# Community broadband
Planning for Success

What is broadband

Future needs (looking out 4-5 years) are now widely projected to be 25 to 50 megabits/second (sustained) with burst needs of 3x (75 to 150 megabits). All voice, TV, data, video, music, and radio will migrate to the Internet. Existing DSL and cable modem technologies offer 1-2 megabits/second at best.

Goals of telecom master planning
- Take control of the economic future of the community
- Create jobs and attract increased private investment
- Aggregate bandwidth, which reduces tax expenditures and saves money for businesses and consumers
- Reduce overbuilding; we don't have four sewer systems or three electric lines to our homes and businesses. Communities build roads; businesses use the roads to deliver goods and services. Modest community telecom investments create opportunities for local and regional businesses.

Four key areas of investment

Colocation facilities and NSAPs
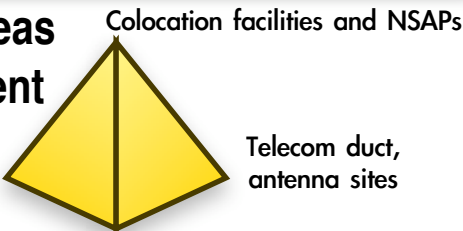
Connection points: MSAPs and RNAPs

Telecom duct, antenna sites

Dark fiber

- Colocation facilities are a place for service providers to locate equipment. Adequate AC power (with UPS backup), air conditioning, and 24/7 physical access is required. Operated on a break even basis.

- NSAPs (Neighborhood Services Access Points) are small plots of land in neighborhoods where AC power is available and equipment cabinets are located. Require developers to set land aside for them.

- Telecom duct and antenna sites are leased out to private sector providers. Fiber and wireless will both be needed; invest in both.

- Dark fiber is leased out to public and private sector customers.

- MSAP (Multimedia Services Access Point) creates a communitywide high performance intranet. Operated on a break even basis. Requires only a small amount of equipment in the community colocation facility.

- RNAPs (Regional Network Access Points) connect MSAPs in multiple communities to create regional "super networks." Especially attractive to businesses because of built in redundancy.

Planning tips
- Do not rely on "free" planning from vendors. Get an experienced, independent third party to assist with planning.
- Complexity and interconnectedness of the global economy makes it difficult to succeed without constant review of the plan
- Remember to aggregate demand--goal is to create a marketplace where sellers can deliver services to savvy buyers
- Mismatch between *what is wanted* and *what is possible* is the biggest source of problems

What you can do NOW

- Appoint a community technology task force with the authority and funding to both plan and implement projects.

- Convene a half day assessment meeting to identify where you are and where you want to go.

- Publish the results of the meeting widely as a regional vision for technology.

- Follow up with a comprehensive and ongoing telecommunications master planning process that is integrated with economic development and community comprehensive plans.

- Identify three modest projects that can be funded and completed this year. Execute!

- Work with builders to get structured wiring in all new construction. Provide builder incentives and work to amend building codes.

- Reallocate 5% of the existing road maintenance budget to begin installing telecom duct, antenna sites, and/or dark fiber.

- Coordinate all regional economic development investments to ensure that telecommunications is being included.

- Review all right of way and easement management processes. Ensure that ROW is being managed thoughtfully.

- Require developers in business parks and subdivisions to install telecom duct (just like water and sewer).

- Create incentives for TND (Traditional Neighborhood Design) with live/work homes--neighborhoods are business districts of the future.

Planning Cycle

Where do you want to go?

Set long range goals

Spin off short term objectives

Meet regularly to assess progress and adjust goals

How will you get there?

Where are you now?

Convert short term objectives to a project plan

Set milestones using strategic planning methods

Review, track, and assess