Request for Information

for

Services, Operations, and Maintenance of City-Built Fiber Optic Network

City of Westminster

Issued: April 12, 2013

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I. Introduction

Located about 35 miles northwest of Baltimore, the City of Westminster, Maryland is situated in a rural to semi-rural area in Carroll County. Westminster has an affluent and forward-looking population and large businesses and institutions. The proximity to Baltimore and the Baltimore-Washington corridor also means there is significant interest in residents working closely with employers and clients and partners in the region as well as telecommuting.

The City does not lie on the routes of any major highways or rail lines, but City officials are planning now to ensure the local economy will have robust Internet access and strong connections to all information highways.

City officials have prioritized pursing access to affordable broadband networks. The City is considering construction of a municipal fiber-to-the-premises (FTTP) network, and is seeking private partners interested in utilizing municipal dark fiber to provide network services to homes and businesses.

This Request for Information (RFI) has been initiated to enable the City to identify one or more private partners who will provide network services to end-users within the City limits *using City-built fiber infrastructure*. The City seeks input from potential partners regarding the terms and conditions under which partners would operate and manage Internet and other network services to homes and businesses over City-owned fiber.

We are particularly interested in providers who will use the fiber to provide ultra-high-speed network access. We define ultra-high-speed as being in the multiple-hundred megabit to gigabit-per-second range.

We also seek partners who will take on network maintenance responsibilities. This role may either be done by the network service provider or by a separate partner.

We view the primary policy goal of this network to be economic development. Broadband enables communities otherwise at a disadvantage to participate on more equal footing in the emerging global economy. With the Internet as a driving vehicle many businesses can locate anywhere—as long as there is enough bandwidth at affordable prices. High tech firms and other companies that rely on high connection speeds will go where they can flourish. Responses to this RFI should state how the respondent's approach will further the City's goals of attracting businesses and residents, and encouraging economic retention in the City.

We seek to make Westminster a more desirable place for firms and residents—who see the quality of life benefits of broadband both directly through home connections and through enhanced services provided by the business community.

Interconnection with other government led fiber networks in the City will potentially provide the means to connect outside the City. The Carroll County Public Network (CCPN), a countywide institutional network (I-Net), connects schools and other institutions throughout the County. The Inter-County Broadband Network (ICBN), a consortium of counties currently building fiber to government sites and community anchor institutions, constructed fiber that is contiguous with

CCPN infrastructure, and together the networks will provide access to the commodity Internet through points-of-presence in Baltimore. The ICBN has connections to Baltimore Technology Park (BTP), multiple AiNet datacenters, and the collocation facility at 111 Market Street in Baltimore either planned or underway.

When built, the Westminster City fiber network would enjoy access via the CCPN and ICBN fiber, providing a means for high-speed Internet bandwidth to be imported from across the state.

II. Project Background

In 2012, the Mayor and Common Council unanimously voted to approve a feasibility study for building a municipal FTTP network. Council members identified a lack of adequate connectivity among businesses within the City as a primary reason for proceeding with the study.

III. Background on City of Westminster

The City of Westminster is an incorporated community in Carroll County, Maryland. According to the U.S. Census, the City has a population of approximately 18,600 with 7,700 housing units. About 27 percent of the population age 25 and above has a bachelor's degree or higher.

Westminster is the seat of County government, and to several higher education institutions including McDaniel College, a private four-year college. The largest employment sector in the City is educational, with the County school district (Carroll County Public Schools) employing about 3,700, and McDaniel College about 640. Other major employers within the City include: Carroll County government, Carroll Lutheran Village (a non-profit retirement community), and General Dynamics Robotics Systems.

Immediately outside the city limits, Carroll Community College employs about 500 workers. There are a number of major private employers just outside the City as well, including Carroll Hospital Center (non-profit), Random House, English American Tailoring, and Knorr Brake Corporation.

The health care sector is a significant portion of the local economy. Carroll Hospital Center itself employs upwards of 1,700 people, and is affiliated with a large group of multi-specialty practices.

Westminster has a significant commuter population. The City is about 35 miles northwest of Baltimore; 32 miles east of Frederick; 56 miles north of Washington, D.C.; 57 miles northwest of Annapolis, the state capital; and 60 miles south of Harrisburg, Pennsylvania's state capital. However, Westminster does not lie on the route of any Interstate or U.S. highways. The lack of a major arterial route in and out of town leads to significant commute times for City residents. According to an analysis conducted by *The Business Journals*, about 32 percent of Westminster residents have a commute time of 45 minutes or more. Another 14 percent have a commute of 30 to 44 minutes.

IV. Policy Goals

Statement of Need

The City is seeking one or more Service Providers to operate fast, affordable services over City-constructed fiber optics. The City will construct fiber to some or all Westminster homes and businesses, and the City will lease the fiber or fiber capacity to Service Providers to sell services and manage the relationship with the customer.

The City also seeks a partner who will maintain the network infrastructure. This role may be performed by a Service Provider or by a separate partner.

This RFI is released for the purpose of optimizing the City's initiative and incorporating the needs and creative ideas of potential FTTP Service Providers. This information will assist in finalizing the Westminster FTTP network design and defining the relationship between the City and Service Providers.

We wish to find prospective partners interested in leasing City owned dark fiber or fiber capacity, and determine what services these partners would propose to provide.

We anticipate developing a pilot project for a portion of the City within the next year. The specifics of the pilot are to be determined.

Though no contracts or formal relationships will be established through this RFI, it will provide valuable information that will significantly influence the Westminster City fiber project and create a community of potential Service Providers for City homes and businesses. It will also enable the City to understand the capabilities and interests of potential partners and determine how to best include them.

All interested Service Providers are strongly encouraged to respond. We welcome the response of incumbent Service Providers, as well as competitive providers, non-profit institutions, public cooperatives, as well as entities that are not traditional Internet Service Providers, but are interested in offering service under innovative business models (application providers, as an example). Nontraditional providers may respond as part of a partnership with a network service provider, or may provide a separate response outlining their approach.

Goals

There are several central goals to the City's FTTP network undertaking. Respondents to this RFI and any possible subsequent RFP should indicate whether and how their proposal serves these goals:

- 1. Offer service to any customer connected to the City fiber network; serving only limited areas of the City or specific types of customers is less desirable.
- 2. Offer unique services and speeds and network performance better than that provided by the incumbent networks in the City. For example, providing hundreds of megabits or gigabit speeds, providing symmetrical services, providing services that continue operating when commercial power fails, providing service level agreements, and providing direct connectivity between locations on the City fiber.

- 3. Propose connectivity services leveraging the ICBN middle mile connections to the Baltimore Technology Park and other locations where a provider can cost-effectively and competitively connect to commodity Internet and secure cloud services.
- 4. Ideally propose an approach that includes open access, where the City fiber network is open to multiple Service Providers in addition to the respondent.
- 5. Respond to the needs of health care providers and patients.
- 6. Respond to the needs of the large and small businesses connected to the City fiber.
- 7. Provide cost-effective services for price-sensitive customers and flexible pricing plans.

The City seeks an uninhibited network, where Service Providers may offer a range of services, and network operators are neutral with respect to Service Providers, applications, websites, type of use, and type of connection device.

The City seeks Service Providers who will offer lit broadband services and partners to handle maintenance and operations of the network. The City also seeks partners who will extend the City fiber if expansion is needed.

For the network to have the intended economic and quality of life impacts, we consider both cost and availability of service to be important. We encourage responses that address both to maximize adoption of service.

The City will negotiate terms of funding user premises installation costs with prospective partners.

V. Existing Fiber Assets

The public fiber infrastructure that currently exists in the City includes assets built by the CCPN and ICBN. CCPN provides broadband service to public locations including the schools, the County's public library, and Carroll County Community College. CCPN's primary purpose is County and local institutional use; however, through a partnership with the Maryland Broadband Cooperative (MDBC), a portion of the County dark fiber (72 strands) is available for leasing to the business community. ICBN fiber, constructed through a federal grant to the State of Maryland Department of IT, will ultimately be sub-granted to Carroll County with a minimum of 24 dark fiber strands made available for open access lease, likely on terms similar to that of the CCPN fiber.

VI. Role of County and Consortium Assets (CCPN/ICBN/MDBC)

The City network will include interconnections with the CCPN and ICBN. The ICBN connection will provide a route from the City network to POP locations in the Baltimore region operated by the MDBC and other commercial service provider and collocation entities. Therefore,

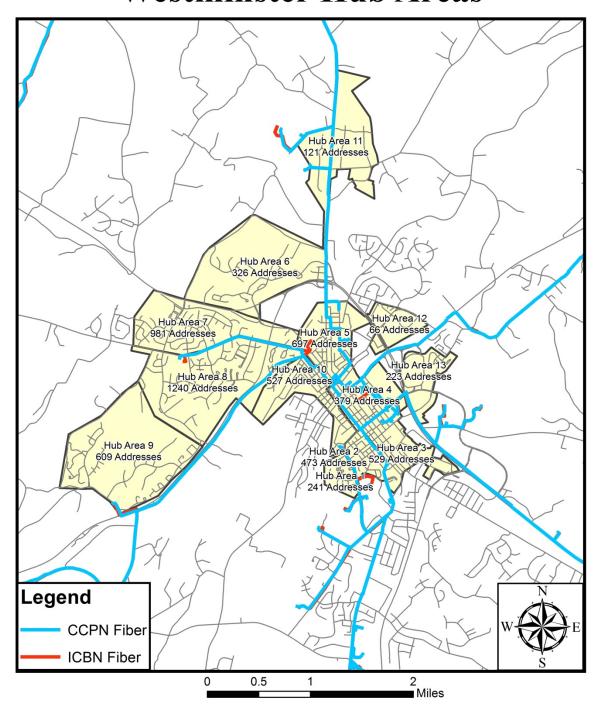
interconnections with state and consortium owned fiber is critical to the success of the municipal network in providing high-speed access to the commodity Internet. We encourage respondents to this RFI to offer strategies for leveraging these assets to the greatest mutual benefit of the City and its partners.

In addition, responses should consider the following items:

- What risks, if any, do you foresee in integrating network service over the City network with CCPN, ICBN, or MDBC fiber? What strategies would you employ to alleviate these risks?
- How could the City network be used to serve community anchor institutions within the City not being served by County or consortium fiber?
- How would you approach management of the interconnections between the City network and other networks from a network architectural standpoint and a business model standpoint?

VII. Map and General Construction Parameters

Westminster Hub Areas



VIII. Information Required to Respond to This RFI and Response Procedure

The City of Westminster requests the following information—in as much detail as is practicable—from respondents:

- 1. Affirm that you are interested in this partnership and address the core policy goals and requirements listed above. If you cannot meet any of those requirements, indicate the requirements to which you take exception and provide an explanation of the exceptions..
- 2. Provide a statement of experience discussing past performance, capabilities, and qualifications. Identify other networks your firm has designed, built, maintained or operated; include the levels of broadband speed, availability and adoption among different categories of end-users and unique capabilities or attributes. Discuss other partnerships with other service providers, government or non-profit entities you have undertaken, particularly any involving dark fiber leasing. Describe the nature of the projects and your firm's role. Explain how your firm is a suitable partner for this project.
- 3. At a very high level, summarize the technological and operational approach you would use for this project. How would you use technology to meet the City's goals? What approach would you use to interconnect with the Internet and other public networks? How would you perform network management? Under what scenarios would you require route diversity or other special features in the City fiber? At what sort of facility (or facilities) would you place network electronics? Would you require direct, dedicated fiber connectivity to all premises or would a passive optical network be suitable in some cases?
- 4. Summarize the business approach you would use for the project. How would your business plan help meet the City's goals? What are the key assumptions? What are your main areas of risk, and how can the City help reduce the risks?
- 5. If you currently operate communications facilities, inform us as to whether they are operated on an open access basis.
- 6. What is your proposed schedule for implementing service? Offer a timeline with key milestones. Would you be able to begin service before the entire City was constructed? Are there areas of the City you would recommend be constructed first?
- 7. Are you proposing to perform fiber network maintenance? If so, describe your ability to perform network maintenance on an ongoing and as-needed basis. Provide estimates of the operating cost of maintaining the fiber optic outside plant for a City fiber network and include your main assumptions.
- 8. What are your requirements for the City to meet in order for you to partner with the City on this project? What, if any, are the financial requirements you have of the City in order to enter into a partnership? If you do not address this question as to financial requirements, it will be assumed that you are interested in the partnership but have no financial requirements whatsoever of the City.

- 9. What service options would you plan to offer over this network (for example, data only, voice and data, a triple play of voice, data and cable television, etc.)? What download/upload or symmetrical speeds would you offer and guarantee to end-users? How will your residential and business offerings differ?
- 10. Provide a statement of how your proposed participation would help the City's economic development goals. Describe your interests and plans to hire local contractors and providers in Westminster, and how your participation would help local job creation. Describe your relationships with local businesses in Westminster as well as your interest and plans to engage them in this project. Describe your relationships with socially and economically disadvantaged small businesses in Westminster as well as your interest and plans to engage them in this project.
- 11. Provide three (3) references, including contact information, from previous contracts or partnerships.

All interested respondents are asked to submit a letter of intent via email by April 19, 2013 to rmiller@westgov.com, or via hard copy to:

City of Westminster Attn: Robert Miller 56 W. Main St. Westminster, MD 21157

Final RFI submissions must be received by close of business on May 3, 2013.

Please send a hard copy of the RFI response to the address above. Additionally, please email a final copy of the RFI response in PDF format to rmiller@westgov.com by May 3, 2013.

Please identify any proprietary and/or confidential information as such.

Questions related to this RFI should be emailed to rmiller@westgov.com no later than 4:00 PM on April 26, 2013.

The following is the schedule for responding to this RFI. The schedule is subject to change:

April 12, 2013 – RFI Released

April 19, 2013 – Deadline for Submitting Letter of Intent to Respond to RFI

April 26, 2013 – Deadline for Submitting Questions

FINAL DEADLINE - May 3, 2013 - RFI Responses Due

The City of Westminster thanks you in advance for your thoughtful response.