



Fiber Optic Ring

Medina County Port Authority
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Medina County's Need: Open, High-Capacity Network Infrastructure

The Medina County fiber optic ring will be an 155 mile, 96 fiber strand cable that will provide a wholesale platform for retail broadband services to a wide variety of users:

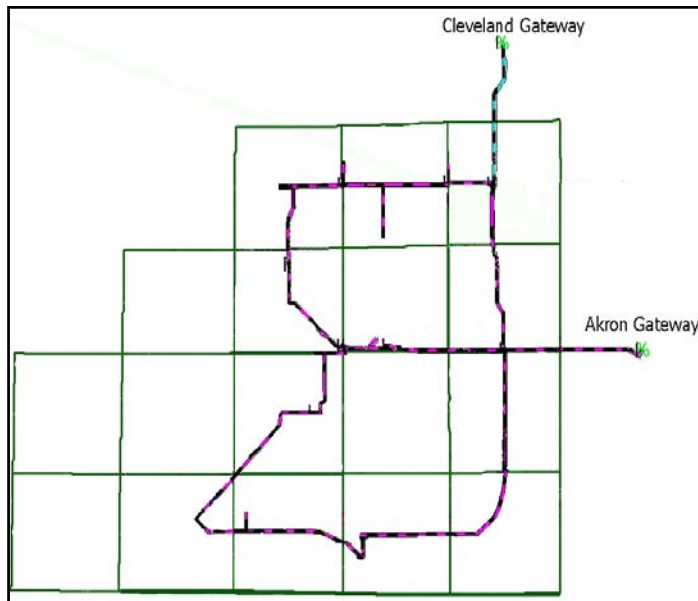
- County government, Local schools and Libraries
- Businesses & Hospitals
- Local safety forces
- Medina County University Center

The fiber ring will significantly increase broadband capacity and will have built-in redundancy as an integral part of its design. Included in this redundant design will be direct connections at two Points of Presence (POP) - Cleveland

and Akron. (See map below) The current communications infrastructure lacks this level of redundancy.

The fiber network was identified as the top priority project by the Medina County eCommunity Leadership team under the direction of the Connect Ohio initiative, which aims to identify the local strengths and weaknesses and cast a vision for a future that takes full advantage of high-speed connectivity.

The fiber ring will provide immediate cost savings to the County's own communications system by using the fiber ring to access multiple vendors, eliminate the problem of limited phone access through expensive long distance, avoid duplication of institutional capital expenditures for fiber infrastructure and serve to increase our business tax base through retention an attraction of new businesses.



"Our core proposition is that there is no economic future in NE Ohio without a broadband strategy. The 21st century global economy is running on top of broadband." Lev Gonick, CIO, CWRU

MCPA Fiber Ring Project Endorsements

- Brunswick City Council
- Medina City Council
- City of Wadsworth
- Medina Area Chamber of Commerce
- Medina County District Library
- Medina General Hospital
- Westfield Group
- Medina County Schools ESC
- University of Akron and others.

Financing of Fiber Optic Ring: Users will Pay

- The Medina County Commissioners will finance the project through the sale of \$7.3 million in non-tax revenue bonds payable over a 15-year period.
- Taxes will not be used to pay for the construction or operation of the MCPA Fiber Optic ring.
- The Medina County Port Authority (MCPA) will provide administrative services and oversee the operation of the ring. MCPA will only provide access to the ring and the revenues generated through access fees will be used to retire the bond debt.
- Projected debt schedule is based on **two-thirds of project for public, tax-exempt purposes**, the other one-third of project will be based on non-public or private sector uses.

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Informative Websites

Baller Herbst Law Group:

www.baller.com/comm_broadband.html

Tech Web: www.techweb.com

Institute for Local Self-Reliance:

www.ilsr.org

Connect Ohio: www.Connectohio.org

www.medinacountyportauthority.org

“At the end of the day, local governments, accountable to local citizens understand their own needs and should have the freedom to find local solutions to local problems. We should not require citizens to beg big corporations to deploy systems when these citizens have the power to take matters into their own hands.” -
Connecting the Public: The Truth About Municipal Broadband, Consumer Federation of America (April, 2005)

Medina County Port Authority Fiber Optic Ring Open Service Provider Network Principles*

Principle 1: Open and wholesale

Network ownership is public and separated from the private enterprises that provide content and retail services.

Principle 2: Carrier-class Quality of Service

Assurance of the highest levels of reliability and redundancy.

Principle 3: High, scalable bandwidth

Provides true broadband service.

Principle 4: Open and independent architecture

Standards-based solution to accommodate a broad range of service providers and the lowest possible cost per megabit.

* Excerpted from “Open Service Provider Networks,” Ben Gould, Vice President and Chief Marketing Officer, DynamicCity, Inc., *Broadband Properties* (May 2005)

MEDINA COUNTY FIBER NETWORK

Newton’s Telecom Dictionary, the *defacto* standard in the telecom industry, defines “broadband” as a minimum of 45 Mbps. The FCC says it is 200 Kbps.

- Japanese residents have access to Internet connections of 47 Mbps for only \$26 per month. On a monthly price per megabit, the United States averages around \$35 while Japan averages 90 cents.
- The United States, birthplace of the Internet, has fallen from world leader in broadband deployment in the 1990s to 19th place in 2006. We are in danger of being passed by Slovenia in early 2007.

Additional Sources:

“Open Service Provider Networks: Taking America’s Communities Into the Digital Age” Ben Gould, Vice President and Chief Marketing Officer, DynamicCity, Inc., *Broadband Properties* (May 2005) DynamicCity, Inc., are designers of the Utah Telecommunication Open Infrastructure Agency (UTOPIA), a pioneering municipal initiative of 14 Utah cities designed to bring at least 100 Mbps to homes and 1 Gbps to businesses through fiber.

For more information see:

www.utopianet.org

TELECOMMUNICATIONS: Subscriber Rates and Competition in the Cable Television Industry

(United States General Accounting Office, March 25, 2004)

What GAO Found. Competition leads to lower cable rates and improved quality. Competition from a wire-based company is limited to very few markets — less than 2%. However, where available, cable rates are substantially lower (by 15 percent) than in markets without this competition. FCC Data shows even larger savings for consumers in areas with a competing wire-based competitor. In Keller, Texas, where Verizon began competing with the incumbent cable operator, the cable company reduced rates by 20%.