



# Frequently Asked Questions

Answers to Commonly Asked Questions About the REACH-3MC Project



## 1. What are the benefits to the Merit Community?

For the first time in our history, Merit will have the ability to connect our Members in the Upper Peninsula with our Members in the Lower Peninsula via a fiber-optic connection. This interconnection will allow Merit Members to collaborate and share resources and information over Merit's network. REACH-3MC supports Merit's Mission to serve our Members in every area of the state. Merit has been working with rural communities for over a decade to help them obtain faster, more reliable and more affordable service. With REACH-3MC in place, Merit will be able to offer the benefits of Merit Membership and improved connectivity to Merit's high-performance network in more areas in Michigan.

## 2. What are the benefits for Michigan?

REACH-3MC will create a statewide network for Michigan's Community Anchor Institutions to leverage. Access to statewide infrastructure for the K12, Library, Community Colleges, State and Local Government, and Public Safety communities will enable our public institutions to cut costs, consolidate resources, share services, collaborate and provide more to Michigan citizens.

REACH-3MC will make tremendous progress toward the goal of ensuring that all Michigan residents, regardless of geography or location, will have equal access to information. Equal access to information for all will be imperative for Michigan to revitalize our economy. And REACH-3MC will create a foundation that can be leveraged to the benefit of the state for years to come.

A study by Gartner Consulting concluded that accelerating the build out of a statewide broadband infrastructure in Michigan could result in a \$440 billion increase in Michigan's gross state product over the next ten years.

## 3. When will this infrastructure be built in my area?

The REACH-3MC network will be completed by Late Summer 2013. Merit Network began construction on REACH-3MC in December 2010. The plan calls for the build to continue in several locations simultaneously. Merit plans to "light" or provision service over various portions of the network as construction is completed.

Merit's REACH-3MC homepage gives you the ability to check the status of the overall project and the individual projects in specific cities across the state. For specific information on project timelines in your area visit:

[www.merit.edu/meritformichigan/](http://www.merit.edu/meritformichigan/)

## 4. How do I receive more information about REACH-3MC in my area?

Updates are provided on the REACH-3MC project website:

[www.merit.edu/meritformichigan/](http://www.merit.edu/meritformichigan/)

Once you are connected to the webpage, **you** can either click on the name of a community on the map, or select your community from the pull down menu just below the map. After selecting a community, the content in the right-hand column will change to the latest update for that community. Also be sure to scroll to the bottom of the page where there are links to the *Community Update Archive* and to *View Maps and other Documents Related to Your Community*. These two links will appear once construction has begun in an area.

## 5. Will Merit provide Internet service to homes and for-profit businesses?

Merit Network has served the education and research community for over 40 years. Merit's mission is to connect Michigan's Universities, K12 schools, Libraries, Community Colleges, Health care providers, State and Local Government and Public Safety entities to our high-performance, regional network.

REACH-3MC is a "Middle Mile" network that will build "backhaul" into regions throughout the state. REACH-3MC is comparable to I-75. It will create a big pipe and work with ISP companies so that they can connect to the pipe ("the network"). Merit Network will directly connect Community Anchor Institutions to the pipe ("Merit's network") because of their unique needs and Merit's mission. Local ISPs and REACH-3MC Sub-recipients will supply the on-ramps ("connections to the network") for homes and businesses.

## 6. How do I connect to the REACH-3MC Network?

If your organization is a Community Anchor Institution, a Public or Private University, Community College, Library, K-12 Intermediate School District, School, Governmental Agency, Public Safety Entity or a Non-profit, please contact Merit Network for service by sending an email to [info@merit.edu](mailto:info@merit.edu)

If your organization is a Community Anchor Institution, you also find it helpful to read the Guide to Connecting to Merit's Network, which can be found at:

[www.merit.edu/meritformichigan/documents/](http://www.merit.edu/meritformichigan/documents/)

If you are seeking service at your home or for-profit business, please contact your local ISP or one the REACH-3MC Sub-recipients listed at:

[www.merit.edu/meritformichigan/subrecipients/](http://www.merit.edu/meritformichigan/subrecipients/)



## 7. Who is participating in the REACH-3MC Project?

The REACH-3MC infrastructure is what is referred to in the telecommunications industry as a “condo build.” Merit is the sole owner of the fiber sheath (cable), and inside the sheath, fiber strands are divided up among the participants. Merit Network owns fiber within the sheath that serves as an extension of Merit’s backbone network. Merit will use its portion of the fiber to connect Community Anchor Institutions to Merit’s statewide network in Michigan. If you have a question related to Merit’s portion of the fiber, please contact Merit by sending an email to [info@merit.edu](mailto:info@merit.edu)

In a “condo build,” each participant will access their own strands and operate its own network within the fiber sheath, separate from any of the other participants’ networks. Each participant will determine what services they will offer and the cost and delivery method for those services in each community. The networks will not be interconnected. For example, obtaining service from one participant does not mean that your service provider’s network is connected to the other owner’s network.

REACH-3MC Sub-recipients will own fiber strands inside the sheath as well, which they will use to provide service to ISPs, homes and businesses. To view a list of REACH-3MC Sub-recipients:

[www.merit.edu/meritformichigan/subrecipients/](http://www.merit.edu/meritformichigan/subrecipients/)

## 8. What services will be provided on the REACH-3MC Network?

Merit will connect Community Anchor Institutions to Merit’s 10 Gigabits-per-second (Gbps) backbone in Michigan, enabling them to take advantage of Merit’s hosted, end-to-end, IP-based services, 24x7 support and leading-edge connectivity. Direct connections to Community Anchor Institutions will be provisioned with 1 Gbps capacity, which can be increased over time with an upgrade in optronics. Merit’s portion of REACH-3MC fiber will allow up to 40 10 Gbps waves for optimal support of the most advanced IP-based services, resource-sharing and collaboration.

The design of the REACH-3MC network easily supports legacy technologies common in some ISPs, while providing a smooth transition to new, high-performance network and application technologies. The network can be leveraged for voice, video, and data services.

## 9. Will REACH-3MC harm local Internet Service Providers (ISPs)?

The REACH-3MC proposal was designed not to harm or disadvantage any incumbent ISP in the service area, but rather it will support their business operations. In rural areas, a large percentage of the cost of delivering broadband service to the community is the cost of obtaining backhaul. ISPs have reported that on average 80% of their costs are for backhaul. The investment from the Stimulus Package (ARRA) through BTOP (Broadband Technology and Opportunity Program) lowers the cost for any ISP (including Merit) seeking to serve the areas REACH-3MC covers.

The grant requires REACH-3MC to operate on an “Open Access” platform. Merit Network and its REACH-3MC Sub-recipients will offer interconnection points wherever it is technically feasible at reasonable rates and terms to requesting parties. Requesting parties will not be unreasonably withheld from accessing the network where capacity permits.

## 10. Why are there some areas of the state that REACH-3MC does not appear to cover?

The REACH-3MC route was determined with input from Merit Members and Community Anchor Institutions in areas of the state where their connectivity needs were not being met, and input from REACH-3MC Sub-recipients where they desired access to Central Office facilities. Merit also coordinated with other organizations submitting proposals for federal broadband funding to maximize investment in our state and ensure that as many areas as possible would see access to 21st century infrastructure. For example, Michigan’s Thumb is not covered by REACH-3MC, though that area applied for and was granted funding for their own project. Merit’s network will interconnect with the Thumb area network to complete a statewide network.

Even though REACH-3MC may not pass through your community directly, it does not mean that your area will not see benefit from the network. ISPs have reported that up to 80% of their costs are for backhaul. By creating an “Open Access,” “Middle Mile” network that solves the backhaul problem in your community, REACH-3MC will help lower the cost for a third party ISP to provide service in your community. Merit will work with interested communities to determine how best to leverage the new infrastructure.