

## Communications Policy for Sustainable Cities: A Potential Role for CTCs

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May, 1999

Most urban communities face at least two challenges to long term sustainability. The first is the near total dependence on the fossil-fueled private automobile which creates unhealthy living conditions through pollution, saps the economy through congestion and makes all of society dependent upon a steady flow of imported oil. The underlying cause of this dependence is the way in which metropolitan areas have been built with housing widely separated from all other urban functions.

The second challenge is the gap between rich and poor which has been widening throughout the post-war years, and the related phenomenon of the spatial concentration of wealth and poverty. One cause has been disparities in educational achievement which tend to follow the structure of household income. Another is the need for access to the digital broadband network infrastructure which forms the means of production in the information economy. Lack of access to this infrastructure is responsible for the so-called *digital divide*.

Communications policy does not now, but could in the future, address both of these challenges simultaneously, thereby improving the prospects for sustainable cities. I call this policy *public transit for the information highway*.

At ground level it should consist of a system of shared-use, non-commercial *network stations* (network access centers analogous to bus or train stations) located so that no household is further than walking distance from a neighborhood station, and no more than 2 miles from a village station.

- The capital cost of network access and the know-how for developing network applications are significant barriers to ubiquitous network use.
- Each *network station* can be programmed and staffed to provide the functions (school classes, medical services, work opportunities, etc.) that address the needs of the community.

The *network station* should provide non-commercial access to broadband networks, become the destination for many trips that would otherwise terminate outside the community and, in general, become the center of neighborhood or village life..

The prototype network station was developed in Compton, California in 1995. Named the Blue Line TeleVillage (BLTV), it has just completed its third year of operation.

The BLTV has six elements.

Computer Center – in an 800 square foot room equipped with 12 pentium computers, local area network, and internet access using 4 integrated services digital network (ISDN) lines.

Video Conference Center – in a 1200 square foot room equipped with a dual monitor group-scale video conference system, seating for up to 25 people, and 3 ISDN lines with an option for 6.

Telework Center – two semi-private work stations equipped with computers, telephones and printer, connected to the internet through the local area network in the Computer Center. The Telework Center was located in the City of Compton's Business Assistance Center (BAC) and provided teleworkers with access to the BAC's meeting room and library. The library was also equipped with a VCR and a desk-top video conferencing unit using a single ISDN line.

Kiosks – City of Los Angeles Housing Authority, AIDS Information Center of the County Museum of Science and Industry, an ATM from Wells Fargo Bank, and an ATM from the Bank of America.

Community Meeting Room -- a large space that could seat up to several hundred.

Circuit Rider Work Station – set aside so that representatives of various government agencies could appear for scheduled visits at the BLTV to provide information or directly deliver services to constituents. A benefits counselor from the Social Security Administration is an example.

The results of the first nine months of operation included the following:

Computer Center – provided public access computing, classes ranging from an introduction to computers to intermediate level in several applications programs, internet access, contract training for local organizations such as day care providers, and facility rental to large organizations interested in conducting their own computer training programs for employees.

Video Conference Center – 24 interactive video conferences were held in addition to 50 meetings that did not use technology. The video conferences included a contract distance education class originating at California State University at Dominguez Hills; library services such as story telling for pre-school children and a book tour lecture by African American author Walter Mosley originating in the Pasadena Public Library; several small business assistance seminars sponsored by the Small Business Development Center also originating in the Pasadena Public Library; a meeting demonstrating the technology for local artists, and another with an FTA official discussing possible programs with state and federal agencies.

Telework Center – provided a professional work space for local residents who were home-based or for small and under-capitalized organizations; and provided a remote

work station for employees telecommuting from a regular job. The desk-top video conferencing unit was intended for local business people to obtain one-on-one training from mentors in Small Business Development Centers located elsewhere in the County.

Community Meeting Room – Several large gatherings were held there, including the BLTV planning meeting attended by 150 community leaders, BLTV Advisory Board meetings and a “Women’s Day” Conference. In addition, other organizations held meetings there in order to tour or to use some other element of the BLTV. These included the Inner City Computer Society, the Compton Chamber of Commerce and the Regional Business Assistance Network of the Los Angeles Economic Development Corporation.

Circuit Rider Work Station – only the federal Office of Personnel Management and the Metropolitan Transportation Authority provided a circuit rider, although there was community interest in other government agencies. The work station was primarily used for BLTV administration.

One of the lessons learned from the prototype was that a *network station* can simultaneously provide non-commercial, community-wide access to broadband networks, electronic versions of a variety of “place-based” urban functions, and a broad program of business and individual support services.

This implies that a system of network stations can legitimately claim financial support from telecommunications, transportation and economic development funding programs. In fact, the BLTV was funded by the Intermodal Surface Transportation Efficiency Act (ISTEA, reauthorized in 1998 as TEA21), not by the Telecommunications and Information Infrastructure Assistance Program (TIIAP). Currently, there is substantially more money available for mobility projects than for information technology projects.

I believe that the next step in the evolution of a communications policy to support sustainable cities is a metropolitan scale demonstration of a system of *network stations*.

It may be that the fastest and most cost-effective approach to this scale demonstration is to transform an existing system of community technology centers. A *network station* uses a broader technology platform and provides many more urban functions than a traditional CTC. Transportation funds could be used to demonstrate this transformation.

Some CTCs are already moving in this direction. Many others have space to expand, a transit accessible location, and innovative management. CTC managers or board members who are interested in the expansion that I have described, and who can mobilize other centers in their metropolitan area to cooperate, should contact me to discuss transforming a system of 3 to 5 CTCs into *network stations*.

