



## Integrated Community Networks

By Francis J. Knott

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Integrated Community Networks (TM) are to the information based economy of the 21st Century, what railroads and canals, road systems and air routes were to the industrial economies of the 19th and 20th centuries. These communication links were essential to the growth of these earlier economies. Each of these basic infrastructures caused major social, political and economic changes, and they also required new policies and laws as well as different types of economic partnerships to facilitate their implementation. Integrated Community Networks call every segment of our country to such a challenge. Yet politically, we have failed to communicate to the American citizenry the very personal and tangible value that such new infrastructure investments would have on their every day lives. What is currently lacking is the general public's genuine understanding and support for private and public sector investments in fiber optic based information highways.

Our economic institutional, regulatory and policy structures are based on an industrial economy which trades goods; an Information Age economy exchanges information resources. As a result, America is ill equipped to effectively compete in the emerging Information Age. The United States is the information technology leader of the world, yet we have not taken advantage of that position to enable our country to become the economic leader of the Information Age. Integrated Community Networks are the economic foundation of the Information Age through which such changes can become a reality. Band-Aid approaches are no longer tolerable. Time will not wait for America; America must seize the day.

An Information Age economy requires a solid base of well educated knowledge workers, not merely hamburger jocks. It also requires real time information accessibility whether it be voice, data, image, and /or video. Such an economy needs communities centered around information technology hubs, not the current transportation hubs. In such an economy, any community with qualified knowledge workers and information network access will be the location of choice for value based knowledge jobs and businesses. As I have observed, this can be in Flippin Arkansas or Ben Lomand Tennessee just as easily as it could be in Chicago, Tokyo or London.

Ours is a nation struggling to understand where we went wrong. The electorate asked for change because they knew in their hearts the country was not on the right course. Americans do want a purposeful vision of where we go from here to get back on track. However, they lack a sense of direction. We find that vision by returning to the interactive society which gave us the strength to master the industrial Age, and to ride this wave of success from 1870 1980. Our national strength arose from our sense of interdependence formed in small heterogeneous communities all across our country. What went wrong is that railways, highways and air routes which fueled our economic growth during the Industrial Age, also gradually separated us into isolated homogeneous communities. We lost our sense of interdependence, and our focus became parochial and narrow. We became a nation of special interest groups, rather than one of common interests. Integrated Community Networks are a key infrastructure solution to these problems. They are the key to rebuilding heterogeneous interdependent communities of interests.

We have not built a modern nationwide broadband communications infrastructure that truly integrates all constituencies of our communities, whether they be urban or rural. We, therefore, attempt to resolve problems as isolated issues, as if education problems, work force retraining issues, health care reform etc. are unrelated. Just as Chrysler Corporation merged



multidisciplinary interests into a newly integrated work force through its new technology center, so also must the rest of this country, its communities and private interests, invest in the creation of Integrated Community Networks. These networks will link separated pockets of expertise and create new economic relationships that positively provoke reform in education, training, health care, research exchange, the environment and economic development.

Networks linking high schools, community colleges, industry and universities can create new more productive economic engines for our economy. High Schools can generate newfound revenues by selling classroom space to community colleges from 4 PM into the evening. Community colleges can assist industry in economical retraining of America's work force without constructing more buildings while dramatically expanding their paying base of students. Colleges and universities can offer remedial programs by buying them from community colleges instead of duplicating resources. Business can better link to colleges and universities to more rapidly share ideas and speed up the time cycle of commercialization of research into the private sector. Industry can transfer its billions of dollars of work force retraining into the public education system, rather than building its own duplicate education program. School systems once again become a 24-hour per day resource, supplying benefits to all constituents of a community.

With hospitals connected to Integrated Community Networks, rural communities can maintain regional health capability for young and old. Nurses in those communities can upgrade their skills by accessing advanced courses through the local school system connected to the medical university. On the Integrated Community Network, far more prisoners can gain access to education and training programs from all across the community. Delivery of prisoner health services, provision for remote arraignment and parole hearings all add up to a much more affordable public safety system. State and local governments can use these same networks to better link all of their communities and more economically provide voice, data and video capability.

The whole community wins with the Integrated Community Network. And once again our individual communities are more closely connected creating a new sense of interdependence instead of independence. We become a nation of renewed common interests, not the tired old one of special interests. We become an economic powerhouse of community based interconnected information hubs, capable of competitively attracting and developing any new Information Age business opportunity. Information Highways make us a stronger nation, politically, socially and economically.

#### **ACCOMPLISHING THE GOAL**

We must communicate to the public that Integrated means the involvement of all social groups in the country, and the interconnection of all areas and levels of the economy. Community applies to various markets, industries and organizations served. Network refers to both the infrastructure as well as the applications and services that each community requires to cause economic and social renewal in the United States. An Integrated Community Network is an infrastructure investment that provides an information foundation upon which institutional, political, social, bureaucratic and cultural barriers can be reformed and /or bypassed. We cannot reform education, create equality in health care delivery, retrain America's work force, improve the environment, and grow our economy unless there is a systemic foundation upon which sustainable change in the ways we do business economically, socially, politically and institutionally can occur.

Today the Integrated Community Network, a fiber optic backbone, will provide the Information Highways akin to past communication technologies. This backbone will provide information at any time and at any speed in the areas of voice, data and video applications. With information available anywhere or any time, from a variety of national sources, economic development and market opportunities for all network users will rise. This network will serve users at a national, state and most importantly of all, at the community level. Further development of the network will reach people in their homes.

With such a communication network, location of business, schools, universities, etc. will be unimportant. In fact, Opportunities for small rurally located businesses and the development of people that work in them will reach levels seen



only previously in large industrial cities. Poor urban communities will be able to have access to Information Age education and training resources and job opportunities here to fore unavailable to them. Traveling will be cut, thus saving fuel and the environment. Educated people living in small communities will lead longer and healthier lives.

We must look to partnerships of private and public interests. The role of the federal government should be one of policy leadership, not just an easy piggy bank. We challenge private citizens, and public officials to see the economic power of cooperative effort. We recognize that old institutional structures, and regulatory policies at the national and regional level may very well inhibit, not facilitate, the deployment of Integrated Community Networks. And we realize that the geographic boundaries of trade policy cannot control information exchange in a world that is seven seconds wide.

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