

## **APPENDIX C**

### **RESEARCH DESIGN**

#### **INTRODUCTION**

The research for this project consisted of a policy review, case studies of three cities that have innovative programs and policy regarding access to IT, and a mail survey of the 339 member organizations of the Community Technology Centers Network (CTCNet). Together, these three approaches allowed us to put together a broad picture of the field and of the policy environment in which community technology organizations operate, as well as a more nuanced understanding of how things work within and between programs.

#### **POLICY REVIEW**

This component of the project consisted of a review of state and local policies concerning gaps in access to information technology. We analyzed policy in order to determine the range of government involvement in IT and how policy regarding IT varies from place to place. We also used this review to gauge government involvement across the country and at different levels of government, and to identify innovative policy efforts nationwide.

Relevant federal-level policy was relatively easy to locate and study. We identified states with important IT policy efforts largely through our interviews with field experts. We then obtained copies of state legislation and interviewed experts and policymakers in those states about their work.

#### **SURVEY OF COMMUNITY TECHNOLOGY CENTERS**

The survey provides a broad base of descriptive information on community technology centers (CTCs). We opted to survey community technology centers (rather than networks, for example) because their missions tend to be most inclusive of community development goals and because centers tend to work more specifically in low-income communities. We used CTC Net's membership list as our mailing list. Information collected from the centers included size, age, target population, affiliation with other organizations, mission, anticipated outcomes, definitions of success, and funding sources. We also collected qualitative information regarding the challenges these organizations face, and the ways in which they measure and evaluate their work. We analyzed the data from this survey in order to describe the range of programs that fall under the umbrella term, community technology center. We also used this data to generate hypotheses about the relationship between public policy and the CTCs' missions, and hypotheses about the relationship between type of funding source and organizational autonomy and accountability.

## CASE STUDIES OF AUSTIN, PITTSBURGH, AND SEATTLE

The case study method was most appropriate for conducting the core of this exploratory research because the project asked questions about processes and relationships. Moreover, some of the questions posed—for example, *How* do community technology programs work and *why* have they emerged?—are best explained by case studies. The case study method, which allows for a wide range of data to be used, is also consistent with this project’s goal to collect a great deal of information from a variety of sources in order to describe the way in which community technology programs work and how their relationship with government is structured. Research conducted included the following:

1. *Existing program data.* The data included the following: budgets; organizational charts; historical statistics on client base and program activity; internal reports and evaluations; externally generated research, including studies conducted by other researchers and grant-making institutions; and state and local interpretations of relevant policy.
2. *Nonparticipant observation.* We attended classes, meetings, and related community events at program sites in each city in order to get a sense of day-to-day operations and to obtain a more complete picture of how outcomes are produced. We also studied the relationships formed within the program and between the program and other agencies and institutions.
3. *Interviews with board and staff.* These interviews focused on interpretations of program mission and goals and assessments of what the programs have and have not accomplished. These interviews also explored the relationships between programs and policy at all levels.

*Interviews with officials at connected institutions.* These interviews were designed to obtain the perspectives of information technology experts, program funders (both public and private), and policymakers.

Because most of these organizations are very new, it is impossible to measure impact in some areas (for example, economic development) in which it takes a longer time to realize the gains of educational programs. The purpose of these case studies was to obtain a better understanding of what programs do, how they do it, and how they structure their relationships with other programs and institutions. These case studies helped us to discern the extent to which community technology programs are reaching their target populations and the extent to which their work is helping to close the gap between information “haves” and information “have-nots.” The research conducted in the three cities also allowed us to compare how the different programs define success.

## **Choice of Programs and Cities**

Although research shows that the biggest gaps in access to information exist in both poor rural and inner-city areas (NTIA 1995), critical differences between the urban and rural contexts exist, making it extremely difficult to address both at once. We were most interested in looking at this issue in its urban context, where poverty has become increasingly entrenched. Fifty-six percent of poor persons in 1960 lived outside of metropolitan areas. By 1990, that number had fallen to 25 percent.<sup>1</sup> Critical differences also exist in the technology landscapes of urban and rural, suburban areas. Most cities already have a sophisticated telecommunications infrastructure of fiber-optic cable and digital telephone switches that is being underutilized while new infrastructure is being constructed in suburban areas (Blakely, Hadi, and Johnson 1995, 26).

The community technology programs in the case studies exhibit a wide range of emphasis, but they are similar in that their stated broad mission is to broker access to IT to underserved groups and to provide critical information to the communities they serve. The three cities in which these community technology programs work were chosen to represent a range in terms of size, demographics, and regional context.

We approached the task of choosing case study cities by simply looking for places in which innovative programs are operating and in which city government has played a proactive role with respect to information technology. Not surprisingly, many of the cities that emerged as candidates—Charlotte, Seattle, Palo Alto, Austin—are thought of as high-tech cities. We chose two of these, Seattle and Austin. We also chose Pittsburgh, partly because it is not a high-tech city and we wanted to examine what difference, if any, this made. All three cities have approached the problem of access to IT creatively and differently.

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<sup>1</sup> The concentration of poverty in urban centers reflects major changes that have taken place in the post-World War II period, resulting in what has come to be known as the “postindustrial city.” Economically, cities have shifted from goods producers to service providers. Demographically, the configuration of cities has changed both in terms of racial composition and in terms of dominant family structure. Geographically, the role of central cities has been transformed as suburbs have developed and the relative location of jobs and housing has continued to evolve, generally to the disadvantage of the poor.