Growing broadband
 - the last mile
 - the local market

From middle mile to last mile

Benefits of a Middle Mile Network

- Connects between communities with a high capacity fiber network
- Links anchor institutions like schools, hospitals, government offices, etc.
- Often provides a competitive marketplace reducing the cost of wholesale broadband services for local ISPs

- THE CHALLENGE: Bringing the benefits of the middle mile network to the remaining last mile customers

Desired Outcomes

- Attract a private sector service provider to build FTTH to the entire community
- Attract a private sector service provider to extend fiber to key business locations in the community, such as an industrial park or downtown area
- Build a targeted or ubiquitous public sector – owned network
  - Operate as a utility
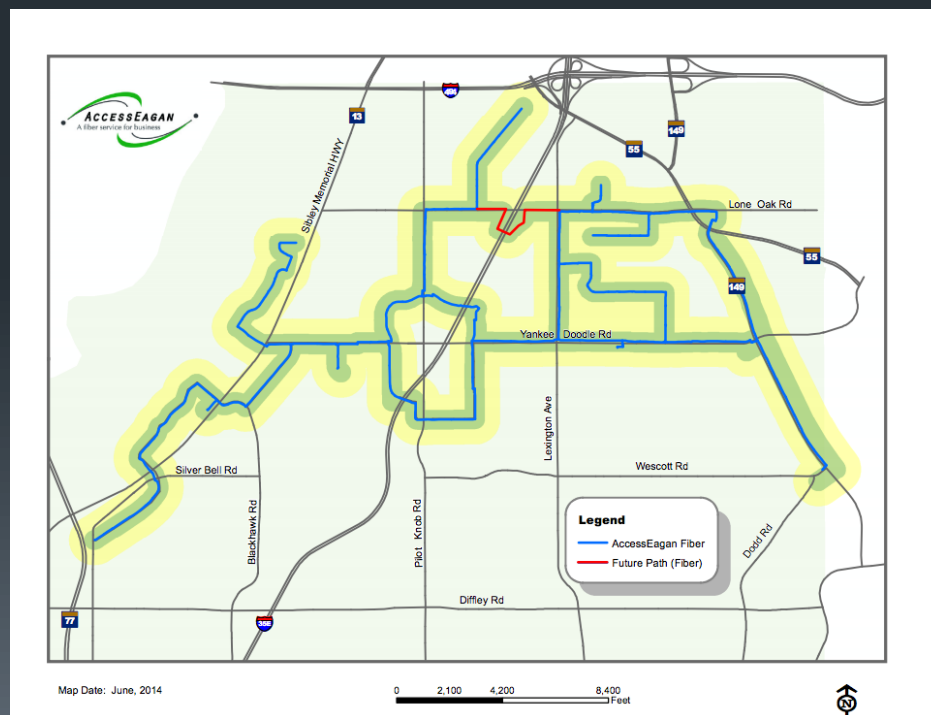 - Operate as an open access network

Attracting providers

- Make your community a more vibrant tech marketplace (Sharon's presentation)
- Document demand (targeted or communitywide)
  - Surveys
  - Social media campaigns
  - Business focus groups
  - GIS maps
- Reduce provider costs
  - Dig once conduit/fiber installation
  - Favorable fiber / conduit lease rates
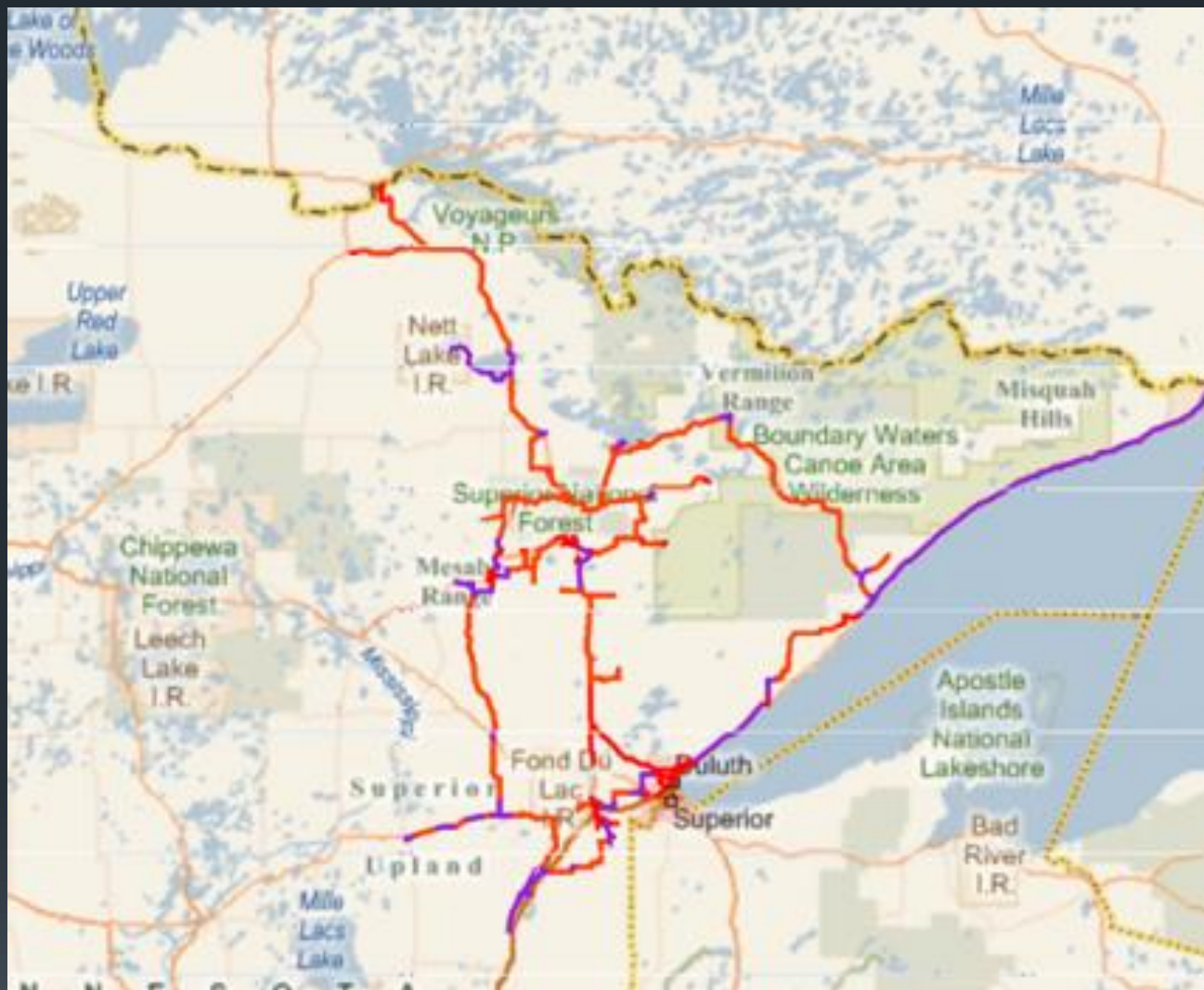 - "Meet me room" in a public sector building
  - Google community checklist

Examples

City of Eagan – Access Eagan Fiber

- Began with "Dig Once" conduit development
- Built fiber to meet its own and county government needs
- Six telecom providers have leased City of Eagan fiber to serve local business customers moving them from T1s to Gb
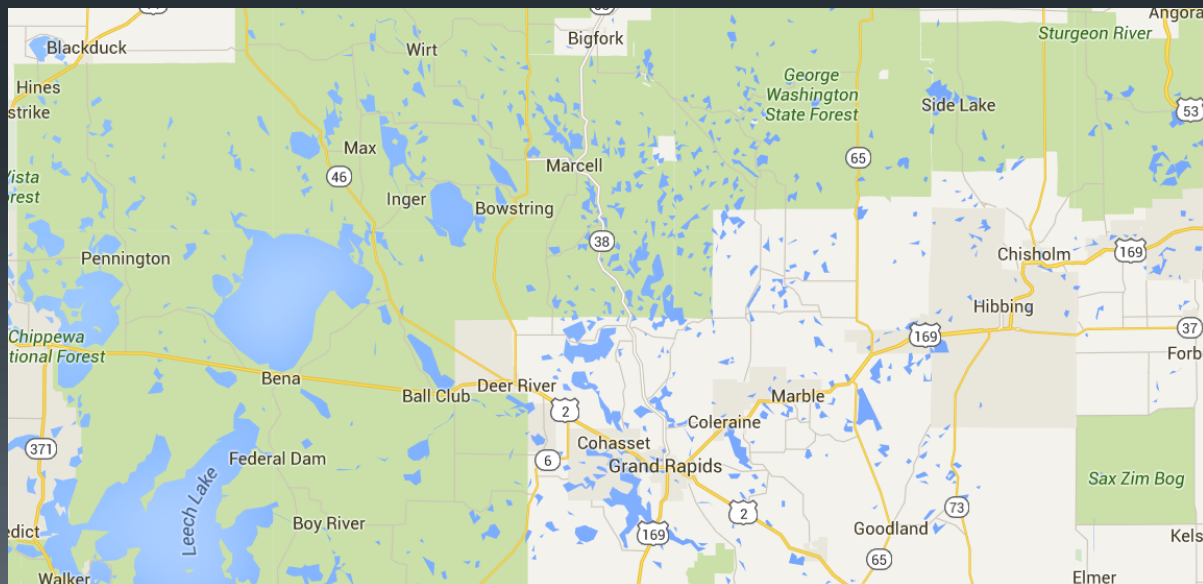 - www.accesseagan.com

Northeast Service Cooperative

Northeast Service Cooperative Middle Mile - Minnesota

- School cooperative received ARRA Stimulus grant to connect Anchor Institutions across much of northeast Minnesota, a very rural place
- Frontier Communications leased fiber from NESC as a way to upgrade their entire network within the region
  - This made high speed Internet services possible to Frontier customers who were close to the Frontier CO's
  - This backbone will enable Frontier to maximize the benefits of CAF2 funding for residential customers
- NESC provides the backbone for use by the Fond du Lac Band of Lake Superior Chippewa to use for their USDA Community Connect project

Itasca County Seeking Broadband

- One half of 3,000 square mile county served by a rural telephone cooperative using FTTH to offer Gigabit services
- One half served by a large LEC offering nothing in the rural countryside
- County used:
  - Surveys   Social media
  - Local broadband champions   GIS mapping
    - To convince Paul Bunyan Communications to expand into at least two additional townships (72 square miles) using state broadband funds.

The Cooperatives Model

- RS Fiber is a new broadband cooperative in south central Minnesota
- Formed by area leaders, assisted by existing farmers' cooperative and electric cooperative
- Covers ten communities and 17 rural townships
- Local units of government are lending funds to the cooperative
- Cooperatives are private sector, but have different objectives than publicly traded firms. Benefits accrue to members, not shareholders allowing more patient investments
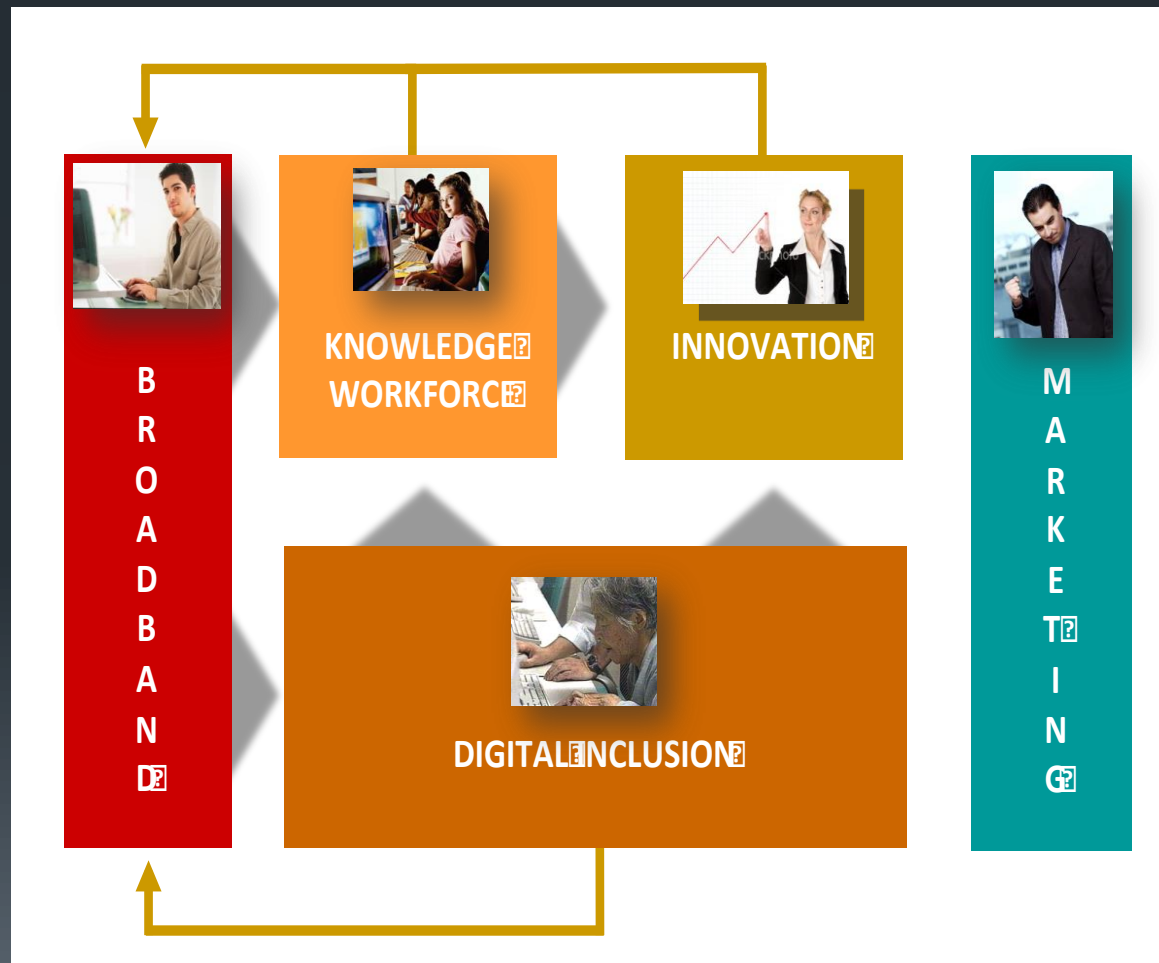
Growing the local market

Blandin Foundation

- Rural philanthropy dedicated to rural economic development and leadership
- Engaged on the broadband issue for more than ten years
- Received ARRA grant for Sustainable Broadband Adoption
- Worked with over 30 "communities" over the past six years to spur broadband adoption using the Intelligent Community model

Intelligent Community Framework

Community Process

- Planning
  - Benchmarking
  - Vision / Desired Outcomes / Project Development
  - Project funding
  - Project implementation

- Projects
  - Training (community and business)
  - Wi-Fi Hot Spots
  - Tech centers
  - Social Media Breakfasts/Tech Networking Groups
  - Tele-health apps
  - Community marketing
  - Lots more!

- Findings
  - 15% faster growth in take rates in our communities
  - More, small projects have higher impact than few, large projects
  - Cross – sector projects have higher impact
  - Fund activity, not equipment

Blandin Foundation
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