

Abstract:

**Texas Public Policy: Community Networks Statewide**

Gene Crick, Director, TeleCommunity Resource Center

Traditionally, submissions for TPRC have comprehensively documented data, results and conclusions drawn from empirical research and scholarly endeavor. However, in what may be their Salute to Diversity in the New Millennium, TPRC has allowed this author to describe not the completion of a telecommunications policy initiative, but rather the beginnings of one.

In recent years the government of Texas made a policy commitment to develop telecommunications infrastructure throughout the state, making Texas arguably the nation's most "connected" state. Texas legislators funded this policy commitment with a telecommunications levy accruing more than 1.5 billion dollars in a Telecommunications Infrastructure Fund (TIF). This fund is to be distributed over ten years in support of public telecommunications development statewide, especially in rural and underserved areas.

Despite growing pains the first five years of this program have ensured broadband infrastructure access in virtually all schools and libraries across the state. Now the Texas program is widening its scope to more directly benefit entire communities and reduce the number of Texans left out of the Information Age. To reach this goal, the state agency is funding Community Networking grants, beginning with 17 million dollars awarded 36 communities on August 11, 2000. These grants are soon to be followed by greater allocations during the coming years.

This first person report is presented not by an academic but by a telecommunity activist, one of the architects of the Texas Community Network technology initiative. The paper discusses the origins and expectations of this innovative public program, the country's largest regional telecom effort to date. Obviously

there are few results yet to recount, but some lessons (and concerns) have already begun to surface. The project outline, including history and some preliminary comments, is briefly summarized below. Further information, as collected, will be presented at the national Community Network Conference and maintained online. (<http://www.tcrc.net>)

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During economic downturns some years back, Texas legislators became deeply concerned about future tax revenues. Two major state economic sectors, ranching and oil, were in serious decline. The cattle industry had long ago lost its dominance in a world of sushi and grilled chicken. And the current tax base mainstay, our domestic petroleum industry, was clearly in deep trouble. But, in a state rapidly running out of liquefied dinosaurs, legislators faced the challenge with vision and resolve. Their credo: “Boys, we gotta find us something new to tax.”

These worried legisfolk soon recognized Texas’ one unlimited resource: words. So they quickly dedicated their efforts to making the state a leader of the Information industries. In this revised economic model, the archetype Tall Texan soon began to look remarkably like Ross Perot.

To give fair credit, their redirected policy proved effective. Though like any elective body, the Texas Legislature has its share of what we sometimes term “special needs legislators” key Texas leaders successfully accelerated the state’s growth in information technology (IT) industries to lead production in the United States; IT has now become the state’s number one economic sector.

At first, Texas telecom policy was focused almost entirely on the business aspects of technology and telecommunications, viewing these tools primarily as vehicles for economic recovery and expansion. There was a good deal less policy emphasis directed toward citizens’ individual, cultural or social benefits, other than to the overall economy.

In fact, despite the energetic economic policy attention paid the business of telecommunications technologies, Texans in general seemed remarkably slow to recognize the other social implications and potential. When citizen-led network efforts arose spontaneously (in Austin, San Antonio, El Paso and North Texas) those remained in a sort of isolation, without notable government interest or public support. Nor was there much interaction with efforts in other states where public interest telecommunications seemed to rank higher on various political agendas.

But for Texas this changed dramatically in 1995. During that year the Texas State Library launched an Internet Access Grant program, which enabled nonprofits like the TeleCommunity Resource Center to help install public Internet access in communities across the state.

An even more significant 1995 policy milestone was the state's defining telecommunications legislation, Texas House Bill 2128, passed by the 74<sup>th</sup> Legislature. This sweeping act redefined Texas telecommunications for the coming decade, including a mandate for all citizens to have opportunity and access in the Information Age.

Theories differ on the forces behind this epiphany in Texas policy:

Some suggest the Texas Legislature was and is a wholly-owned subsidiary of Southwestern Bell Telephone Corporation. Not so, though it is true Bell generously provided nearly two hundred registered lobbyists, constantly on hand to assist lawmakers with any questions or doubts about the value of this telecommunications bill.

Others suggest the Angel of Conscience visited the hearts of those legislators and bade them care and labor mightily for all our people. Well, maybe. Especially if the Angel timed her visits for Happy Hour.

But whatever their reasons, Texas lawmakers drafted comprehensive new telecom policies and affirmed that principles of universal service should continue to apply for rapidly evolving communications technology. Much of this Texas law seemed to anticipate provisions in the federal telecommunications bill that passed a year later (1996).

## IMPLEMENTING SOCIAL TELECOM POLICY

To implement these public policy commitments the 74<sup>th</sup> Legislature created a 1.5 billion dollar (\$1,500,000,000.00) Telecommunications Infrastructure Fund (TIF). Money for this fund is generated by surcharges on consumer telephone and wireless account charges.

The 1995 legislature also created a new state agency, the Texas Telecommunications Infrastructure Fund Board, to administer grants and loans from this fund for ten years, averaging \$150 million per year. The TIF Board goal is to promote development of telecommunications infrastructure statewide, especially in rural, geographically remote, and underserved areas.

Greater detail of the basic TIF grant and loan program plan is available in the appendix to this paper or even better, online at:

<http://www.tifb.state.tx.us/masterplan/masterpln-grntloan2.htm>

Other related HB2128 and TIF information documents are linked via:

<http://www.tifb.state.tx.us/masterplan/masterpln-table.htm>

Naturally, as a new state agency, TIF had growing pains. With only a tiny staff and operating budget, lacking any precedent, existing management, or

bureaucratic heritage, it seemed impossible for this plucky little agency to achieve successful operation within two years.

And it was impossible. By 1997 the next (biennial) Texas Legislature convened to find the only TIF funding in two years had been a 30 million dollar transfer into another state agency's coffers. (Naturally heads of other agencies, recognizing a weak new competitor with a huge fund of unspent cash, began circling and perching on telephone poles, ready and eager to help TIF distribute the \$150 million a year.)

Fortunately the Governor's Office intervened, providing TIF with new board leadership and motivation, plus desperately needed support for a too-small staff. Programs became much more effective, soon providing new telecom connectivity for nearly every school district, library and institute of higher education in the state, also funding distance learning, telemedicine and "discovery" grants (for exploratory projects).

Although initiated before coinage of the term "Digital Divide," the Texas TIF program has been successfully addressing the challenges of equity and franchise in the Information Age. The first phase, now very well underway, provides every community with basic connectivity, beginning with Internet access networks and terminals for schools and with public access stations for libraries. At the current time, TIF has spent approximately \$340 million statewide, providing T-1 speed telecom access for virtually all eligible institutions.

This success however, though important and commendable, brought direct benefits only to limited segments of each community, mostly K-12 school children and library patrons. TIF's Phase I was having little constructive impact on the larger community, specifically including families, wage earners, employers and local businesses, even county and municipal government. Under terms of the

law, these vital elements of every community are not eligible to directly benefit from TIF grant support.

So, recognizing that basic local access is necessary but not sufficient, the Texas program continues those efforts but has recently added a new series of grant programs to address the challenge of telecom infrastructure benefits for the entire community. The goal, working within the mandate and enabling legislation, is to allow every Texan a real opportunity to participate in the Information Age.

TIF staff, working with volunteer advisors (including the author) designed and created the Community Networking (CN) series of grant programs. CN grant funds are offered to support local leaders who are working to use telecommunications tools for community-wide benefits.

Local goals may include economic development, improved education, more (and better) employment opportunity, enhanced local medical services, and anything else considered worthwhile by the community itself. CN grants should not only be used to pay for improved local infrastructure, but also to discover and deliver ways TIF grants can help leverage other telecom resources for community benefits. For example, a CN grant might be used to collaborate with an industry partner providing additional services to the community.

## REQUIRED COMMUNITY NETWORK ELEMENTS

Though communities decide what their CN projects will offer, TIF does require four elements for any funded Community Network:

Public Access – the project must expand free public terminal access to the Internet.

Community Web Content – The CN project must include presentation of local community information on the Internet.

Training – Offering technology without training is a poor way to serve communities. TIF-funded CNs must include classes for CN staff and for the general public.

Sustainability – No project will receive a TIF CN grant without a clear plan for continuing the benefits after TIF grant support is completed. Leaders must explain what services will be continued and how the CN can meet the costs of providing those services beyond the TIF grant funding.

Note: For purposes of this grant program, community is defined as local physical proximity rather than a wider community, related by some common interest. Future TIF grants are planned to link today's funded Community Networks into larger, Regional Networks. These will be followed by grants an even wider hierarchy of networks, progressing toward a fully interactive citizens' network of networks statewide.

## GRANT PROVISIONS

Eligible entities may apply on behalf of local collaboratives, which must include a broad group of community members and organizations. Commercial companies may join and support the collaborative, but are not eligible to directly receive TIF funds.

The Community Networking grant program is designed in separate stages. The first step is required application for a planning grant. Those awarded planning grants then use the money to help develop an overview telecommunications plan for their communities, including a detailed plan for the local community network to be funded by TIF.

When the plan is completed and returned by deadline, it becomes an application for the next phase of funding – up to \$500,000 in implementation funds, to actually build the community network project. No community which has not sought and completed a planning grant may apply for implementation funds.

## CN GRANT HISTORY AND STATUS

Highlights of the very first grant round (CN1):

The initial CN1 program is now underway, with approximately 18 million dollars in funds recently awarded to 36 communities.

09/01/99 - 205 communities submitted the required letters of intent to apply for CN grants.

10/01/99 - 97 submitted applications for Phase I planning grants.

02/01/00 - 54 applicants, having been awarded \$20,000 planning grants, (with a 10% cash match required from the community) began community network planning efforts.

05/19/00 - 49 communities submitted completed community network plans as applications for implementation funding.

08/11/00 - 36 communities awarded Phase implementation grants, up to \$500,000 each.

10/02/00 - Community Network project building to begin. Duration of funding period is 2 years.

10/06/00 - Estimated release of CN2 RFP. Next Community Network Grant cycle to begin.

Total awards for the first (CN1) grant program were approximately 18 million dollars; the second (CN2) grant cycle, expected to begin within 60 days, may be allocated a greater amount of TIF \$150 million annual funding budget.

#### FIRST NOTES ON THE PROCESS:

As noted in the abstract, at time of writing this paper can describe only the beginning of a program. Awards are less than two weeks past and official implementation period will begin October 2, 2000.

But based on previous projects and pilots during the five year program development period, plus intense experience with planning for thirty one communities funded under the program, I offer a few preliminary comments and tentative guidelines:

COMMUNICATIONS - Developing guidelines and documents for this first-ever regional community telecom project proved much more difficult than anticipated. While most other state and federal grant programs tend to attract and serve particular groups (schools and nonprofits, for example) Community Network grants seek to reach many people who are unfamiliar with these, or any, grant processes. Explaining the potential benefits and the complicated application to these community partners can be quite difficult. In fact, simply reaching community leaders to advise them of the opportunity proved enormously challenging; there is no single channel to reach "community leaders" (although in one very small community I was informed they already had a communications network center, located at the town's only ladies hair salon)

COMMUNITY LEADERSHIP - A critical aspect of this policy initiative is promoting and enabling local community technology development, rather than directing or mandating it. A possibly condescending “top down” government policy of “bringing the telecom miracle” to smaller communities is inappropriate and inevitably limited in success.

From early lessons, we recognized the CN program’s proper role is only to offer resources (possibilities, information, funding and support) for any local leaders who choose to design, build and sustain telecom projects for their communities. And for greatest success, one or more of these local leaders or groups become “champions” who invest great personal effort into the process. Their unwavering commitment is an important element of success.

But identifying, developing, promoting and supporting community leadership is no small challenge. We hope eventually to create more formal programs to help build this sort of leadership; right all we can do is invite communities to send people to workshops we host to discuss building community technology networks. From those who come to those workshops we try to recruit and engage people in the process. Some people respond, and we start working with them in their communities; we never hear back from others. For now at least our own resources are limited, so this self-selection of candidate cities works fairly well in identifying areas where our efforts are more likely to help enable success.

“RIGHT” (AND WRONG) COMMUNITIES - Many locales we visit are highly motivated to enhance their telecommunications capability. These communities feel higher bandwidth information access will help them preserve a viable local economy and offer their young people more opportunity to remain in their hometowns. They believe community telecommunications resources can help reduce pressure to move elsewhere for better educational and employment

opportunity. In fact, local economic development leaders, along with educators, are among the most active supporters of community telecom projects.

On the other hand, not all communities share this great enthusiasm for connectivity. A few communities, while recognizing the power of the Internet, indicate surprising contentment with their community's present condition and even express a courageous willingness to face a life without the fastest possible access to the World Wide Web.

So local decision prevails. Texas community infrastructure grant programs save time and effort by focusing on supporting active efforts of involved community leaders. They avoid the "drive-by" philanthropy mistake of attempting to impose unasked, unwelcome, and almost inevitably unsupported and unused technology on people disinclined to receive it.

RELUCTANT PROVIDERS – Though telecom deregulation has many virtues, the doctrine shows a dark side to rural connectivity planners. Most telecommunications providers quite naturally focus on denser, more profitable urban markets, where lower costs of service allow them greater return to their equity holders. Thus simply finding vendors for higher speed data communication is difficult (or impossible) in many underpopulated or geographically remote rural regions.

Alas, we can't claim to have perfect answers for this problem. One useful tool has been greater attention, both from the Legislature and from the public. Lawmakers have affirmed a doctrine of universal service statewide; they erected a firm platform guaranteeing advanced services at equitable prices for every community. Immediately afterward, of course, Texas telco termites began chewing away at the planks in this platform:

DSL, which can deliver T-1 speed over copper pairs, is justifiably promoted as flavor of the month in bandwidth circles. But some evangelists neglect to mention the 16,000 foot signal limitation (and \$100K+ DSLAM cost) which means DSL isn't likely to appear at many West Texas goat ranches, or anywhere else in more remote regions, anytime soon.

ISDN, which delivers a respectable 128K, was mandated statewide. But the most rural LECs (local exchange carriers) quickly sought and received waivers, potentially denying better access to people who may just need it the most. (Please note I'm not arguing tiny rural phone companies must provide expensive switches if unused - only that a better plan must be found to include rural people in modern telecommunications.)

And finally, POTS. Policy from our legislature and state public utility commission (one of the country's finest, no joke.) sought to assure that customers could at least get a pitiful minimum connectivity from their Plain Old Telephone Service. All they asked was a 14.4 Kb rate so if all else failed you could dial the Internet and go fix dinner while one web page downloads.

Nope. No deal. At least one major telephone company has refused to promise to provide even a 14.4 rate, at least for several years. They say their service just isn't good enough to deliver such blistering speed.

Finally, adding insult to insufficiency, some (enormously profitable) telecom providers turned to the policies requiring that advanced services be eventually made available for every consumer.

Their answer to this vital socio-technical challenge? They're pushing the definition of advanced services downward to 56Kb connections, a data rate which is possible using two very clean tin cans and a piece of newly greased

string. (The only charitable view here is that our giant telcos want to protect innocent customers from being struck by flying data.)

**CIVIC COMPETITION** – Another unexpected obstacle we’re encountering is a lack of heritage of cooperation between some governmental entities. Although it’s old news to seasoned policy makers, we were surprised to find bitter inter-governmental competition in a few communities.

One recurring example was tension between city and county governments over costs of public services. Enduring disputes like support for library patronage or indigent health care can become acrimonious barriers to governmental cooperation for community networks. In at least one pilot, the best we could do was invite the divided community to make contact whenever they felt ready to proceed as a collaborative effort. Fortunately, though extreme, this was an isolated example. Almost all government leaders we encounter are grownups, able to work and play well together when it benefits the community they are pledged to serve.

**TECHNO-RAPTURE** - Losing perspective in such intense endeavor remains a chronic hazard. We believe in the social value of telecom technology, which is why we advocate its wide spread availability. But sometimes zeal might cause us to forget that communication is the goal, technology is nothing but a tool to serve the purpose.

For this reason, we recommend communities regularly re-examine where and how their telecom projects are spending money and effort. It helps me to remember that community networks have been around as long as people have shared ideas and information with each other – the only thing that ever changes is the technology they use to communicate.

GETTING PAID HELP – A funny thing happened on the way to Utopia. After years of our constant whining for a large-scale community technology network initiative, the government did a cruel thing: they adopted the policies and provided the funds. In this uncomfortable “put up or shut up” situation, we discovered a shortage of community network planners experienced in designing technology for social goals, a fairly critical shortcoming when a \$1.5 billion dollar fund is redirecting efforts toward this area.

Further complicating our situation was the state’s announced belief that Texas planning funds should employ (and develop) community network planners located in the state.

Ironically, this arguably provincial attitude was proved correct, but for a different reason. The problem was not philosophy but logistics. We discovered the vast geography involved and continuing need for personal community contact simply make proximity a requirement for consulting in Texas.

(At the urging of certain officials, our solution was to create Texas Telecom, a CN consulting organization [www.txtele.com](http://www.txtele.com) but other solutions may be available in different states and circumstances. I recommend contact with the Association for Community Networking <[www.afcn.net](http://www.afcn.net)> )

## STIRRING CONCLUSION

I believe no one here disputes the impact of digital communication. Nor doubts its potential for economic and social value. But I suspect you may also share my concern that telecommunications could become a force for segregation, further dividing an already polarizing society. If we accept and celebrate an electronic culture which excludes some, perhaps most, of our people, then the Information Age has become a very bad time to live.

My hope, as a telecommunity activist, is that this Texas policy experiment will continue to flourish, promoting development of infrastructure and opportunity throughout the state. And that the Texas CN policy model, both good and bad, to be closely considered. At our TeleCommunity Resource Center, we'll be working to record and share the experiences and lessons learned as this initiative unfolds.

Since our nonprofit project is national in scope, we hope other states and countries will stay in touch with the Texas efforts, building upon the things that work and avoiding the mistakes we'll inevitably make.

If we have a credo (as a Texan I'm big on credos, provided they contain short, easily pronounced words) it would be to remind everyone: If a bunch of Texans can build community networks across our state, how tough can it be? Surely you can do it in your state.

Respectfully submitted,

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You are invited to further discussion of this policy model, either online or when presented in Austin, Texas at the December 11-12 Community Network Conference <<http://www.tcrc.net/conference>>