Muni Fiber Models

Community networks have a variety of models, from offering full retail services to dark fiber approaches. Each comes with its own strengths and weaknesses and will appeal differently to different communities. Below are some common approaches, though communities often tweak these models in various ways.

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.