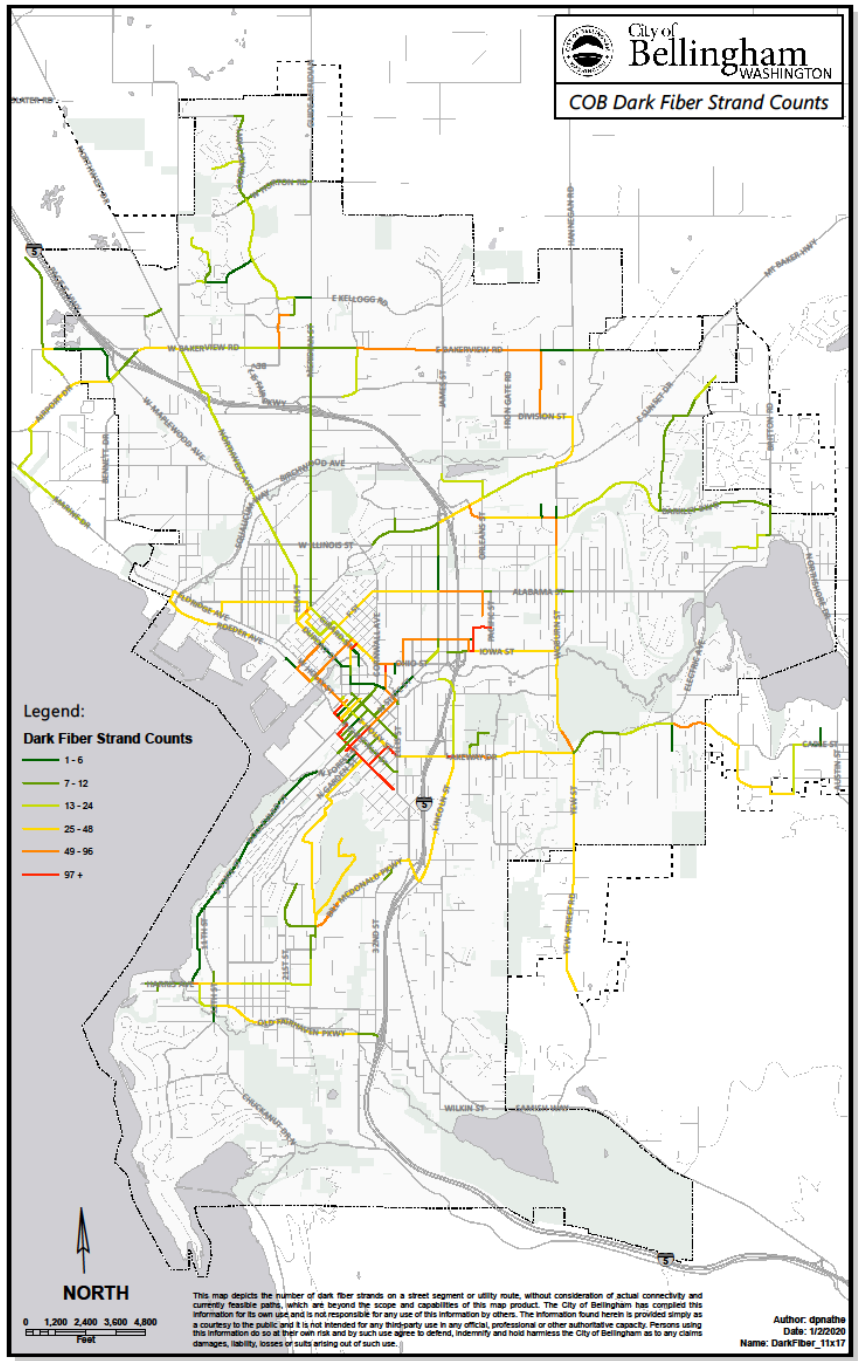
City of Bellingham
Broadband: Access, Equity & Affordability

Eric Johnston, PE
Public Works Director


City of Bellingham WASHINGTON
COB Dark Fiber Strand Counts
Legend:
Dark Fiber Strand Counts
1 - 6
7 - 12
13 - 24
25 - 48
49 - 96
97 +
NORTH
0 1,200 2,400 3,600 4,800
Feet
This map depicts the number of dark fiber strands on a street segment or utility route, without consideration of actual connectivity and currently feasible paths, which are beyond the scope and capabilities of this map product. The City of Bellingham has compiled this information for its own use and is not responsible for any use of this information by others. The information found herein is provided simply as a courtesy to the public and it is not intended for any third-party use in any official, professional or other authoritative capacity. Persons using this information do so at their own risk and by such use agree to defend, indemnify and hold harmless the City of Bellingham as to any claims damages, liability, losses or suits arising out of such use.
Author: dpnalhe
Date: 1/2/2020
Name: DarkFiber_11x17

Partnerships

- Bellingham
- Whatcom County
- Port of Bellingham
- Bellingham School District
- Private Providers
- Whatcom Transportation Authority (WTA)

What model?

Full Retail Service

The city network offers services directly to the public just like a private cable company — telephone, Internet access, and television are common. Most, but not all, of the cities that have used this model already had a municipal electric utility. This is the most common model to date for citywide networks.

Examples: Chattanooga, Tenn.; Wilson, N.C.; Lafayette, La.; and Sandy, Ore.

Dark Fiber and Conduit

This is one of lowest cost, lowest risk options — installing conduit and fiber optics, often as part of other capital projects, and making it easily available for lease to ISPs (or available for future municipal use). Cities generally do this in limited parts of the city, often business districts, but Stockholm used it to supercharge Internet access everywhere and Huntsville is running dark fiber near every premise in the city. This approach can lay the foundation for a partnership.

Examples: Stockholm, Sweden; Huntsville, Ala.; Rockport, Maine; Lincoln, Neb.; and Sonic

Open Access

The city builds and operates the fiber network, making it available to multiple independent ISPs that compete for subscribers. The city generally does not offer services directly to subscribers in this model. Learn more with this resource.

Examples: UTOPIA, Utah; NoaNet, Wash.; and Ammon, Idaho

I-Net 'n' More

The city begins by connecting its own anchor institutions — schools, libraries, public safety, water department, etc. Then it begins offering services to businesses and residents near those locations and expands incrementally. This approach often blends the others — for example Santa Monica offers retail services and dark fiber leases.

Examples: Santa Monica, Calif. and Scott County, Minn.

Partnerships

There is more enthusiasm than examples of success, but this approach is nonetheless growing. Ideally, the city and a partner share both risk and reward. Cities that can partner with infrastructure co-ops may have the best luck. More guidance on partnerships here.

Example: Westminster, Md.

Source: Extracted from Institute for Local Self-Reliance, "Muni Fiber Models Fact Sheet."

Process, Process, Process…..

1. Evaluate access/cost issues in Bellingham
2. Inventory completeness, quality, and capacity of existing public fiber
3. Identify possible public-public or public-private partnerships
4. Assess likely impact on economic development
5. Decide on delivery model

Process, Process, Process…..

6. Identify private or public partners if appropriate
7. Taking the above into account: Develop a formal (or informal) analytical framework to evaluate the likely net benefits – financial, economic, and civic – of expansion of public fiber
8. Estimate the likely trajectory of costs and revenues
9. Develop a plan to mitigate risks of the business model chosen.

Next Steps

- Council funded $100,000 study
- Council discussion on August 24
- Creation of policy and purpose statement for broadband infrastructure
- Funding plan to implement policy once adopted

Questions?

Presented by: Eric Johnston
Public Works Director
(360) 778-7710 ecjohnston@cob.org