

Community investment in telecommunications infrastructure

A brief overview

Key goals

- Create a competitive marketplace
- Encourage private investment
- Reduce data and telecom costs for all
- Reduce overbuilding and redundant facilities
- Create local markets for new services

Roads, water systems, and sewer systems were usually privately maintained before communities began management of them for the common good.

Community investment in duct allows small and regional entrepreneurial telecom companies to compete with "old" monopoly service providers. It also reduces costly overbuilding.

Duct

Dark fiber may be provided by either the community or the service provider. All present and future voice, video, and data services can be delivered to homes on a single fiber pair.

Dark fiber

Data exchange points (MSAPs)

Wired and wireless services may both be used in communities. Geography, service needs, and costs will determine which is appropriate.

Co-location facilities

MSAPs, or Multimedia Service Access points, keep local voice, video, and Internet data traffic within the community, which reduces costs for all in the community.

Co-location facilities provide a place for service providers to place equipment. Shared facilities reduce costs for all.

Joining the Information Economy: Four key challenges

- **21st century telecommunications infrastructure**
- **Skilled workforce**
- **Savvy entrepreneurs**
- **Quality of life**



The Blacksburg Electronic Village (BEV) is an outreach effort of Virginia Tech, the public land grant university of Virginia.

For more information on starting a community network, visit the BEV Digital Library, at http://www.bev.net/project/digital_library/ or write to bev.info@bev.net.