

Engineering Management Consulting Services

Final Report
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Submitted by

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16. Abstract The Capital Management Division of the New Jersey Department of Transportation requires that expert and experienced personnel participate in their projects. With the recent and ongoing retirement of many NJDOT personnel, there existed a shortage of qualified individuals to facilitate the work. This project authorized Rutgers' Center for Advanced Infrastructure and Transportation (CAIT) to locate and provide experienced and qualified personnel who would perform various management and leadership tasks for NJDOT activities in five major categories: Partnering; Meeting Facilitation; Organizational Development Efforts; Industry Relations Facilitation; and Task Forces Facilitation.			
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EXECUTIVE SUMMARY

This project does not follow the traditional timeline and methodology of the traditional research project. Rather, it was a project designed to meet an immediate need experienced by the New Jersey Department of Transportation for personnel that could effectively plan for, conduct, and facilitate meetings with and on behalf of the NJDOT and its partners. Work was performed on an “as needed” basis at the request of NJDOT’s Capital Program Management Division. During the three years that the project was active, over 330 separate tasks were performed under the five major categories that constituted the scope of the project.

BACKGROUND

The Capital Program Management Division of the New Jersey Department of Transportation requires that expert and experienced personnel participate in their projects. With the recent and ongoing retirement of many NJDOT personnel, there existed a shortage of qualified individuals to facilitate the work. (NJDOT Proposal, 2005)

OBJECTIVES

The objective of this project was to manage experts in the areas of Facilitation of Departmental/Industry/University Initiatives, Pre Construction Partnering, Pre Design Partnering and public meeting facilitation, Engineering Unit strategic planning, and Industry and University task force facilitation and deployment. These experts will provide Engineering Management Consulting Services to the NJDOT Capital Program. (NJDOT Proposal, 2005)

The final product of this work is to provide the New Jersey Department of Transportation with the necessary experts to conduct engineering management consulting.

INTRODUCTION

The initial task of this project was to identify and hire the appropriate consultant(s) that could effectively facilitate and manage ongoing tasks and initiatives critical to the NJDOT Capital Management Program. Once selected, CAIT would be responsible for executing the consultant agreement. The work performed falls into 5 major categories:

- 1) Partnering
- 2) Meeting Facilitation
- 3) Organizational Development Efforts
- 4) Industry Relations Facilitation
- 5) Task Forces Facilitation

SUMMARY OF THE WORK PERFORMED

Partnering

The consultant organized and conducted approximately 21 meetings with various NJDOT partners. Examples include:

- Construction partnering on Routes 1/9 over Amtrak
- Route 9 Land Use Workshops
- Exit A Partner Workshop for Congestion Buster
- Route 46 construction projects
- Preliminary discussion regarding Route 18 contract
- Rt. 295 partnering
- Rt. 139 partnering workshop
- Warren Township town center
- Stony Brook Project

Meeting Facilitation

The consultant prepared for and facilitated approximately 44 meetings. Examples include:

- Initiated tasks surrounding field implementation of construction issues
- Developed and deployed agenda for Consulting Engineers Quarterly meeting
- Facilitated DEP/DOT meeting regarding new Storm Water Regulations
- Traffic Mitigation Workshop Rt. 139 Holland Tunnel entrance
- Logistics Council Meeting
- Plan and conduct Design Template Workshop
- Prepare goals and accelerate planning for Construction Workshop
- Review lessons learned from Rt. 70 Bridge Project
- Rt. 295 Construction Workshop
- Congestion Busters Task Force/Implementation Team
- Congestion Buster Exit 8A meeting with municipal engineers
- Congestion Buster meeting with Middlesex County Engineer
- Congestion Buster Workshop Exit 8A at Monroe Township
- Prepare and conduct Truck Task Force Meeting
- Facilitate Local Aid Baldrige Assessment meetings
- Public Meeting for Route 206 projects
- Smart Growth Workshop
- Regional Ownership Workshop
- Contract review meeting with AASHTO

Organizational Development Efforts

Participation by the consultant in approximately 47 NJDOT Organizational Development efforts including the following:

- Planned and conducted Administration Strategic Planning Retreat
- Reorganization of the Division of Environmental Resources
- Succession Planning meetings
- Regionalization meetings
- Organizational change for CPM
- Regionalization sub group Customer Care
- Project Planning Process Review meetings
- Proposal for Customer Care Center
- Customer Care team meeting
- Hyper Build with QMS
- Pipeline Task Force
- Regionalization Task Force Presentation to the Commissioner
- Quick Fix Task Group
- EEO/AA Retreat Review
- Regional Ownership
- Performance Based Contracting
- Consultant Selection
- Strategic Planning Initiative

Industry Relations Facilitation

Approximately 39 tasks related to Industry Relations were performed by the consultant. Examples include:

- CEC Quarterly Meetings
- CIAP Script & meetings
- CIAP/DOT meeting
- CIAP/DOT Scholarship collaboration
- Construction Industry Advancement Program quarterly meetings
- Construction Industry partnership meetings
- Construction Industry Task Force meetings
- Contractor Relationship Meeting with Commissioner/Contractors
- Coordinated NJQI bi-annual seminar, providing facilitation and organizational services
- Design Summit with CEC
- Highway Engineers Exchange Program/DOT Host/Keynote Address
- Hyper Build with QMS
- Logistics Task Force Team Leader and Logistics Council meetings

- NJQI Agenda planning & meetings
- Planning for NJQI bi-annual seminar/transportation summit

Task Forces Facilitation

The consultant's largest contribution to this project involved Task Forces Facilitation. Over 180 meetings were facilitated. Examples include the following:

- Capital Investment Strategy
- Congestion Buster Senior Staff retreat
- Congestion Busters Implementation Team
- Customer Service Team Meetings
- Electronic Bidding and Construction Payment Task Force
- Estimation Task Force
- Federal Financial System Task Force
- Federal Financial Team Meetings
- Federal Financial Utilities
- Financial Management
- Logistics Council Task Force
- Pipeline Working Group
- Project Planning and Development Process Review Team
- Quick Fix Review meetings
- Regional Alignment Task Force
- Reprioritization of the NJDOT Task Force implementation strategies
- Scope Team Process Review meetings
- Task Force Status Review with Deputy Commissioner
- Transport Electronic Task Force
- Transport Meetings with Construction Staff
- Transport Meetings with software vendors & Materials Staff
- Transport Team IT
- Transport Team Meetings & Workshops
- Turnpike Electronic Bidding

CONCLUSIONS AND RECOMMENDATIONS

Success of the project can be gauged by customer response. Due to the effectiveness of the consultant and the increased demand for his services, the initial budget for this project was doubled within the first year and doubled again during the second year. This project, which was originally expected to last two years, was extended for an additional two years at the request of NJDOT. Consultant services were temporarily discontinued one year prior to the contract end date and not resumed.

REFERENCES

NJDOT Proposal. *Engineering Management Consulting Services*. August 5, 2002.