PROJECT OVERVIEW REPORT

1. Center Identifying Number
   NYMTC-RU0054

2. Project Title
   Develop Consultant Management Estimating Tool

3. Principal Investigator
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5. Project Description
   The New York State Department of Transportation (NYSDOT) Consultant Management Bureau's primary responsibilities are to negotiate staffing hours/resources with engineering design consultants, and to monitor the consultant's costs. Currently the Consultant Management Bureau uses knowledge of past and current projects as well as engineering judgment to estimate consultant costs. The proposed research will focus on several major issues:
   - The establishment of a central database that contains historic total project cost and staffing level data.
   - The development of a computer based estimating tool that employs the data from the historical database to provide more accurate and efficient estimates of consultant resources.
   - We will identify the major variables that affect the consultant's hours and develop predictive models. We will study multiple regression analysis as a method for developing the models. We will only consider techniques that can easily be incorporated in an Excel spreadsheet.
   - The NYSDOT already employs an excel spreadsheet based estimating tool. We will determine how to best integrate the new computer tool with the existing spreadsheet. We will also explore how the developed estimating tool can exchange data with Primavera software. One meeting will be held with other interested parties in the NYSDOT to discuss the possibilities for integration.
   - Training will be provided including at least three PowerPoint presentations to NYSDOT engineers. The meeting will occur in the main office, downstate, and in the Buffalo area. The PowerPoint presentations produced for the meetings will be provided to NYSDOT as a deliverable. A users manual will be developed to assist Consultant Managers using the system.
6. Dates and Budget
   Start date: 6/1/2008
   End date: 12/31/2009
   Total Dollars: $125,000

7. Keywords
   Estimating tool, predictive models, consultant management,