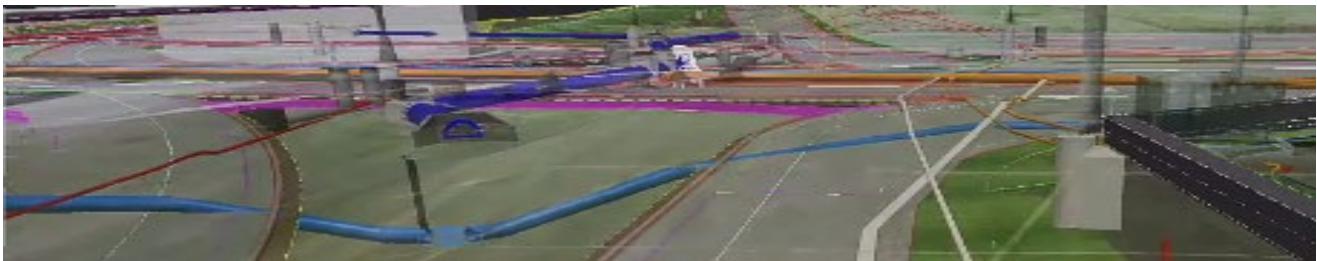


Asset Management for Project Managers/Design Engineers

Due to shifts in demographics, technology, environment, economy, and travel behavior in Minnesota, changes are happening in how people and goods move throughout the State. MnDOT pursues innovative tools and advanced data analyses to address these shifts and yet create a cost-effective and safer transportation network.



MnDOT believes it is vital to practice and continue to advance Transportation Asset Management because TAM:

- Is a performance-based approach that uses agency goals and objectives to drive resource allocation. Asset management relates resource needs to the construction, maintenance, and operation of transportation infrastructure assets.
- Enables transportation agencies to improve accountability, decision-making, and coordination between maintenance and capital programs and better manage the available funding.

The collection, management, and analysis of quality asset inventory and condition data is a critical part of asset management. Asset management implementation benefits from well-planned information technology systems that consider the decision-making processes that agencies use to keep assets operational and safe.

MnDOT made a strong commitment to managing our assets by adopting an [Asset Management Strategic Implementation Plan](#), which sets a departmental vision (and set of strategic objectives and action plans). In other words, MnDOT is committed *“to effectively manage transportation assets by mitigating risk, optimizing return on investment, and using the best available information and tools.”*

Maturing Asset Management at MnDOT

Project Managers and Designers play a critical role in the asset management picture. The following are a few of the ways their roles help:

1. Encourage consideration of “Total Cost of Ownership” in decision making. Consider maintenance and operations costs as well as initial construction costs.
2. Promote data interoperability throughout MnDOT software systems for building information modeling (BIM) to reduce duplicate data entry across the agency.
3. Take advantage of existing asset related inventory and performance data in enterprise asset management systems to support comprehensive scoping decision making.
4. Support the capture of asset as-built information so the data can be used for planning and maintenance tracking. Determine practice to be used for each project.

Project Managers and Design Engineers are both consumers of asset data as well as producers of asset data. As the design world moves to 100% digital delivery, the opportunities for more efficient data flow and advanced analytics strengthens. One of the challenges in determining the level of detail in asset management data collection is the potential diversity of its use. Current methods generally limit the detail to a level useful for asset management and project planning and scoping. As developments in BIM continue, it is possible to envision an environment where data would be increasingly useful, even for project development and some design. Continued business process development, and futuristic thinking has heightened both the importance, and the influence of the role project delivery roles.

