REQUEST FOR QUALIFICATIONS
MUNICIPAL FIBER BASED BROADBAND NETWORK

Prepared January 25, 2018

The City of Anacortes, Washington is developing a Municipal Broadband Network.

The City of Anacortes is requesting qualifications from internet service providers [ISP] to manage and operate our Municipal Broadband Network [MBN] and serve as the internet service provider [ISP] for our residential and small-medium businesses [SMB] customers. Anacortes is a progressive community with a current population of 16,800 residents.

The essence of our Fiber based Municipal Broadband System is that the City will own the broadband system infrastructure and the ISP will operate the service on the City-owned system.

Key Elements of the Fiber Optic System

Our initial fiber backbone build is constructed as a telemetry system that connects our wastewater and water facilities together with all municipal buildings. In the initial build, we installed sufficient capacity to allow us to begin a MBN. We have 4 independent fiber routes. Each route has 144 strands. To date we have installed a fiber optic cable backbone in the eastern half of the City [see map] using a combination of both aerial and underground applications. In 2018, we will continue our fiber deployment to the western portion of the City.

We have constructed a colocation facility at the Anacortes Public Library that will contain our GPON system and serve as the central facility for the City's entire municipal broadband system.

We have implemented the COS software program to ascertain community interest in a municipal broadband fiber system. The initial response was overwhelmingly positive with over 1425 responses. Our website has current data on the number of responses and their locations.

In 2018, we will establish our municipal broadband fiber system by deploying a Fiber to the Home (FttH) network in two pilot neighborhoods that provides the potential of connecting over 200 customers. Our long-range plan is to provide all City residents the opportunity to connect to our MBN.

Overview of Requirements

We anticipate the network will offer a symmetrical one gigabit per second connection speed. The network will be operational, on a phased, demand driven basis.

We anticipate the successful vendor will be the sole ISP on the City's MBN for the residential and SMB customers for the lifetime of the contract. The City envisions the enterprise, active Ethernet customers would be provisioned on an open access format, allowing a number of ISPs to serve those customers over the City's fiber infrastructure; however, the City is interested in collaborating with applicants regarding this approach and we are willing to explore exclusivity alternatives. We are also

interested in collaborating on the concept of sole ISP vs multiple ISP's. Please include a discussion of the pros/cons regarding this concept as part of submittal.

The successful ISP will provide their own redundant Direct Internet Access with sufficient capacity to provide a symmetrical service at the specified speeds.

The selected ISP will provide IP addresses as necessary to operate the system. We anticipate the city will assume direct ownership of IP addresses used in the MBN.

Selection and further information

The selected provider will be a partner with the City in the operation of the MBN. Both the City and the provider will have separate roles and responsibilities; however, we envision a collaborative partnership where we work together to resolve issues and ensure our mutual success. We have attached a matrix explaining the essential elements of the relationship.

ISP provider must be a member of ARIN (The American Registry of Internet Numbers), own a AS (Autonomous System) number and be allocated IPV4 and IPV6 addresses. Additionally, the ISP provider must have a minimum of 5 years' experience deploying fiber broadband services including GPON and CWDM/DWDM.

The successful applicant will be selected based on several elements including but not limited to:

- Commitment to customer service
- Expertise and experience operating a fiber broadband network
- Variety of services they provide (i.e. internet, television, VoIP)

It is expected the application and selection process will involve both the City and the ISP exploring different approaches to the issues. Finalists will make a presentation to the City Council in a public forum. The final selection will be by a committee made up of City staff and City councilmembers. The preferred organization will enter into cost/price negotiations with the City. In the event an agreement is unable to be reached on cost or other elements, the City will negotiate with the next organization and so on.

Pre-submittal Meeting

The City is hosting a pre-submittal teleconference meeting, open to all to participate in. The teleconference meeting will allow all interested parties an opportunity to ask City staff questions and hear responses about the project in an open forum. All questions and answers will be available to all applicants. Submitting your questions in advance will facilitate a more comprehensive discussion.

The meeting will occur on Monday February 12, 2018 2:00 PST.
https://global.gotomeeting.com/join/168564021 or dial in using phone only
United States: +1 (872) 240-3412 Access Code: 168-564-021
(First GoToMeeting? quick system check: https://link.gotomeeting.com/system-check)

REQUEST FOR QUALIFICATIONS [RFQ]

Interested firms will submit a proposal addressing at a minimum the following elements:

1. Office locations and key staff members with organizational structure.
2. Potential or anticipated partnerships with other companies to provide this service
3. Customer service philosophy including a detailed matrix describing a process to measure customer service satisfaction
4. Customer service history and applicable data
5. Previous internet service provider experience
6. Network Operations Center plan details
7. Services proposed to offer
8. Details of how the internet bandwidth will be provided including a detailed explanation regarding the nature of the direct internet access, including redundancy and source.
9. Position on Net neutrality
10. Position on active Ethernet customers including a detail explanation of the pros and cons of establishing an open access approach vs exclusivity to active Ethernet customers.
11. Position on sole ISP vs multiple ISP approach.
12. After reviewing the Roles/Responsibilities matrix, describe any concerns regarding the division of duties and include alternatives or suggestions.
13. Describe any proposed upfront capital cost sharing commitments to the project
14. References (5)

Responses are due by Friday, March 2, 2018 at 12:00 PST. Proposal is limited to no more than 25 double-sided pages. Provide five printed copies as well as an electronic version.
Submit your proposal to:

City of Anacortes
Attn. Emily Schuh, Administrative Services
P.O. Box 547
904 6th Street
Anacortes, WA 98221

360.299.1941
360.299.1982 (secure fax)
emilys@cityofanacortes.org

BROADBAND ROLES RESPONSIBILITIES

	Work that needs to be done	City	Retail / SMB ISP
	Marketing		
1	Develop service offering and pricing		x
2	Develop name/brand recognition in Anacortes	x	x
3	Provide liason/consulting relationship to key customers	x	x
4	Community education	x	x
5	Track and manage demand, market share, etc.	x	x
6	Market competitive community based communications	x	x
	Customer Service 24/7		
7	Physical infrastructure problems (outside plant, fiber cuts, etc.)	x	
8	Problems with electronics (routers, GPON, etc.)		x
9	Problems inside the residence or business		x
10	Trouble calls: "My internet is down"		x
11	Network outage, unknown cause	x	x
12	Billing, contractor, or other complaints	x	x
13	Vet/audit/QA third party ISPs	x	
	Customer building installation (work inside residence/business)		
14	Drill through wall, run ethernet cable from ONT to customer router/wifi device		x
15	Test Internet connection (if provisioned in GPON)		x
	Customer building modification (work inside residence/business)		
16	Drill through wall, move/add-new ethernet cable		x
	Direct Internet Access		
17	City buildings/ facilities	x	
18	Customers		x
	Customer Activation/Deactivation/Move		
19	System provisioning (add new customer PON assignment)		x
20	Setup new customer billing	x	x
21	System provisioning (remove customer PON assignment)		x
22	Remove billing	x	x
23	System provisioning (modify customer PON assignment)		x
24	Modify billing	x	x
	Ongoing maintenance		
25	Maintain physical infrastructure (outside plant, fiber)	x	
26	Maintain end-point electronics (ONT)	x	
27	Maintain data center: inside plant, room, racks, power, cooling, backup	x	
28	Maintain routers	x	x
29	Maintain network monitoring equipment		x
30	Network health monitoring	x	x
31	Capacity planning (physical)	x	
32	Capacity planning (Internet utilzation)	x	
	CALEA		
33	Provide address/billing info to law enforcement upon CALEA request		x

Initial Pilot Neighborhoods

Pilot 1 extends from 22nd Street to 32nd Street between M Ave and I-J Ave
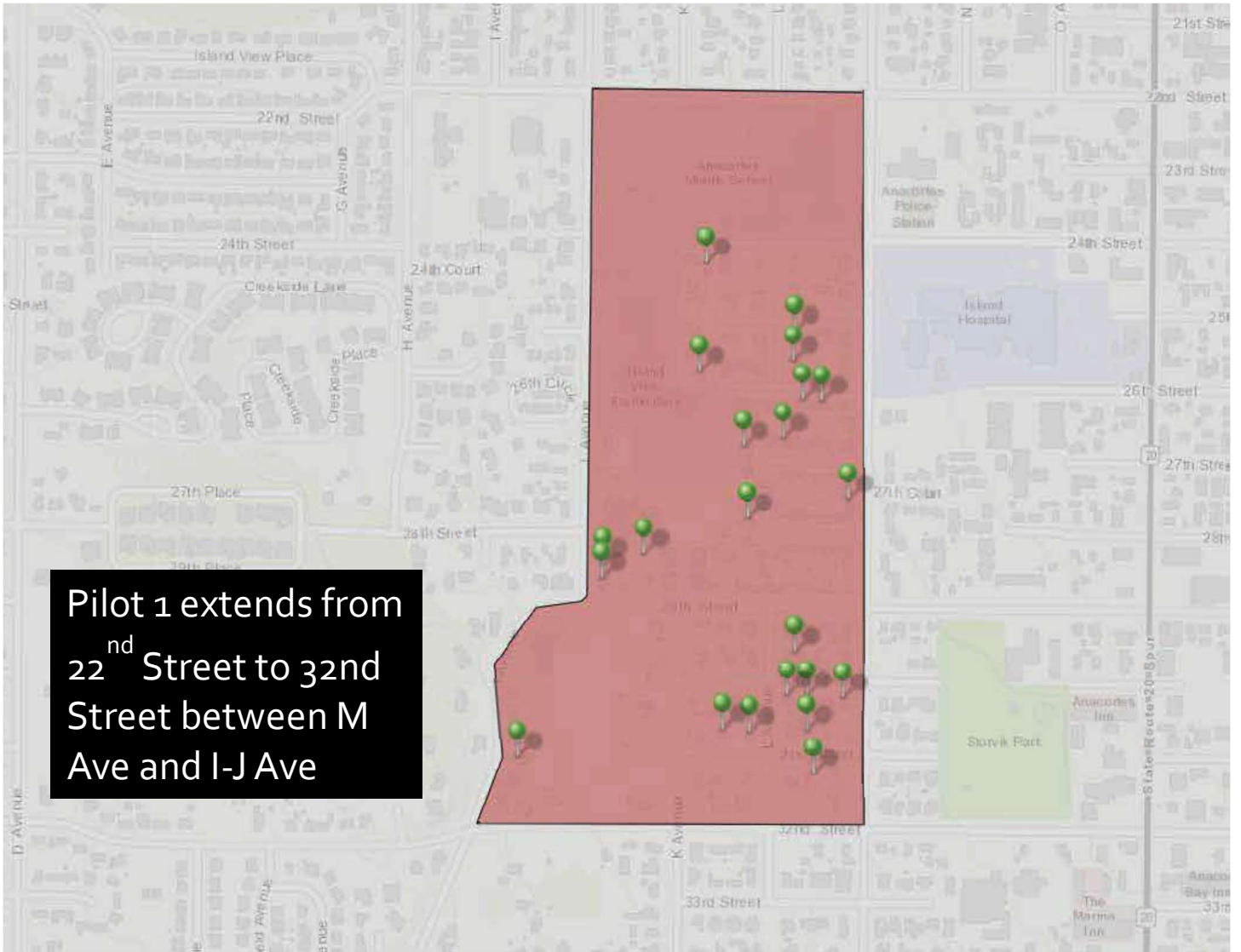
Pilot 2 extends along 11th Street between E Avenue and M Avenue

Fiber Optic Deployment 2017