

MOOSE Net + Maine's Middle Mile

Summer 2023



What is middle mile?

Middle mile is the regional fiber optic backbone that enables last mile internet connectivity to homes, businesses, and other users at the local level. It is made up of high-capacity fiber that carries large amounts of data at high speeds over long distances.

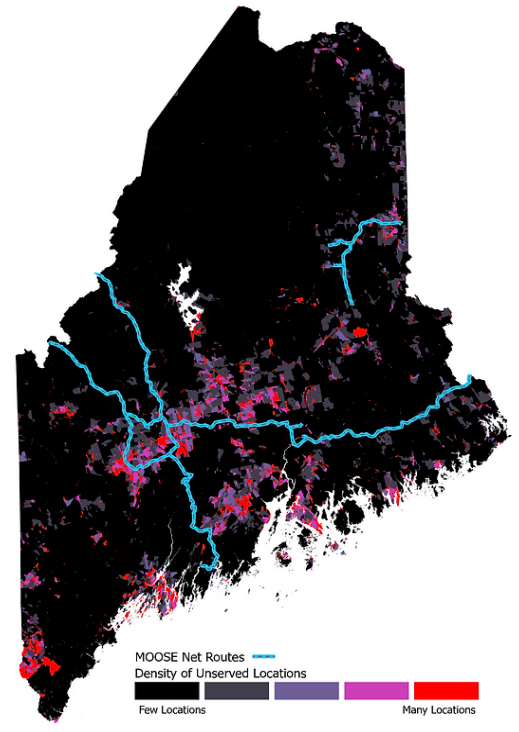
What is the problem?

Maine's existing internet infrastructure is a patchwork of individual private networks. The middle mile infrastructure supporting these networks was generally not created to support the goal of universal broadband access throughout the state. While public and private investments over the last decade, including the federally-funded Three Ring Binder, have added essential infrastructure to support this goal, the job is not done.

Introducing MOOSE Net

The **Maine Online Optical Statewide Enabling Network** (MOOSE Net) is a new strategic initiative created by the Maine Connectivity Authority to address these challenges. MCA recently joined with key partners to develop a \$53 million project to construct the MOOSE Net. In June, Maine received a **\$30 million competitive grant award** from the National Telecommunications Information Administration's (NTIA) Enabling Middle Mile Broadband Infrastructure Program.

MOOSE Net will cover **530 route miles** through **131 communities**, representing over **11,000 unserved local businesses and residents**. It will reach more than **200 community anchor institutions**, including schools, hospitals, libraries, local government buildings, and civic centers.



MOOSE Net's expansion will deploy open-access fiber "highways" that will:

- Facilitate affordable broadband access to thousands of households along the route.
- Ensure Maine's digital 21st-century infrastructure that businesses need to thrive and grow
- Add resiliency to Maine's internet networks, eliminating single points of failure
- Connect community anchor institutions like schools, libraries and hospitals
- Achieve financial self-sufficiency and create a strong platform for future expansion

maineconnectivity.org/middle-mile

Frequently Asked Questions

What makes Middle Mile infrastructure different from fiber serving my house?

The internet is a network of neighborhood and community sized networks. Middle Mile infrastructure provides the connection between those smaller community sized networks. While it uses the same fiber optic technology, it has more limited access points, is generally more directly routed, and is higher capacity than a traditional Last Mile network.

Will Maine Connectivity Authority become a retail ISP? Will my house connect directly to MOOSE Net?

Maine Connectivity Authority (MCA) will not serve individual houses via MOOSE Net. MCA will act as an underlying infrastructure provider for those ISPs who do serve communities. MOOSE Net will provide additional connectivity options to those Last Mile networks

What does this mean for broadband access in my community?

Depending on the region, it means either the first available Middle Mile infrastructure, or an additional option for Middle Mile connectivity to the larger internet. MOOSE Net also includes 9 colocation huts along the route, giving providers a secure, reliable place to deploy equipment at their network edge. In practice this could translate to lower capital and/or operating expenses for a project, which should in turn mean lower subscription prices for end users. It also reduces the possibilities of a single point of failure for internet traffic in the state. Having more routes and internet exchange points in the state means more resilience for Maine's internet users.

Why is this important for Maine?

As Maine prepares to deploy Broadband Access, Equity, and Deployment (BEAD) Program funding to connect the unconnected, MOOSE Net will stretch those dollars further by providing additional connectivity options to Last Mile networks. MOOSE Net will also provide connectivity options to Community Anchor institutions, other state Agencies, and commercial users. As demand for both wired and wireless connectivity continues to increase, having robust Middle Mile and colocation infrastructure in place in the state is critical to meeting that demand.

Who is going to build MOOSE Net?

MCA anticipates a thorough RFP process to identify 3rd party construction partners for environmental compliance, detailed design, and construction work.

When will it be complete?

MCA anticipates that construction will be substantially complete two years after the grant is awarded.