Taking on Telecommunications Planning in Your Community

by Christopher J. Campbell

Telecommunications — the web of networks that carry voice, video, and data — is the infrastructure of today's "information economy." Increasingly, communities are seeking to understand, develop, and take advantage of advances in telecommunications technology. It only makes sense that telecommunications planning is on the rise.

Of course, telecommunications plans have been around for a long time. Telephone companies, cable companies, and, more recently, users like large businesses, schools, and hospitals have put together plans to guide the development of their networks. But community-based telecommunications planning is new in most places.

Community telecommunications plans can address some or all of the following issues:

- Developing a network (for example, an institutional network serving schools, town offices, and libraries)
- Planning a telecommunications facility (for example, a telework center where residents can access distant work opportunities locally)
- Providing new features on an existing telecommunications system (for example, increasing the amount of locally-produced content on the Internet).

Community-based telecommunications planning requires a high degree of collaboration between public agencies, private businesses, and non-profit organizations. Representatives from education, government, health care, libraries, PEG (public, educational, and governmental) cable access stations, and telecommunications service providers are all good candidates for participation in the planning process. Telecommunications planning efforts should also include community leaders and decision-makers, front-line users, "techies" (although they should not dominate), and students.

Here are some guidelines on what information to collect as you get ready to prepare a community-based telecommunications plan:

- Learn how groups in your community are already using telecommunications, and ask how it is making a difference.
- Identify the level of technical support, sophistication, and attitudes toward technology.
- Review any telecommunications plans already prepared by individual institutions in your community.
- Learn how different kinds of communications or information capabilities could make a difference to various groups within your community.
- Ask where people can go to learn how to use new technology.
- Identify your community's information "have-nots."

Learning about the capabilities of the telecommunications infrastructure — what it can do — is more important than learning about its physical composition. Keep in mind that only a few telecommunications networks, such as telephone networks, extend directly to most end users. Others require connection at a distant point. For example, many Internet users access the Internet indirectly through the telephone network. Identify which networks you can readily and economically access.

Two Local Approaches

The small city of Glasgow, Kentucky, is fortunate to have an Electric Plant Board (EPB) (municipal electric company) that, in the late 1980s, boldly developed an advanced public telecommunications network. The EPB, though originally looking for a way to transmit information in a city-wide electricity demand management system, realized that the same wires could also support a cable television system.

According to the EPB: "One lane of our 'highway' carries telemetry and commands that the electric utility uses to operate its distribution and transmission system. Other lanes carry meter readings from electric and other utility meters and commands to control capacitor banks and outdoor lighting installations. Some of the highway is used to provide a competitive cable television service and a competitive telephone system." In addition, the city-wide network connects all of the K-12 classrooms, city agencies, utilities, and a growing number of homes and businesses.

The Electric Plant Board has also fostered cooperative telecommunications

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The Broader Planning Picture

Municipal, county, and regional planning bodies influence telecommunications primarily through policies that provides advice, guidelines, or regulations for those who are actually developing or managing telecommunications systems. For example, local or regional policies can affect the permitting of wireless telecommunications facilities, use of public rights-of-way, franchising of cable operators, and the development of networks by schools, governments, or publicly-owned utilities. These policies may be part of a larger plan, such as a municipal or regional compre-

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ventures. For example, the EPB saw that the cable infrastructure could allow for the development of a shared geographic information system (GIS). This system would benefit not just the city government, but the county government, school district, water agency, and regional rural electric cooperative. These organizations, realizing their common interest, shared the cost of developing the GIS. The GIS database is now also available for a subscription fee to any computer user connected through the EPB's cable infrastructure.

In Rutland County, Vermont, a partnership between the County's school districts and Castleton State College provided the basis for a planning project that included the regional planning commission, the economic development corporation, and the public library, among others.

The Rutland planning group, through a series of community meetings, discovered that a broad range of the county's small institutions, organizations, and businesses were not using their existing infrastructure to its potential. Few groups had developed the ability to effectively understand and use new telecommunications technologies. The resulting telecommunications plan called for the development of a technology cooperative to assist the schools and others with training, technical support, and technology management. ◆

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