

Purpose

Project Managers must be aware of potential risks to a project from inception to completion. Having a strategy to manage those risks during the project lifecycle is critical for project success. Obviously, PMs cannot accurately predict what will happen on a particular project. However, referring to a standard *Risk Register* will help the PM think through the possibilities.

Definition

A definition of “risk” is “an uncertainty that matters and can affect project objectives negatively or positively”. The two elements of a risk are (1) the probability of occurrence and (2) the impact on the project.

Procedure

PMs are required to prepare and periodically update the *Risk Register* for all projects at the start of the Preliminary (conceptual) phase and continuing until final completion. With the project-specific information gathered through this risk assessment process, a Project Manager can refer to historical, comparable information. This information also allows the creation of new tools to address types of risks that are most frequently encountered.

PROJECT RISK ASSESSMENT												
Step	Responsible Party	Action										
Project Initiation												
1	Project Manager	<ul style="list-style-type: none">At start of Design phase, drafts project <i>Risk Register</i>. Refers to <i>Sample Risk List</i> for assistance in identifying project risks and categories <table><tr><th>Category</th><th>Description</th></tr><tr><td>Environmental</td><td>Environmental issues, including historic sites, endangered species, cemeteries, parks, floodplains etc.</td></tr><tr><td>External</td><td>Citizen/stakeholder issues, changes in regulations and processes, schedule constraints</td></tr><tr><td>Design</td><td>Complex features, unexpected issues, surveys incomplete, changing standards</td></tr><tr><td>E/A</td><td>Engineering/Architectural – Special requirements, seasonal constraints, stakeholders aesthetic expectations, key elements missed</td></tr></table>	Category	Description	Environmental	Environmental issues, including historic sites, endangered species, cemeteries, parks, floodplains etc.	External	Citizen/stakeholder issues, changes in regulations and processes, schedule constraints	Design	Complex features, unexpected issues, surveys incomplete, changing standards	E/A	Engineering/Architectural – Special requirements, seasonal constraints, stakeholders aesthetic expectations, key elements missed
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			Real Estate	Lengthy utility relocation, negotiations with railroads, condemnation process
			Construction	Expired permits, differing site conditions, traffic control, work stoppages, utility damage, claims
			Project Management	Poorly defined scope, scheduling errors, scope creep, unanticipated costs, changing priorities, lack of coordination and communication
			Organizational	Change in key project staff and workloads, internal “red tape”, funding changes
			<ul style="list-style-type: none">Obtains comments from Sponsor and other project team members	
Quarterly for the Design-Bid Phases/Weekly for Construction Phase				
2	Project Manager	<ul style="list-style-type: none">Reviews <i>Risk Register</i> with project team members and updates as necessaryEnsures that each risk has an identified “owner” who provides regular updates on the status of that risk itemIncludes the <i>Risk Register</i> as an agenda item for all project meetings		
Project Closeout				
3	Project Manager	<ul style="list-style-type: none">As applicable, incorporates risk management outcomes into project <i>Lessons Learned</i> templateProvides copy of <i>Risk Register</i> and <i>Lessons Learned</i> form to administrative staff who incorporate information in database available for all PMs to review		

References

Administrative Chapter – [Lessons Learned](#)

Forms

Preliminary Chapter – [Risk Register](#)

Preliminary Chapter – [Sample Risk List](#)

Preliminary Chapter – [Sample Risk Register](#)

Administrative Chapter – [Lessons Learned template](#)

Risk Database