Municipal Broadband Network Summit

October 24, 2019

AGENDA

- 12:00 – Introductions, ground rules

- 12:05 - Fiber as essential infrastructure / municipal broadband network overview

- 12:10 - Broadband strategic plan milestones

- 12:15 - Results of workgroup sessions and discussion of new input

- 1:10 - Questions / feedback

- 1:25 - Next steps

Introductions

- City of Bangor participants

- Mission Broadband role and participants

- Housekeeping and process for today

Essential Infrastructure

On July 23rd, 2018 with City Council Action 18-298 the City Council of Bangor, Maine, officially declared fiber as essential infrastructure with the following order:

This order will declare fiber as essential infrastructure in the City of Bangor, Maine. Reliable, high speed, affordable access to the Internet is imperative for Bangor residents, businesses, non-profit organizations, and visitors. The Internet is changing how humans interact with each other and with the world at large, as well as being a driving force for the current and future economy. The Internet creates opportunity for increased innovation for consumers, businesses, and government. Countries, states, and cities that prioritize and provide access to advanced Internet infrastructure such as fiber are surpassing those that do not in terms of social, economic, and knowledge development. Bangor must prioritize this infrastructure as an essential service, just as we have with water, sewer, and electricity.

In taking this action the City Council established a critical foundation for a dialogue around broadband access. Since this action occurred there have been several communications and Workgroup Sessions with the community and stakeholders in business, healthcare and education to further explore and define not only the current issues associated with lack of adequate broadband but also the tangible benefits that will be realized with a robust municipal broadband network implementation throughout Bangor.

Municipal Broadband Network Overview

Municipal Broadband Network - a broadband network built in a community to provide Internet Access to residents, businesses and organizations. These networks are owned or subsidized in part or fully by the municipality. There are laws in 25 states that limit or ban construction of municipal broadband networks. Maine is not one of them.

- **Municipal Owned Open Access Network** – the municipality builds a network and allows all Service Providers to compete and provide services over the network. Open access networks can be dark fiber or active with electronics. In these scenarios there are different ways the network can be managed and supported. Municipalities subsidize the cost of the network for the Service Provider(s) which should offset retail rates of service.

- **Public / Private Partnership** – the municipality partners with an existing service provider or with multiple service providers to build a network and provide services on the network. Municipalities subsidize the cost of the network for the Service Provider(s) which should offset retail rates of service.

- **Blended Municipal Network** – Municipality will own and operate zones or regions of the network. Existing and/or other service provider(s) will provide their own coverage areas within the city limits.

Broadband Strategic Plan Milestones

- Community Need for Broadband Defined – City of Bangor Order 18-298

- Broadband Strategic Plan Development – In Process

- Present Broadband Strategic Plan to City Council
  (Currently planned for later this year)

- City Council approval of Broadband Strategic Plan

- Request for Proposals (RFP) Process

- Negotiate Operational/Financial Models

- Approval by Voters if Necessary

- Implement Network Strategic Plan

Results of Workgroup Sessions
Areas of Concern/Opportunities

- Economic Development

- Healthcare and Public Safety

- Education / Digital Literacy / The Digital Divide

- Government, Energy, Environment, Transportation

Results of Workgroup Sessions
Economic Development

A robust municipal broadband network in Bangor will provide a significant competitive advantage for future economic development.

- Lack of robust broadband has impacts to existing business(I.E. downloading data, transferring files, inability to do Video Conferencing, telephony, etc.)

- Workforce Attraction / Retention

- Ability to Support Remote/Virtual Workers in all industries and professions

- Will increase digital literacy and the pool of capable workers

- Will help in efforts to retaining youth post High School and College

- Will lead to even more positive experiences for tourists and visitors

- Will increase economic diversity

- Will make Bangor attractive to Site Selection Companies

12:15 – 12:30

Results of Workgroup Sessions
Healthcare and Public Safety

A robust municipal broadband network in Bangor will advance healthcare technologies and enhance public safety.

- Telemedicine and Telepsychiatry

- Aging in place

- Patient and Provider Cost Reduction

- Access to Specialists

- Public safety technology devices throughout city

- Providers want to create wireless and radio networks to connect to vehicles and field work to information and providers.

- Public safety can be improved with access to video and imaging in real time.

- Use of technology improvements such as drones is limited if we don't have the network to carry these huge files back to the command post. Public safety needs speed – urgency of getting information on the way to a call or from the call location.

12:30 – 12:45

Results of Workgroup Sessions
Education / Digital Literacy / The Digital Divide

A robust municipal broadband network in Bangor will provide a significant education advantage.

- Homework Gap

- Teaching and Learning Models are changing
  - Artificial Intelligence(AI), Augmented Reality(AR), and Virtual Reality(VR)

- Digital Literacy

- Remote Training and Education

- The haves and have nots of the Digital Divide

12:45 – 1:00

Results of Workgroup Sessions
Government, Energy, Environment and Transportation

- A robust municipal broadband network in Bangor will provide advantages for Government, Energy, Environment and Transportation

  - Digital Inclusion of entire community

  - Enhance communication and increase Civic Engagement

  - More efficient utilization of resources

  - Interconnected transportation and utility systems

  - Improvements in the speed and accuracy of analysis, maintenance, and repairs

  - Strong broadband infrastructure allows us to focus on functions and standardization and not the network itself

1:00-1:10

Questions, Comments, and Feedback

Now it's your turn!

Next Steps

- Follow up stakeholder meetings as necessary

- Public survey

- Present broadband strategic plan to City Council (December 2019)

- Develop and publish request for proposal (by June 2020)

- Select winning respondents

- Determine financial model
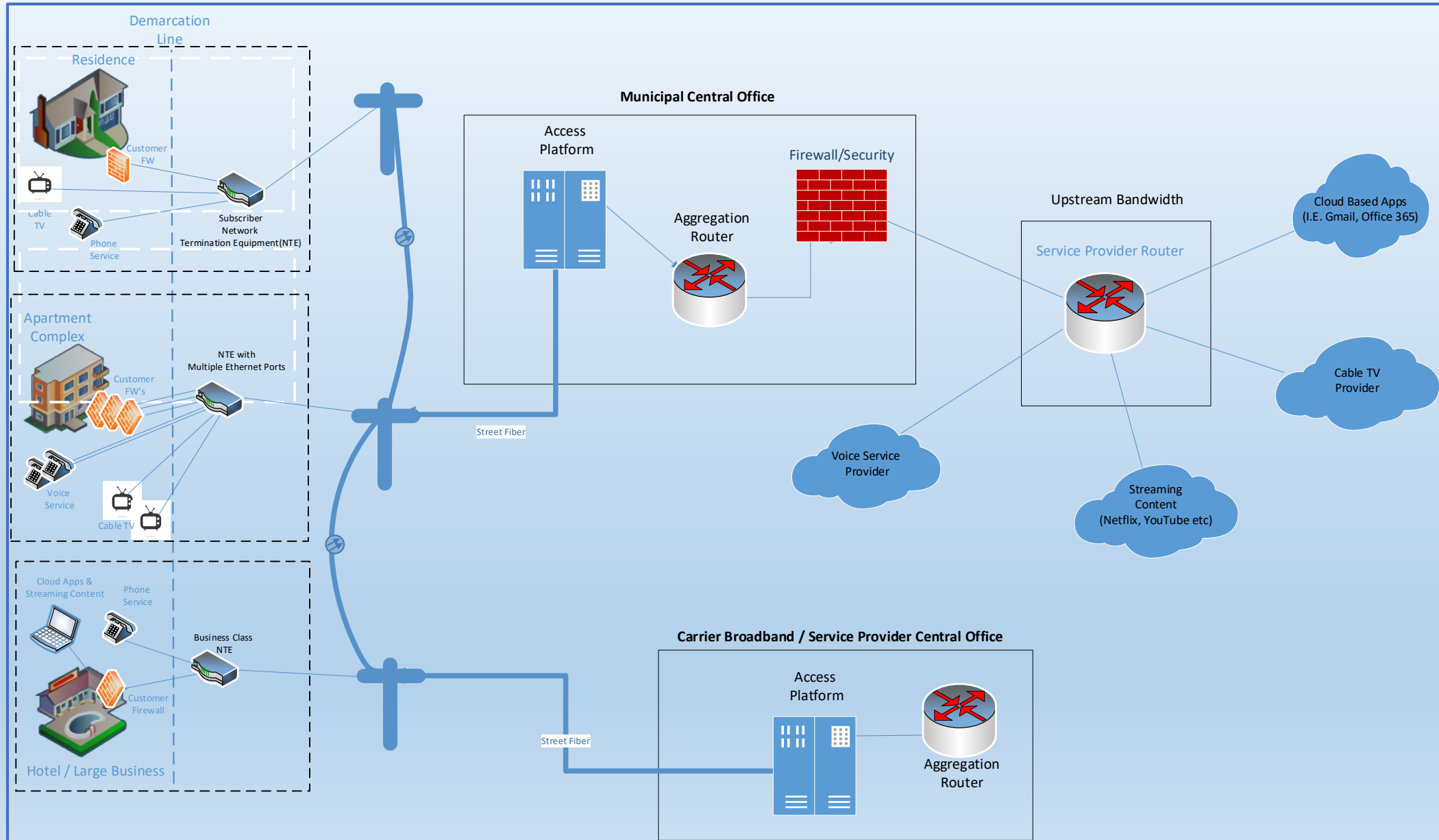
- Public vote if necessary

- Implement network

Municipal Broadband Network Summit

Thank you for your participation!

Municipal Broadband Network Overview

Results of Stakeholder Meetings
Areas of Concern/Opportunities

- Smart Cities
  - Autonomous vehicles
  - Internet of things
  - Waste management
  - Traffic management
  - Public wifi with pertinent information for visitors & residents
  - Public safety
  - Data-driven decisions
  - Increased digital equity
  - Enhanced citizen and government engagement