



# Role Definition for MnDOT Project Managers

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*The Responsibilities and Accountabilities for MnDOT  
Project Managers*

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## General

### **1)-General Project Manager Role**

The project manager is the leader of the project and is accountable for making the project successful. The project manager leads the project team and works with all stakeholders to define the project and then to meet all defined project scope, schedule and budget requirements. The project manager is responsible to ensure that the team and all stakeholders have a common understanding of the project scope, plans and status. The project manager should have broad understanding and experience in developing projects, and should ensure that all needed expertise is obtained and applied to a project. The project manager works to establish an effective teamwork environment on the project and to build and maintain productive working and communication relationships with stakeholders external to the project. The project manager acts, at all times, in an ethical and professional manner to make the project a success and to be a role model for others to follow.

## Stakeholder Interface Roles

### **2)-Sponsor Working Relationship**

**Background and General Role** – Project sponsors are critical to a project management organization. They provide programmatic and strategic vision and direction to project managers. In addition to efforts by the PM, the project sponsor's support in securing resources can be key to support project success. Sponsor support in areas of setting of priorities and timely resolution of issues that cannot be resolved by the project team can also be important. Sponsors support the project manager in working with functional groups, management, and stakeholders. In Metro, area staff typically serve as a project sponsor in providing programmatic direction and review of scope. In order to fully utilize the benefits of the project sponsor, the PM must work with the project sponsor throughout the life of a project to ensure project success.

It is the role of the project manager to:

- During the project initiation phase, work with the project sponsor to understand the strategic direction of the Department of Transportation with regard to the highway program and sources of funding that are available.
- During the project scoping phase, the PM should consult with the project sponsor as needed to address conflicts regarding the development of the

scope or issues arising from the development of the schedule or budget. The PM shall submit a completed scoping document to the project sponsor for review, comment, and approval.

- During the project execution, brief project sponsor on project status as needed. Include project sponsor in key decision making meetings. Bring issues that could not be resolved by the project team to the project sponsor in a timely manner for resolution. Notify project sponsor of potential issues regarding scope changes, schedules, budgets, resources, or stakeholders so the project sponsor can provide guidance or assist in resolving the issues.

### 3)-Working with MnDOT Leadership

**Background and General Role** –Leadership involvement in projects is a key success factor. Depending upon the sensitivity of the project, leadership may include district leadership up to and including the Commissioner’s office. The PM should develop a sound and effective working and communications relationship with their leadership. This will benefit the project, leadership and MnDOT overall as a clear understanding of project information should result and this will also benefit the project manager especially when the project needs leadership support. The PM and leadership should work as a team to support project success.

- **Significant Project Issues** – It is the role of the project manager to inform the project sponsor and other leaders, as appropriate, of any issues seriously jeopardizing project technical, schedule or budget success. This communication would include the background of the issue, what specifically the issue is, what actions the project is taking or will take and what, if any, support from leadership is requested. The benefits and risks for current actions in resolving the issue is an important part of this problem communication. The PM has a responsibility to inform leadership of serious issues in a timely fashion such that advice or support for issue resolution can be provided to best support project success.
- **Periodic Project Status** – It is the role of the PM to periodically report overall project status information, including issues and corrective actions to the project sponsor and other managers. The frequency of the updates will depend upon the complexity and priority of the project along with the level of risk associated with the project. Early in the project development, the PM should consult with leadership to establish a schedule for project status updates.
- **Project Changes** - Where significant changes to the project requirements, priority, design, schedule or budget happen, the PM has the responsibility to ensure that the leadership is made aware of the change, what impacts the

change generates, why the change occurred, and that leadership approves of the project changes.

- **Contact with External Stakeholders Related to Significant Issues –** Where the project manager has contact with important external stakeholders on significant issues, these communications would be identified to leadership. Examples include communications with the public, elected officials and federal and state regulatory agencies. In Metro, the Area staff is often the point of contact with important external stakeholders and has the responsibility of identifying important contacts with external stakeholders.

#### 4)-Working with External Stakeholders

**Background and General Role–** Working relationships and communications with external stakeholders is a critical aspect of managing a project and in supporting success. External stakeholders may range from a public citizen with broad interest in the project to an agency representative with a very specific interest in one aspect of the project. The project manager is the focal point for many external stakeholder interfaces and is accountable for this important project management function. The PM may rely on functional group experts to communicate with external stakeholders when the functional group has a working relationship with the stakeholder and the stakeholder's interest is focused on the technical expertise of the functional group. In these situations, the PM should maintain an awareness of important external stakeholder interfaces. In Metro, the working relations and communications with external stakeholders and the activities listed below are typically the responsibility of the Area staff.

- Beginning at the time the scoping is planned, the PM takes a proactive approach by identifying potential external stakeholders, analyzing issues related to those external stakeholders and how their input could be obtained, and identifying functional groups that provide support in addressing issues.
- The PM works with public affairs and engagement staff (and Area staff in Metro) to develop a public engagement plan that identifies strategic methods and techniques for working with affected stakeholders. The public engagement plan is updated as necessary.
- The PM ensures that a record is established of public involvement that has taken place, including attendees, MnDOT information shared, information gathered, and how that information will be used in the project's development.
- The PM is the focal point for establishing, facilitating, and maintaining working relationships with external stakeholders. Some functional groups may also work with external stakeholders within their area of expertise. The PM will identify which functional group is best able to communicate with the stakeholder and gain functional group acceptance of these decisions.
- The PM communicates the set of stakeholders and their roles to the project team

- The PM maintains a sufficient awareness of external stakeholder views, needs and actions.
- The PM is accountable to ensure that their interfaces with external stakeholders are handled in a professional and constructive manner to both support project success and to develop and maintain effective on-going working relationships.
- The PM coordinates with public affairs (and Area staff in Metro) to ensure consistency of message with other MnDOT communications.
- The PM (in consultation with Area staff in Metro) is able to adjust the level of external stakeholder involvement based upon a stakeholder analysis and the level of sensitivity of the project.

## 5)-Functional Group Resource Management Role

**Background and General Role** – Functional groups are responsible to ensure that their tasks are completed on time and within scope and budget. Functional groups may need to augment their staff in order to meet their commitments. The PM's role is to look for staffing concerns that threaten project performance, identify whether alternative delivery methods could be used, lead efforts to consolidate consultant contracts where that is of value, and work with functional groups to establish work priorities consistent with project and program success.

- **Selection of internal resources** – Functional group leaders are responsible for optimizing their staff resources in order to deliver their tasks on time. They are also responsible to develop their staff. Therefore, the functional group leader is best suited to select staff to work on assigned project tasks. Project managers should notify functional group leads of any concerns regarding staffing. If a project manager does not believe that a functional group can deliver on time with internal resources, the project manager may elevate the concern to the project sponsor.
- **Selection of consultant resources to support a given functional group** – Functional groups are responsible for optimizing their staff resources. If they are not able to complete the assigned project tasks, they are responsible for acquiring the required external resources to complete their assigned project tasks on time and being aware of the consultant acquisition timeline. Project managers and functional groups should discuss whether to consolidate consultant contracts if multiple functional group consultants are needed. . Consultant contracts containing project management tasks are typically established, led, and administered by the project manager with involvement of affected functional groups. (See section 6 for project level consultant contracts managed by the project manager and for functional level consultants managed by the given functional group.)

- **Priority of resources** – Once projects are baselined, all functional groups are committed to deliver their tasks on time. MnDOT has incorporated an enterprise-wide project scheduling system to establish timeframes for work task completion. A project manager may request a functional group to reprioritize their work when such action is needed to support a successful project. If a functional group does not agree to reprioritize work based upon other programmatic considerations, the project manager has the responsibility to take action to support the project and may elevate the request to the project sponsor to establish district or statewide priority for the project.
- **Project schedules** – Functional groups are responsible to role load their activities in project schedules to ensure that the use of their resources can be planned and that their activities can be delivered according to the baselined schedules.

## 6)-Consultant Acquisition and Management Role

**Background and General Role** – Consultant resources may be hired to support project management activities such as the development and analysis of project concepts. These contracts would typically be administered by the project manager as a project level consultant. In some cases, a project team may decide to package the work of many functional groups into one contract where a single consultant supports multiple functional groups. For contracts such as these, the project manager and functional groups shall agree on who may be best suited to take the lead on the consultant contract. Other consultant resources may be hired to address resource shortfalls within a particular functional group and serve to complete tasks normally done by that functional group. These contracts should be administered by the functional group lead. (See section 6.b for Functional Group consulting)

### a) **Project Level Consultants**

Note: This section addresses management of consultants hired to support project management and that are typically managed by the project manager. Consultants hired to perform work for a given functional group for resource management are typically managed by the respective functional group.

It is the role of the project manager to:

- Identify project management work that can be done either internally or externally to MnDOT. If a decision is made to use external resources, the PM will coordinate with functional groups for other work that can be included in the consultant contract where that situation exists.
- Work with the consultant services section or the district consultant coordinator to follow the MnDOT process for consultant selection.

- Develop requirements for the consultant's scope of services. Include functional groups to provide or review content if their work is to be included in the consultant contract.
- Work with needed MnDOT functional groups, external partners, and the consultant services section to form an agreement with the consultant that includes a scope of services, schedule, fees, and other necessary terms and conditions
- Work with needed MnDOT functional groups and the consultant services section or the district consultant coordinator to negotiate and finalize the consultant agreement
- Ensure the consultant scope of services, schedule and budget are integrated into the overall project plan
- Determine how the PM and functional groups will interface with the consultant during the project and how the consultant's work will be managed and how deliverables will be transmitted to and from the consultant. The PM ensures that sufficient time for the review of consultant deliverables is included in the project schedule.
- Establish a sound and productive working relationship with the consultant to best support project success and to support productive working relationships on future projects.
- During the project, ensures adequate communication with the consultant for both technical and status information exists.
- Ensure the consultant is notified of any changes on the project that affects the consultant's scope of services or the details of the consultant's work responsibilities.
- Include the consultant in the project's risk management activities to the extent necessary to support project success through effective identification of risks and risk controls especially where the consultant's work generates risk and/or where the consultants work can be a part of risk controls
- Integrate consultants into public involvement activities where appropriate
- Review consultant invoices for accuracy and consistency with contract scope, schedules, and budget.
- Identify work performed by consultants for role loading in the resource management plan.

**b) Resource Level Consultants**

Note: This section addresses management of consultants hired by a functional group as part of resource management to support that functional group in delivering a specific functional task.

It is the role of the project manager to:

- Support the functional group in the acquisition of the consultant resources by defining project constraints such as scope, schedule, and budget that the functional group will need to form requirements for each consultant scope.



- Support the functional group in the identification of consultant selection criteria where that is appropriate
- Incorporate the work of the consultant into the project plan.
- If multiple functional groups need to hire consultants, the PM or consultant coordinator will lead discussions as whether the combination of the consultant needs into a single contract would be beneficial.

It is the role of the functional group to:

- Identify functional group work that can be done either internally or externally to MnDOT and to determine which work will be done externally.
- Work with the PM in situations where multiple functional groups and/or project manager might use a single consultant to make consultant selections that best support the project overall.
- Work with the consultant services section or the district and/or office consultant coordinator to follow the MnDOT process for selection of consultant and the development of requirements for the consultant's scope of services
- Work with the consultant services section to form a contractual agreement with the consultant that includes a scope of services, schedule, and fees and other necessary terms and conditions
- Work with the consultant services section or the district and/or office consultant coordinator to negotiate and finalize the consultant agreement
- Determine how the functional group will interface with the consultant during the project and how the consultant's work will be managed and how deliverables will be transmitted to and from the consultant. Functional groups will ensure that sufficient time in the schedule for review of consultant deliverables is planned.
- Establishes sound and productive working relationship with the consultant to best support project success and to support working relationships on future projects.
- During the project, ensures adequate communication with the consultant for both technical and status information happens.
- Ensure the consultant is notified of any changes on the project that affects the consultant's scope of services or the details of the consultant's work responsibilities.
- Include the consultant in the project's risk management activities to the extent necessary to support project success through effective identification of risks and risk controls especially where the consultant's work generates risk and/or where the consultant's work can be a part of the risk controls.
- Facilitate meetings with MnDOT staff as appropriate.
- Review consultant invoices for accuracy and consistency with contract scope, budgets, and schedule.
- Identify work performed by consultants for role loading in the resource management plan.

## Project Phase Roles

### 7)-Project Initiation, Scoping, and Baseline Role

**Background and General Role**– Potential projects may be proposed by several sources.

- MnDOT currently has a centralized process for initiating projects using Statewide Performance Program (SPP) funds for pavements and bridges and Highway Safety Improvement Program (HSIP) funds.
- District functional groups select projects using the District Risk Management Program funding.
- District planning staff may initiate planning or corridor studies that result in anticipated projects.
- State legislature can establish special programs such as “Corridors of Commerce” that result in a list of projects.

Regardless of how a project is proposed, the PM is the overall coordinator of scoping and is accountable for a complete, accurate, feasible and acceptable project scoping definition.

Once a project is initiated, MnDOT project managers are expected to lead projects through the scoping and baselining phase to ensure that all needed project parameters are well established. Adequately and accurately scoped projects are more likely to be successful and less likely to experience delay, scope creep, or budget overruns. Project scopes are approved by the project sponsor.

- **a) Project Initiation**  
The role for the project manager related to “Project Initiation” phase efforts applies to the following project types.
  - Statewide Performance Program (SPP) and Highway Safety Improvement Program(HSIP)
  - District Risk Management Program (DRMP)
  - Planning and Corridor Studies by the District
  - Special programs established by State legislature

The PM shall:

- On SPP, HSIP, or DRMP projects assigned by the project sponsor, the project manager assists in the development of the base purpose and need of the project and any constraints that may apply to the scoping process. Lead or participate in planning studies, as assigned by the project sponsor, to guide the outcomes such that resulting project recommendations produce projects that can be developed within a defined scope, schedule, and budget.

- **b) Plan Scoping**
  - The PM ensures that known project constraints pertaining to and including budgets, schedules, and design constraints are defined. Assumptions made as a basis for scoping are documented and communicated.
  - The PM includes the SPP, HSIP, or DRMP program manager in the planning of the scoping.
  - The PM identifies the set of MnDOT functional groups that will be needed to support the project scoping.
  - The PM identifies external stakeholders, analyzes their potential interests, and develops a public involvement plan.
  - The PM ensures that project start up information (such as the above information) is communicated to, and understood by, all appropriate stakeholders. Provides enough time for scoping and makes sure project sponsor is aware of resource needs.
  - The PM establishes how the project will be managed and how the project team will communicate and work together.
  - The PM prepares a role loaded scoping schedule for the scoping phase.
  - The PM prepares a project charter and submits the charter to the project sponsor for approval.
  
- **c) Analyze Needs and Finalize Scope**
  - The PM solicits, actively pursues, and tracks scoping involvement and input from affected functional groups and external stakeholders regarding potential needs and solutions.
  - The PM identifies potential agreements or other miscellaneous work that may be added to the scope.
  - The PM facilitates resolution of scoping comments.
  - The PM ensures that the scoping assumptions, issues, and risks identified conform to project constraints, project charter, and overall project needs
  - The PM validates final scope definition and documents scoping decisions. The PM ensures that the documentation of scoping decisions includes items considered but rejected.
  - The PM identifies scoping issues where consent has not been achieved and works with project sponsor to obtain resolution.
  - The PM works with the project sponsor to finalize scope and obtains project sponsor's approval of scoping report.
  - The PM ensures the final scope document is available or provided to all appropriate stakeholders.
  - Where alternative delivery methods may have benefit, the PM shall work with appropriate staff to consider alternative delivery methods.

- **d) Work Definition (WBS) and Schedule Development Role**
  - The PM leads work package discussions for assigned projects with affected functional groups.
  - The PM reviews selection of work packages by functional groups for alignment with project scope and initiates development of a role loaded schedule with Shared Service Center scheduling staff.
  - The PM obtains initial schedule concurrence from involved functional groups.
  - The PM works to make sure the work definition and schedule development are mutually consistent with established project constraints, project charter and scope.
  - The PM is accountable for the preparation of accurate, complete and feasible project work definition and schedule.
  
- **e) Budget Development Role**
  - The PM obtains total project cost estimate and validates that the project scope and schedule is accurately reflected in the cost estimate.
  - The PM leads the effort to identify risks to the cost estimate and analyze their impact on establishing a budget.
  - The PM works with functional groups, Shared Service Center staff, local partners, and programming staff to establish project budgets.
  - The PM ensures budgets exist for project work requiring funding.
  - The PM works to make sure the budget development is mutually consistent with established project scope, constraints, projects charter, and schedule.
  - The PM is accountable for the preparation of accurate, complete and feasible project budgets.
  
- **f) Risk Identification and Assessment**
  - The PM leads identification of risks associated with scope, schedule, and budget.
  - The PM leads development of a risk register.
  - The PM ensures that risks to schedule and budget are quantified to the extent possible and that the impacts are understood.
  - The PM ensures all appropriate functional groups and stakeholders are involved in risk identification to support a sound understanding of project risks.
  - The PM is accountable for a productive risk identification and assessment effort.
  
- **g) Role for Ensuring Scope, Budget and Schedule are Achievable and Realistic**
  - The PM reviews project scope, budget, and schedule for alignment and correlation and to determine if the project can be delivered within reasonable and achievable boundaries. Where such alignment

does not exist, the PM should notify the project sponsor of specific scope, schedule, and budget disconnects.

## 8)-Project Pre-Design Role

**Background and General Role** – The development of a project concept, layout, and environmental review can involve resolving many conflicting points of view. As a project's success relies on these issues being identified and resolved, the PM has an important role to play in this phase. For some projects, the development of concepts, layouts, and environmental documents may occur during the scoping phase.

It is the role of the project manager in the Pre-Design phase to:

- **Project Management Functions, Pre-Design**
  - Public engagement – With public engagement staff and using the stakeholder analysis done in scoping, establishes an appropriate public engagement program for the project by ensuring that a public involvement plan is developed and updated throughout the course of the project. Ensures that the input from the public is documented and evaluated. Draws upon resources and techniques to ensure stakeholders are identified and engaged in the project development. Leads or directs others in the public engagement effort. Leads coordination with local partners. In Metro, the working relations and communications with external stakeholders are typically the responsibility of the Area staff.
  - Environmental Coordination and Development of Environmental Strategies and Documents – Ensure that specialty office staff work with environmental review agencies in an early and timely manner to address environmental issues. Review environmental commitments to validate that they are reasonable. Ensures the preparation of needed environmental documents. Ensure that environmental permits are obtained and project commitments are carried out.
  - Consistent Baselines - Monitors and controls the scope, schedule, and budget baselines during the project development. Reviews changes to scope, schedule, or budget to ensure that the changes are in the best interest of the project overall and that all changes result in all baselines being mutually compatible. Develops recovery plans as needed. Submits changes to project sponsor for approval.
- **Technical Functions, Pre-Design**
  - Selection of design standards – Documents existing conditions. Works with specialty offices and communities to gather input on appropriate design considerations for the project within the project scope, desired

performance, program constraints, and the context of the project. The PM works with technical experts to facilitate the selection of appropriate design standards and communicates selected standards to all appropriate stakeholders. The PM documents the process for deriving the project design standards, including discussions with technical experts.

- Technical Data Development - Ensures that all work and special studies required to develop the project are identified and resourced by the functional groups.
- Coordination and development of concepts – Coordinates the development of the concepts and layouts to create a preferred alternative and to ensure that the project objectives are met within the project scope and program constraints.
- **Project Consultant Agreements** – Identifies work to be performed by resources external to MnDOT. The PM procures and manages project level consultants performing activities necessary for project management and concept development efforts. This role definition is separate from those consultants hired by a single functional group.

## 9)-Project Design and Pre-Letting Role

**Background and General Role** – During final design, a design lead may perform some of the roles of a project coordinator, helping coordinate the deliverables and decisions necessary to keep a project design on schedule. The project manager maintains the primary role in resolving issues that rise above the level of design coordination and ensuring that the design conforms to the established scope, budget, and schedule.

- **Project Management Functions, Design Phase**
  - Supports the design lead who coordinates deliverables and design decisions that do not affect scope, schedule, or budget with functional groups, utilities, and local governments. Project manager remains responsible for overall management of project with regard to scope, schedule, and budget and resolution of issues affecting those baselines with utilities and local governments.
  - Works with project team to resolve project issues. Escalates issues to the project's sponsor when project team members cannot consent to the decision.
  - Facilitates traffic management approach in coordination with construction, traffic, local governments, and affected businesses and landowners.
  - Supports design lead so that project construction plans are delivered in compliance with scope, budget and schedule.

- Ensure all documents required for plan turn in and project approval have been completed and submitted on time.
- **Technical Functions, Design Phase**
  - ⊖ Works with design staff so that design decisions and commitments developed during the pre-design phase are incorporated in the final design. Works with functional groups to manage scope, schedule, and budget.
  - Supports design lead, who coordinates 30%, 60%, and 90% plan review for internally developed plans. Reviews plans for consistency with scope, schedule, and budget. Supports design lead in developing cost estimate updates as needed.
  - For consultant developed plans, design lead coordinates internal functional group reviews of 30, 60%, and 90% plans and provides comments to the consultant. For consultant designed plans that include project management activities, the project manager may take a role in coordinating comments with consultants.

## 10)-Project Post Letting Role

**Background and General Role** – During construction, the resident engineer and staff are designated as the construction lead and serve as MnDOT’s authority in dealing with the construction contractor. However, the project manager still has a role to play in managing the project, public engagement, and project commitments. The PM facilitates the hand-off of the design to resident engineer and staff.

- **Project Management Functions, Post-Letting**
  - Project Changes –Assists construction lead regarding decisions on project changes that affect scope or stakeholders. Routine field changes are addressed by the construction lead. The PM maintains an awareness of change orders, why they are needed, and what impacts result from the changes to support lessons learned for future projects.
  - Transition – Organizes and facilitates meetings, as needed, to transition the project from the design phase to the construction phase.
  - Engineering Support – Identifies engineering staff that could be available to answer questions and support decision making.
  - ⊖ Public Engagement – Continues to serve as the project manager for issues dealing with project commitments or on issues that are elevated above routine day to day questions. Transfers most day to day communication to the construction lead since the construction lead is best equipped to answer routine questions. Maintains a level of awareness of project progress in order to respond to or direct stakeholder questions.

- Project Commitments – Ensures that commitments made during project development and design are addressed during development of plans and special provisions and ensures this information is communicated to the construction lead.
- Lessons Learned -Participates in lesson learned meetings with construction staff and other functional groups at the end of the construction season, if held by the district.
- **Technical Functions, Post-Letting**
  - Contract Administration – Contract administration and inspection tasks are performed by the construction lead. The construction lead keeps the PM informed of changes that affect the scope, stakeholders, or other commitments.

## 11)-Project Closeout Role

**Background and General Role** – Once a project is completed, the project will need to be closed out. While the resident office is responsible for closing out the construction contract, there are other issues that the PM may need to take action to support an effective project closure.

- **Environmental Closure** – The PM ensures that major environmental commitments and permit requirements have been met or that those that have not been met have a plan for completion.
- **Agreement Closure** – The PM ensures that agreements with stakeholders have been met or that those that have not been met have a plan and schedule for completion. Examples of stakeholder agreements may include right of way or asset releases to local units of government.
- **Work Scope Complete** – The PM validates that key stakeholders have an understanding that the project work scope has been successfully completed.
- **Post Construction Actions** – The PM communicates commitments that affect maintenance and operations to appropriate staff and validates that all post construction communications are completed.
- **Closeout of Documentation**
  - Retain project documentation created under the direct supervision of the PM as per the retention schedule.
  - Review final costs and schedules. Document and share lessons learned that could be applied to other projects.



## Leadership Role

### 12)-Project Team Leadership

**Background and General Role** – The project manager has many roles and in addition to being an effective manager of project details, the PM is a “Leader” of the project. Leadership is distinctly different from managing the technical details and schedules on a project and is a key attribute all productive PMs should exhibit.

It is the role of the project manager to:

- Exhibit sound leadership behaviors to the project team and stakeholders at all times.
- Take responsibility for the project and its issues and risks.
- Lead the team in a fashion that is aligned with sound leadership practices including the following:

**General** - The project manager is the leader of the project and is accountable to lead the project to success. The PM garners that role by being a leader and earning the respect and trust of the team. The project manager is a member of the team and exhibits leadership behaviors that are a good model for others to replicate

**Strategic Thinking** - The project manager maintains an organization wide and a project wide perspective as project directions and decisions are made. The project manager maintains a good balance of strategic and tactical thinking and actions necessary to properly lead the team and to make the project a success.

**Empowering the Team and Instilling Accountability** - The project manager instills accountability in all team members and empowers them to complete and manage their respective responsibilities. The project manager, in turn, is a role model for others by being accountable in performing the PM role and by acknowledging their own mistakes.

**Driving Results** - The project manager is able to drive project success through leading the team to successfully complete project work. The PM works with a sense of urgency. The PM drives project results through professional leadership behaviors that builds teamwork and leads the team without being arrogant or confrontational.

**Handling Difficult Situations and Risks** - The project manager addresses, and does not shy away from, difficult project situations and takes charge to

lead the team to needed resolutions. The project manager handles challenging situations with professionalism and looks for and controls risks to project success.

**Communications** - The project manager is an effective communicator of project efforts for internal and external stakeholders and acts as the key facilitator for project communications. The project manager fosters an effective and transparent communications environment within the team and between the team and other stakeholders.

**Stakeholder Management** - The project manager is proactive in making sure all appropriate stakeholders are involved in the project and are provided needed information about the project as is appropriate. The PM makes sure stakeholder expectations are realistic and aligned with project planned efforts. The PM is a good listener for stakeholder concerns and needs and addresses any issues and questions stakeholders may have.

**Learning** - The project manager constantly is looking for ways to increase their own project managing knowledge and skills.

**Improvement Mindset** – The best project managers have a continuous improvement mindset, constantly looking for better ways to perform and manage the project.

**Ethics** - The project manager performs their role in an ethical manner and in full accordance with MnDOT practices, state and federal laws and regulations and other standards of conduct that might apply. The PM's actions, behaviors and decisions are a sound and appropriate role model for others to follow.

**Team Leader** - The project manager is the leader of the team and works to make the project team an effective team to successfully complete the project. The PM maintains an awareness of team and team member project accomplishments and shortcomings and takes actions appropriately. The project manager is able to work with individuals with different personalities, different learning and communications styles and supports team members of the project team to do the same. The PM is collaborative, transparent and positive

**Decision Making** - The project manager is able to make calculated decisions where that is needed and able to make sound decisions in limited time frames where that is required. The PM makes decisions that take into account impacts on all stakeholders. The PM considers key decision criteria and alternative decisions when making decisions and leads the team to do the same. The PM maintains a good awareness of decisions that should be escalated for further review and documents decisions made by the project team.

**Managing Differences** - The project manager is able to work with all types of personalities and is able to form and lead a team of different individuals. The PM is able to constructively manage conflict within the team and works to ensure all team members are respectful of others.

**Commitment** - The project manager is committed to meeting customer needs and MnDOT's mission, vision, values and goals and demonstrates commitment through their actions. The PM demonstrates this commitment in all project activities and leads the team to do the same.

## **Core Project Management Roles**

### **13)-Project Execution, Monitoring and Control Role**

**Background and General Role** – Scope, schedule, and budget need to be managed throughout the life of a project. The PM is the individual accountable to ensure that these core project management functions are accomplished.

#### **a. Scope Change Management Role**

- The PM manages the scope of the project, owns the project scope baseline and is accountable for attaining all aspects of the project scope.
- Is accountable for maintaining a complete, accurate and feasible project scope definition throughout the project to best support project success.
- When scope changes are identified, the PM identifies positive and negative impacts to the design, construction and project end product due to the change. The PM ensures the change does not violate any previously defined requirements such as design standards, public commitments or other project requirements.
- When scope changes are identified, the PM develops, or ensures the development of, resources, budget and schedule impacts that will be caused by the scope change.
- The PM obtains the concurrence of functional groups regarding the impact of the scope changes.
- The PM ensures that all appropriate stakeholders are aware of the change and of all anticipated change impacts prior to change finalization.
- The PM validates that all necessary approvals are in place before officially accepting a scope change. Project manager obtains project sponsor approval for a scope change.
- The PM works with all affected team members and stakeholders to define, review, and finalize the change

- The PM ensures that the project plan's schedule and budget baselines are modified to reflect the scope change

**b. Schedule Management Role**

- The PM manages the schedule of the project, owns the schedule and is accountable for project schedule success.
- Functional groups are responsible for updating the status of their respective work in the project schedule.
- The PM reviews the project schedule regularly during the project to maintain an awareness of project progress and to identify work status that threatens schedule performance. This is done prior to meeting with the project team.
- Where corrective actions are needed, the PM works with the project team to determine what actions are needed and who should implement each action
- The PM tracks the progress of schedule recovery.
- The PM works with the project team to identify risks and opportunities that exist within the schedule and takes action to control the risks and to capture opportunities. The PM takes a "look ahead" approach to identify schedule opportunities and risks.
- The project manager does not change the original duration, remaining duration, or percent complete of an activity owned by another functional group without the approval of the respective group.

**c. Budget Management Role**

- The PM manages the budget of the project, owns the budget and is accountable for completing the project within project budget constraints
- The PM obtains updated construction cost estimates and reviews the project construction budget status at critical decision points during the project development.
- The PM reviews updated construction cost estimates in relation to current budgets and determines if corrective actions are needed
- Where corrective actions are needed, the PM works with the project team to determine what actions are needed and who should implement each action
- The PM tracks the progress of corrective actions identified to control budget issues.
- The PM works with the project team to identify risks and opportunities to the budget and takes action to address those risks and opportunities
- The PM brings budget changes to the project sponsor for approval
- The PM notifies functional groups if the funding source changes and impacts the project scope or schedule.

## 14)-Risk Management Role

**Background and General Role** – All projects have threats and opportunities for success and a core function of the project manager is to work to control these threats and to capture opportunities. Classic project risk management actions need to be inherent in every project and the project manager needs to lead the team in this necessary effort.

It is the role of the project manager to:

- Own the project risk management effort and to lead the project team and stakeholders during all project phases to effectively identify, assess and control risks to project success.
- Understand the basics of project risk management and have a risk management mindset that proactively looks for and controls risks to project success and looks for opportunities. The project manager helps to establish a risk management mindset in the project team to form a team approach to managing risks and opportunities.
- Work with the project team and sponsor to identify technical risks and opportunities, stakeholder risks and opportunities, and risks and opportunities to the project's schedule and budget baselines. This includes the following actions.
  - Quantify the impact of the risk where possible.
  - Work to assess and prioritize risks and opportunities to determine the most important risks to control or opportunities to pursue
  - Work with the project team to identify risk controls that will avoid the risk and/or control the impacts of the risk if it materializes as a problem.
  - Ensures selected risk controls are the most appropriate actions to control project risks and ensures that selected controls do not themselves generate unacceptable risk.
  - Ensure identified risk controls are implemented
- Report significant risks and opportunities to the project sponsor including probability, impact assessment, and risk control information. The PM elevates serious risks to an appropriate level of MnDOT leadership for awareness and potential support.

## 15)-Quality Management Role

**Background and General Role** – Quality management is an important function on any project and is a key factor in supporting project success. All members of the team and the PM are responsible for completing their work with a level of quality that clearly supports a successful project. The PM may not have the technical expertise to ensure quality work products exist in all areas of the project but the PM instills a quality mindset in the project team and works consistently throughout the project to support the completion of quality project work products.

It is the role of the project manager to:

- Own the project's quality management function and to promote quality as an important project objective.
- Work with project team members to support the completion of quality project work products.
- Work with project team to develop and maintain project schedules that allow enough time to incorporate quality control and quality assurance reviews as is appropriate to support project quality
- Ensure timely communication with stakeholders so that issues can be resolved in a timely manner and decisions can be incorporated as early as possible in the project development
- Keep project team informed of changes and work with project team to understand the impacts to quality prior to final change decisions
- Model the importance of project quality by ensuring all project management products developed for a project are error free

## 16)-Project Team on-Going Communications Role

**Background and General Role** –All projects need adequate communications to be successful. Project constraints, scope, designs, plans, work assignments, schedules, budgets, work status, and corrective actions are a few examples of the things the project manager, team and stakeholders must be well aware of. The project manager is often the key individual that can cause all needed communications related to any given project to happen and this is a very important aspects of the PM's role.

### a. **General Team Communications**

- It is the role of the PM to establish and maintain an open and effective communications environment on the project.
- It is the role of the PM to facilitate sufficient team communications to support project success and to establish sound teamwork and productive working relationships.

- It is the role of the project manager to establish and maintain periodic, consistent and substantive team communications or meetings to review project technical work, schedule progress, budget, risks, issues and corrective actions and other project information pertinent to performing and managing a given project.
- Although the PM takes the lead in team communications, functional groups are responsible to notify the PM if and when they see a need requiring the attention of the PM.
- It is the role of the PM to utilize project management tools and systems to effect adequate project communications especially in the areas of scope, schedule, and budget management.

**b. Requirements and Design Related Communications**

- It is the role of the project manager to ensure that scope, requirements and design information baselines are established and communicated to all appropriate project team members and stakeholders
- It is the role of the project manager to ensure that all project requirement and design level decisions affecting scope, schedule, budget, commitments, and other important aspects of the project are properly documented and communicated to appropriate project team members

**c. Project Scope, Schedule and Budget Status, Problems and Corrective Actions Communications**

- It is the role of the project manager to lead the project team and stakeholders in capturing and communicating project issues and corrective actions.
- It is the role of the project manager to lead the project team and stakeholders in capturing and communicating agreed upon changes to project scope, schedule and budget baselines.
- In Metro, the working relations and communications with external stakeholders are typically the responsibility of the Area staff.