

What We Do

P&M offers specialized and value added integrated project delivery services, project management and program controls services. Clients include owners, architects, engineers, and construction contractors. Our staff bring extensive background as a general contractor with expertise in alternative as well as traditional design-bid-build project delivery

Our Approach:

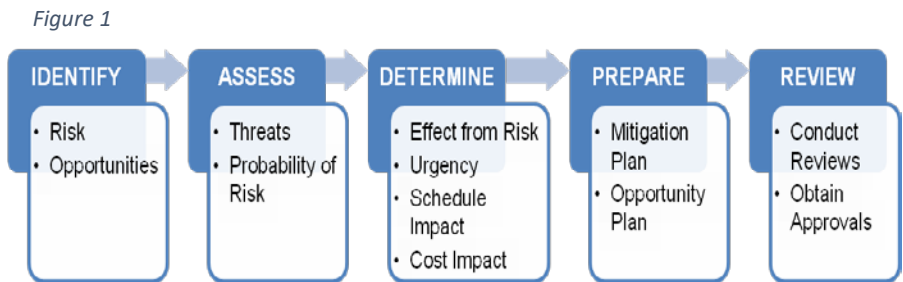
With each project, there are numerous uncertainties that must be considered in a project planning stage and through its life cycle. Risk Management is an essential element that must be implemented throughout a project's life cycle to deliver it on time and within budget. Values such as costs, resources, dates and durations can all affect the outcomes of timelines and final cost expenditures. So it makes sense to analyze the risk, identify any potential threats and impacts to the project, and then assign adequate resources to manage the risks.

P&M uses several important tools that are used to quantify the risks. One such tool is a "Monte Carlo" simulation which provides information about the project and the likelihood that it will be completed on budget and within a certain time frame. The power of Monte Carlo simulation is the representation of possible outcomes and their probabilities.

With timely reporting, charts and graphs, management can easily see the risk impacts and probabilities to projects cost and schedule and can then implement informed project risk mitigation measures.

Risk Register (Qualitative Risk Analysis)

P&M has developed a Risk Management database "Myriad™" that facilitates complete risk analysis as outlined in Fig 1.



Monte Carlo Simulations

Myriad™ utilizes the support of Monte Carlo Simulation software's such as Safran, Oracle Primavera Risk Analysis (Pertmaster) as well as Excel based @Risk and/or RiskAMP™. You can add Risk Analysis to your spreadsheet models quickly and easily to evaluate probabilistic outcomes for:

- Estimated Cost
- CPM Schedules
- Proposed Schedule Float and cost Contingencies as well as Management Reserves

Figure 2



Services

RISK MANAGEMENT CAPABILITY STATEMENT

- Professional and experienced risk workshop facilitators for complex programs and projects in public and private sector capital construction projects
- Cost & schedule risk assessment
- Risk register development and implementation
- Monte Carlo simulations
- Integration of risk management into project controls as well as cost and schedule forecasting
- Project and executive dashboard reporting
- Development of risk management policies and procedures conformed to project specific needs
- Risk management training

**OUR VALUES AND GOALS ARE TO
CONTRIBUTE TO THE SUCCESS OF OUR
CLIENTS THROUGH DEMONSTRATED
INTEGRITY, PROFESSIONALISM AND
LONGTIME RELATIONSHIPS.**

Differentiators

- Risk management services that integrates with P&M's estimating, cost controls, scheduling and project controls expertise.
- Use of best practices in cost engineering including range estimating and stochastic Monte Carlo analysis in support of contingency and probable cost analysis.
- Keen knowledge of the unique complexity of cost estimating, planning and scheduling in delivering airport, seaport, mass-transit, wastewater, power, energy and utility Projects.
- Extensive experience with Risk Engineering Management for Sound Transit's Capital programs.
- Risk management services for variety of Port of Seattle major capital programs
- P&M staff draws from multiple market sectors experience, enabling the application of industry best practices benefiting the program delivery.
- P&M staff has general contractors background with expertise in alternative as well as traditional design-bid-build project delivery with strong experience understanding how the contractor will plan, execute and manage a project.
- Fostering collaborative relationships by listening and learning about client needs and performing with utmost character and ethics.
- Certifications in industry best practices such as: Project Management Institute and Association for the Advancement of Cost Engineering.

Project References



Sound Transit: ST2 & ST3 Risk Management

P&M is providing Risk Engineering Program Management to produce and manage the risk program for all projects that are part of the Sound Transit 2 and 3 programs, which include:

Conducting independent quantitative risk assessments (including FTA top-down assessments) for all projects, for planning, design and construction phases, to evaluate project schedule and cost contingencies.

Overseeing the development and maintenance of project specific/ program wide risk registers, facilitate risk workshops and risk mitigation plans with project team members.

Drafting comprehensive reports of risk assessments for client leadership and FTA partners.

Utilizing the risk register to monitor the identification and assessment of risks and to monitor the implementation and effectiveness of the risk mitigation strategies throughout the life of each contract package.

Working with the client project schedulers and cost engineers to establish a traceable basis for cost and schedule contingency forecasting and modifications at both the contract and program levels.

Port of Seattle: Terminal 5 Berth Modernization



P&M provides risk assessment, risk workshop facilitation, Monte Carlo stochastic analysis, cost estimating, CPM scheduling, cost engineering, progress tracking and reporting for this major capital program. The project consists of upgrades and modifications to existing container terminal facilities to accommodate berthing and loading/unloading of larger ships. This is the largest capital project undertaken by the NW Seaport Alliance, which is an alliance between the Port of Seattle and the Port of Tacoma. As such, there is a high level of executive interest, engagement and oversight. P&M provides valuable support to management by integrating risk analysis with cost engineering to assess probabilistic outcomes of major facets of the program and probable balances in the program's numerous reserves and contingencies.

RISK MANAGEMENT CAPABILITY STATEMENT



Port of Seattle: Fishermen's Terminal Redevelopment

P&M is supporting the Port Program Management team by providing peer-level risk assessment and risk analysis services at key project milestones for the FT Development Program. The scope of the work includes leading the review of the base cost estimate and basis of estimate, the elicitation, identification, definition, and quantification of risks, the development of stochastic models of the FT Development Program's cost estimate and schedule, including consideration of various alternative scope options, and the assessment of appropriate risk response and management strategies. Activities include project risk workshops, which provide a key component of peer-level review or due diligence analyses on the scope, schedule, and cost estimate of the project.

In conjunction with the programmatic implementation of the Fishermen's Terminal (FT) Long-Term Strategic Plan, the Port of Seattle (Port) is seeking to implement new light industrial development as part of the FT Redevelopment Program and has identified two specific buildings to come into service within the next two years, the Gateway Building and the Maritime Innovation Center (MInC) building.



Port of Seattle: International Arrival Facility Program Management

P&M is providing an integrated program controls team with AECOM (prime) in support of the delivery of this program that includes P&M providing the program controls manager; risk management and cost engineering; cost estimating; document controls and project administration. The project is delivered through "Progressive Design/Build" and is first of its kind at the Port of Seattle.



Port of Seattle: Terminal 91 & T30 Cargo Terminal Development

P&M provided program controls for the relocation of the T30 cruise operations to a new facility at T91 and the work to combine Terminals 25, 28 and 30 into a 70-acre container terminal. P&M led a team of project controls specialists providing risk workshop facilitation and comprehensive risk focused cost and schedule project controls services for this complex program. The program faced significant political and logistical risks including critical schedule constraints and coordination with on-going terminal operations.

RISK MANAGEMENT CAPABILITY STATEMENT



Port of Seattle: Shilshole Bay Marina Redevelopment

P&M provided comprehensive risk focused scheduling and cost management services for this major capital project. This project, delivered through GC/CM, involved complex logistics with challenging operational requirements. Special services included risk assessment and finalization of the engineer's estimate and negotiation support of Maximum Allowable Construction Cost (MACC) for this project.

Awards:

2013 WTS Puget Sound Employer of the Year:
Small Business Category

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- Cage Code: 3HU74
- King County (SCS # 174)

P&M has strong record as an equal opportunity employer with diverse inclusion of woman and minorities in its consultant key staff and ownership!