

PROJECT SUMMARY

Fiber Optic Feasibility and Partnership Study

Project Location:

Statewide

Start – Finish Date:

July 2019 – February 2022

Project Status:

Complete

Project Partners:

Ernst & Young Infrastructure
Advisors

MnDOT Project Cost:

\$639,000

Projects with Similar Characteristics:

Project Description:

The Fiber Optic Feasibility and Partnership Study aimed to develop a strategic plan for future fiber connectivity by utilizing public-private partnerships. The project involved the following tasks:

- Reviewed state policy and legal barriers.
- Assessed the state's current right-of-way assets.
- Identified fiber and telecommunications gaps and needs.
- Developed an economic opportunity valuation by mapping the state's assets.
- Met with private industry to gauge interest in partnerships.
- Coordinated across MnDOT and other DOTs for best practice reviews.

Project Objective:

- Create a tool to assess the state's fiber optic capacity and identify areas to build out broadband infrastructure.
- Identify funding gaps and opportunities to partner with the private sector to build out the fiber optic network.
- Expand the telecommunications network along highway right-of-way.

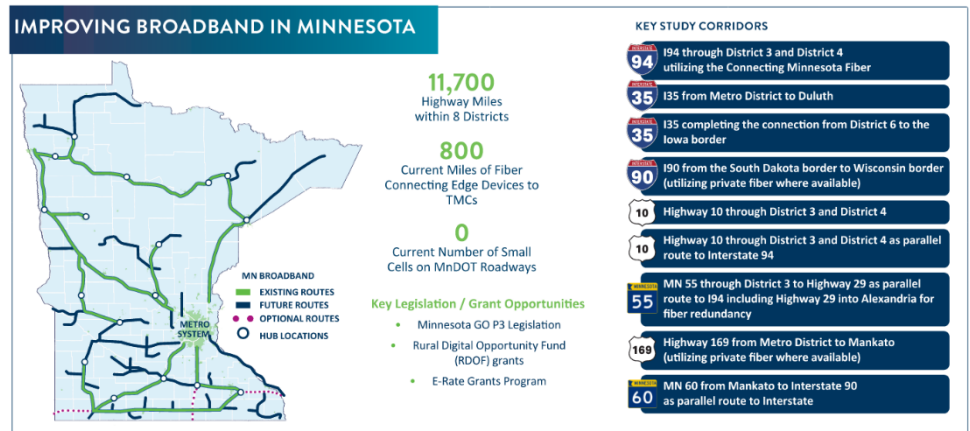


Figure 1: Improving Broadband Informational Graphic

Project Accomplishments:

- Created a tool for MnDOT to use to assess the existing fiber optic network and identify areas for growth.
- Gauged private interest in partnerships with MnDOT.
- Identified several roadblocks that may make public-private partnerships difficult to come to fruition.
- Developed a short-term and long-term strategy for MnDOT to use as a guide in future connectivity planning.

Key Findings:

Fiber Gaps

To enable full connectivity, it would require approximately \$400 million dollars to be invested in fiber optic and wireless technologies.

Private Partnership

Through outreach efforts, it was determined that most private entities would have liked to partner with MnDOT, but the partnership models differed widely.

Lessons Learned:

- Existing policies within MnDOT made it difficult to successfully utilize public-private partnerships.

Potential Next Steps for MnDOT:

- Create a group within MnDOT with representatives from IT, ITS, broadband, and transportation programs to ensure that utility and telecommunications programs are coordinated as needed.
- Continue to evaluate the benefits of public-private partnership and work to modify policies/laws that make the partnership difficult to happen.
- Continue to evaluate areas within the state that should be connected to fiber optic communications.
- Apply for federal fiber grants to assist with funding for supporting broadband infrastructure investments.
- Conduct an RFI to gain a better understanding on private interest for partnerships.
- Create a dashboard to track progress of fiber installation.
- Incorporate results into a MN CAV Readiness map / database.



Figure 2: Next Step Project Initiatives