

**RURAL TELECOMMUNICATIONS  
MEETING SUMMARY  
Lexington, Kentucky  
December 8 - 9, 1993**

Convened By:  
**Kentucky Science and Technology Council, Inc.  
Aspen Institute Rural Economic Policy Program**

## **INTRODUCTION**

A meeting of telecommunications and rural development professionals from across the United States was held to review the status of rural telecommunications and to recommend courses of action to advance the field. Specific objectives of the meeting were:

- Review the critical economic development issues facing rural communities.
- Examine the appropriateness, viability, and potential impact of the Kentucky Rural Telecommuting Centers as a rural development strategy.
- Reach consensus on an action plan that could significantly advance the knowledge and practice-base surrounding the Centers.

This report outlines the major outcomes of this meeting and provides recommended future actions.

## **PARTICIPANTS**

Representatives from private and public organizations were provided an excellent cross-section of telecommunications specialists, business and economic development personnel, federal and regional telecommunications and rural development agencies, and consultants. Attachment A provides a list of the meeting attendees and their affiliations.

## **MEETING SUMMARY**

A series of questions were posed to determine what are some of the major issues in rural telecommunications and development. These questions were framed by two presentations. First, a summary of Kentucky's rural landscape was presented. Second, a detailed description of Kentucky's Rural Telecommuting Centers was provided. The ensuing discussion provided ideas and experiences which have direct application to this initiative.

## **RURAL LANDSCAPE**

Kentucky is a rural state. Over half of its population lives in counties with no town greater than 50,000 persons nor within the SMSA of another county or state. Using this definition, less than a quarter of the U.S. population live in rural counties.

As an essentially rural state, Kentucky faces many challenges.

- Rural and urban Kentucky lost 5 percent of its population to outmigration.
- Rural personal income is one third less than the national per capita income.
- A fourth of rural Kentuckians live below the poverty level versus 15 percent nationally.
- Rural Kentuckians are among the least educated - 44 percent did not complete high school compared to 23 percent nationally.
- The rural work force earns 38 percent of the state's total earnings despite making up 52 percent of the population.
- Rural workers are employed in the same sectors as urban workers with a greater proportion in mining and farming and a lower percentage in service industries.
- Despite the population majority in rural areas, only 45 percent of Kentucky firms are in rural counties.
- One in ten homes lacks phone service.
- A smaller percentage of rural Kentuckians (60 percent) are in the work force than in urban areas (70 percent).

Meeting participants suggested several other data sources and measures which would provide a more complete profile of rural populations. Specifically, they suggested:

- net taxable retail sales (U.S. Commerce Department);
- cable penetration to households;
- new business starts and other entrepreneurial activities;
- unemployment and migration rates by age and education;
- sociological profiles of rural persons; and
- leadership emphases and directions.

## **KENTUCKY RURAL TELECOMMUTING CENTERS**

Access to ideas, technology and information has replaced traditional development tools as a primary means of creating and sustaining economic growth. A gateway or access point has been lacking in many isolated regions of the state. The Kentucky Rural Telecommuting Centers (KRTC) are structured as mixed-use facilities providing an array of telecommunications and related services to client firms, organizations and individuals and serve as this vital gateway to the broader world. They permit the community to expand its boundaries through telecommunications - creating a "Telecommunity."

The Centers are designed to support a variety of clients with telecommunications services such as computers/modems, facsimile machines, document conferencing systems, video-conferencing, voice and electronic mail. Space will be leased on a yearly, monthly, or shorter basis depending on the needs of the market. Clients will include entrepreneurs, information-driven rural companies and organizations, health care deliverers, satellite offices of urban-based corporations, colleges and universities, state and federal offices, public libraries, and others.

Copies of overheads outlining philosophical and practical attributes of the Kentucky Rural Telecommuting Centers are included as Attachment B.

### CONCEPTUAL FACTORS INFLUENCING TECHNOLOGICAL SOLUTIONS

In response to the presentation on the Kentucky Rural Telecommuting Centers, participants were asked to determine factors which will influence the success and failure of Centers and which will reduce the barriers for members of the telecommunity. Several factors and considerations were presented.

1. Rural problems are oftentimes sociological. **Technology can be an enabler** which helps persons face seemingly difficult problems with hope. Persons must be convinced that change is necessary if they wish to avoid a worsening condition or to have a brighter future. The need for change can then serve as a catalyst for trying new technological models.
2. **Rural persons need to be included as stakeholders** in the process of technical and economic development. Educating the populace and promoting ownership are needed for longterm success. Collective buy-in and partnerships are important.
3. Keeping the process **outside of the public-political realm** assists responsiveness to rural needs versus becoming identified with a political agenda. A private non-profit structure may be the most effective in introducing new technologies to rural areas.
4. The application of **entrepreneurial thinking through the use of technology in the schools** may provide a good entry point for rural patrons and develop future capacity. Use the Center and telecommunity concepts as ways to **encourage young persons to remain in the community** rather than to seek employment elsewhere. Telecommunities help children rethink their future possibilities through the use of technology.
5. **Successful models are needed** to encourage communities to try new technologies and techniques. Establish the Center as a catalyst organization which encourages change in a variety of arenas.

6. Ensure that the **leadership needed for economic development is in place** and committed to economic development. Determine how the community gets its information, who the power brokers are, and how the community views itself. Help economic development personnel who lack technical backgrounds to explain the Center concept.
7. Look at other attempts in the community such as business incubators and business parks to **determine what has been successful and unsuccessful**. Discover how willing the community is to try again despite setbacks.
8. **Deal with the existing work force** because many of these persons will remain active for the next two decades.
9. Overcome the "entitlement" factor which interferes with forward thinking. Emphasis should be placed on **proactive steps for self-sufficiency** versus waiting for someone to provide answers. **Use the traditional ideas of the culture**, such as a frontier spirit, to encourage change and responsible economic development.
10. View the **longterm purpose as changing attitudes and the short-term purpose as achieving results through effective leadership**. Develop champions of change, ownership and involvement.

## **CHALLENGES TO SUCCESSFUL TECHNOLOGICAL SOLUTIONS**

Meeting participants were asked to enumerate the challenges which must be faced by Rural Telecommuting Centers. Potential obstacles range from limits of the technology to specific business problems. Listed below are some of the specific considerations.

1. **Hidden incompatibilities** within the different technologies involved may cause a lack of success. One approach would be to simplify and go with a single service.
2. The **multiple objectives** of the Centers may make it difficult to focus. Measuring success would entail many different means. Too much emphasis might be given to a component that will ultimately fail within a community while taking resources away from something that would be successful. **Conversely**, Centers may be more successful because several alternative services are offered. A narrow focus may actually mean a greater risk of failure.
3. **Competition between Centers** in a region may cause both to suffer or fail. Geographic and access convenience need to be considered as part of Center planning.
4. **Local entrepreneurs may feel unfair competition** from the Centers especially if external or public support is used.

5. **Uncertainties of funding, viability, and structure** may prevent success. The public-private relationship may be too new and uncertain to work smoothly. Usage projections for a new, untested service may mitigate against success. The number of users for each service may be too small.

6. **Centers need external review** in order to assist them in providing the best possible services while meeting the needs of their communities and achieving financial viability. The external review process helps ensure standards.

7. **Centers need to have an entrepreneurial outlook** - a focus on financial survival. Part of this financial success could come by having programmatic versus project outcomes. A solid business plan with minimal or no reliance on external funding would assist survival.

## **RECOMMENDATIONS - INFLUENCING TECHNOLOGICAL SOLUTIONS**

A final component of the meeting was to suggest ways to enhance the study of rural telecommuting and advance the practice-base. In addition, suggestions were made about what the group could jointly do to improve the environment for telecommunications and innovative development throughout rural areas. The following recommendations are divided into these two classes.

### **---Rural Telecommuting Centers**

1. **Actualize an operating Center.** It is essential that a Center be activated to test the different premises and technologies in rural areas. This will serve as an incentive to other communities.

2. **Make contact with independent businesses** such as Kinko's to participate in the Centers. Confidentiality considerations would need to be worked out if private firms operated components of the Centers.

3. **Sign-up state and federal agencies** as users of the facilities. This would help attract users and give a higher visibility to the Centers. Discussions with government agencies should be accomplished as early as possible.

4. **Develop strong links with the schools.** This could be done at all levels. College and vocational technical school students could serve as interns for some of the different services. Elementary and secondary school students could receive access to other databases and services not available through the schools.

5. **Shorten the list of objectives** to those which will have clearly defined customers. Developing the use of an innovative but unknown services may require excessive resources.
6. **Acknowledge mistakes and document the process** in order to make it easier for other communities to use the model.
7. **Conduct high interest video conferences** at the sites to encourage initial use. Offer common meetings (state and national teleconferences), "experts" from other locations, successful entrepreneurs who use the technologies, on-line counseling, etc.
8. **Institute a continuing restatement of the vision.** Include continuing marketing and education support as part of the Center operations. Actions of the Center should be consistently focused on keeping the public informed about what it is doing and how it can meet their needs.
9. **Ensure that information equity** is practiced by the Centers. The facility should assist persons throughout the community to take advantage of its services. The Centers can help **maintain the personal touch in an ATM environment** and simultaneously encourage better use of existing technologies by all persons.
10. Keeping with its entrepreneurial focus, **Center managers should have incentives** to run an innovative operation which also has financial success.
11. Work to **remove regulatory barriers** which prevent or limit some of the services available through the Centers.
12. **Establish strong baseline measures of success.** Involve the community in setting up the measures. Use existing commitments such as education to build acceptance in communities.
13. **Build on the shared resources concept.** Work with other agencies and businesses to make Center services shared assets.
14. **Rename the concept** from telecommuting to something more identifiable with the state or region.
15. **Investigate establishing ties with European or other foreign communities** with which ideas and services could be shared.

### **---General Practice-Base Recommendations**

1. **Conduct continuing group workshops and meetings** to stay abreast of the private-public development of rural telecommunication strategies. Regular learning forums are needed to stay abreast of the rapid changes in this field.
2. **Identify nationally what different organizations are doing** in telecommuting. Determine what the outcomes of the different approaches are. Develop some common evaluation measurements.
3. **Establish an electronic network** using existing services (BITNET, INTERNET) to maintain contact and share ideas and critiques.

### **CONCLUSIONS**

The meeting provided an excellent forum for discussing the Rural Telecommuting Center concept. In addition, it brought together persons with many different perspectives who were able to provide concrete examples of their successes and directions. The process of model and idea sharing enriched the participants and improved the likelihood of success for the Kentucky Rural Telecommuting Centers. It also highlighted the need for continuing discussions and successful models. The results of this initial meeting will influence rural telecommunications and economic development.

# THE RURAL TELEVILLAGE™

## RURAL TELEVILLAGE INITIATIVE

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*a joint project of:*

Kentucky Science & Technology Council, Inc.

GTE

South Central Bell

AT&T

Herman Miller, Inc.

Kentucky Cabinet for Economic Development



# THE RURAL TELEVILLAGE™

## RURAL REGIONS – THE CHALLENGE

- Isolation
  - Population Dispersion
    - Interaction
  - Access to Resources
    - Human
    - Technological
  - Lack of Scale Economies
-

# THE RURAL TELEVILLAGE™



The  
Televillage



Platform for Changing:

- Work Styles
  - Organizational Styles
  - Learning Styles
-

# THE RURAL TELEVILLAGE™

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## THE TELEVILLAGE™

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A virtual community of people, businesses, schools and organizations linked through telecommunications and empowered by an information pathway unfettered by geographic boundaries.

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Rural Televillage... Initiative  
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# THE RURAL TELEVILLAGE™

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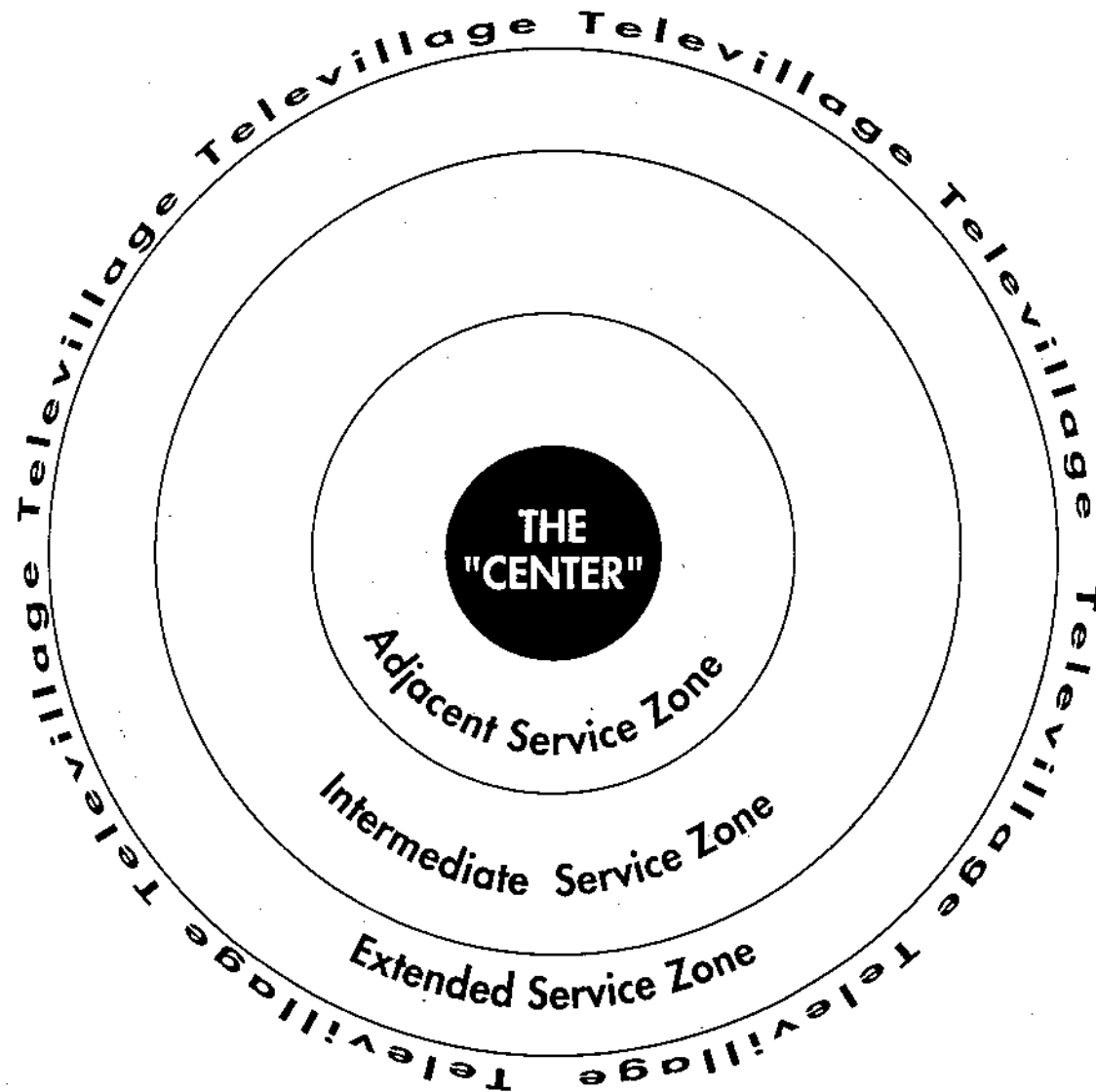
## WHY “BUILD” A TELEVILLAGE?

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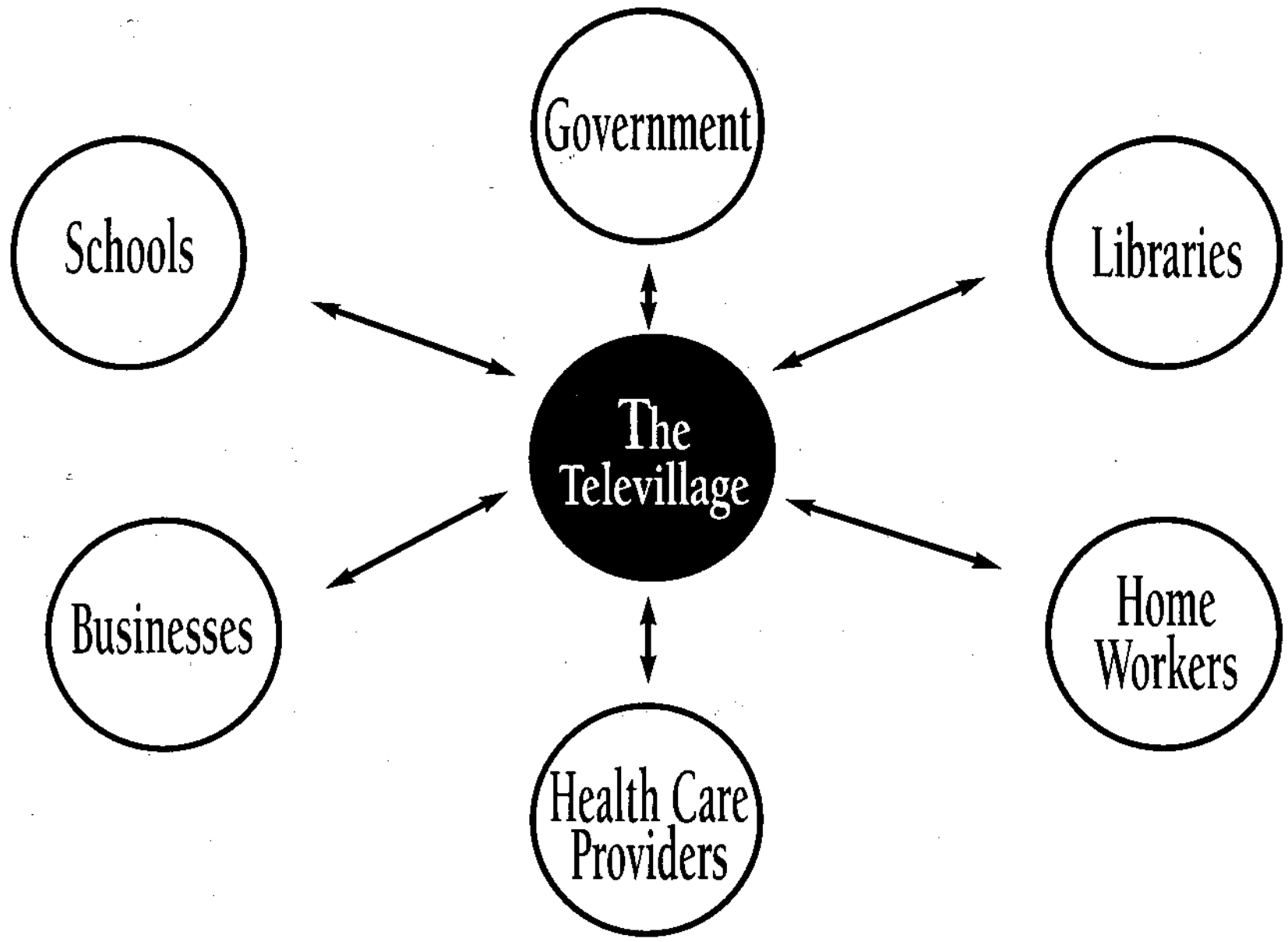
- Develop a strategic focus
  - Organize resources and manage allocation
    - Pool Demand/Resources
  - Expand and extend capability
    - Business
    - Education
    - Health-Care
    - Library/Information Access
    - Government
  - Build Capacity
    - Economic Development
-

# THE RURAL TELEVILLAGE™

CREATING THE "TELEVILLAGE"



# THE RURAL TELEVILLAGE™



# THE RURAL TELEVILLAGE™

## TELEVILLAGE /CENTER

### SERVICE PLATFORM

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#### 1. Technology/Information

- Video Conferencing
- Document Conferencing
- On-Line Services
- Systems/Shared-Use
- Optical Scanning
- Archiving
- Large Format Fax
- Off-Site Backup Storage

#### 2. Consulting/Information

- Information Counseling

- Information Services (gov't)
- Education/Training

#### 3. Ancillary

- Incubator/Shared Services
  - Library (Public, Medical, etc.)
  - Education/Training
  - Local Dial-In Capacity
  - Braille and Audio Services  
Physically Challenged
  - Child Care
-

# THE RURAL TELEVILLAGE™

## TELEVILLAGE CENTER

*Mixed-use information work center providing access to global knowledge economy*

### Strategic Characteristics

#### 1. Multipurpose

- Public/Private Sector
- Internal/External Services
- Comprehensive Service Package

#### 2. Integrated

- Services/Technology functionally integrated

#### 3. Flexible

- Technology Platform allows for variation & innovation
- Work Environment
  - Adaptable Office Systems
  - Privacy Sequencing
  - Promotes Interaction



# THE RURAL TELEVILLAGE™

## TELEVILLAGE CENTER

*Mixed-use information work center providing access to global knowledge economy*

### Strategic Characteristics

#### 4. Accessible

- Flexible Service Zones
- Local Dial-In Capacity
- Customer-Friendly

Design

Information Broker

- Business orientation & culture

Solid business plan

High-performance organization

- Diverse Funding Structure

#### 5. Business Focus

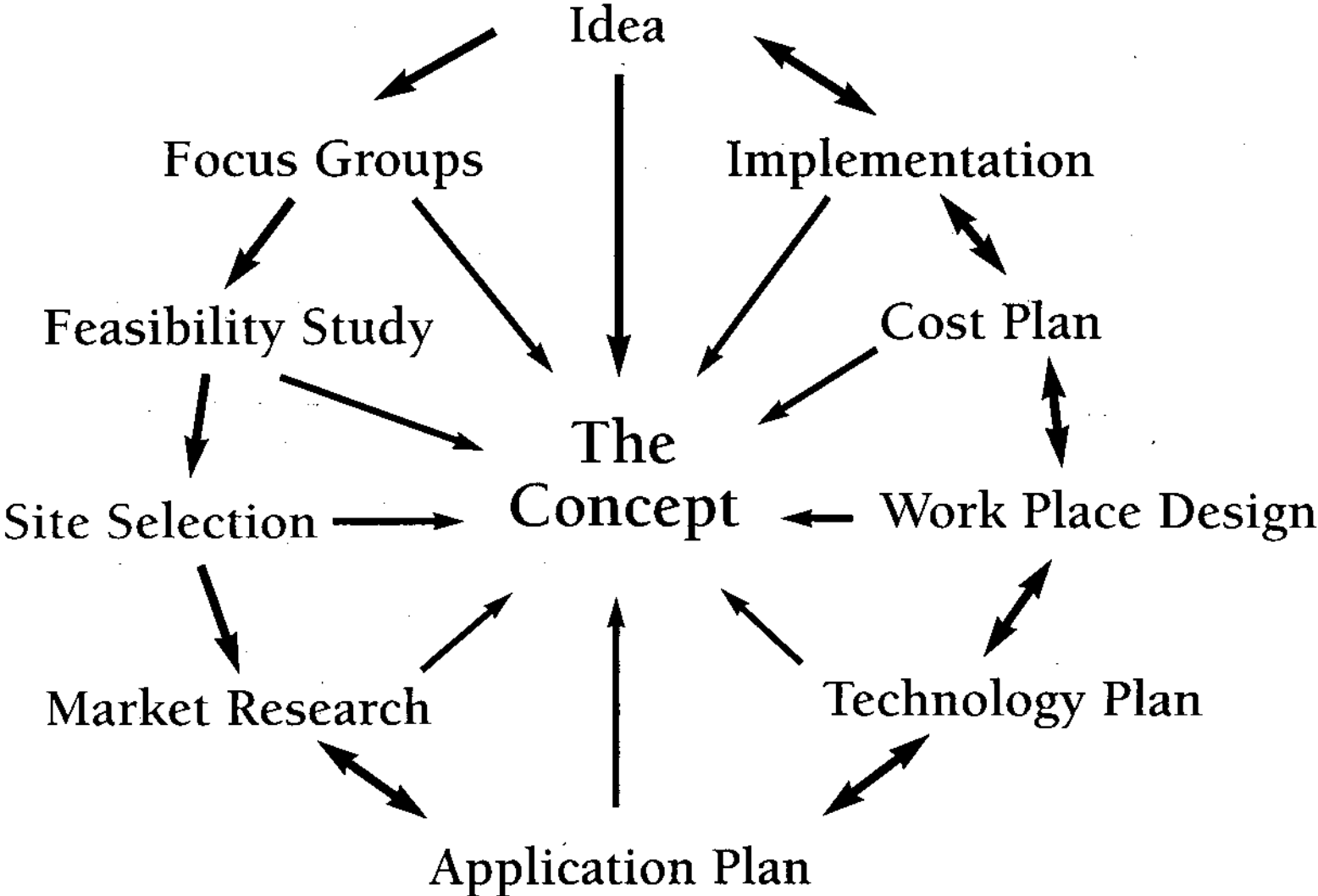
- Locally-owned non-profit corporation



# THE RURAL TELEVILLAGE™

## DESIGN PHASE

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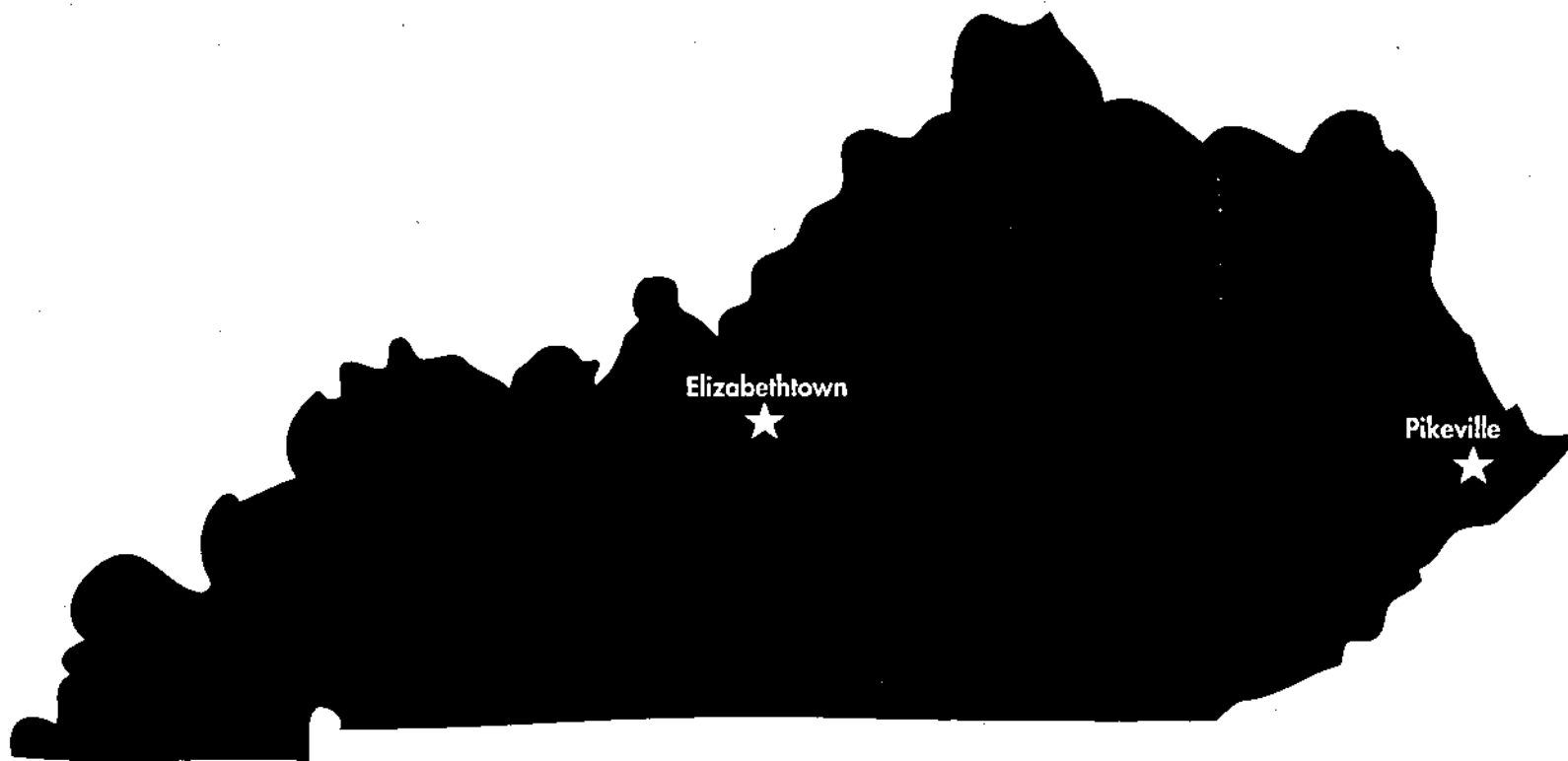


# THE RURAL TELEVILLAGE™

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## PILOT SITES

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**KENTUCKY SCIENCE & TECHNOLOGY COUNCIL, INC.**

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The Televillage Initiative is an effort of the Kentucky Science and Technology Council, Inc. (KSTC), in cooperation with GTE, South Central Bell, AT&T, Herman Miller, Inc. and the Kentucky Cabinet for Economic Development. KSTC is a private nonprofit corporation concerned with advancing science, technology and innovative economic development.

In 1991, KSTC and its partners began to explore ways that telecommunications and information resources could be used to build and extend development capacity in rural areas. This effort led to the creation of the Televillage concept.

This report discusses the Televillage strategy, lessons learned, work-to-date and explores important issues facing technology-based solutions in rural areas. Parts of this report emerged from discussions at a meeting on the Televillage Initiative sponsored by the Aspen Institute's Rural Economic Policy Program.



*the*  
**RURAL**  
**TELEVILLAGE™**

*Creating a new strategy for rural development*

➤ Concentrate attention on the existing work force because many of these persons will remain active in the economy for the next two decades.

➤ Emphasis should be placed on taking proactive steps for self-sufficiency.

➤ Televillages benefit from external review to help them in providing the best possible services while meeting the needs of their communities.

### **C**HALLENGES TO SUCCESSFUL SOLUTIONS:

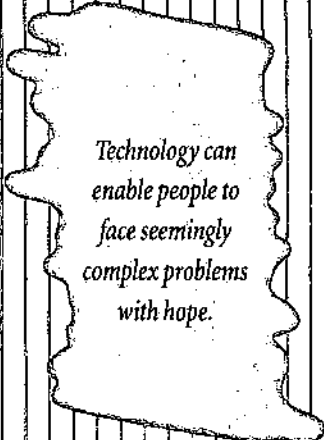
➤ Hidden incompatibilities within the different technologies may inhibit success.

➤ The multiple objectives of the Televillage may make it difficult for people to "focus" early in the planning process.

➤ Competition between Televillages in a region may cause both to suffer or fail.

➤ Local entrepreneurs may feel unfair competition from the Televillage especially if external or public support is received.

➤ Uncertainties of funding, viability and structure may prevent success.



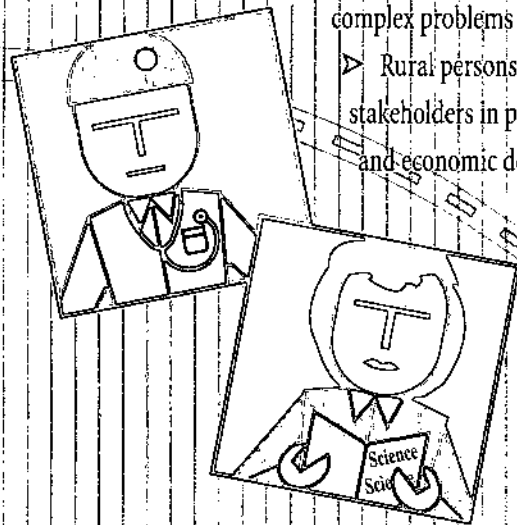
*Technology can  
enable people to  
face seemingly  
complex problems  
with hope.*

Project staff developed detailed implementation plans over a two-year period to implement the Televillages, including five-year financial projections. Funds are being raised to support start-up; commitments from customers and tenants are being pursued and services are being phased in. Plans call for these first Televillages to be fully operational by mid-1996.

### LESSONS INFLUENCING SUCCESS OF A TELEVILLAGE OR SIMILAR STRATEGY:

- Technology can enable people to face seemingly complex problems with hope.
- Rural persons need to be included as stakeholders in planning and executing technical and economic development efforts.
- Keeping the process outside the public-political realm encourages responsiveness to rural needs versus becoming identified with a political agenda.
- Successful models are needed to encourage communities to try new technologies and techniques.

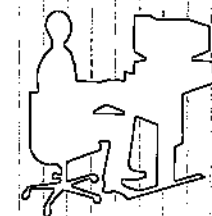
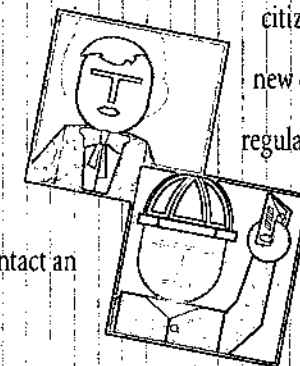
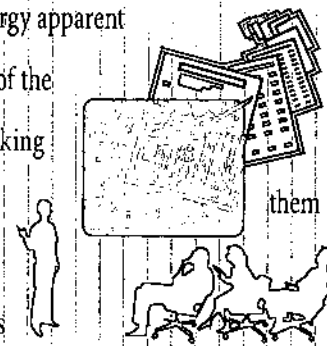
➤ Look at other attempts in the community such as business incubators and business parks to learn what has been successful and unsuccessful.



# THE RURAL TELEVILLAGE™

There is an energy apparent in the conversations of the groups of people working at the Televillage Center: Local mathematics teachers are sharing ideas with colleagues in another country through an educational video conference. A local pediatrician is using another video conference area to contact an expert at the state university's medical school about a newborn baby's puzzling symptom.

system to consult with potential investors, showing them up-to-the-minute income and cost projections. A staff member of the new Government Information Office is helping a citizen access information on new environmental regulations. History students at a local high school, linked through a Televillage network, have just finished retrieving information remotely from several computer databases for a research project. One has the feeling that the opportunities "here" are endless.



*Access to ideas and information is rapidly replacing traditional development tools as a primary means of creating and sustaining economic growth.*

## THE CONTEXT

This picture illustrates what could soon be taking place as the first Televillages begin to take shape: Freed from the constraints of time and distance, rural areas now have the opportunity to reshape themselves into Televillages.

The forces of the global information economy are transforming patterns of business and community life. Access to ideas and information is rapidly replacing traditional development tools as a primary means of creating and sustaining economic growth. Telecommunications and information are changing the ways people learn and conduct business - altering the characteristics of many existing jobs, creating entirely new jobs and broadening cultural horizons, especially for rural residents.

Many rural communities have responded to these new challenges, not by innovating, but by investing more time and resources in obsolete development strategies - strategies that fail to reshape the local economic base. The means are now available to enable rural areas, through the construction of information "gateways" such as a Televillage, to innovate, expand health-care and educational opportunities and strengthen economic development capacity.

**Q** What is a Televillage?  
**Answer:** A Televillage can be understood as a virtual community of people, firms, government agencies, schools, libraries, health-care providers and others connected through a common vision or need and linked

The project team asked an architect to create schematic drawings of a hypothetical Televillage Center to help focus discussion of specific issues related to the strategy. In 1992, 47 rural Kentucky communities who had expressed interest in developing a Televillage were sent a Request for Proposals. Nineteen formal proposals were received and a site selection team visited the five finalists. The sites were judged on the:

- ✓ strength of the local economy,
- ✓ nature of businesses or institutions,
- ✓ range of potential users,
- ✓ community leadership,
- ✓ technological infrastructure,
- ✓ proposed facilities to house the Center,
- ✓ understanding of the concept, and
- ✓ evidence of a sufficient market to support the Televillage.

The two pilot sites selected for Televillages in Kentucky - Pikeville and Elizabethtown - will provide valuable lessons and contrasts in local needs, economic conditions and geographical factors. The Big Sandy Televillage centered in Pikeville will serve a region that is very mountainous, extremely isolated from major markets and has scarce building land. The Lincoln Trail Televillage centered in Elizabethtown will be in a more densely-populated region whose economy is agriculturally based with a small pool of manufacturing firms.

*Project staff developed detailed implementation plans over a two-year period to implement the Televillages, including five-year financial projections.*

These figures are based upon one fairly ambitious model. Many other variations on this model exist which can result in much lower or perhaps higher costs.

## WORK TO DATE

The Televillage Initiative involves an aggressive approach to development which uses telecommunications and human resources to stimulate economic growth in rural areas. Two Televillages are now taking shape in rural Kentucky with others emerging in other areas including regions outside the United States.

Besides the project partners the Televillage Initiative has received financial support from the Economic Development Administration of the U.S. Department of Commerce, the Appalachian Regional Commission, The Aspen Institute, the James Graham Brown Foundation and the German Marshall Fund of the U.S.

Extensive research and community development activity has guided the Televillage effort since it began in 1991. A feasibility study completed in late 1992 concluded that rural areas could potentially benefit by reshaping themselves into Televillages.

The broad concept of the Televillage was a result of the feasibility study. Two focus groups of professionals, educators and business people familiar with economic development and the needs of their regions offered valuable comments and insights. The project team conducting the feasibility study also met with national experts on rural development and telecommunications and held a conference on the topic that attracted more than 200 people.

through telecommunications, information resources and shared services. A Televillage is characterized by dynamic, new patterns of human interaction, cooperation, communications and development.

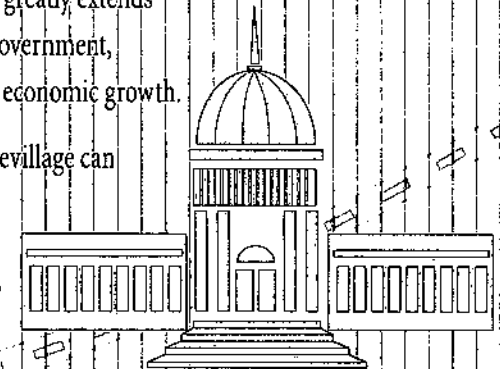
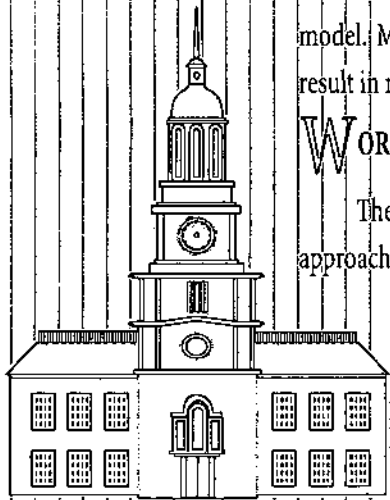
**Q** Why would an area create a Televillage?

**A** *answer:* The creation of a Televillage is an effective tool for:

- **Developing a strategic focus:** The process of "building" a Televillage involves extensive community planning and the creation of a common regional vision.
- **Organizing, pooling and managing resources:** Through a Televillage, an area can strategically organize and provide a variety of equipment, resources and services for people, workers and organizations that might not otherwise be practical or affordable.
- **Extending capability:** The Televillage greatly extends and expands the capabilities of schools, government, businesses - adding value and promoting economic growth.
- **Facilitating information access:** A Televillage can help a region take full advantage of the global information economy. It can be thought of as a kind of "on and off ramp" of the information highway.

**Q** Does the Televillage have "borders"?

**A** *answer:* The Televillage possesses a sense of place with roughly defined borders (e.g., a group of counties or cities). But by its nature it is flexible and adaptable and in many ways edgeless.





**Q** What is the Televillage Center?

**answer:** It is an actual physical facility that serves as the "town square" for the Televillage. It is the hub of an integrated information pathway involving information networks, equipment and services.

The Center is a public and private mixed-use facility providing a comprehensive package of services to the larger Televillage. The

Center can support a variety of customers with services provided on-site or remotely. Office space may be available and organizations may be part of or consolidated with the Center. A Televillage may have more than one Center.

**Q** How will the Center be designed?

**answer:** The facilities are viewed not simply as technology centers but also as living laboratories of innovative workplace environments. The work environment is designed with careful attention to systems that enhance individual health, satisfaction and productivity. In addition, the Center serves as a place where people can meet, work together and share information and ideas.

**Q** What kinds of applications and resources will be available through the Televillage and the Centers?

**answer:** The service package could include computer usage, video and document conferencing, fax, optical scanning, voice and electronic mail, information access, training and consultation.

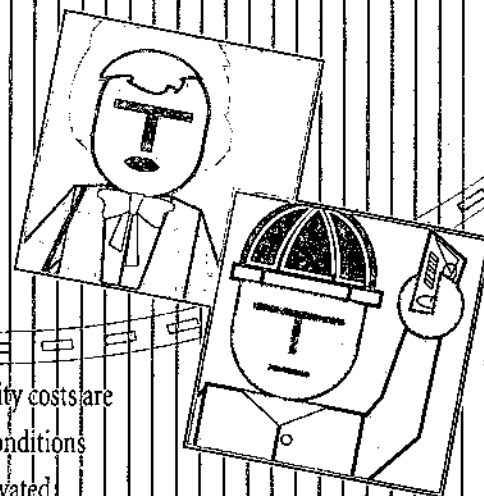
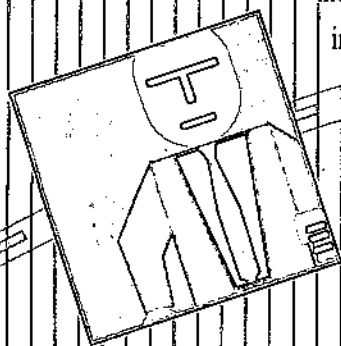
**Q** How much will it cost?

**answer:** The actual costs involved in developing and operating a Televillage can vary greatly depending upon many factors and the scope of the particular effort.

Planning activity could be kept at a modest dollar level but should not be underemphasized. A viable Televillage depends on solid planning and extensive community involvement.

The availability of appropriate facilities, technology infrastructure and expected usage influences costs. Generally, start-up costs can be clustered into two categories: capital and operating. Capital costs include equipment, technology and facilities. Operating costs involve personnel, supplies, communication line and rental costs, leases (including facility), insurance and similar ongoing expenses.

For one Televillage now under development, the initial technology platform is estimated to cost approximately \$350,000. Facility costs are subject to local markets and conditions and will be different for a renovated structure or a custom-designed Center. Operating costs for the first full implementation year are budgeted at approximately \$300,000 - some of which will be offset by revenue.



A viable  
Televillage  
depends on solid  
planning and  
extensive  
community  
involvement.

Implementation may raise such issues, but the experience to this point suggests that existing regulations and policies pose no insurmountable barriers. This situation may be different in other areas of the world.

**Q** Who will operate the Televillage or the Center?

**answer:** The initial pilot Televillages and Centers are structured to be nonprofit corporations governed by boards of directors. The corporations will own the Centers' assets. Other governing and operating structures may be appropriate.

**Q** How will Televillage Centers be financed?

**answer:** The Televillage and Centers are proposed to be viable market-driven operations supported by solid business plans. Up-front development costs could be privately financed or supported through a combination of public, foundation and private grants. Ongoing operations are to be supported in large part by fees and related revenue.

**Q** How long does it take to get a Televillage operating?  
What process is involved?

**answer:** Phase One, which involves an extensive planning/community development process, securing a site for the Center, identifying a market to support the Televillage, creating management and operational plans and securing initial financing for start-up, could take ten to eighteen months. Phase Two involves full implementation, designing and constructing or renovating a facility (or facilities), hiring full-time staff, marketing and seeking sources of financial support. It will require twelve to twenty-four months.

**Q** What types of customers will the Televillage and Center serve and what kinds of services will be provided?

**answer:** **▷ Companies:** Small or start-up firms might locate or rent space, using the Center as an incubator. An area firm could have affordable, expanded access to equipment, technical assistance or information, perhaps time-sharing the use of certain technology or services. Out-of-town companies might rent space, use the Center as a satellite office or have employees in the field use the facility to telecommute to the home office.

**▷ Schools:** Area colleges and schools might conduct professional training or distance learning classes for students gaining access to expertise and learning opportunities outside the region.

**▷ Libraries:** Local libraries could emerge in the Televillage (perhaps as an actual part of the Center) as Telibraries integrating electronic or more traditional information formats and greatly expanding their capacity.

**▷ Workers:** Home-based workers might use the Center as a part-time office or access services remotely (including consulting assistance).

**▷ Health-Care Providers:** Health professionals or local medical centers could use the Televillage to support remote diagnosis, consultation, patient monitoring or continuing education.

**▷ Government:** Local, state or federal governments could provide simple, single point access to government

The Televillage  
greatly extends  
and expands  
capabilities of  
schools,  
government,  
businesses -  
adding value and  
promoting  
economic  
growth.

The Televillage is specifically structured to provide services and widespread access to rural residents, including those with very limited technical skills.

information, services and perhaps documents. Regional or satellite government offices might be located in the Center.

▷ **Citizens or Civic Organizations:** Local civic groups and residents could take advantage of training and technology education opportunities or use a Televillage's on-line service to communicate and access a variety of information and services.

**Q** What physical facilities are needed to house a Televillage Center?

**answer:** At the start, a community may use an existing facility, followed by a renovated or specially built new facility. Initially, renovating an existing facility will keep start-up costs down, reduce early financial pressure on the Center and help with community acceptance by associating the Center with a familiar structure. Permanent site selection should consider ease of access, convenient parking and proximity to other resources such as libraries and government offices. The Center should be designed with constant change in mind.

**Q** This strategy sounds fairly sophisticated. Can a small underdeveloped rural area create a Televillage?

**answer:** Yes, the Televillage is a development strategy, not a "thing." Each Televillage is different, structured to meet the unique needs of an area. Frequently, a region may not require all of the services and applications mentioned here. A viable Televillage, either operating on its own or serving as a satellite to another larger Televillage, can be created in many rural regions. A sophisticated communications infrastructure is not required to begin the development of a Televillage.

**Q** Will Televillages create new jobs?

**answer:** In and of themselves, the Televillages will only create their own staff positions, which will be good-paying jobs that will contribute to the local economy. They will also provide the stimulus and resources for entrepreneurs to start new businesses and for existing firms to expand. The Televillages can also help local professionals such as engineers, doctors and lawyers to remain in the area and encourage professionals such as writers or consultants to work or locate in a rural area.

The Televillage is structured to strengthen the economic development capacity of rural areas.

The primary focus of the strategy is to stimulate growth and job creation from "within."

**Q** What help will be available for Center users who are not familiar or comfortable with technology?

**answer:** An Information Broker will guide and help potential users. The Broker can help with training and education needs, locating sources of information and assist in using technology to access information and services. The Televillage is specifically structured to provide services and widespread access to rural residents, including those with very limited technical skills.

**Q** Will local or state government approval be needed to create a Televillage?

**answer:** None of the activities planned and anticipated for the pilot sites is expected to require special regulation or exception from existing regulations.

