## Overview of Community Broadband Networks

Masha Zager, Editor Broadband Communities Magazine January 27, 2015



# How many municipal networks are there in the United States?

- 136 municipal fiber networks
- 11 public-private fiber networks
- Plus...
- Cable, wireless networks (not gig-capable)
- Dark fiber networks
- Networks serving city offices only
- Many networks in the planning stages
- At least 6 formerly municipal networks have been privatized

# Which municipalities build fiber networks?

- Typically small to mid-sized cities or counties in 37 states
- Several joint projects (owned by multiple municipalities)
- Projects expand to serve additional municipalities
- Many but not all of these cities own electric utilities

## Who are the customers?

- More than 1/3 of community fiber networks serve businesses only (or primarily)
- A few serve multifamily housing or residential greenfield developments in addition to businesses
- The rest serve all residents and businesses or are on the way to doing so

### What business models are used?

- Several successful models no single right answer
- Most common model: Municipality owns, operates and provides services
- Open access (multiple retail providers): ~30 networks
- Single third-party retail service provider: ~12 networks
- Third-party network operator: ~15 networks
- Public-private: 11 networks where private operator or other private investor has "skin in the game" (a few are open access)

## Pathways to municipal networks

- Build on existing fiber assets, if any
  - Municipal I-net, intelligent traffic systems, other municipal fiber
  - Electric utility fiber network, smart grid
- Minimize expense of adding customers
  - Businesses and community institutions, especially if they can pay for connections
  - MDUs and new developments
  - Preregistered neighborhoods

### Be aware of obstacles

- Laws in at least 19 states restrict municipal broadband networks
  - Restrictions vary from hurdles to outright bans
  - New restrictions may be imposed
- Local political opposition
- Competitive response
- Lack of experience in competitive markets

## Improve the odds of success

- Most community broadband networks are successful but you need to define success for your own community
  - Some benefits may be "off the books"
- Find out what consumers and businesses want and need
- Educate consumers and businesses about the benefits of better broadband
- Inventory community assets, and add to assets by laying fiber and/or conduit, implementing "dig once" policies, collaborating with providers
- Reach out to private-sector partners
- Treat the network as a business
- Coordinate efforts with the economic development agency

#### Resources

- Broadband Communities Magazine / conference series
  - www.bbcmag.com
- Fiber-to-the-Home Primer
  - www.bbcmag.com/Primers/BBC\_Nov14\_ Primer.pdf (ask me about getting printed copies in bulk)
- Fiber-to-the-Home Deployment database
  - www.fiberville.com
- Contact me at: masha@bbcmag.com