

City of Alexandria, Virginia

City I-Net and Municipal Broadband

December 2015



Defining Municipal Fiber



- There are 2 primary elements of the Municipal Fiber project:
 - Institutional fiber optic network serving City, Library, and ACPS facilities
 - Currently lease our network from Comcast
 - Fiber optic network serving Alexandria businesses and residential premises
 - Primary provides high-speed internet, but could be used to provide television and phone service with right franchisee

Institutional Network



- Alexandria's institutional users (City, Libraries, ACPS) require a robust, highly reliable fiber network
 - Improve existing network reliability and performance
 - Support public safety, education, and customer service delivery
 - Promote future innovation in government
 - Serve as a backbone for a Community Broadband network
- Currently lease institutional fiber network from Comcast
 - Need protection against future cost growth and changing needs
 - Existing fiber lease expires next fall

Community Broadband



- Alexandria's small businesses and residents have consistently asked for additional internet service options beyond Comcast and Verizon DSL
 - Larger businesses have ability to buy direct fiber connections
- Industry has been unwilling to come into the City and compete with incumbents for residential and small business
- A citywide fiber-to-the-premises (FTTP) network would provide our community with internet service that meets today's standards
- Would require a fiber backbone (City I-Net or other)

Municipal Fiber and Economic Development



- 10 Gbps speed at competitive prices is highly desirable for the business community, including start-ups and the home-based businesses so common in Alexandria
- Measurable increase in per capita GDP for U.S. cities with widely available gigabit service
 - Study included 55 communities in 9 states
 - Business attraction and residential property value increase
- Access to this type of network would competitively differentiate Alexandria from the rest of the region

Market for Municipal Fiber



- Gigabit residential speeds already available in hundreds of communities in 2015
 - Local FTTP projects in MD, NC, and VA
- Cisco Systems estimates global Internet traffic in 2018 will be equivalent to 64 times the volume in 2005
- Fiber ISP's represent a new emerging market, lead by Google
 - Other smaller ISPs offering FTTP are starting to appear

Evaluating Models



- The City received 10 responses to the RFI, representing a good cross section of market players
- The evaluation team has been assessing the different approaches for their fit within our community
- Have engaged industry experts to help interpret the responses and start building proposals with cost estimates for City Council consideration

Evaluating Models, cont.



- I-Net options vary primarily in terms of:
 - Ownership (City-owned, leased, or a hybrid)
 - Operation (in-house vs. managed service)
- Community Broadband also offers numerous variations:
 - Ownership (City-owned, privately owned, hybrid)
 - Financing (City financed, privately financed, hybrid)
 - Geographic (Pervasive vs. selected portions of the city)

Timeline

