

Harford County, Maryland

Request for Information

for

**Partnership for Deployment of
High-Speed Broadband in Harford County, Maryland**

Issued: June 4, 2020

Table of Contents

I.	Introduction	1
II.	Background on Harford County	2
III.	Current State of Broadband in Harford County.....	3
IV.	The County’s Vision.....	5
V.	Project Goals	6
VI.	Network Design and Construction Parameters	7
VII.	County Contributions and Assets.....	7
VIII.	RFI Response Requests	8
IX.	Response Process.....	9
	Letter of Intent.....	9
	Questions	10
	Response Deadline.....	10
	Summary of RFI Process Deadlines.....	10
X.	Personal Presentations	10
XI.	County Rights Reserved	10

I. Introduction

Harford County, Maryland is committed to ensuring that the County continues to prosper and evolve as the global economy shifts and the need for ultra-high-speed broadband access grows.

The County therefore issues this Request for Information (RFI) to determine the interest of private entities to collaborate with the County to address the lack of broadband infrastructure in the northern part of Harford County. The County seeks ideas and interest from private entities regarding bringing Gigabit-class broadband to currently-unserved County homes and businesses in the northern parts of the County over privately constructed and owned communications infrastructure. To support the collaboration, the County can assist in seeking federal and state grant funding, providing access to community assets and rights-of-way (ROW), navigating the permitting process, and offering any other reasonable support the County can bring to the collaboration.

The County's preferred technology is fiber-to-the-premises (FTTP). The County understands, however, that the geography and population density of the north part of the County may require creative options for ubiquitous broadband deployment. As such, the County is open to considering hybrid fiber/wireless solutions and last-mile wireless solutions. Another possibility is the extension of hybrid fiber-coaxial service from adjacent areas, so long as the resulting network provides the necessary level of service.

In responses to this RFI, the County seeks to learn how the respondent's approach will further the County's goals of ensuring that residents, businesses, and visitors to our community have access to market-leading broadband services.

The County also seeks input from potential partners regarding the terms and conditions under which they would participate in such a project. We are prepared to consider a variety of business models that may share technological and operational responsibilities and financial risk between the partners and the County in innovative ways.

We encourage respondents to share their expertise, which may be used to shape the direction and form of this potential initiative. Respondents may work together to respond to this RFI. The County is open to creative solutions that will maximize private investment, as well as state and federal broadband funding, while providing reliable and high-quality services to meet its citizens' needs.

We welcome the responses of all prospective partners, including incumbent service providers, as well as competitive providers, nonprofit organizations, public cooperatives, and entities that are not traditional internet service providers (ISPs) but are interested in acting as a partner in offering

service under innovative business models. Nontraditional providers may respond as part of a partnership with an ISP, or may provide separate responses outlining their approaches.

The County will review responses based on the respondents' experience, how well the responses address the County's objectives, how the proposed business model balances and shares risks and rewards, and other factors. The County may provide more detailed information on available assets to one or more respondents, and ask those respondents to refine their responses.

Following the evaluation of responses, the County may issue a request for more detail relating to the County-initiated project, cancel or delay plans to deploy a network, or choose another direction that is deemed in the County's best interest.

Responding to the RFI is not a guarantee of a contract award. Further, there is no guarantee an RFP will be developed as a result of this RFI. The County reserves the right to withdraw the RFI or any subsequent RFP, or to decline to award a contract.

II. Background on Harford County

Located on I-95 just 25 miles northeast of Baltimore and situated on the western shore of the Chesapeake Bay, Harford County offers a compelling combination of bayside quality of life and first-class amenities. In addition to its close proximity to Baltimore, the County is within easy driving distance of Wilmington, Annapolis, Washington, DC, and Philadelphia.¹

Harford County includes three municipalities: Aberdeen, Bel Air, and Havre de Grace. As of last year, the County's estimated population was 256,000, and population forecasts expect this number to increase to around 300,000 by 2045.² Median household income and per capita income both sit well above the national average, at \$85,942 and \$39,365, respectively.³

Technology companies and other large employers such as Battelle, APG, SafeNet, SAIC, EAI Corporation, McCormick Company, and Procter and Gamble have all chosen to take advantage of Harford County's advantageous location, skilled workforce, and quality of life.⁴

Southern Harford County provides easy access to the MARC Train—and with it, a direct connection to downtown Baltimore and Washington, DC—as well as retail, recreation, and entertainment amenities. Northern Harford County complements the bustle of the south with beautiful farmlands, revered vineyards, and traditions that range from apple festivals to polo

¹ <https://www.harfordcountymd.gov/1410/Life-in-Harford-County>

² <https://www.harfordcountymd.gov/564/Data-Demographics>

³ <https://www.census.gov/quickfacts/fact/table/harfordcountymaryland,US#>

⁴ <https://www.harfordcountymd.gov/1393/Housing-Neighborhoods>

matches. Scenery and outdoor recreation is abundant throughout the County, from waterfalls to bayside docks.

III. Current State of Broadband in Harford County

While parts of Harford County are currently served by Comcast, Armstrong, and Verizon FiOS, some parts of the County cannot access broadband that meets the federal government's definition of broadband. The less densely populated areas of the County tend not to have cable modem service at all; some areas receive only very low speed DSL service, and that service is frequently not available for new customers.

The County's main focus under this initiative is to make new broadband services available in areas of the County that currently are unserved by broadband providers. The County has already undertaken significant steps to build an environment that is conducive to investment and broadband expansion, including a multi-year strategic effort to identify and analyze unserved and underserved areas and potential solutions. The County hopes to build on this foundation with a partner to fully meet its connectivity needs.

In 2015, the County developed a Broadband Strategic Plan and began implementing key steps to expand the breadth and depth of services to meet the County government's centralized broadband needs. The Harford County Metro Area Network (HMAN)—a fiber optic, carrier-grade network - was deployed throughout the County to provide equitable broadband access to County agencies, schools, libraries, and public safety sites.

Building on these steps, the County proceeded to undertake a multi-year strategic planning effort to investigate the potential for expanding broadband, in partnership with the private sector, to areas of north Harford County where inadequate service exists.⁵

The County conducted a statistically valid survey in 2019 to assess respondents' use of internet services and whether customers' needs are being met.⁶ Seventy-nine percent of households had a connection via dial-up, satellite, cellular/mobile, DSL, fixed wireless, or another technology that falls short of the capabilities of fiber or cable service. Survey respondents ranked service reliability and speed as the most important service aspects, and noted teleworking as a significant driver of demand for improved services. Overall, north end residents surveyed were generally unsatisfied with what the market currently has to offer.

⁵ Public-Private Partner Feasibility Study for Broadband in the North End, January 2017

<http://www.harfordcountymd.gov/DocumentCenter/View/8749/Harford---North-End-Broadband-Feasibility-Study>

⁶ Residential Broadband Survey Results, April 2019

<http://www.harfordcountymd.gov/DocumentCenter/View/15534/Residential-Broadband-Survey-Results-2019>

Further, the survey found that the appetite for a higher quality product in the North End is significant. At a cost of \$60 per month, 84 percent of respondents reported that they would purchase a robust, high-speed product; at \$80 per month, 57 percent of the respondents would purchase the service; and at \$100 per month, 40 percent of respondents would purchase the service. Additionally, internet users with slower connections reported that they would be more willing to switch providers at various price points, and they would be more willing to pay a one-time fee for obtaining access to high-speed internet, compared with those who already have internet service above the minimum criteria.

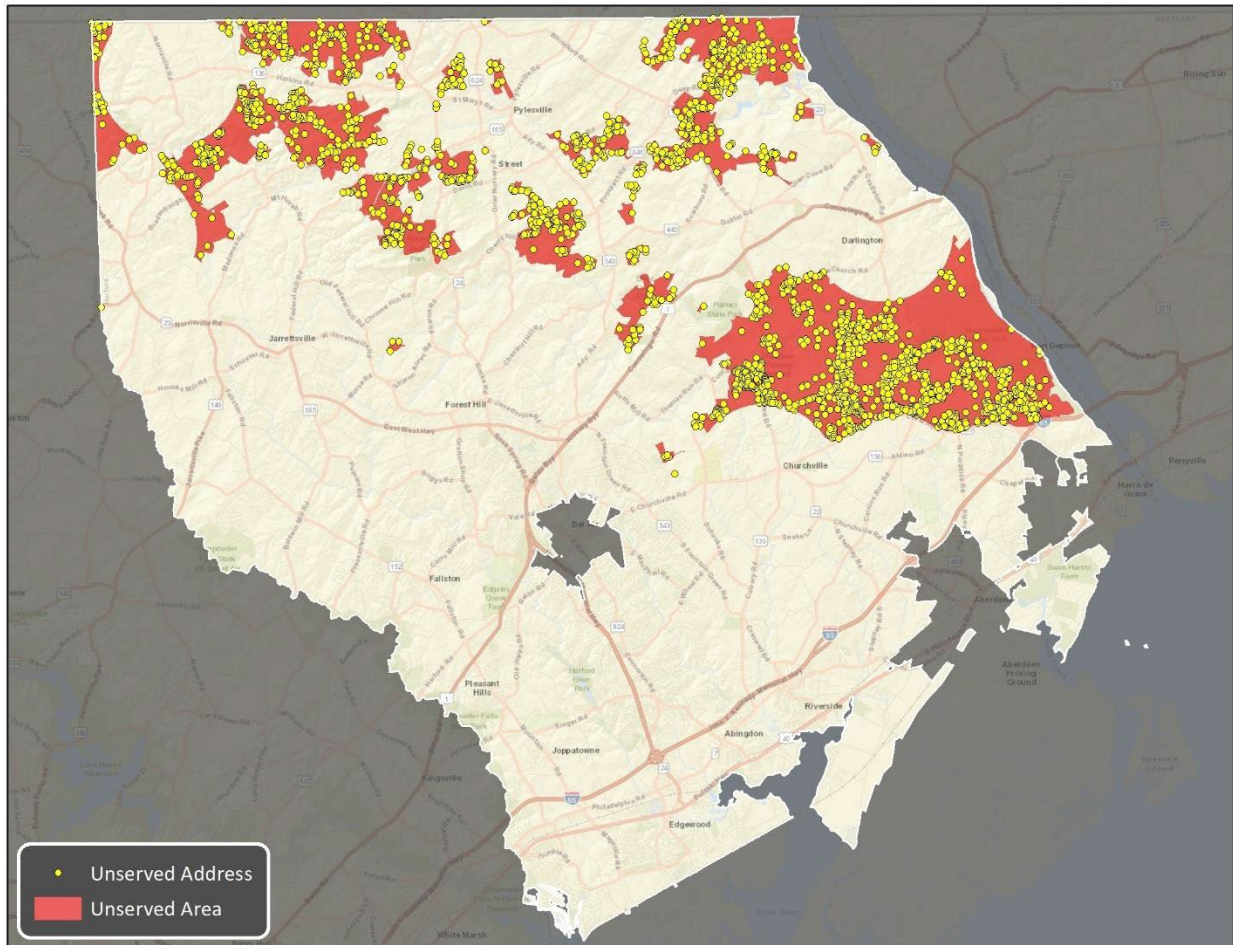
Overall, the survey concluded that the market for a robust, high-speed product in the North End is extremely strong, with room for new products and a healthy appetite from consumers to upgrade.

Following the market research, the County carried out analysis to determine the specific areas in the North End that are unserved and underserved by broadband at the address level.⁷ Research conducted this year found that the North End has approximately 2,500 unserved addresses—defined for the purposes of the survey as premises not passed by infrastructure capable of delivering internet service with speeds of at least 10 Mbps download and 1 Mbps upload (i.e., 10/1)—as well as several areas in which 90 percent of addresses are unserved by 10/1, as illustrated in Figure 1.

⁷ Broadband Strategic Plan, April 2020

<http://www.harfordcountymd.gov/DocumentCenter/View/15397/Broadband-Strategic-Plan>

Figure 1: Areas and Addresses Unserved by 10/1 Mbps



With this information, the County evaluated high-level designs and cost estimates for both fiber optic deployment and fixed wireless deployment that could fill or help fill broadband gaps in the County.

Finally, the County has analyzed a range of federal and state funding opportunities to identify potential sources of grants or loans (to the County or to a partner) that could be leveraged to meet the County’s broadband goals.

IV. The County’s Vision

We believe access to broadband is critical. Equal and affordable access to communications infrastructure and service is essential to promoting equal opportunity in business, education, employment, healthcare, and all other aspects of day-to-day life. We recognize the need and the challenges of expanding broadband to businesses and residents in the less densely populated sections of the County.

Broadband is particularly important for Harford County because the County competes with relatively well-served neighbors and other communities in the super-region in and around Baltimore and Washington, D.C. (Many of these communities have far more extensive Verizon and Comcast broadband infrastructure than does Harford County.)

Among its immediate neighbors, Harford County competes for businesses and residents with both Howard and Baltimore counties. More broadly, in the broadband Internet era, Harford County and all communities compete with other localities around the country and, to some extent, the world. Broadband is the threat that makes real this competition but, at the same time, enables Harford County to differentiate itself from other localities that have achieved less and focused less on broadband infrastructure.

The County intends to empower its citizens and local businesses to be network economy producers—not just consumers of network information and data services. Further, we intend to provide our stakeholders with the broadband capacity they need to compete successfully in the global marketplace.

V. Project Goals

The County seeks a creative partnership that will meet its current connectivity needs, and one that will work collaboratively with the County to anticipate future needs. An ideal Partner will be enthusiastic about and plan for a long-term relationship with the County, and should take the County's vision and goals into consideration in developing its response.

The County seeks a Partner to offer fast, affordable broadband internet and data services. The County has prioritized a partnership that:

1. Considers creative ways by which the County can support private investment and opportunity in broadband
2. Provides the broadband infrastructure to currently-unserved Harford County homes and businesses to enable residents, workers, and visitors the opportunity to access affordable, reliable high-speed broadband connections to the internet and other networks; the infrastructure will ideally be capable of 1 Gbps, but the ability to provide hundreds of Mbps will still be a substantial improvement, especially if there is a technological roadmap to higher speeds in the future
3. Delivers an unfettered data offering that does not unreasonably impose caps (i.e., does not limit the types of uses that enable distance learning, telework, and telehealth)
4. Substantially improves service to unserved areas within three years

The County is acutely aware that some existing providers report to the FCC as “served” some areas in which residents and businesses in fact cannot obtain broadband service or are told that service is only available if they individually fund construction. The County wishes to address this problem by requesting that the Partner clearly identify its proposed services area, and that it extend service to a large number of passings at once, with an equitable approach to sharing costs among the potential customers.

VI. Network Design and Construction Parameters

The County is willing to consider all proposals for partnerships, and welcomes respondents’ unique approaches to network design and construction. The County prefers the following baseline technical attributes:

- Fully fiber-based connectivity (i.e., FTTP) to residential and business customers
- Fiber strand capacity capable of providing direct homerun connections to businesses and residential “power” users
- Fiber strand capacity and physical architecture (e.g., handhole placement, backbone routes) anticipating full deployment to all homes and businesses
- Low latency
- Backbone topology capable of supporting connections over diverse paths from one or more central hub locations to fiber distribution cabinets located throughout the County to facilitate high-availability service offerings

We understand that fiber-to-the-premises may not seem cost-effective for some. Respondents that believe this goal to be a barrier to their ability to successfully partner with the County should clearly articulate their reasoning, and describe how they may provide a “good-enough” technological alternative to FTTP.

For example, the County will consider hybrid fiber/wireless approaches that may reduce fiber construction costs while still providing high-speed broadband access to remote areas of the County.

VII. County Contributions and Assets

We are in the early stages of determining exactly what the County’s role will be in promoting enhanced broadband access, and we are willing to consider various levels of public involvement.

Among other roles, the County may consider:

1. Assign a point of contact who will be the liaison to the company and its contractor(s), and providing services to help prevent or lessen conflicts in the construction schedule
2. Assist the company in navigating necessary permitting to streamline planning and construction efforts
3. Dedicate resources to support private companies through plan review, coordination, and inspection services to expedite and potentially reduce the cost of construction in the public rights-of-way
4. Provide access to the County's own considerable broadband assets, including the Harford County Metro Area Network (HMAN), a fiber optic, carrier-grade network deployed throughout the County to provide equitable broadband access to County agencies, schools, libraries, and public safety sites
5. Provide access to data that identify County infrastructure including the location of traffic, sewer, water, and storm-drainage facilities
6. Provide multiple forms of support for pursuit of state and federal broadband awards, such as the Federal Communications Commission's Rural Digital Opportunity Fund, the U.S. Department of Agriculture's ReConnect and Community Connect programs, and the State of Maryland's Broadband Infrastructure Network Buildout Program and Assistance for Broadband Expansion Pilot Projects program

The County is open to suggestions for other roles it can play in supporting this project, including a model in which County-funded fiber is deployed on main roads, and the Partner(s) is responsible for drop cables and laterals into subscribers' homes and businesses. We encourage partners to suggest creative and innovative ways the County can leverage its strengths to accomplish its goals by enabling private sector opportunity.

VIII. RFI Response Requests

Harford County requests the following information from respondents.

1. **Cover Letter:** Please include company name, address of corporate headquarters, address of nearest local office, contact name for response, and that person's contact information (address, phone, cell, email).
2. **Collaboration Proposal:** Please summarize the business model you intend to use for the collaboration with the County. This should be a concise explanation of the key components of your business model, including but not limited to the division of network and operations responsibility and ownership, as well as a discussion of what you would expect from the County as part of this collaboration. How would your business plan help to meet the County's goals? What are your main areas of risk, and how can the County

help reduce the risks? What are the County's main areas of risk, and how will you attempt to reduce the risk to the County?

3. **Experience:** Please provide a statement of experience discussing past performance, capabilities, and qualifications. Please share such information as other networks you operate and other partnerships with governments or nonprofit entities. Describe the nature of the projects and your firm's role. For entities currently providing communications services in or near Harford County, please describe your current service footprint in the County and the region, including a description of the type of infrastructure and services you currently offer and the technology platform(s) used.
4. **Technical and Operational Approach:** At a high level, please share the technological and operational approach you would use for this project.
5. **Schedule:** Please describe your proposed schedule for implementing service. Offer a timeline with key milestones.
6. **Financing and Funding:** Please clearly describe any financial requirements the County must meet for you to collaborate with the County on this project
7. **Services:** Please describe the service options you plan to offer over this network.
8. **References:** Please provide one to three references, including contact information, from previous contracts or collaborations with other localities or non-profit entities.

IX. Response Process

Please submit your response via email to cbsullivan@harfordcountymd.gov.

Ms. Christen Sullivan
Senior Budget Analyst
Office of Budget and Efficiency
Harford County Government
220 S. Main Street
Bel Air, MD 21014

Letter of Intent

In addition, we ask that all interested respondents are asked to submit a letter of intent via email by **June 25, 2020** to cbsullivan@harfordcountymd.gov.

The letter of intent should include the company name and the name, title, phone number, and email address of the respondent's primary point of contact, and should indicate that the

respondent intends to submit a formal response to the RFI. The letter of intent can be contained in the body of an email, and does not have to be a formal, standalone letter.

Questions

Questions related to this RFI should be emailed to cbsullivan@harfordcountymd.gov no later than **July 2, 2020**.

Response Deadline

Final RFI submissions must be received via email no later than **August 7, 2020 at 4:00 PM EST**. Please send to cbsullivan@harfordcountymd.gov.

Summary of RFI Process Deadlines

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

June 4, 2020 – RFI issued

June 25, 2020 – Deadline for submitting letter of intent to respond to RFI

July 2, 2020 – Deadline for submitting questions about RFI

July 17, 2020 – Responses to questions issued

August 7, 2020 – RFI responses due

Harford County thanks you in advance for your thoughtful response. We look forward to the opportunity to work with the private sector to meet our community's broadband goals.

X. Personal Presentations

At its discretion, the County may request that vendors and other parties that provide a timely response to this RFI make an individual and personal presentation to better explain information or solutions identified in the response. These presentations, if requested by the County, shall be held at a time and place of mutual convenience.

XI. County Rights Reserved

1. The County reserves the right to accept or reject all or portions of any response(s) to the RFI, to waive any formalities of the RFI process, to re-advertise the RFI, to amend the terms of the RFI, to extend the dates provided herein, to suspend the procurement if the desired outcomes are not achieved, to award the contract to the most responsive and responsible respondent(s) as deemed in the best interest of the County, and/or to proceed to provide the services otherwise, as the County may determine in its sole discretion is in the best interest of the County.

2. No reimbursement will be made by the County for any costs incurred in responding to this RFI, developing or submitting responses to the RFI, or attendance at a site inspection, pre-bid conference, or interviews.
3. The County reserves the absolute right to conduct such investigations as it deems necessary to assist in the evaluation of any response to the RFI and to establish the experience, responsibility, reliability, references, reputation, business ethics, history, qualifications and financial ability of the respondent(s), proposed subconsultants, independent Consultants and suppliers. The purpose of such investigation is to satisfy the County that the respondent has the experience, resources and commercial reputation necessary to perform the work and support any warranties in the prescribed manner and time.
4. In the event the RFI responses are considered for an award, the County reserves the right to award the Project to the firm that demonstrates the best ability to fulfill the requirements for the performing the subject services. The successful firm will be chosen based on the qualifications, evaluation of submittals and a possible interview. The County reserves the right to conduct such discussions or negotiations with Proposers or other entities as it deems necessary to assist in the evaluation of any proposal, to secure maximum clarification and completeness of any proposal, and select the proposal that best meets the requirements of the County and the public interest.