

July 18, 2025

The Honorable Jon Koznick, Co-Chair House Transportation Finance & Policy Committee 5<sup>th</sup> Floor, Centennial Office Building Saint Paul, Minnesota 55155

The Honorable Scott Dibble, Chair Senate Transportation Committee 3107 Minnesota Senate Building Saint Paul, Minnesota 55155 The Honorable Erin Koegel, Co-Chair House Transportation Finance & Policy Committee 2<sup>nd</sup> Floor, Centennial Office Building Saint Paul, Minnesota 55155

The Honorable John Jasinski, Ranking Minority Member Senate Transportation Finance & Policy Committee 2227 Minnesota Senate Building Saint Paul, Minnesota 55155

Re: MnDOT Oversight Reporting on Light Rail Transit #2

Dear Legislators,

The Minnesota Department of Transportation is pleased to provide this report as required by Minn. Stat. 473.3999.

The law requires that the commissioner submit all recommendations regarding light rail projects to the chairs and ranking minority members of the legislative committees with jurisdiction over transportation policy and finance within 30 days of submitting its recommendations to the Metropolitan Council.

This oversight report details MnDOT's recommendations related to schedule for planning and design delivery: an analysis of the critical path for delivery of plans and specifications, contract documents, and risk assessment analysis of plan content and quality as defined in Minn. Stat. 473.3999, Subd. 2(a)(2). This was submitted to the Metropolitan Council on July 7, 2025. MnDOT anticipates a future report on the Blue Line extension project scope, schedule, and budget no later than August 2025.

Please contact me if you have questions or comments about this report at <a href="mailto:nancy.daubenberger@state.mn.us">nancy.daubenberger@state.mn.us</a>.

Sincerely,

Nancy Daubenberger, P.E. (MN)

Nancy Daubenburger

Commissioner

cc: Charlie Zelle, Chair, Metropolitan Council



## **Legislative Request**

This report is issued to comply with Minn. Stat. 473.3999.

# 473.3999 LIGHT RAIL TRANSIT CONSTRUCTION; COUNCIL AUTHORITY; STAFF ASSISTANCE; PROJECT MANAGER QUALIFICATIONS.

Subdivision 1. Powers.

The council may exercise the powers granted in this chapter and in other applicable law, as necessary, to plan, design, acquire, construct, and equip light rail transit facilities in the metropolitan area as defined in section 473.121, subdivision 2.

Subd. 2. Staff and project assistance required; Department of Transportation.

- (a) Notwithstanding any cooperative agreement between the commissioner of transportation and the council in section 473.3994, subdivision 1a, if the council is the responsible authority, the commissioner of transportation must provide staff and project assistance to the council for review and oversight of the project's development. The council must utilize the Department of Transportation staff and project assistance for:
  - (1) the appropriate delivery method selection for the design, planning, acquisition, construction, and equipping of light rail transit projects;
  - (2) risk assessment analysis and cost analysis in the planning, designing, and construction of a light rail transit facility or a new light rail transit project, including but not limited to:
    - (i) a critical path schedule for the planning and design phases of a project developed jointly by the council and the commissioner of transportation;
    - (ii) peer reviews or value engineering reviews at various milestones established in the critical path schedule created under item (i); and
    - (iii) council participation in cost estimate reviews by third-party independent cost estimators in conformance with Federal Transit Administration regulations and guidance;
  - (3) contractor and subcontractor schedule analysis and contractual requirements, including but not limited to:
    - (i) development and review of requests for proposals and bid documents prior to advertisement and solicitation;
    - (ii) review of bids submitted prior to the award of bids;
    - (iii) review of draft contractual language prior to the execution of project contracts;
    - (iv) review of change orders for major cost items exceeding \$500,000 and schedule delays of more than 30 calendar days prior to the execution of a change order; and
    - (v) participation in any dispute resolution process that may arise to address competing claims or disputes between a contractor and the council;

- (4) light rail transit project cost management and budget analysis for the planning, designing, and construction of a light rail transit facility or new light rail transit project, including but not limited to:
  - (i) recommendations to address or manage cost overruns or discrepancies, funding sources, contingency funding sources and availability, and the management of state or county financial resources;
  - (ii) recommendations on appropriate contractual enforcement mechanisms and penalties for any council agreement with a contractor for a light rail transit project; and
  - (iii) the development of future cost estimates and communication of projected cost increases for a light rail transit project; and
- (5) any other areas of expertise that the Department of Transportation may offer.
- (b) The council must provide the commissioner of transportation all relevant information required by this section.
- (c) Staff from the Department of Transportation providing project assistance to the council must report to the commissioner of transportation. Staff assistance from the Department of Transportation must include at least one licensed professional engineer.
- (d) If the commissioner of transportation provides the council with staff and project assistance for the development of a light rail transit project as provided under this section, the commissioner must submit and detail all recommendations made to the council to the chairs and ranking minority members of the legislative committees with jurisdiction over transportation policy and finance within 30 days of submitting its recommendations to the council.
- (e) The council must give strong consideration to utilizing input or recommendations developed by the commissioner of transportation. If the council decides against utilizing input or recommendations from the department, the council must reconcile significant deviations to the extent practicable and that portion of the project cannot move forward from the critical path schedule's milestone until the recommendation is reconciled. If the council has sufficient reasoning to justify not utilizing input or recommendations from the department, the council must, within 30 business days, provide written notice and documentation of the decision to the department and the chairs and ranking minority members of the legislative committees with jurisdiction over transportation policy and finance. The notice and documentation must provide the reasons why the council is not utilizing the input or recommendations provided by the department.

#### Subd. 3. Project costs.

The project budget is responsible for costs incurred by the commissioner of transportation for duties required in this section. The council must only use direct appropriations in law or federal sources to pay its portion of light rail transit capital construction costs.

#### Subd. 4. Project manager; qualifications.

If the Metropolitan Council is the responsible authority, the council must select a qualified project manager and lead project engineer with at least ten years' transportation industry experience to lead the planning, design, acquisition, construction, or equipping of a new light rail transit project.

## Report #2: Schedule, Critical Path, and Quality of Design

The 2024 legislative session resulted in legislation which increased MnDOT's involvement in the Blue Line Extension and future light rail projects. The legislation seeks to leverage MnDOT expertise in contracting, project management, and program delivery to provide greater accountability and oversight in these large-scale infrastructure projects.

The legislation requires that the Metropolitan Council use MnDOT staff and project assistance for risk assessment analysis in the planning and design of a new light rail transit project. This includes jointly developing a critical path schedule for the planning and design phases of the project and assessing risk for planning and design delivery as noted in Minn. Stat. 473.3999, subd. 2(a)(2).

MnDOT uses schedules during the design phase of project development to monitor the progress of design work and forecast the date construction will start. MnDOT schedules include work breakdown structures of design tasks and define a critical path of those activities that are dependent upon each other and essential to complete in a timely manner. The Project Management Institute is considered the leading authority on project management and is responsible for developing and administering the project management professional certification. PMI emphasizes the importance of project scheduling with a work breakdown structure as a key tool for planning and reporting on project progress. The work breakdown structure lists the tasks to be completed and milestones to be achieved. The schedule shows how tasks are dependent upon each other, as well as sequencing and when tasks need to be accomplished to complete project work on time. A good schedule, including identifying tasks on the critical path, has the greatest positive influence in the early stages of the design. Early in the design process a project team can take preemptive measures through the management of resources to avoid potentially costly reactive measures. A well developed and maintained design schedule is an effective and proactive project management tool that serves to communicate project status, identify potential causes of delay, and give a realistic expectation for the start of construction.

In May 2023 the Council executed a program management consultant services contract to develop and maintain a design schedule for proactive monitoring and managing risks associated with the project scope, schedule, budget and quality. Task 9060 of this contract identifies the design schedule requirement and identifies the added requirement of producing a staffing plan, indicating the design schedule shall also be resource loaded. The contract further requires the program management consultant to incorporate the design schedule into the project integrated master program schedule.

In June 2023 the Council executed a risk management consultant services contract to assess project risk and mitigation of risks associated with the project scope, cost estimate, and schedule with a focus on elements of uncertainty. The objective noted is proactive monitoring and managing of risks associated with the scope, schedule, budget, and quality of work to avoid surprises. A detailed planning and design schedule allows for a proactive independent assessment of risk.

MnDOT uses checklists as a tool to measure plan completeness and minimally required content as part of the department's quality management system when presenting design plans for review at various stages of completion. Checklists, or some other metric of plan content, aid design teams by providing prompts related to expectations of plan content and can support good plan organization. As the design of a project progresses, the value of measuring the content and completeness of a work product increases in importance and value. Checklists are an effective and

proactive management tool that serve to communicate expectations of plan content, organization, and completeness.

The executed engineering services consultant contract, Task 3010, identifies numerous deliverables and the completion of activities with submission of 30 percent plans and specifications. Task Series 4000 identifies 60 percent, 90 percent and 100 percent plans and specifications deliverables.

The executed risk management consultant services contract, Task 12010, identifies independent peer reviews as a requirement that include reviewing design and engineering deliverables at 30 percent, 60 percent, 90 percent and 100 percent milestones.

Developing and sharing a design schedule that includes a work breakdown structure and having metrics such as checklists to measure plan content and completion are proactive design project management tools that MnDOT routinely uses to deliver its construction program. Schedule and checklist metrics work together to communicate the status and comprehensiveness of work product and allow MnDOT project managers to proactively direct resources and make efforts to control project delivery costs. These tools minimize the risk of delay and risk to additional potential costs associated with mitigation of delays or change orders during construction from incomplete plans and specifications and help maintain confidence in a management team.

### **MnDOT Recommendations**

In December 2024 MnDOT offered three recommendations related to the selection of appropriate contract delivery methods; all have been accepted by the Council.

- 1. MnDOT recommends the development of best value criteria that are structured to increase bidder participation and solicit constructability feedback.
  - As of the writing of this report the Council has produced a draft Best Value Procurement Plan and MnDOT has provided comments. Contract specifications are in progress.
- 2. MnDOT recommends the Council increase its staffing capability and expertise in the roles related to contract delivery.
  - The Council appointed a project director for the Blue Line project with extensive transitway experience including BRT and LRT projects. For the best value procurement, the Council is utilizing the experience of an engineer and construction manager in the Capital Programs Division who previously administered a best value project for MnDOT. In addition, the Council has hired legal counsel with expertise in construction contracting including best value and has retained consultants with experience developing and managing best value procurements on transitway projects nationwide as part of the project consulting team.
- 3. MnDOT recommends Council seek additional alternative delivery authority for horizontal construction in a future legislative session.
  - The Council has sufficient alternative delivery authority for the planned procurements on the Blue Line project. MnDOT understands the Council plans to seek additional alternative delivery authority for horizontal construction in a future legislative session.

To study risk and evaluate a critical path schedule for the planning and design of the Blue Line Extension project MnDOT is recommending two additional actions.

- 4. MnDOT recommends the Council provide additional detail in the project design schedule and integrate into the integrated master program schedule for delivery of the contract documents, plans and specifications. MnDOT recommends development of a detailed design schedule with task level detail by engineering discipline to support an analysis of the critical path schedule for the planning and design phases of the project as required in the engineering services contract. This level of detail will enable the identification of activities and tracking of progress and completion of numerous engineering task elements and plan deliverables which if behind schedule may lead to moving the letting date or incomplete contract documents. Within the schedule, links to prerequisite tasks and milestone deliverables should be made to define activities on the critical path which cannot be completed at a later date without increasing cost, reducing quality, or impacting the date of bid letting.
- 5. MnDOT recommends the Council further define the content required to meet 30 percent, 60 percent, 90 percent, and 100 percent complete contract documents, plans and specifications, and validate deliverables to meet consultant contract requirements. MnDOT uses checklists as a guide for roadway designers that provide a uniform measure of plan completion and content. Checklists serve to identify the tasks to be completed and in an order that allows for efficient and effective agency reviews. Checklists also measure progress and reduce the potential for submittal of an incomplete set of contract documents. Independent validation of contract deliverables at important milestones, including design plans and specifications, is required by the risk management services contract and is anticipated with all project submittals.