

Final Report Presentation for the Best Practices Review of the Capital Project Management Process

City of Milwaukee, Wisconsin



October 24, 2007

Project Scope of Work

- ◆ Document current workload and service demands faced by staff involved with Capital Project Management.
- ◆ Evaluate adequacy of processes and systems utilized to plan, budget, manage and report on the financial status of capital projects.
- ◆ Review the adequacy of processes and systems employed to define scope, develop cost estimates and identify financial risks of capital projects.
- ◆ Evaluate the structure and organization of the Department's employees assigned to capital projects.

Project Methodologies

- ◆ Key staff in the Department of Public Works, Department of Administration Budget Office, and other involved offices were interviewed to document current processes and approaches to Capital Project Management.
- ◆ Data were developed which profiled the delivery of capital projects by the Department of Public Works.
- ◆ An anonymous employee survey was conducted for Public Works staff to solicit their input into the study.
- ◆ Services provided were compared to 'best management practices'.
- ◆ Throughout the study process the project team reviewed interim findings and results with the Department and the City.

Background to the Project

- ◆ This study undertaken following several internal audits conducted by the Comptroller's Office which outlined several necessary changes including:
 - ➔ more detailed and frequent project reporting
 - ➔ improvements in the management of project scope and estimating
 - ➔ need to better utilize the financial management system.
- ◆ Staff have already implemented process and software changes to address key findings of these audits.
- ◆ Existing financial systems do not provide the capacity for staff to easily prepare, review and analyze real time financial data.
- ◆ AIM Initiative and associated capital project reports provide a solid foundation for the necessary improvements in reporting.

Key Strengths of Existing Processes

- ◆ Utilization of a multi-year capital budget that provides a five-year planning horizon beyond the adopted annual work program.
- ◆ Implementation of a diversified funding approach for capital projects.
- ◆ Detailed project data is submitted for each project during the CIP planning process regarding financial costs, priorities and expected outcomes.
- ◆ Utilization of external consultants and project managers to supplement City staff - especially on high risk and atypical projects.
- ◆ CIP projects have defined criteria for inclusion in the CIP and broad goals and objectives are utilized for prioritizing projects.

Key Strengths of Existing Processes

- ◆ Various reports are prepared (including AIM reports on selected projects) to keep stakeholders informed of current progress of capital projects.
- ◆ Utilization of standard design criteria and development of final reports on all capital projects.
- ◆ Change order authority is delegated to the Public Works Director and his staff.
- ◆ Comprehensive and up-to-date condition assessments are maintained for the street network and bridge infrastructure.
- ◆ Construction inspectors are directly involved in the on-going management of projects including review of change order data.
- ◆ Staffing levels appear generally in balance with workload.

Improvement Opportunities: Technology and Reporting

- ◆ Implementation of financial planning, budgeting and project costing software that will integrate with existing FMIS (estimated cost of over \$1 million for software purchase and several years to implement).
- ◆ Expansion of AIM Initiative Reports to a greater percentage of capital projects. Detailed project summaries provided at least semi-annually to Budget Office, Mayor's Office and Common Council.
- ◆ High Risk and Atypical projects should be monitored on a monthly basis.
- ◆ A "special exception report" should be developed to identify all projects that are deviating by more than 15% from the original project budget and/or schedule.

Improvement Opportunities: Policies and Procedures

- ◆ A “risk factor” should be assigned to each capital program and project as appropriate.
- ◆ All estimates and project schedules utilized in the CIP planning should be reviewed annually and signed off on by DPW regarding continued sufficiency for use.
- ◆ A communication mechanism should be put into place to keep all stakeholders informed of projects that are being added, deleted or delayed following adoption of the annual work program.
- ◆ All capital projects should be reported on a total cost basis including all components of the project and all funding sources.

Improvement Opportunities: DPW Project Management (1)

- ◆ Implementation of Gantt Chart Schedules to determine adequacy of project schedules, annual work requirements, and staffing resources needed to implement the annual work program.
- ◆ Cost of construction guidelines should be utilized for estimating staff resource requirements for the design and inspection of capital projects.
- ◆ Staff utilization targets should be established for staff involved in design and engineering of Capital projects.
- ◆ A RFQ should be utilized to develop a Master Contract of pre-qualified design and engineering firms for capital projects.
- ◆ Addition of 1 position to handle increased reporting requirements.

Improvement Opportunities: DPW Project Management (2)

- ◆ An evaluation system should be implemented for all consulting engineers utilized by the City.
- ◆ A monthly progress statement should be developed by DPW for each customer department showing the progress (financial and schedule) of each capital project.
- ◆ Contingencies should be included as a line-item for each project.
- ◆ Internal reports should be developed and utilized to manage and evaluate the sufficiency of estimating, bidding, and change order processes.
- ◆ Engineering and Design functions of Public Works should be consolidated into a centralized unit reporting to the City Engineer.

Project Conclusions

- ◆ Milwaukee's Capital Project Management processes have major strengths that can be built upon to take them to the next level.
- ◆ The DPW and the Budget Office have begun implementation of many changes designed to improve the availability, accuracy and dissemination of critical project data.
- ◆ The most critical issues for improvement in the process include:
 - ➔ Implementation of software for budgeting and project cost accounting.
 - ➔ Enhanced reporting and information sharing on project status.
 - ➔ Increased accountability for staff.
 - ➔ Utilization of a master contract for design and engineering.
 - ➔ Use of multi-year scheduling and staff utilization analysis.