Our CPC practice provides advisory services for facility/property owners/operators, government agencies, financial institutions, developers, or any organization with a significant interest in the successful delivery of a construction or asset-based project.

The CPC practice is often called upon to perform construction cost assessments, project management oversight (PMO), process improvement, project controls development, and dispute consulting services for public sector and private sector clients. Several of our professionals have served as construction industry experts in the resolution of construction disputes involving hundreds of millions of dollars. In addition, some of our professionals have gained valuable industry experience working for state transportation agencies as project engineers, field engineers, and design engineers, including for the New Jersey, New York and Pennsylvania Departments of Transportation. The following project profiles demonstrate this broad-based experience in many facets of capital project management oversight:

- ***Federal Transit Administration - New Starts Program Assessment***

In June 2006, the FTA retained Deloitte Consulting LLP, an affiliate of Deloitte FAS, to perform a detailed analysis of the New Starts program. The objective of this analysis was to assess the project development process to identify opportunities for streamlining or simplifying the process, while focusing on FTA's stated goals for the program. The analysis involved conducting over 60 interviews with FTA Headquarters Offices, selected FTA Regional Offices, the American Public Transportation Association, selected transit agencies, GAO, and Congressional staff. In addition, we conducted detailed reviews of 6 projects awarded recent New Starts Full Funding Grant Agreements (FFGA), and 3 Non-New Starts projects. The team provided detailed recommendations for improving the efficiency and effectiveness of the New Starts program.

- ***Federal Transit Administration - Project Management Oversight***

Deloitte FAS professionals, while with another professional services firm, performed project management oversight of FTA-funded projects throughout the country, including the performance of project monitoring, quality control, project budget and schedule monitoring and management, and monthly report development. Some of the projects involved are listed below:

- Sacramento Regional Transit Light Rail – Construction of light rail system
- Los Angeles Metro Light Rail – Commuter rail project including tunnels, rails, and stations
- SEPTA Frankford Elevated Railroad – Rehabilitation of elevated rail system (Philadelphia)

- ***Sound Transit “Link” Light Rail (Seattle)***

Sound Transit retained Deloitte FAS to conduct a performance audit of the cost estimating and project control systems for a \$2.4-billion light rail project servicing downtown Seattle. The purpose of this evaluation was to determine whether the systems in place were appropriate to properly

manage and monitor the cost of the project as it progresses forward with design and construction phase activities. Of particular importance were the systems for cost estimating, cost reporting, project scheduling and the organizational structure for project controls. As a result of the Deloitte FAS work, the project has implemented and improved processes for project reporting.

- ***Central Artery/Tunnel Project (Boston)***

The Commonwealth of Massachusetts, Office of Administration and Finance, has retained Deloitte FAS since 2000 to perform process improvement, project management oversight, and dispute consulting in connection with this \$14.6 billion project. Initially, we evaluated an estimated \$1.4 billion cost overrun to determine whether the Project Management team was properly monitoring and reporting both the anticipated cost to complete the project and the project completion date. Deloitte FAS performed a detailed evaluation of 19 active contracts, each valued at over \$200 million, to identify and quantify anticipated cost and schedule impacts. Deloitte FAS concluded that the project was behind schedule by approximately 5 months and that the budget overrun, which had initially been reported to be \$1.4 billion, should be revised to a range of \$2.14 to \$2.42 billion.

Our team has provided the Commonwealth with annual independent cost and schedule updates for the project, testing budget and schedule assumptions, and developing forecasts based on progress. Primary tasks included performing a project assessment of construction contract direct costs and contingency for active construction contracts and an assessment of the I-90 and I-93 schedule status. In addition, Deloitte FAS evaluated and assessed proposed project costs for Project Management, Force Accounts, Right-of-Way, Design Fees, Cash Flow, and Unawarded Contracts. The purpose of our work has been to evaluate the approach and methodology used to identify risks and exposure to additional costs.

In addition, the Massachusetts Turnpike Authority (“MTA”) retained Deloitte FAS to evaluate selected construction contract modifications for merit, time, and quantum, as well as compliance with project requirements governing the claims and changes process. A majority of this work focused upon evaluations and assessments of three pending global settlements with the associated contractor on three active construction contracts valued at approximately \$1 billion. As part of our scope of work, we established recommendations and strategies for settlement and provided expert witness testimony at the mediation related to cost and schedule impacts. Deloitte FAS has also performed special assignments and tasks for the MTA, including confidential evaluations concerning the viability of Big Dig contractors and issues surrounding tunnel water intrusion.

- ***Greenbush Commuter Rail Line (Boston)***

The Executive Office of Administration and Finance for the Commonwealth of Massachusetts retained Deloitte FAS to assist in evaluating the August 2001 capital cost estimate for the Greenbush commuter rail line project, including the rehabilitation of The Old Colony Railroad. The estimate for this project was prepared by consultants working for the Massachusetts Bay Transportation Authority (“MBTA”). Deloitte FAS was requested to perform the following tasks:

- Evaluation of the capital cost estimate summary provided by the Commonwealth
- Evaluation of supporting data and details of the estimate
- Meet with MBTA consultants to evaluate and discuss the scope of the estimate, supporting estimate data and assumptions, estimate methodology for major cost elements, and evaluate any additional information required to understand the details of the estimate.

Thereafter, Deloitte FAS provided findings and recommendations related to the reasonableness of the capital cost estimate and potential future cost risks.

- ***Southeastern Pennsylvania Transportation Authority (SEPTA)***

Deloitte FAS has served in various capacities in support of this Philadelphia metropolitan area transit agency:

- Performed entitlement analysis and developed related independent cost estimates associated with potential scope changes on a \$710 million transit reconstruction project. Deloitte FAS also analyzed change order requests impacted by price escalation as a result of a contract suspension. SEPTA utilized the cost estimate information provided by Deloitte FAS to assist in the negotiations of change orders.
- Conducted a construction cost assessment analyzing the allowability of costs incurred on a \$30M+ cost-reimbursable contract for project management services in support of an ongoing, multi-year \$500M+ commuter rail project.
- Serve as an arbitrator/hearing officer, evaluating contractor requests for additional compensation and time extensions by reviewing written submissions, conducting evidentiary hearings, assessing the validity of the parties' competing positions, and issuing written decisions resolving the allocation of liability and damages between the parties.

- ***Bay Area Toll Authority (San Francisco)***

The Bay Area Toll Authority (BATA) is a California public agency that administers, allocates revenues and funds the long term capital improvement and rehabilitation of the seven state-owned bridges in the San Francisco Bay area. Deloitte FAS is currently providing project controls and project management oversight services in support of an \$8.7B seismic retrofit and bridge replacement program under a multi-year engagement extending to 2010:

- Evaluating the process and organization related to program cost and schedule control, risk management, and financial control
- Conducting project management oversight reviews, and cost/schedule analyses
- Evaluating design and construction responsibilities, change orders, and the claims and dispute resolution process
- Performing project closeout cost assessments

- ***Walt Whitman Bridge (Philadelphia)***

Deloitte FAS professionals, while with another professional services firm, provided project management oversight for the Walt Whitman Bridge redecking and redesign project for the smoother and more efficient flow of traffic. This work included management oversight of the budget, schedule, and change orders, as well as the coordination of all prime contractors on the project.

- ***Illinois DOT - Capital Grant Close-out Cost Assessments***

Deloitte FAS professionals, while with another professional services firm, assisted in performing capital grant closeout procedures in order to comply with federal regulations. The procedures related to contract costs for completed federal aid highway construction annual contracts.

- Compared invoiced amounts to the amounts paid by the City of Chicago

- Evaluated initial invoices, identifying if costs were incurred prior to the federal or state authorization granted under the City Contract (“Contract”)
- Compared the billed rates per the invoices with rates obtained from the hourly rate range under the Contract
- Compared direct costs per the invoices to supporting documentation to ascertain whether the direct costs were allowed under the Contract
- Compared the total invoiced amount for the consultant to the vendor limit under the contract
- Compared overhead rates billed by the consultant with rates obtained from the Illinois Department of Transportation (“IDOT”) for the consultant
- Compared overtime (“OT”) charges to supporting documentation to ascertain whether premium OT had been separated and not included in calculating overhead
- Traced 25 payroll or non-payroll charges to the consultant’s source documents (i.e., payroll records, time cards, invoices, etc.).

The procedures assisted IDOT and the Federal Highway Administration in evaluating consultants’ costs for selected completed federal aid highway projects. Deloitte FAS identified and closed projects allowing unexpended grants to be reallocated to other capital needs.

- ***Texas Department of Transportation - Engineering Processes***

Deloitte FAS performed a detailed analysis of the project development and preliminary engineering processes of the Texas Department of Transportation in connection with its multi-billion dollar construction program. The focus of the analysis was to compare the efficiency of in-house design engineers to outsourced professional engineering firms. The study identified several process inefficiencies, which led to the outsourced services to be slightly higher. The implementation of the study’s process improvement recommendations would switch the cost advantages for outsourced vs. in-house services.

- ***New Jersey Highway Authority - Garden State Parkway Development and Maintenance***

The New Jersey Highway Authority (“NJHA”), responsible for the development and maintenance of the Garden State Parkway, engaged Deloitte FAS to assist in the development of a policies and procedures manual for its Capital Program Planning and Construction process. Project activities included:

- Assisting the development of long-range goals for the Parkway, conceptualizing projects to support the goals, and formulating an approach to funding and evaluating projects by the Board of Directors and management
- Evaluating, modifying, and documenting the NJHA's project management procedures
- Helping develop specific project plans and schedules for the design and construction phases of the project
- Evaluating staffing levels and provided a hiring plan
- Monitoring the project and comparing actual performance against the project plan for financial, schedule and quality aspects of the project and total program.

- ***New Jersey Turnpike Authority – Turnpike Widening***

Deloitte FAS professionals, while with another professional services firm, participated in a \$550-million project to widen sections of the New Jersey Turnpike. They assisted in evaluating delay damages claims from various contractors and established as-planned schedules and as-built schedules. Our professionals prepared master and detailed schedule updates and cost estimates and budgets for the widening program. They planned, organized and controlled the summary budget and time elements, maintained and monitored the pricing and processing of changes, or proposed changes, and prepared and maintained cash flow forecasts for the Turnpike's Finance and Budget Department. In addition, they performed Time-Impact Analyses to determine critical delays and concurrent delays impacting the project completion and performed delay analysis, which included evaluation of delays and disruption due to changes in contract drawings, interference of other contractors and other issues.

- ***Channel Tunnel Railway (United Kingdom and France)***

Deloitte FAS professionals, while with another professional services firm, provided consulting services to Eurotunnel PLC, to assess the cost and schedule status of the Channel Tunnel project. The engagement required an overall assessment of the uniquely complex project, which was, at the time of engagement, behind schedule, over budget, and in breach of covenants with the financing banks. The services included an evaluation of all outstanding change orders and claims to assess the overall budget status, assessment of the management tools being used to track project cost and schedule, and an evaluation of the policies and procedures being used to manage the project. As a consequence of the evaluation and findings, the engagement was expanded to include a full-time staff in the U.K. to implement improvements to management systems of the project and provide assistance in negotiating change orders and claims filed by the contractors.

- ***Virginia Department of Transportation (VDOT)***

VDOT retained Deloitte FAS to perform a management assessment of the \$1.9 billion Hampton Roads District construction program, including an organizational assessment, process improvement, and program evaluation. Recommendations included:

- Altering Organization Structure
- Implementation of Cradle-to-Grave Project Management
- State-wide training of construction personnel in project controls
- Development of Implementation Plan for recommended changes

Deloitte FAS also helped develop an Antifraud Procedures Manual for the VDOT Antitrust Section to assist it in performing bid and market analyses to identify instances of potential collusion and fraud in the bidding and award of construction contracts.

- Provided detailed procedures based on leading practices, and general information with regard to indicators of fraud
- Created templates to document the bid and market analysis efforts and to facilitate the development of referrals
- Developed a proposed staffing plan and qualifications to effectively implement the proposed procedures

Deloitte FAS continues to perform claims consulting and dispute resolution work in support of individual projects.