

STRATEGIES FOR RURAL SOCIAL SERVICE ORGANIZATION AND DELIVERY

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STRATEGIES FOR RURAL SOCIAL SERVICE ORGANIZATION AND DELIVERY

INTRODUCTION

This monograph begins an analysis of the fundamental challenges and opportunities for strengthening basic social service delivery in communities that are not in the path of growth. This research is to help focus the attention of policy makers on strategies for social service delivery in rural communities as they affect the economic vitality of the Northwest.

Many communities in the rural Northwest have few growth prospects, and a mature or dwindling tax base is making it more difficult for these places to provide the broad range of governmental and quasi-governmental services upon which citizens depend. Rural residents may be willing to travel farther to gain certain types of assistance, affecting the nature of social service provision in the community. At the same time, demographic shifts such as a changing age structure of the population are affecting the character of demand for services and increasing the need for specialized care. While many of these issues have been examined with regard to professional and retail services in the private sector, there is a dearth of current research that rigorously examines public sector social services in rural areas. For example, a national study of the availability of rural health services concluded that information on strategies is lacking.

Although numerous short- and long-term strategies exist that might enable rural health facilities to adapt to changes, evidence of their existence and effectiveness is limited and comes largely from anecdotal sources. Few mechanisms exist through which information on prospects and efforts might be disseminated to rural facilities or to government policymakers who might wish to support such efforts on a larger scale. [U.S. Congress, 1990, p. 211]

The work reported here is, in general, a survey of selected literature and an attempt to offer a framework for thinking about the organization and delivery of social services.

OBJECTIVES

Several specific objectives guided this study as follows:

1. To describe unique aspects of rural areas, and sketch the changing external and internal environments affecting stability, quality and accessibility of social service infrastructure in communities outside the path of growth.
2. To define the concept of "social service infrastructure" within a context of public and private goods provision; compare and contrast social services infrastructure with physical infrastructure and civic infrastructure.

3. To outline categories of social service functions, a typology of delivery approaches, and a matrix of delivery approaches and social service functions, utilizing case examples of Northwest rural community experiences.
4. To suggest a research agenda for testing the applicability of such approaches across other service functions, and raise issues to be considered by policy makers and administrators.

PROCEDURES

Data for this analysis were obtained through a review of literature on social services in rural areas, contacts with managers of selected programs that have piloted and/or researched innovative service delivery, and focus group interviews with selected local administrators delivering social services in rural areas.

A considerable body of existing literature on social services in rural areas was identified and reviewed. Contacts with the directors of the four regional rural development centers and the associate director of the Agriculture and Rural Development Division, Economic Research Service, U.S. Department of Agriculture identified previous and current work in this field by researchers in land grant and other universities beyond the literature accessed through computerized library searches. Several journals which focus on rural social service delivery were identified and reviewed for articles relevant to this study. A bibliography of literature reviewed is being developed and will be available upon request.

Profiles of alternative delivery approaches in specific service functions were developed through face-to-face and/or telephone interviews with managers of selected programs. (The people interviewed are listed in Appendix A.) A focus group interview was conducted with a group of local administrators delivering social services in rural areas of northeastern Washington. Partnership for Rural Improvement (PRI) Eastern subregional coordinating committee members appropriate to the task and other local administrators were convened by Lois Irwin. (Focus group participants are listed in Appendix B.) The purpose was to identify case examples of innovative delivery strategies, and to obtain their views about advantages and disadvantages of alternative approaches, and consider the applicability of alternative strategies across a broad spectrum of service functions. This input built on and provided a longitudinal dimension to the results of the Shared Services Task Force sponsored by PRI in 1982 [Rogers, et al., 1983]. This task force studied options for rural public service delivery in the same general geographic area, and is treated here as an earlier focus group.

PREVIOUS RURAL COMMUNITY SERVICES RESEARCH

Social services delivery in rural areas has received sustained, but limited, attention by community services researchers in the USDA and the land grant universities for over a half

century. With the exception of a rapid influx of funding in the late 1960s and early 1970s, the level of commitment to services research has been uniformly low. Following several decades of concern with the organization, reorganization, and financing of local government services, four multi-state technical research committees within the land grant university system (NC-102, NE-77, S-79, and W-144) were organized in the late 1960s to conduct research on community services and services delivery systems. A December 1971 National Conference on the Delivery of Community Services in Rural Areas held in Lincoln, NE focused on 1) problems of measurement and assessment of the adequacy of community services, and 2) the organization of service delivery systems. Five years later, a National Conference on Nonmetropolitan Community Services Research was held at Ohio State University in January 1977 to facilitate the improvement of the quality of such research for public decisionmaking at local, state and Federal levels. The identification of emerging problems, exploration of new research approaches, discussion of new theoretical developments, and presentation of new findings [U.S. Senate, 1977] was characterized by one participant as a final high visibility effort in community services research by USDA and the land grant universities. [Gessaman, 1981, pp. 1-3] Continued work on rural community services, however, is reported in various proceedings published in the latter 1980s of workshops and testimony on rural development policy. [For three examples, see Brown, et al., 1988; U.S. Congress, 1986; or Options in Developing a New National Rural Policy, 1989]

Since the mid-70s, several journals have emerged which publish articles by researchers and practitioners on rural social service delivery. These include *Human Services in the Rural Environment* (1976), *Journal of Rural and Small Schools* (1986), *Journal of Rural Community Psychology* (1980), *The Journal of Rural Health* (1985), *Journal of Rural Studies* (1985), and *The Western Planner* (1980).

PREVIEW

This report summarizes existing literature on social services in rural areas, presents a framework for a social services infrastructure, proposes a typology of delivery approaches, identifies service functions where those approaches have been attempted, raises issues to be considered by policy makers and administrators, and suggests a research agenda to help inform those policy decisions.

There are three major parts. First, a framework for analyzing rural social service delivery highlights unique aspects of rural areas, lays out conceptual building blocks for defining a social services infrastructure, and then focuses on key dimensions of a social services infrastructure.

Low population density and geographic isolation are identified as the unique characteristics that distinguish rural from urban areas in the organization and delivery of social services. Overcoming distance presents problems of increased cost, lower service quality, or doing without. Consolidation and cooperation are two basic public choice approaches to solving these

problems to achieve economies of scale and professional quality at lower per unit cost with implications for local control, responsiveness to individual preferences, community choice, competition, and innovation. Various notions of infrastructure are presented as building blocks for a "social services infrastructure." With the framework of public overhead capital, the definition of infrastructure is broadened from a traditionally narrow physical interpretation to include a strong and resilient civic (or social) infrastructure that matches the need for sound physical infrastructure. The idea of a telecommunications infrastructure is included to recognize that rapid changes in the technology of the information society present challenges and opportunities for the organization and delivery of rural social services.

At a conceptual level, the social services infrastructure may be defined as the total set of organizations (public and private) providing social services to people in a community. It also includes the institutional framework and the rules within which people and organizations operate. As one attempts to operationally define the somewhat elusive concept of a "social services infrastructure," the inquiry into strategies faces the difficulty of "mixing apples and oranges" as one examines alternative approaches. Some help in this differentiation is provided by a four-component taxonomy: resources, organization, delivery and rules. This framework for thinking about a social services infrastructure and its multiple dimensions in a more systematic manner suggests a critical distinction between alternative forms of service organization and service delivery approaches which frames the subsequent analysis.

What kinds of service functions should the term "social services" include is a key definitional issue. Focusing on those services that influence the behavior patterns of individuals in the community and the social environment of the community members, the analysis examines seven categories of social service functions: 1) aging and long-term care, 2) education and libraries, 3) health systems (hospitals and public health), 4) mental health, alcohol and drug counseling, 5) public safety (police and fire protection), 6) social welfare, and 7) transportation.

The next section provides a preliminary empirical view of a rural social services infrastructure with examples of alternative organizational strategies and service delivery approaches found in different social service function.

The social services infrastructure is difficult to characterize in terms of responsibility for delivery of service and sources of funding. Responsibility for service delivery, while generally at some level of local government, varies not only between service functions, but often within each function. Sources of funding are even more diverse, as well as unstable and dispersed among the local, state and federal levels of government, user fees, charity and other private sources. Considerable variation exists between states as well. Furthermore, while local government has historically assumed responsibility for delivery of some social service functions, the assumption of responsibility by local government for other social service functions has been relatively recent. In still other service functions for which county government has historically been responsible, the nature of local responsibility has become dramatically more complex to

include coordination of diverse delivery approaches and mobilization of multiple sources of funding.

This preliminary analysis explores which alternative organizational strategies and which service delivery approaches are being applied by which service functions. The results suggest that the two basic organizational strategies, consolidation and interlocal cooperation, are applicable across the broad spectrum of the social services infrastructure. Examples of both approaches, as well as of the three types of cooperation, namely, sharing arrangements (personnel or facilities), contracting with private sector provider (privatization), and inter-agency coordination, are found in every social service function.

Similarly, each service delivery approach is being applied in all the social service functions. Alternative service delivery approaches can be utilized by either the consolidation or interlocal cooperation form of service organization. The approaches are presented in several categories: sharing arrangements, service extenders, home-based delivery and physical linkage through telecommunications. Sharing arrangements, also introduced above as an alternative form of service organization, include several alternative delivery approaches: circuit riders, community center facilities, and case management. Service extenders is a concept for extending the service beyond the scope of what could be provided through direct contact by a professional through use of volunteers, natural helpers or natural networks. Home-based delivery of services previously offered through complex institutional arrangements away from home may become increasingly possible through the technological revolution. Physical linkage through telecommunications is an innovative infrastructure strategy for delivering services to people at remote locations. Beyond providing examples of applications across the broad range of social service functions, the analysis lists advantages and disadvantages of each approach as documented in the literature or by the focus group meeting or program interviews.

The report concludes by proposing policy issues and related research needs which can lead to opportunities for strengthening social services organization and delivery in rural areas. People in rural communities, particularly those outside the path of growth, face fundamental challenges in accessing quality social services. To help address these challenges, this report offers a framework for thinking about a "social services infrastructure," as reported in the literature and by practitioners in the field. The adoption of new forms of social service organization and delivery that overcome space and distance can help serve people more effectively and also contribute to the vitality of isolated communities.

FRAMEWORK FOR ANALYZING ALTERNATIVE STRATEGIES

There are some unique aspects of rural areas and the changing external and internal forces affect stability, quality and accessibility of social services in communities outside the path of growth. The concept of "social services infrastructure" will be established within a context of public and private goods provision, and based on two other notions of infrastructure: physical (public works) and civic infrastructure. The definition of social services infrastructure will continue with a taxonomy or operational definition, a delineation of several categories of social services functions, and discussions of alternative forms of service organization and service delivery approaches identified in the literature.

UNIQUE ASPECTS OF RURAL AREAS

Developing sound strategies for social service delivery in rural areas requires understanding of those aspects of the rural environment that are unique, and appreciation of the internal and external forces affecting the rural social and economic conditions most relevant to this issue. In the broadest and most general sense, the two characteristics that most distinguish rural from urban areas in regards to problems relating to the delivery of social services are their low population density and geographic isolation. Strategies to improve the provision and delivery of social service in rural areas must ultimately deal with problems having spatial dimensions. Put another way, organizational, institutional, and technological solutions to rural social services provision and delivery must cope, in some manner, with conquering space.

In the early 1980s Beth Honadle completed a thorough review of research which focused on public administration in rural areas and the factors affecting social service delivery. Honadle concluded, "The problem is that small communities and communities outside metropolitan areas have been shortchanged in the mainstream public administration literature." [Honadle, 1983, p. xvi] Nonetheless, Honadle did find that the literature identified certain salient characteristics common to rural areas judged as having important implications for the quality, accessibility and delivery of social services within a rural setting. Honadle's findings remain pertinent today, for they capture the central themes that rebound throughout the more current literature.

Isolation. Geographic isolation - distance - causes such problems as low utilization rates for services; inadequate response times for ambulance, police, and fire services; and separation of service delivery professionals from their colleagues. Geographic isolation and providing services to large areas make interlocal cooperation difficult and lead to diseconomies because of added transportation costs.

Low population density. Sparse population concentrations give rise to high per unit cost of services; lack of specialized services, unavailability of some general services; and low quality of available services.

Mobility disadvantages. Transportation problems affect the accessibility of services in rural areas. Exacerbated by the distances between service providers and recipients, other factors creating transportation problems are high incidence of one-car families, elderly persons, poverty, and handicapped people.

Scarcity of fiscal resources. The fiscal capacity of rural areas strains limited resources and deprives rural residents of social services. Some reasons for inadequate revenues in rural areas are rural poverty, an urban bias in intergovernmental grant programs, local ignorance of programs intended for rural areas and of how to apply for them, insufficient staff capability to seek out grants, and insufficient attention to alternative revenue sources.

Lack of expertise and human resources. As a consequence of inadequate fiscal resources and lack of training opportunities, rural areas confront shortages of managerial expertise and qualified personnel. Implications of scarce human resources include understaffing of many functions, incompetently performed jobs, overworked personnel, low quality and quantity of rural public services, and inattention to long-range planning.

Personal familiarity. The lack of anonymity among rural residents has implications for public service delivery. These include subjectivity on the part of decision-makers, reluctance to seek out services where anonymity is preferred, and undermining of professional credibility and image of service providers.

Resistance to innovation. Rural citizens resist adoption of innovative and nontraditional social services. Conservative rural attitudes and concerns that new services are unnecessary and will not work, cost too much, and that individuals or the private sector are better providers are among the explanations offered. The implication of this alleged resistance to innovation is that rural areas lag behind urban areas in providing needed social services.

Lack of ancillary services. Some urban public service delivery models assume various complementary support services are available in the community. This assumption is inaccurate in many rural areas. Thus the public service sector must work closely with private sources of assistance--family, friends, religious organizations, and volunteers--to assure that complementary services are provided.

Public Service Provision

For defining issues and choosing approaches to formulating rural policy, J. Norman Reid and Richard Long (1988) identified the provision of public services as a major dimension of the rural problem. First, they discuss conditions in rural areas more broadly.

The most salient condition of rural America, in terms of its relevance for policymaking, at least, is its economic disadvantage in comparison with urban areas. Rural residents generally have lower income and living standards... Three factors contribute to the lag in rural income and standard of living. One is the chronic and pervasive urban-rural gap in highly rewarded skills and opportunities. A second is the vulnerability of small and undiversified rural places to cycles in some basic rural industries, especially agriculture and natural resources, which have experienced both long-term contraction, and in the case of agriculture, a recent dramatic decline in the number of farm owners and workers. The third is the intense poverty found particularly among minority groups in several regions. [Reid and Long, p. 203]

In addition to the issue of lagging incomes and living standards, Reid and Long also emphasize the disparities between rural areas and their urban counterparts in the provision of basic public services. They stress the importance of costs, as well as income, as a major contributing factor.

The level of public services, such as treated water supplies, medical facilities, and good roads and highways, still lags behind big cities and suburbs. This is primarily because rural places face higher unit costs for many services stemming from their smaller scale and low population density. Rural people must pay more than their urban cousins for some services or else do without them. [Reid and Long, p. 203-04, bold italics added]

Echoing Honadle, Reid and Long identify the low density, dispersion and isolation of rural populations as distinct and fundamental rural characteristics. In addition, they give attention to the rural economic conditions and trends. While the rural economy as a whole is extraordinarily diverse, when taken individually, most rural communities are typically dependent on a narrow, and often declining, economic base. Taken together, the sparse size, spatial configuration, and narrow economic structure of rural economies are the root cause for the symptomatic problems relating to public service provision in rural areas: (1) higher unit costs, (2) higher transportation costs, (3) limited leadership capacity, (4) undertrained public official and professional staff, and (5) local government fiscal stress. [Reid and Long, p. 213-14]

Forces of Change in Rural Areas

Rural areas have been experiencing economic and social change for a long time. But several major forces of change have converged in recent years which have amplified and accelerated the economic dislocation and social adjustment taking place in rural areas. Such changes have greatly affected both the demand for, and supply of, rural social services. In recent years, a substantial literature has focused on the study of changing rural conditions and trends, and on identifying and examining the factors that are affecting the economic and social well-being of rural citizens. Several common themes repeatedly surface and are reiterated throughout the literature. Bruce Weber, et al. (1989) provide a good synopsis of these themes by distinguishing six forces of change having a major affect on rural America:

- *Technological change has been a way of life in rural America. The mechanical/chemical revolution of farming since the 1950s is now being supplanted by a biotechnology and information technology revolution that could be even more dramatic in its effects on rural areas. Yet, technological changes are not limited to those in agriculture. The emergence of the information age and information technologies offers the opportunity to reduce further the isolation of rural areas and permits new rural economic activities previously tied to concentrations of people. New technologies also have the potential to allow some activities now requiring rural locations to move to urban areas.*
- *Rural America is no longer isolated from international forces. The value of the dollar, foreign policy decisions, export promotion programs, trade embargoes, domestic self-sufficiency goals in other countries, increased competition from foreign manufacturers, and the movement of rural manufacturing production facilities to other countries extend the influence of international forces into both the farm and the nonfarm economies of rural areas.*
- *The changing demographics of the nation and rural areas portend some significant shifts in rural policy concerns. The most obvious demographic change is the aging of the population. This means health care, housing, transportation, recreational facilities, and training for emerging occupations will gain increased importance. The retiree is an emerging economic force in both the national and rural economies that needs to be explicitly considered in rural economic development efforts.*
- *An increased proportion of personal income is coming from dividends, interest, rents, private retirement funds, and transfers (e.g., social security, public assistance, unemployment compensation). This has been stimulated by an aging population, indexed retirement benefits, and an increased number of financial alternatives for savers and investors.*
- *Off-farm income is a larger and more stable source of income for farm families than net farm income. Even for moderate and large farms (\$100,000 to \$499,999 gross farm sales), off-farm income provides an average of one-quarter to one-half of total family income and has become critical to the maintenance of farm family living standards.*
- *There has been a visible national shift to service-producing activities (e.g., health care, finance, insurance, engineering, and information processing). Nationally, these activities have provided the majority of jobs since the early 1950s. The development of a service economy has implications for the types of occupations people are prepared for and the incomes earned by workers. Some question exists, however, as to whether the rural sector can compete and benefit from a service-oriented economy to the same extent as the urban sector. [Weber, et al., pp. 33-34]*

Janet Ayres and Ron Knutsen (1990) focus on another factor affecting rural areas--recent shifts in the locus of decisionmaking. Ayres and Knutsen observe that a dichotomy emerged for rural decisionmakers during the 1980s. The internationalization of business--and the deregulation of the banking, transportation, and communications industries--removed local control over many community decisions. However, under the "new federalism," federal funds for rural programs were reduced, while authority and fiscal responsibility for social service and other community functions were returned to the local level. At the same time, the tax base of many rural communities eroded as a result of deteriorating economic conditions. The outcome of these developments, Ayres and Knutsen contend, is that rural communities have less control and less money for solving their problems and managing their destiny. [Ayres and Knutsen, 1990, p. j2]

Telecommunications and Information Processing

Among the forces affecting rural areas, the rapid changes occurring in telecommunications and information processing will likely have the most dramatic and singular impact on rural areas--and rural social service delivery--in the decade of the 1990s. Don Dillman and Don Beck have studied the role and potential impact of information technologies in rural areas, and approach the topic from a historical perspective. They describes three eras that characterize the changes and adjustments experienced by rural communities during the 20th century. [Dillman and Beck, 1988]

Community Control Era. This era was the period prior to World War II. Nearly one-third of the population lived on farms during most of this period. Rural communities were relatively self-sufficient--local production was mostly for local consumption. Prevailing technology tended to restrict people to the community where they lived and worked. Community values, social norms, and local economic relations dominated rural people's behavior. Rural life was community centered.

Mass Society Era. Toward mid-century, community domination over the pattern of people's lives gave way to influences exerted by the emergence of a mass society. National corporations and the federal government exerted greater influence and control over daily life. The automobile, telephone, corporate employment and careers, and the consumption of standardized, mass produced products commanded people's attention. Rural communities became less isolated, and less central to the lives of rural people.

Information Age. The mass society era is being displaced by advancements in computers and telecommunications. Information technologies substitute for time, labor, and energy in the production and distribution of goods and services. Rural citizens must learn to effectively manage and utilize information resources, and investment in rural technical information infrastructure is a prerequisite for rural community survival in the information age. [Dillman and Beck, 1988, pp. 29-31]

Parker et al., (1989), focus a great deal of attention on the role of telecommunications in rural areas as it relates to the spatial dimension. They emphasize that distance, in conjunction with the sparsity and low density of rural area populations comprise the "rural penalty"--the defining rural characteristics--which makes the development of a telecommunications infrastructure in rural areas vital to their survival.

Increasingly, new economic development depends on human resources and telecommunications and information-processing infrastructure. In the provision of physical goods and services, rural areas could only compete across barriers of distance and geography if they had a natural resource advantage. In the provision of information goods and services, reliable telecommunications infrastructure can make geography and distance irrelevant. [Parker, et al., p. 2]

By definition, rural means located outside of, and frequently away from, large cities. From one perspective, rural is all the residual space that separates cities from one another. Rural people live in small collectivities (sic) that are less densely populated than cities. Distance represents time, in an increasingly time-conscious world. [Parker, et al., p. 25]

In a resource intensive economy, rural communities existed because means of resource extraction and utilization had to be brought to where the resources were located. In a service economy, that reason for the existence of rural communities no longer exists. However, if means are available for overcoming the problem of rural distance, then whether rural communities continue to exist can be decided on other grounds, for example, residential preferences and quality of life considerations. [Parker et al., p. 26]

Parker et al., concede that telecommunications alone cannot stem the tide of rural out-migration. In other words, telecommunications development is a necessary but not a sufficient condition for rural development. Nonetheless, they remain firm in their resolve that telecommunications can "...enhance the quality of rural living and, to that extent, contribute to the personal and social well-being of rural residents". [Parker et al., p. 50] The most unequivocal and greatest benefits of telecommunications use in rural areas relate to improving the provision and delivery of rural social services--education, transportation, health care, civic participation, and cultural enrichment activities.

Overcoming Distance: Cost-Quality Trade-offs

Conquering space or perhaps more accurately, overcoming distance, entails costs. Castle (1988) is careful to emphasize the distinction between geographic distance and economic distance. Economic distance encompasses the costs of overcoming geographic distance--costs arising from the time and resources required to transport goods, services and people from one point to another. Improvements in transportation and telecommunication services and infrastructure

reduce economic distance. As we review and explore alternative strategies for social service delivery in rural areas it may be useful to follow Castle's suggestion, and "...distinguish between the economic cost of geographic distance within the rural area and the cost of distance between the area and other external places." [Castle, p. 19] How organizational, institutional and technological approaches contribute toward lowering the costs and improving the quality of social services delivery *within* rural areas, and *between* the rural area and the rest of the world, is an issue that needs investigation.

BUILDING BLOCKS FOR A CONCEPT OF "SOCIAL SERVICES INFRASTRUCTURE"

As a conceptual approach, the social services infrastructure is defined here as the total set of organizations (public and private) providing social services to people in a community. It also includes the institutional framework and the rules within which people and organizations operate. That infrastructure is examined here first as an economic concept under the public choice approach along with the more traditional view of government organization. Next, various notions of infrastructure are presented, starting with physical infrastructure as traditionally defined, and then broadened under the framework of public overhead capital to include civic or social infrastructure. Finally, reference to telecommunications infrastructure acknowledges that the organization and delivery of social services is changing along with the technology of the information society. These conceptual building blocks will provide a context for developing an operational definition of social services infrastructure to guide the empirical work.

Public Choice Theory

In this century in the United States there have been two major movements with regard to the organization of government and provision of services at the sub-state level. The first was the old reform tradition from the first half of the century that urged the creation of large all purpose government at the metropolitan level. The second is the new reform movement calling for more local community control. The political economy of public choice is an alternative approach, but seeks to bridge the gap between the old and the new reform movements.

The old reform movement believed that much more efficiency and economy could be had if each major urban area had a single unit of government, voters elected only a very few policy making officials, professional administrators were separate from politics, and administrative structure were hierarchical with a single chief executive. [Anderson pp. 641-3] It was believed that many separate jurisdictions were simply too small to achieve economies of scale and did not provide enough professional management and administration by experts. In 1966 The Committee for Economic Development called for a reduction by 80 percent of local governments, curtailment of overlapping jurisdictions, elections limited to a policy making body and a chief executive, and all administrative agencies responsible to the executive. [Committee for Economic Development]

By the 1960s, however, there were growing concerns that large units of local government were unresponsive, bureaucracies were bloated and inefficient and government did not sufficiently meet varied needs of different groups or areas. [Bish and Ostrom, 1973, pp. 11-12] A large array of federal legislation under the "Great Society" programs of the 1960s required local involvement and control that bypassed the metropolitan bureaucracies causing considerable friction.

Public choice theory combines elements of economics and political science with regard to the organization and provision of goods and services. It begins with a focus on individuals who are assumed to make decisions and act upon their knowledge of a set of alternatives that are available to them. Their knowledge is also assumed to be imperfect and increased knowledge carries a cost of acquisition. People are assumed to have diverse preferences and they make decisions and choose alternatives they think will be in their best interest. Individual self-interest may also include some concern for the welfare of others. In the society there is a set of decision rules that order the relationships among people. Some people hold specialized positions in government to determine, enforce or alter legal relationships. [Bish and Ostrom, Chapter 3]

Public vs. Private Goods

Individuals are assumed to have a set of unique preferences for both public and private goods. Private goods or services are those that are highly divisible and individuals can be prevented from obtaining them if they are not willing to pay for them. Furthermore, when a private good is consumed by an individual there is none available for consumption by others. Private markets work fairly well to allocate the use of such private goods.

Public goods, on the other hand, are such that one person's consumption does not diminish the amount that is available to other individuals. Once it is provided it is impossible (or very difficult) to exclude anyone from consuming it. National defense is commonly cited as an example. At the local level police services or roads are examples of public goods that are available to all members of the community. There can be degrees of variation in the "publicness" of a good or service. When the streets are jammed with traffic my consumption may indeed diminish the amount available to you. A school teacher or a social worker can only work with a certain number of clients, but the broader system within which education or social services are provided are open to all.

Public goods and services cannot be provided through purely voluntary efforts. If payment were voluntary, an individual would have an incentive to withhold payment so long as others were willing to keep the system going. Soon others would follow and the resources would not be sufficient. Government organizations also provide people with a means to communicate their preferences to officials by elections, lobbying, and other ways to influence policies. Viewed in this light, government is not an end in itself but a means to provide goods and services in line

with citizen preferences. Different forms, structures and sizes of government provide different incentives for public employees to serve the citizen preferences. [Bish and Ostrom, Chap. 3]

The public choice approach is in many ways close to the community control advocates, but is more inclusive. Public choice also provides criteria for determining which goods are best provided at national, state, regional or at small local levels.

Demand and Supply

Demand for public goods is not easy to quantify. In private markets the willingness to pay is an excellent indicator, but no parallel exists for public goods. Voting, lobbying, petitions, public hearings, surveys, legal actions and other means of influencing public decisions are all possible. Interpreting what people mean when they "demand" more of a public good is not clearcut. People may misstate their preferences (high or low) if they think they may get what they want at less cost by doing so. In very large units, with a widely diverse population with varying preference functions, it is extremely difficult to gain an accurate perception of demand for public goods. The smaller the governmental unit the more likely it is that citizen preferences can be determined more precisely. This is because the population can be more homogeneous and there are more opportunities available to people to communicate directly with elected officials.

Supply of a public good or service is also an important component of the social services infrastructure and public choice theory. It, like demand, is a somewhat intractable concept. It is difficult to measure the quantity of most public services. A true measure of a police system, a court system or education is not easy. The answer may well depend on the characteristics of the area being served so that, depending on circumstances, a given set of resources will result in different outcomes in different places.

Some services are capital intensive and where large physical facilities are required it is more likely they will be suited to larger organizations or units. Others are highly labor intensive such as many social services. For the capital intensive system, such as a sewer system, an output measure may be specified in gallons of effluent or houses served, etc. For mental health counseling, however, no physical output measure is possible and the real results are very hard to measure.

The public choice approach to the provision of public goods and services suggests that for some kinds of service, say air or pollution control, the appropriate unit of government may be fairly large because the watershed or airshed effectively sets the boundaries on the region. For other services, however, it is likely that they can be effectively and efficiently delivered by much smaller units, some even at the neighborhood level. Overlapping jurisdictions are not automatically bad according to the public choice approach because some competition may better serve the various preferences of different individuals. Remember that the initial assumption of

public choice was a focus on individuals making decisions and choices to meet their own interests.

Key Issues

A summary of the key issues treated by public choice analysis is provided by Bish and Ostrom below. [Bish and Ostrom, 1973, pp. 32-33]

1. *Nature of the good.* Does production and consumption occur simultaneously in interpersonal relationships (like education and police patrol), or is it a physical product like water or sewers? The more face-to-face contact that is required, the more difficulty it will be to manage a large organization because of the difficulties in controlling the quality of interpersonal relationships and of measuring outputs.
2. *Scale of production effects.* What geographic area is covered by the field of effects which are enjoyed or used in common? Air pollution control must cover an entire airshed, but elementary education can be provided in a small neighborhood.
3. *Demand articulation.* Can all citizens articulate their preferences? How many issues are included in a single voting process? How much voice does the individual citizen have in public decisions?
4. *Professionalization.* Professionalization within organizations enhances reliability and predictability. Does it also encourage the substitution of professional judgments for citizen preferences?
5. *Choice.* What recourse do citizens have if they are dissatisfied with the outputs of a single political unit? Are there overlapping units to provide some alternatives? How far would citizens have to move to find a more satisfactory arrangement? How costly are private alternatives?
6. *Competition.* Do opportunities exist among the various jurisdictions in a metropolitan area to contract for public services? Do the smaller jurisdictions behave like buyers' cooperatives working on behalf of local residents and firms? Are private vendors as well as public agencies contracted with? Do the different agencies take advantage of each other's diverse capabilities?
7. *Innovation.* Are there incentives for government employees to improve efficiency, or do incentives encourage maintenance of routine operations with little exposure to competitive rivalry?

Public Overhead Capital and Infrastructure

Webster's New World Dictionary defines infrastructure as "a substructure or underlying foundation; esp. the basic installations and facilities on which the continuance and growth of a community, state, etc. depend, as roads, schools, power plants, transportation and communication systems, etc." [Second College Edition, 1980]

Physical Infrastructure

Traditionally, the nation's infrastructure has been thought of as the physical framework that supports and sustains virtually all economic activity. Several characteristics describe physical infrastructure as defined by the Government Finance Research Center of the Government Finance Officers Association [GFOA, 1990, p.2]:

- It serves an essential public purpose.
- It has a long useful life.
- It is infrequent and expensive.
- It is fixed in place or stationary.
- It is related to other government functions and expenditures.
- It is usually the responsibility of local government.

Public works improvements were defined by Congress in Public Law 98-501, which created the National Council on Public Works Improvement, to include the following publicly owned civilian facilities: highways; streets; bridges; mass transportation facilities and equipment; resource recovery facilities; airports; airway facilities; water supply and distribution systems; wastewater collection, treatment and related facilities; dams; Federally owned buildings; docks and ports; waterways; and such other public facilities as the Council determines are critical for national economic development. [National Council on Public Works Improvement, 1986, p. B.2]

Two Categories of Public Overhead Capital

Neither the discussion of public choice nor the traditional view of infrastructure draw major distinctions between physical and social goods or services. Niles Hansen (1970) suggests a framework for analysis of various kinds of public goods and the kinds of communities where the needs may be more acute. He relates infrastructure or public overhead capital to regional development of areas ranging from urban to rural. [Hansen, 1970, pp. 8-10]

Hansen divides infrastructure into two categories: economic overhead capital (EOC) and social overhead capital (SOC). These mirror two broad categories of capital facilities or infrastructure suggested by the GFOA's Government Finance Research Center. Economic overhead capital

projects are those that give support directly to economically productive activities including transportation facilities, energy projects, communications systems and other physical investments that are needed to support development. This GFOA category encompasses those facilities that must be completed and in place before human habitation or use of a structure can occur. Such facilities that are absolutely essential to support economic activity and healthy living include streets and roads, sanitary sewer systems, drainage systems, water supply systems, and solid waste disposal systems.

Social Overhead Capital (SOC) consists of the social services of education, training, health and other programs whose primary emphasis is on development of human resources. As defined by GFOA, this category includes those facilities that are considered to enhance the quality of life of those who occupy a particular area. Such investments include public safety services, education, libraries, parks, and mass transit, health, and other human resource development.

Hansen's public overhead capital framework supports the hypothesis that rural social services infrastructure holds promise for those communities that are small, declining and not expected to find economic footing soon. For lagging rural regions, Hansen argues that a higher priority should be given to social overhead capital investment in order to improve upon the quality and productivity of the human resource base that will make them more competitive economically. Over time that will induce economic overhead capital investments as the development process occurs, Table 1.

Table 1. Unbalanced Growth and Regional Development

Type of Region	First Priority	Induced Intermediate Consequences	Induced long-term Consequences
Lagging rural regions	SOC	Human resource development; net outmigration	Induced EOC; balanced growth
Intermediate with smaller urban areas	EOC	Modernization of agriculture; small scale industrial dev.	Induced SOC; balanced growth
Large urban centers	EOC	Large and/or med. industrial dev.	Induced SOC; balanced growth

Source: Adapted from Hansen (1970)

SOC - Social Overhead Capital; EOC - Economic Overhead Capital

Hansen argues that economic overhead capital investments should be given more initial attention in regions with large urban centers and that social overhead capital investments will be induced in the longer run. This is not to suggest that no SOC investment should be made in the short-term but that EOC will have greater returns at first. Hansen makes a similar argument for intermediate regions with smaller towns and cities.

Civic or Social Infrastructure

Neal R. Peirce (1988) considers a strong civic infrastructure the foundation of communities that function both competitively and for the broad masses of their citizens. By examining the factors that restrain, inhibit, even paralyze healthy civic life, the National Civic League identified elements of a strong and resilient civic infrastructure to match the sound physical infrastructure that successful communities require.

Citizen Participation. Informed, participating citizens are the first requirement of a vibrant, strong community. How well do they participate? Are neighborhood and civic groups active? How can this be encouraged?

Community Leadership. Is community leadership results-oriented? Is it risk taking? Do they work together?

Government Performance. Is local government professional and competent? Does it work well with other units and sectors of the economy?

Volunteerism and Philanthropy. Is there a good climate for volunteerism and giving?

Intergroup Relations. Is there good communication between various interest and ethnic groups?

Civic Education. Are schools teaching citizenship and civic responsibility?

Community Information Sharing. Are people well informed about their community? How does information flow?

Strategic, Long-term Planning. How well do public and private entities plan ahead? What structures are in place to encourage and facilitate planning?

Capacity for Cooperation and Consensus Building. Do people work together? What systems are available to foster this cooperation?

These are the factors that make it possible for some communities to "get their act together" to advance with confidence, according to Peirce, even in this era of shrinking federal assistance

and threatening national and international economic competition. Peirce argues that the building of the strong civic infrastructure will become an ever-more-needed art and frontier in the times ahead. [Peirce, 1988, pp. 27-29]

Social infrastructure was also recognized as an important factor at four regional rural development policy workshops held in 1988. A major conflict arose between the advocates of greater emphasis on physical infrastructure and job creation versus those who would place more emphasis on social infrastructure designed to improve the capacity and flexibility of people. Workshop participants suggested that federal programs should place greater emphasis on social infrastructure because the mobility of people makes it more difficult for rural communities to capture the benefits of social infrastructure investments such as in education.

Limiting rural development to physical infrastructure and job creation is an unduly narrow definition of rural development. It is a definition that will not solve rural problems. There is need for a balance between building the capacity of people to deal with their problems, physical infrastructure and job creation. [Knutson & Fisher, 1989, p. 9]

Telecommunications Infrastructure

The telecommunications infrastructure in rural America today as portrayed by Parker, et al., addresses five issues: universal access (extent of telephone penetration in rural households, single-party telephone service, digital switching, quality of transmission, and likely penetration of mobile cellular telephone service in rural areas. [Parker, et al., 1989, Chapter 5] They argue that a developed telecommunications infrastructure can contribute to more efficient, effective and high-quality services.

For example, the rural population as a whole benefits if shuttle bus operators can communicate with their headquarters via radio or cellular telephone; if health paraprofessionals can contact physicians in cities or regional centers; if agricultural extension agents can query outside experts to answer farmers' questions; and if students can interact with distant instructors to study subjects not offered by local teachers. Besides enhancing quality of life, these information exchanges can yield many economic benefits such as new efficiencies in services, fewer patient evacuations, higher crop yields and reduced student dropout and failure rates. [Parker, et al., pp. 43-44]

Dillman and Beck call for investment in rural technical information infrastructure, noting that telecommunications capacity for the two-way flow of information is to the information age what the building of interstate highways and long distance power lines were to the industrial age. This capacity includes digital switching, distortion-free fiber optic cable, adequate trunk line capacity, open network architecture and system reliability. They also call for investment in the associated human capital necessary for the effective use of information technologies. This

includes not only computer and technical skills such as information sorting, computational word processing, and learning skills, but also skills for cross-cultural interaction with businesses and people in distant places. [Dillman and Beck 1988, pp. 36-37]

DIMENSIONS OF A SOCIAL SERVICE INFRASTRUCTURE

Low population density and geographic isolation were identified by Honadle, Reid and Long as the unique characteristics that distinguish rural from urban areas in the organization and delivery of social services. Overcoming distance presents problems of increased cost, lower service quality, or doing without. The discussion of public choice theory in the subsequent section presented two major approaches to solving these problems through consolidation or cooperation to achieve economies of scale and professional quality at lower per unit cost with implications for local control, responsiveness to individual preferences, community choice, competition, and innovation. Additional support for a "social services infrastructure" was provided by the discussion of public overhead capital with its economic and social components, reinforced by the need for sound physical infrastructure to be matched by a strong and resilient civic infrastructure. This section will move further towards a definition of the somewhat elusive concept of a "social services infrastructure" that addresses the problems of overcoming distance in rural areas.

A Taxonomy for Analyzing Social Services

An inquiry into strategies for social services delivery quickly confronts the difficulty of "mixing apples and oranges" as one examines the literature and discusses alternative approaches. Some help in this differentiation is provided by a taxonomy presented by Jerry Stam (1977) for analyzing the community services delivery system. The four components of Stam's taxonomy: resources, organization, delivery and rules provide a helpful framework for organizing our thinking about its multiple dimensions in a more systematic manner. The following operational definition of a social services infrastructure suggests a critical distinction between alternative forms of service organization and service delivery approaches that frames the analysis in the balance of this study.

Resources include funds, personnel, information, input goods and input services. This component involves all pecuniary and non-pecuniary inputs, including volunteers. It encompasses issues regarding the generation of revenues from own sources and the transfer of intergovernmental revenues, i.e., public finance. Quality questions, such as the "capacities" of local officials are included. It is the beginning point once the system reflects individual choices and the nature of the community goods and services to be produced.

Organization comprises the combining of the factors of production -- land, labor and capital -- both spatially and through time to produce the desired stream of community goods and services. It includes issues of the process, methods, decision rules, and structure to be employed. It involves the setting of the more general rules of the game regarding the usage of community properties and resources (political culture). To the political scientist it encompasses questions termed governmental organization, structure, intergovernmental relations, and administration. To the sociologist, it includes interorganizational networks or linkages, and patterns of interagency cooperation and exchange. Important concerns thus include such issues as centralization versus decentralization, governmental production versus contracting for services, and specialization versus integration of services.

Delivery involves the actual delivery of individual community goods and services to the populace. It embraces issues of quantity, quality, and equity. In short, delivery deals with the direct or tangible outcomes of the system and how users regard this outcome (consumer needs and satisfaction). Such service level adequacy may be analyzed by studying individual preferences, voter behavior, benefits, and costs, and professional standards.

Rules consist of the setting of certain community rules that fall outside the scope of the more specific problem of direct community goods and services delivery. This component encompasses the indirect and regulatory functions. Such rules may affect both public and private decisions and can influence the scope and manner in which community goods and services are delivered. Examples include land use and zoning regulations, professional licensing, safety requirements, and utility regulation. [Stam, 1977, p. 14]

Categories of Social Service Functions

One definitional issue is what kinds of service functions should the term "social services" include? Webster's defines social service as "same as social work", which is "any service or activity designed to promote the welfare of the community and the individual, as through counseling services, health clinics, recreation halls and playgrounds, aid for the needs, the aged, the physically handicapped, etc." Starting with examples of education and health care, counseling and geriatric care, police and fire protection, this study expands and classifies social services functions in a manner consistent with the literature reviewed.

Fred Hitzhusen and Ted Napier (1978) identify ten broad public service functions including education, welfare, public safety, hospitals, highways, sanitation, water supply, public health, parks & recreation, and library. [Hitzhusen and Napier, 1978, p. 129] Community services are differentiated by Stam into three groups according to their output orientation: physical, physical-people, and people. [Stam, pp. 14-16]

Physical services influence, alter, and determine the physical and biological environment of a community. Examples are sewer, water, housing, solid waste, and roads.

Physical-people services influence both the physical-biological environment of a community and the behavior patterns of individuals in the community, i.e., joint physical and social services affecting the environment of the community. Examples are police, fire, parks and recreation, and transportation.

People services directly affect the individual in a nonphysical sense and therefore affect the social environment of the community members. Examples are health, education, welfare, and employment services.

As one moves from the physical to the people end of the continuum, the types of service functions listed appear to parallel those considered human services. In *Human Services in Contemporary America*, Schmolling, Youkeles and Burger define human services as "organized activities that help people in the areas of health care, mental health including care for retarded persons, disability and physical handicap, social welfare, child care, criminal justice, housing, recreation, and education." They identify eight target populations: America's poor, children in need, the elderly, disabled persons, the mentally ill, substance abusers, the law violators, and the mentally retarded. [Schmolling, et al., 1985, Chapter 1]

Based on this literature and the focus group interviews, the analysis proceeded with seven categories of social service functions: 1) aging and long-term care, 2) education and libraries, 3) health systems (hospitals and public health), 4) mental health, alcohol and drug counseling, 5) public safety (police and fire protection), 6) social welfare, and 7) transportation.

Alternative Forms of Service Organization

Hitzhusen and Napier identify six alternative forms of service provision: directly by local government, contract between governments, contract with private firm, regulated private provision, regional or special district, and state or federal government. [Hitzhusen and Napier, p. 129] Honadle identifies several alternative service delivery strategies: contracting, interlocal cooperation, and the use of user charges to finance services. [Honadle, 1984, p. 301] Three types of interlocal cooperation are suggested (joint facilities, mutual aid, and purchase of services) that not only make service delivery more effective, but also less costly,

Consolidation is defined as the formal merging of two agencies to provide continued or expanded services to their clientele. Variants of this strategy include cases where agencies share a building, clerical help, formal combining of agencies within and across county lines. Or, the new agency resulting from consolidation may be the outgrowth of an existing unit or may be established for the specific purpose of providing services for two or more jurisdictions or types of clientele. [Rogers, et al., 1983, p. 11]

Interlocal cooperation is usually defined as any instance in which two or more local governments work together to solve common problems. The cooperating units range from cities to school districts and may join efforts to provide parts of or an entire service. [Honadle, 1982, p. 362; 1984 p. 305; and Rogers, et al., p. 20] Three different forms of interlocal cooperation are sharing arrangements, privatization, and inter-agency coordination.

Sharing arrangements is defined as the mutual use of personnel, facilities and/or equipment to meet the service provisions of the cooperating agencies or governmental entities (e.g., the sharing of a communications system by several local agencies). [Rogers, et al., p. 41] Three variations of sharing arrangements, elaborated below as alternative service delivery approaches, are **circuit riders** to share specific personnel and/or equipment among multiple locations, **community center facilities** to share multiple services at a specific location, and **integrated case management** (also known as **client-level service coordination**) to share a multiple services team with a specific client and family.

Privatization is contracting the provision of public services to private for profit or nonprofit private providers.

Inter-agency coordination is defined by Canham as a process in which two or more organizations come together to solve a specific problem or meet a specific need. It carries with it the assumption that, by working together, agencies will increase effectiveness, resource availability, and decision-making capabilities. Mulford and Rogers (1982, p. 12) define interorganizational coordination as "the process whereby two or more organizations create and/or use existing decision rules that have been established to deal collectively with their shared task environment." All definitions have this in common; two or more organizations pool their resources together to provide better services to their mutual clients. Nelson et al., (1988, p. 5) suggest that formal working agreements can serve as useful links between service organizations and as a means of clarifying the boundaries of responsibilities and maintaining interorganizational continuity.

These three forms of cooperation are not mutually exclusive. Community-based social services, for example, may involve sharing arrangements, privatization, and/or interlocal cooperation. Community-based social services are described by Chazdon as small-scale, local programs designed to meet the specific needs of individuals and families as defined by their surroundings. The key to this approach is their ability to tailor service delivery to client needs rather than deliver a particular service as defined by strict program and funding requirements. Community-based social services have three basic characteristics: 1) they are administered at the community level; 2) they provide support networks for individuals and families living within a geographically defined area; and 3) they strive for comprehensive service delivery. While the particular emphasis of community-based social service programs vary with the demographics and ethnicity of communities and the severity of their social problems, all community-based social service programs share the goal of providing a locally based, accessible, and nonbureaucratic

alternative to assist individuals and families in their efforts to become more functional and self-sufficient. [Chazdon, 1991, p. 3]

Service Delivery Approaches

Alternative service delivery approaches can perhaps be classified with reference to several of the dimensions introduced above. Any of the approaches listed below can be utilized by either the consolidation or cooperation form of service organization. The approaches are presented in several categories: sharing arrangements, service extenders, home-based delivery and physical linkage through telecommunications.

Sharing Arrangements, introduced above as an alternative form of service organization, include several alternative service delivery approaches: circuit riders, community center facilities, and integrated case management.

Circuit rider is a mobile service delivery system intended to reach remotely located rural clients.

Community center facilities is an approach to providing social services more appropriately viewed as a variety of interlocal cooperation involving the operation of jointly owned facilities by local residents. This approach is also known as co-location.

Integrated case management is a strategy that assigns responsibility to a single person or team to work with a client, and often the client's family, in an ongoing relationship to develop an appropriate service plan, ensure access to services, monitor service delivery, advocate client needs, and evaluate service outcomes. Also known as **client-level service coordination**, case management is a key element to the community-based approach to social services.

Service extenders is a concept for extending the service beyond the scope of what could be provided through direct contact by a professional through use of volunteers, natural helpers or natural networks. Webster (1984, pp. 17-23) provides a framework that could be useful for better understanding of not only categories of service extenders or helping systems, but also how they evolve over time as they adapt to various forces. This work clearly removes conceptual confusion in the literature. Webster's framework includes a typology of rural helping systems and a codification of forces which shape them. Three rural helping systems include:

Formal helping systems consist of organizations and professional individuals with formal missions to provide health and social services under the auspices of governments or private sectors. Most providers in this category receive financial remunerations for their efforts. This type of helping relationship is, therefore, based on a "logic of accountability." [Webster, 1984. p.19]

Informal helping systems are those based on moral precepts of helping the less fortunate and are, therefore, governed by the "logic of charity." The principal sources are voluntary associations and role-related helpers [Webster, 1984, p. 19]. The classic definition of a volunteer is one who does not expect monetary rewards in return for services performed. According to Rogers (1987, p. 353) voluntary networks occupy an intermediate position between the two extremes of capitalist and socialist models of public service delivery. Pierce (1988, p. 28) argues that volunteerism and philanthropy are among the key requisites for building strong civic infrastructures or cooperative communities.

Natural helping system defined as "those supportive and enhancing services which result from the every day interactions of individuals within their social network." This form of helping system is based on the "logic of mutuality," that is, "people doing things for each other because of the personal relationships which have evolved between them." Natural helping is most often evident between the individual and his or her relatives, friends, and neighbors. It may also derive from "role-related helpers" whose occupational functions bring them into regular contact with the public (deliverers of mail, bartenders, hairdressers, grocers), and who may provide support or other resources. Finally, natural helping systems can grow out of organizations such as churches or fraternal organizations. The use of natural networks in social service delivery, also known as the family-oriented approach, is essentially a complimentary strategy which reflects a recent trend in community psychology. This approach is built on improved understanding about the special traits of certain target population (e.g., elders and at-risk youth) and appreciation for the potential contribution of informal structures in extending service to such groups. [Webster, 1984, pp.18-19]

Home-based delivery of services previously offered through complex institutional arrangements away from home are becoming increasingly possible through the revolution in information technology, sometimes coupled with the services of volunteers.

Physical linkage through telecommunications in an innovative infrastructure strategy for delivering services to individuals or groups at remote locations. As social services become more information sensitive, they rely more heavily on access to high quality telecommunications. Beyond needing adequate voice, facsimile, and data links, many education and health services are coming to rely on telecommunications to provide access to diverse, high-quality expertise in cities. A new web of telecommunications dependencies is developing, changing what services are available to rural people and the means and timeliness of their delivery. [Parker, et al., 1989, pp. 36-37]

OVERVIEW OF SOCIAL SERVICES INFRASTRUCTURE

This overview begins with a discussion of which levels of government are responsible for social service delivery and funding. The next two sections provide examples of alternative organizational strategies and service delivery approaches by service function with evaluations of advantages and disadvantages of selected organizational strategies and delivery approaches.

RESPONSIBILITY FOR SOCIAL SERVICE DELIVERY AND FUNDING

The social services infrastructure is difficult to characterize in terms of responsibility for delivery of service and sources of funding. Responsibility for service delivery, while generally at some level of local government, varies not only between service functions, but often within each function. Sources of funding are even more diverse, as well as unstable and dispersed among several levels of government, with considerable variation between states as well. Furthermore, while local government has historically assumed responsibility for delivery of some social service functions (e.g., public safety, education and libraries), the assumption of responsibility by local government has been relatively recent for other social service functions (e.g., mental health and alcohol, social welfare, and transportation). In yet other service functions for which county government has historically had responsibility (e.g., aging and long-term care), the nature and scope of local responsibility has dramatically shifted. The ownership and operation of the county home (or "poor farm," which a generation or so ago was a self-contained form of service delivery and source of funding) was a much different management function than today's complex task of coordinating diverse forms of delivery and mobilizing funding from multiple sources.

The following general overview of selected social services, based on contact with and observation of local governments in Washington, provides an introduction to the diversity and complexity of social service organization and funding.

- Within public safety, for example, both delivery and funding of police services are generally the responsibility of the general purpose government (city or county). Fire protection services, on the other hand, may be delivered by the general purpose government in a town or city, by a special taxing district in some unincorporated areas, or by a volunteer association in other unincorporated areas or some smaller incorporated places. Fire protection equipment is usually funded by the respective general purpose local government or special district, even if the fire department is staffed and/or administered by volunteers.
- Kindergarten through grade 12 public education is generally administered by a local school district (special district); however, schools are part of city government in a few metropolitan areas. Funding is from a combination of local, state and federal funding, in differing mixes for operating expenses and capital facilities. Libraries are generally administered and funded

by city government or by a special district serving unincorporated areas and incorporated places lacking municipal library service. Even with a staff funded by local government, libraries often depend on a staff of volunteers to maintain services.

- Several social service functions are administered by county government, in forms ranging from a multi-service human services department within a county, to several single service departments serving only that county, with various other combinations of services and counties. The complexity of human service organization and funding can be illustrated by an example. One county human services department has a small administrative staff, supported by a human services coordinating council represented by advisory boards for alcohol/drug abuse, mental health, developmental disabilities, senior citizens, and public health (whose programs are administered by the county health department). The human services department contracts with other local agencies for service delivery of alcohol, drug abuse, mental health, developmental disabilities, senior citizens and other community programs. Funding for these diverse programs comes from local government (county and city), state and federal categorical programs, and fees for services.
- Health systems include services such as public health and hospitals, as well as private sector providers. Public health services are administered as a county government department or a health district which may be county or multi-county. Hospitals are public (often a special taxing district) or private (often with ties to a religious denomination). Funding of health systems is from a mixture of public and private sources, including local, state and federal government, private charity, and fees for service supported by health insurance including medicare and other public support programs.

This overview of social services infrastructure responsibility has attempted to illustrate the complexity of service delivery and sources of funding. Responsibility for service delivery, while generally at some level of local government, varies not only between service functions, but often within each function. Sources of funding are even more diverse, often unstable and are dispersed among the local, state and federal levels of government, user fees, charity and other private sources.

ALTERNATIVE ORGANIZATIONAL STRATEGIES FOR SOCIAL SERVICES

This section develops a matrix of five alternative organizational strategies and seven social service functions, utilizing case examples of applications in rural communities in the Pacific Northwest and elsewhere. The five alternative organizational strategies include two major forms of service organization, consolidation and interlocal cooperation, and three types of cooperation: sharing arrangements (personnel or facilities), contracting with private sector provider (privatization), and inter-agency coordination. The seven categories of social service functions are: 1) aging and long-term care, 2) education and libraries, 3) health systems (hospitals and

public health), 4) mental health, alcohol and drug counseling, 5) public safety (police and fire protection), 6) social welfare, and 7) transportation.

Data for this analysis were obtained from three types of sources: 1) a review of literature, including several journals which focus on rural social service delivery; 2) contacts with managers of selected programs that have piloted and/or researched innovative service delivery in rural areas; and 3) a focus group interview with selected local administrators delivering rural social services in Northeast Washington. The purpose of the interviews was to go beyond the literature with current applications of alternative organizational strategies, and to solicit views about advantages and disadvantages of alternative approaches. The focus group input built on and provided a longitudinal dimension to the results of a 1982 Shared Services Task Force [Rogers, et al., 1983], which studied options for rural public service delivery in the same general geographic area.

The matrix in Table 2 was constructed from examples from the literature review (L), supplemented with the focus group meeting (F) and the program manager interviews (I). Community-based services is not included in this matrix table since this strategy can include all three types of cooperation.

Table 2. A Matrix of Alternative Organizational Strategies by Social Service Function.

SOCIAL SERVICE FUNCTION

ORGANI- ZATIONAL STRATEGY	Aging & Long- term Care	Education & Library	Health Systems	Mental Health/ Alcohol	Public Safety	Social Welfare	Transpor- tation
Consolidation	F	FI	LFI	LF	F	F	F
Interlocal Cooperation	LF	LFI	FI	LF	LF	LF	F
Sharing Arrangements	F	FI	F	F	F	F	F
Privatization	LF	LF	FI	LF	LF	LF	F
Inter-Agency Coordination	F	F	F	F	F	F	F

L - Literature review; F - Focus group; I - Interview

Consolidation

Consolidation is the formal merging of two agencies to provide continued or expanded services to their clientele. Consolidation is reported in all seven social service functions. Examples cited by the focus group included mergers of districts within a function (school, library or health) and creation of human service departments consolidating two or more functions (aging/long-term care, mental health/alcohol and social welfare, or police and fire).

Both the literature, interviews, and focus group identified that consolidation may lower costs per capita, allow the use of more specialized personnel, and broaden agencies' population base. Rogers (1983, p.11) suggests that a broadened population base can result in increased funding from state and federal sources. The focus group echoed this sense that in some cases consolidation of rural programs can gain the critical mass necessary to provide some services for scattered, priority populations which otherwise would not be available. While cost savings may be found in building costs, shared support staff and administration it was also recognized that co-location in a shared building might result in decreased costs for clients who will no longer need to travel to different locations to obtain services.

A major disadvantage of consolidation cited both in literature, interviews, and the focus group is the perceived or real loss of political autonomy. In addition to the loss of autonomy of previously separate programs, it is also feared that representatives to regional governing boards may not be directly responsible or responsive to the public [Rogers, 1983, p. 14; Helge, 1984, p.17]. Ray Smith (1990) observes that there is no longer pressure for school consolidation in Washington because of the political controversy and, with the advent of telecommunications and new models for inter-local cooperation, there are new ways to achieve economies of scale without consolidating school districts [Smith, 1990]. In addition, the Rogers report (1983, pp. 14-17) and the focus group identify that multi-county agencies may actually incur higher costs when the geographic area is too large, sparsely populated, or presents rugged terrain and bad weather conditions. The focus group felt that costs to the client can be increased if they must travel longer distances to services; and that in seeking economies of scale, there is a potential of losing individual services. Finally, it is suggested that savings through consolidation are more likely in capital intensive services (such as a multi-county irrigation system) and less likely with personnel intensive services [Rogers, 1983, p. 14].

In summary, whether cost savings can be achieved and service availability maintained through consolidation requires analysis of the specific situation and fears of loss of local control must be addressed openly and from the start.

Interlocal Cooperation

Interlocal cooperation is any instance in which two or more local governments work together to solve common problems. Some type of interlocal cooperation was reported in each of the social

service functions reviewed. Examples of intergovernmental systems or cooperative networks in rural eastern Washington involve nursing homes and nursing training schools; resident therapy, family planning and mental health in court-ordered counseling for minors; juvenile probation department and mental health department; local community hospitals and mental health; mental health/alcohol program and the sheriff departments. [Rogers, 1983, pp.20-30]

In rural education, cooperative networks fall into four categories; (1) state-mandated special district systems and education service agencies (2) educational cooperatives formed by local district initiations (3) regional or decentralized state education agency systems, and (4) interorganizational structures. [Helge, 1984, p. 6]

Suggested **benefits** of collaboration include the following: alleviation of duplication, overlap and fragmentation in service delivery; retention of local government autonomy which may be threatened by contracting or consolidation; access and referral to individuals or organizations with specific professional expertise; access to greater resources in the forms of goods and services; access to special services that would otherwise not be available to some communities. [Rogers, 1983, p. 20] The focus group also identified access to multiple resources as an advantage, along with the increased communication between (and subsequent buy-in of) government entities. In a specific example, interlocal cooperation between school districts is resulting in stronger programs, lower drop-out rates by maintaining a strong community base to keep the kids in school, and high percentage of graduates enrolling in college.

Perceived **barriers** to cooperation in the school example include inequities in location of facilities and programs, concern about travel cost and long time feuds in athletics. "If the process starts out slow and in athletics, and if it works there, the rest will work." [Ray Smith, 1990] The focus group identified the increased time to coordinate between entities and work out the details as a general disadvantage of the interlocal agreement approach. They also felt that the legally binding nature of a written interlocal agreement can be either an advantage or disadvantage, depending on the situation.

In **summary**, it appears that the use of interlocal agreements can achieve many of the benefits associated with consolidation but with fewer of the disadvantages.

Forms of Interlocal Cooperation. Three general approaches to interlocal cooperation were introduced on pages 20-21: 1) a variety of **sharing arrangements** (including the use of circuit riders, community centers, and integrated case management); 2) **privatization**; and 3) **interagency coordination**. The remainder of this section looks at some of the strengths and weaknesses of these three approaches, along with a comment on community-based services. Advantages and disadvantages of three specific techniques for implementing the sharing arrangements approach (e.g. circuit rider, community center, and integrated case management) are presented in a later section on delivery approaches.

Sharing Arrangements

Sharing arrangements are the mutual use of personnel, facilities and/or equipment to meet the service provisions of the cooperating governmental entities or local agencies. Some form of sharing arrangement was reported in each of the social service functions. In Grant and Adams Counties, some mental health agencies share a consulting psychiatrist. In Whitman County, separate agencies residing in the same building sometimes share secretarial help. The health district and mental health programs share building and clerical support in Pend Oreille County. Due to mutual aid agreements, law enforcement officers in Douglas and Okanogan Counties have authority to cross boundaries in pursuit of law violators. In the Moses Lake area, Washington State Patrol officers share breathalyzer and other police facilities with other agencies. Similarly, Chelan County shares computer records (relating to law enforcement) with the Wenatchee Police Department. [Rogers, 1983, pp. 41-44]

Advantages of this service delivery method include cost control in the use of facilities and equipment and time management. It promotes and maintains cooperative efforts between agencies. Sharing can often be achieved on a voluntary basis without the formal arrangement of contracting and associated transaction costs. [Rogers, 1983, p. 41] The focus group identified the ability to combine multiple resources and get "more bang for the buck" as a strength.

On the negative side, sharing arrangements carry hidden costs. For instance, civil liability suits could result from improper maintenance of shared equipment. Where costs cannot be accurately determined, sharing buildings and/or administrative support may be difficult. Finally, when sharing arrangements take contract forms (that is, mutual aid agreements) on a temporary basis or for emergency services, they require continual revisions and improvements such that the agreements will be capable of covering any type of emergency. [Rogers, 1983, p. 42] The focus group echoed this concern about lack of clarity as to who is in charge.

Privatization

Privatization is contracting the provision of public services to private for profit or nonprofit private providers. The privatization approach was reported for each service function either in the literature, during program interviews, or by the focus group. This approach includes contracting with private non-profit organizations as well as with private firms. Another form of privatization is through third-party insurance as a source of funding for health services.

Privatization plays a major role in Washington's long-term care delivery system, through contracting with private nursing homes and other private alternative care providers. Encouraging private financing of long-term care is another form of privatization where public expenditures are reduced or eliminated through the use of private funds. One form of this is long-term care insurance, which helps to pay for extended care in a nursing home or nursing services in private homes. Programs which encourage informal provision of care, thereby reducing or delaying the

need for public support, represent another potential area of cost savings which is also a form of privatization. [Washington Research Council, 1988, pp. 10-11]

The literature abounds with cases of successful application of the contracting approach. In California, many communities contract with private entrepreneurs for services ranging from police protection to education. The Rural/Metro Fire Development Company provides the city of Scottsdale, Arizona, with fire protection at half the cost of similar services provided by public producers. [Lovejoy, et al., 1982, p.9] The city of Little Rock, Arkansas has, since 1977, contracted custodial services to a private firm, reportedly at half the former cost. The city of Poughkeepsie, New York contracted its off-street parking and sewage treatment facilities. In 1980 alone, the city estimated savings of almost \$226,000 a year on sewage treatment and over \$300,000 on parking by contracting out the management of these facilities. [Honadle, 1984, p. 303]

Contracting offers the incentive for entrepreneurial efficiency. Inefficiencies such as overstaffing, underpaying, and overworking can be eliminated. Local governments can take advantage of economies of scale and specialization associated with the private sector. Contracting avoids the often difficult problem of establishing the minimum costs of public goods or services. The process of considering, reviewing, and letting contracts forces local officials to develop better information about costs and outputs. Contracting also offers the potential for increased government responsiveness to public preferences as it allows elected officials to circumvent bureaucratic resistance to needed adaptations or changes in services offered. It does not compel producers and local governments to be organized with reference to the same geographical boundaries. [Lovejoy, et al., 1982, p.8] The points of less bureaucracy, opportunity to use expertise in public and private policy making, and greater choice in service provider were reinforced by the focus group participants, who cautioned that privatization has worked where there is sufficient population.

Contracting has potential limitations [Rogers, 1983, pp. 4-5]. Agencies' lack of control over the personnel practices of the contractor raises serious concerns as employees may lack commitment and ties to the community in which they are working. Contracting may equally result in the loss of control of program and lessened commitment by the contracting unit. Finally, contracting a service may be opposed by union officials with possible threat of civil suit and strikes.

Contracting also has the following drawbacks in rural areas, according to Rogers (1983, pp. 4-5). A government's option to contract may be limited due to lack of contractors, qualified personnel and the geographical distances involved. Contracting can result in the provision of substandard services by profit-minded suppliers, and as noted by the focus group, potentially higher cost or siphoning off only clients that can pay. It places upon the contracting governmental unit the burden of specifying the goals and objectives, selecting contractors, monitoring and ensuring public accountability, requiring as the focus group observed, more time to collaborate and greater organizational skills. It may be difficult to specify certain areas of

responsibilities, for instance, in the case of law enforcement: obligation for security checks, traffic citations and animal control, resulting as emphasized by the focus group in less control of quality or no government regulation.

Inter-Agency Coordination

Inter-agency coordination is a process in which two or more organizations come together to solve a specific problem or meet a specific need. One distinction between interagency coordination and sharing arrangements is the difference between informal coordination and legally binding agreements. Another distinction is whether the focus is on the relationship between the agencies or the facility or personnel being shared. In this study, an inter-agency coordination approach was reported by the focus group in all seven rural social services.

Eastern Washington was a demonstration area for an inter-agency collaboration effort that sought to create a continuum of care between school-based services and community-based services in rural areas. Human service agencies sent representatives to a county team; at the county level, agencies learned about one another's missions and services. The teams received staff support for team formation aimed at moving the inter-agency team from sharing information about isolated services to achieving agreement on integration of services and collaboration in some new service development.

The benefits of interagency cooperation are as follow: they include reduced duplication and overlap in service delivery processes; increased potential for covering administration gaps and oversights through interagency coordination; increased potential for minimizing, or removing interagency conflicts; and increased opportunities for empowering small organizations through the sharing of information, resources, and technical assistance. Other benefits include improved staff effectiveness; improved accessibility for clients; reduced fragmentation of services and increased potential to treat clients as whole persons rather than as packages of unrelated problems; and increased efficiency through economics of scale, reduction in service duplication, and improved cost benefit ratios. [Chibwana, 1989, p. 29] The focus group perceived interagency coordination as politically rewarding in the long run because better communication results in shared ownership of services. Their experience suggests that not only are resources conserved but that the resource pool is enriched, especially by sharing public and private expertise.

In rural areas, more than in urban areas, the dominance of strategies of survival, the generalist role, and a tradition of cooperation and community are potential stimulants of interorganizational linkages which should be harnessed by rural service providers, administrators, and planners. On the other hand, boundary and turf issues, incompatible goals and values, and lack of boundary spanning skills (consultation skills, ability to handle extensive travel, and to adapt to different settings, and negotiation skills) all impede interorganizational linkages [Nelson et al., 1988, p. 7; Canham, 1979, pp. 2-3]. Other barriers to interorganizational coordination include

administrative training (which inhibits compromise, consensus-building, and group commitment); internal agency structure (internal reward systems tend more to promote organizational loyalty, tunnel vision and single purposeness); agency reputation; unequal power among agencies; and unclear goals. [Canham, 1979, pp. 2-3] The focus group agreed that turf wars, resistance to change, and the greater organizational skills needed to achieve collaboration present barriers. As practitioners, they identified specific administrative problems with accountability (who is ultimately responsible?) and problems with cost allocation and the need to use sophisticated accounting software.

Community-Based Services were introduced on page 24 as a different perspective on service organization, one which may involve several forms of interlocal cooperation. This is illustrated by the "Local Area Management Organization" (LAMO) model is being proposed in the State of Washington. This model would emphasize a system of shared state and local responsibility under which the state would establish minimum service levels and standards, and then enter into contracts with local governments which would have considerable flexibility in determining how to accomplish those targets. The state would be responsible for establishing eligibility standards; budget development and monitoring; developing regulations and program standards; monitoring adherence to statewide quality standards; negotiating contracts with local administrative entities; and operating the state institutions. The local/regional governments would then have broad flexibility in allocating funds across different types of services, selecting contractors, negotiating payment rates, and assuring service quality and financial accountability.

Community-based social services are considered beneficial by Chazdon (1991) because they are *client-centered*, *less bureaucratic* than centralized state service agencies, *fiscally efficient* due to their ability to leverage private funds with public funds, and *responsive to specific service needs* as determined by the residents of the community. [Chazdon, 1991, p. 3]

DELIVERY APPROACHES FOR SOCIAL SERVICES

Alternative service delivery approaches can be utilized by the consolidation or any of the interlocal cooperation forms of service organization presented in the previous section.

This section develops a matrix of six alternative delivery approaches and the seven social service functions. The six service delivery approaches examined are: 1) circuit rider; 2) community centers; 3) use of volunteers; 4) natural networks; 5) home-based delivery; and 6) telecommunications. Two of these delivery approaches, circuit riders and community centers, along with integrated case management, are forms of sharing arrangements, also discussed above as an alternative form of service organization. Use of volunteers and natural networks are two types of the service extenders delivery approach.

Table 3 presents a matrix of the alternative delivery approaches and social service functions discussed in this section. Omitted from the matrix table is the integrated case management

approach which, by definition, involves several social service functions. Again utilizing case examples of applications in rural communities in the Pacific Northwest and elsewhere, this matrix was also constructed with examples from the literature review (L), supplemented with the focus group meeting (F) and the program manager interviews (I).

Table 3. A Matrix of Service Delivery Approaches by Social Service Function.

SERVICE DELIVERY APPROACH	SOCIAL SERVICE FUNCTION						
	Aging & Longterm Care	Education & Library	Health Systems	Mental Health/ Alcohol	Public Safety	Social Welfare	Transpor- tation
Circuit Rider	F	LFI	FI	F	LF	F	F
Community Centers	LF	LFI	FI	F	F	LF	
Use of Volunteers	LF	F	LF	F	LF	LF	F
Natural Networks	LF	F	F	F	LF	LF	F
Home-Based Delivery	LF	FI	LFI	F	F	F	F
Telecommu- nication	F	LFI	FI	LF	F	F	F

L - Literature review; F - Focus group; I - Interview

Sharing Arrangements

The sharing arrangements form of service organization includes several alternative service delivery approaches: circuit riders, community center facilities, and case management.

Circuit Riders

Circuit rider is a mobile service delivery system intended to share specific personnel and/or equipment among multiple locations to reach remotely located rural clients. The circuit rider approach was found in all of the social service functions. Through circuit riders, local services can be taken anywhere they are needed. This strategy easily lends itself to transboundary applications.

In the field of education, circuit rider services for Washington school districts are contracted through the Educational Service Districts and include special education, testing, therapy (physical, speech, occupational), nursing, library and counseling services [Smith, 1990] Bookmobiles are a longstanding mechanism for serving rural libraries and schools. Several community colleges with rural service areas, including the Community Colleges of Spokane in a state demonstration project, have implemented mobile training units which deliver specialized education which requires expensive equipment or laboratory settings not normally available in small communities (e.g. computer training).

Another interesting application of educational delivery is in the firefighting service area. The Main Fire Training and Education Program provides a successful example of a mobile training unit. Because rural fire departments cannot afford to purchase all the training aids needed by their firefighters, the state of Maine, using Carl Perkins Federal Vocational Education grants, has devised a mobile unit. Currently, a sprinkler and alarm training is being used, a smoke training aid is under construction, and a mobile burn facility is being considered. The system allows each county or fire department to obtain free training courses on request. [SRDC, No. 128, 1990, p. 41].

Examples of circuit rider services utilized by health systems in eastern Washington include physicians from Spokane delivering specialist services in outlying communities and mobile vans providing diagnostic services such as ultrasound, EKGs, and mammograms. A management contract is an agreement between the specialist consultant and the community physician that outlines procedures for continuity and quality of care. This addresses legal liability and other concerns about leaving the patient in the care of another provider. On the positive side, the specialist physician circuit rider is a way to overcome the sense of isolation, improve access, and save time and money. The fear of losing patients and bypassing local care is offset by an improved scope of service provided locally and enhanced local practice. [Baldwin and Meltzer, 1990]

In their study of an outreach nursing service provided to a migrant farm population on the eastern shore of Virginia, Mendelson et al., (1986, p. 37) found a high penetration rate through this more accessible health delivery system. They attribute success to such factors as "accessible and highly visible field service, after-work hours, extensive primary care nursing, and a responsive, bilingual staff." This approach clearly demonstrates how client utilization patterns can be altered by providing a comprehensive program and removing structural barriers at the same time.

In an overview of this approach, Lippold (1990, pp. 3-14) posits that the same environmental factors that created a rationale for adoption of circuit riding as a method of service delivery in Colonial America are still applicable to present rural communities. These are geographic isolation and distance; a lack of role clarity; role diversity; few formal resources; role incompatibility; lack of role compartmentalization; and value conflicts between community residents and the professional "outsider." These factors pose constraints on the service delivery

process in some indirect ways, both in terms of the challenge to the social worker for continuing, generalist education and his/her psychological developmental needs. This, in Lippold's view, calls for innovative integration of the mentoring and circuit riding models to meet the educational and developmental needs of the rural practitioner. The fundamental dualism of the 20th Century rural America means that it is confronted with the problems of technological change as much as, if not more than, metropolitan America.

The focus group perceived a number of advantages in the use of circuit riders, including: cost-sharing, cost-effectiveness, the promotion of cooperation and collaboration, and increased territory that can be covered. They felt that it is preferable to decentralize delivery, especially for low-income clients who would otherwise have to travel to a distant location. Experience shows that this model works well if the circuit-rider can do eligibility assessment and referrals for multiple programs that may still be headquartered elsewhere.

They did, however, see some disadvantages such as the time lost to travel; problems with scheduling and response time so that the service is not available at all times; and the potential for spreading energy and expertise too thinly. Some practitioners expressed concern about creating dependence on an outside service which does not necessarily build community resources.

Community Center Facilities

Community center facilities is an approach that shares multiple social services at a specific location. This approach is also known as co-location. The community center facilities approach was reported in all of the social service functions. Community center facilities are provided by collaborative agreements between school districts and other agencies to deliver programs such as Youth at Risk, early childhood education, and pre-natal care. Although not trained for such an approach, there is a need for school administrators to take more leadership in providing coordinated services for pre-school and school-age youth. [Smith, 1990] A variation of the community center approach is the satellite health clinic staffed by a circuit rider physician as part of a multi-service function. [Baldwin and Meltzer, 1990]

This arrangement is usually appropriate when the costs of investing in a site or an installation are prohibitively high for individual communities. It is also suited to situations in which a number of users can benefit from a facility at the same time without interfering with satisfactory use by other people, and in cases in which pooling of resources means that a higher quality or more effective facility can be developed or maintained. This approach is suitable for establishing parks, recreation centers, police dispatching systems and multi-jurisdictional landfills, communication technology systems. [Honadle, undated, p. 4, and 1984, pp. 305-307]

In Valdosta, Georgia, several communities jointly developed the Coastal Plains Computer Cooperative which enables them to share computer facilities by expanding and upgrading one

city's data processing system. [Honadle, 1984, p. 305] Similarly, Vance County and the city of Henderson, North Carolina operate a joint recreation and parks department. [Honadle, undated, p. 4]

Taggart (1990, p. B-3) reports successful application of the community facility approach in the Coeur d'Alene High School. Coeur d'Alene's alternative school and Project CDA (Creating Dropout Alternatives) offer on-site child care services for its students and gives pregnant girls enrollment priority. This child care delivery method, formerly shunned by traditional high schools, has just been adopted by Coeur d'Alene High with some innovative twists. The program features occupational training for students interested in child care as well as free child care and instruction for young parents and low-cost child care for teachers. This has successfully attacked the drop-out problem while, at the same time, enriching the school's curriculum.

A fully developed co-location model is used extensively in Great Britain, Germany, and Scotland, and is being researched by Emilia Martinez-Brawley at The Pennsylvania State University. The concept is a "one-stop shop" rural service center akin to the old settlement house model utilizing abandoned schools, storefronts, or underutilized buildings in rural areas. Both stigmatized and non-stigmatized services would be in this "rural community center" ranging from adult education, mental health, senior services, employment security, public assistance, and library if appropriate. The staff is decentralized from the metro area or county courthouse seat to these rural centers, administered from the central location, and work a circuit out of the rural centers. In a theoretical county, an inventory is done of how many school nurses, mental health outreach workers, librarians, etc. are working out of various agencies to serve the larger county. The county is then divided into x number of quadrants, each one to have a rural center site. The staff is then re-allocated to the rural centers. The most qualified workers, generalist-oriented with MA level, work from the rural centers, and the less qualified workers, with BA level or limited skills, are kept at the administrative headquarters and work as specialists (housing, entitlement requirements, data, etc.). [Jacobson, 1990]

The focus group saw a number of advantages in the community center approach. It creates a one-stop access to multiple resources who, because of proximity, can communicate better and distribute services more effectively. The potential exists for a sense of community ownership which, in turn, can extend to a community/family feeling in the center.

They also perceived some disadvantages which included: extra costs for infrastructure and staffing for satellite facilities; extra coordination time to monitor multiple centers; possible access and travel problems, depending on facility location; and the potential for concentrating client populations in a certain part of the county.

Integrated Case Management is a strategy that assigns responsibility to a single person or team to work with a client, and often the client's family, in an ongoing relationship to develop an appropriate service plan, ensure access to services, monitor service delivery, advocate client

needs, and evaluate service outcomes. Also known as **client-level service coordination**, case management is a key element to the community-based approach to social services.

One example is the Washington State Family Academy, a coordinated family services delivery initiative by five agencies: the Departments of Social and Health Services (DSHS), Community Development (DCD), Health (DOH), Employment Security (ESD), and the Office of the Superintendent of Public Instruction (SPI). The purpose of this long term initiative is to fundamentally alter the delivery of services toward family-focused, coordinated, and locally planned approaches. To meet this purpose, the Family Academy has initiated the following initial strategies: 1) Creation of an Interagency Council on Families to provide guidance to state agencies in developing and promoting collaborative, family-focused service approaches; 2) Identification of barriers to cooperation among and within agencies, and impediments to accessing services by clients; 3) Training agency staff to provide family-focused problem solving with field staff training in family-focused service coordination, cultural sensitivity, evaluation and assessment, and cross training to ensure that agency staff and community providers are aware of all resources available to the client family; and 4) Development and enhancement of approaches that meet the guiding principles of this initiative. [WA State Family Academy, 1991]

As a result of co-location discussed above, it is much easier to achieve an integrated case management model. This approach reinvests money and personnel in rural rather than more developed areas, with resulting economic spinoff effects. The model works best in states where most service decisions are still vested at the county level. Rule-making at the state level cannot dictate the variation of formation of the centers as they need to be very sensitive to local conditions, given the advantages and disadvantages of decentralized vs. centralized models in regional collaboration cited by Helge (1984, pp. 11-26). Problematic aspects are: 1) categorical funding requirements, and 2) political turf regarding accountability regarding makes what decisions at what level. [Jacobson, 1990]

Service Extenders

Service extenders is a concept for extending the service beyond the scope of what could be provided through direct contact by a professional. The use of some form of service extenders (volunteers or natural helping systems/networks) was found in all the service functions examined. The following pages identify advantages and disadvantages of this method of maintaining service delivery.

Use of Volunteers - Formal and Informal

A volunteer is one who does not expect monetary rewards in return for services performed. Volunteers have been extensively used in the areas of public health, mental health, and alcohol programs in Whitman County, Washington. They have also been used in law enforcement and

associated considerations in Douglas County, Okanogan County, Chelan County, Lincoln County, and Moses Lake, Washington. [Rogers, et al., 1983, 35-38]

Bedics and Doelker (1983, pp. 18-20) suggest that utilization of community people in a planned, organized, voluntary system is one way to develop service resources. Like the social service system, the design for volunteer use must be generic in scope to adequately serve the multiple needs of rural clients. Basic precepts necessary to planning a voluntary service network include identification of key informants (natural helpers and community leaders) whose support is necessary both for reason of their influence and accurate assessment of community needs; and an understanding of community life styles and values. The authors identify three levels of volunteer efforts; the most frequently utilized level of volunteer involvement in community service focuses on individual families with special needs; volunteers are also used by social service agencies and other human service organizations such as schools and churches; the third category of volunteer utilization is situated on the community level and is carried out by such civic organizations as Ruritan, volunteer fire departments or neighborhood security watch groups.

In his study of the role of the voluntary sector in rural England, Rogers (1987, pp. 359-360) found that it has been "truly responsive to people's needs, effective in its implementation and a proper restraint to the excesses and insensitivity of both the public and private sectors." This success is attributed to a deep seated need within individuals and societies to respond to altruistic motivation and to act within a communal framework. In another study, Banister and Norton (1988, pp. 57) found volunteerism in transportation in Norfolk and Suffolk less impressive. According to these analysts, volunteerism in rural areas may even increase inequalities in service provision. Both studies suggest that in order to be effective, volunteerism need to be mobilized, coordinated, and guided toward qualitative and equitable provision of services in the rural environment.

Similarly, Johnson (1983, pp.27-31) suggests that increased need for volunteers and self-help groups in providing needed resources calls for developing ways for formal and informal systems to work together. This coordination is necessary since rural residents seem to prefer informal to bureaucratic structures. This analyst further offers a set of tentative principles for the use of "networking" as a means of coordinating and enhancing available resources in nonmetropolitan situations. Knowledge of the community is necessary to identify both the formal and informal resources in the community. Professional workers should accept informal helpers as colleagues and equals with different, but not inferior resources. Communication between both categories of helpers is useful for both sides to understand what each has to exchange. Leadership and provision for on-going functioning of the network must be developed in order to sustain its usefulness. Leadership should be shared by formal and informal representatives. Leaders should use an enabling, facilitative stance to motivate a broad range of persons to participate in the coordinating activity. Leadership roles should be assumed by persons that enjoy wide acceptance in the community.

Kendall and Kenkel (1989, p. 25) note that "natural helpers" are part of the social exchange system of human society. Use of natural helpers in professional help systems should, therefore, account for the change in costs and rewards the helpers could receive when they become associated with a service agency. The researchers found that natural helpers experience costs and rewards as a result of their helping interactions, and often receive social approval for their helping activities. When the costs outweigh rewards, helpers cease their activities. Helpers see rewards as critical to maintenance of their helping activities. Waters (1990, p. A-3) reports that some AIDS volunteers encounter discrimination and hide their supporting role or risk the consequences. This further confirms Kendall and Kenkel's argument for systematic ways of rewarding informal helpers.

Advocates of use of volunteers in public service delivery point to the fact that they may provide a cost effective means of furnishing certain services in association with staff support, such as in law enforcement (search and rescue missions, administrative support, and neighborhood patrols). Volunteers can also be used to perform tasks that consume large blocks of staff time and would otherwise be infeasible for the staff to accomplish. They can be used in support areas such as needs assessments, record filing or transportation. They provide a vital link in public relations to the community and may enhance communication access to particular religious, cultural and socio-economic groups. Finally, they generally exude a high level of enthusiasm which may extend to the paid staff and have a positive effect on clientele. The focus group also saw advantages in agency use of volunteers, including: a sense that volunteers have been successfully used and are absolutely essential in rural areas; community expertise is used; an opportunity for adults to learn is provided; new blood/ideas are introduced into a program; and human touch/availability is extended. Pro-Bono legal volunteers were cited as a positive example.

Opponents of use of volunteers argue that, owing to the turnover rate among volunteers, the cost associated with recruitment, orientation and supervision may not be justifiable. It is also argued that volunteers often do not possess the degree of professionalism required in the public service, that they can break client-agency confidentiality, and may often be perceived as possible job threats by regular staff. Similarly, it is suggested that the use of volunteers with professionals affects a community's perception of the need for professional services. Finally, it is feared that owing to the high volunteer turnover rate or absenteeism, programs can face interrupted service. [Rogers, et al., 1983, pp. 32-33] Disadvantages perceived by the focus group social service practitioners included: inconsistent coverage and extra problems posed in coordination and scheduling; accountability issues related to volunteer reliability and problems in supervision; limitations for providing specific or technical training; and the tendency to create burn-out in rural communities because a small number of people do everything.

The Use of Natural Helping Systems/Natural Networks

Natural helping system is the supportive and enhancing services which result from the every day interactions of individuals within their social network. Natural networks were utilized in all

seven social service functions, according to the focus group members. Advocates of this arrangement contend that traditional, bureaucratic methods were designed as if recipients lived in a social vacuum.

Ray Rashko, Spokane Community Mental Health - Elderly Services, has pioneered the use of natural helpers as gatekeepers for service deliverers. In this model, newspaper delivery people, postmen, and other home-delivery based businesses are trained as to what to look for that will identify frail elderly at risk and how to refer these needs to the appropriate resources. This approach is similar to how individuals working with children are required by law to report indications of abuse. These approaches formally harness the energies of others to provide referrals into the social service delivery system.

The Illinois Child Neglect Services Project is a good example of where the effort of social services agencies are complemented by those of clients' natural network. The project is implemented by the Illinois Department of Children and Family Services (DCFS) in cooperation and collaboration with the Illinois Department of Alcoholism and Substance Abuse (DASA). An essential component of the project is the portion of outreach worker services in the home to provide support for both sobriety and the application of new parent skills. [SRDC No. 128, 1990, p. 99]

In Madison, Wisconsin, the Community Options Program (COP) is intended to target shrinking resources toward elderly and disabled persons to make sure that reliable assistance is available to individuals who prefer to stay in their homes or communities. COP is an effective alternative to nursing home care. [SRDC No. 128, p. 96]

It is argued that the use and support of naturally occurring helping systems involve several advantages for rural practitioners. First, the resistance of many rural residents to conventional delivery arrangements may be circumvented by the delivery of services through more naturally occurring networks. Second, the use of natural networks may reduce the difficulty experienced by isolated, sparsely populated areas in attracting and retaining professionals. Third, the per capita cost of services may be reduced because of the voluntary nature of the informal support system. Fourth, natural networks eliminate the difficulties of program location, transportation, and acquiring physical facilities because delivery is reduced to personalized services, provided in informal natural settings, between close social associates. [Coward, 1980, p. 54] The focus group recognized that church and family systems are very close to people, so that natural helping systems increase the availability of human resources to serve the rural population. Such systems are spontaneous and thus capable of serving quickly and flexibly.

The close cooperation involved in the natural network system's approach is a two-edged sword and there is a potential for both benefit and harm. It seems most useful in the planning and delivery of the services that various agencies provide as it allows for maximum input from family members. However, the situation also provides the client and family with little privacy or confidentiality. It is possible for clients to be labeled and expected to fail. Furthermore, the focus group queried how rural peoples' needs are met when there is no family or church.

Natural helping networks were perceived as being hard to supervise, less reliable, and requiring more training to be effective. In general, practitioners felt that such networks cannot be sustained as an organized entity.

Home-Based Delivery

Home-based delivery of services previously offered through complex institutional arrangements away from home may become increasingly possible through the revolution in information technology, coupled with the services of volunteers. Home-based delivery was reported for all the social service functions. In education, home learning centers are tied to the home school concept [Smith, 1990]. Health systems examples range from home calls by physicians and other home health services, to hospice services by paraprofessionals and trained volunteers, to services accessed from home by telephone such as poison control centers staffed by medical professionals and crisis hotlines staffed by volunteers. Counseling services are also provided over the phone by some employee assistance programs. [Baldwin and Meltzer, 1990]

Long-term care in Washington has several examples of home-based delivery beyond home-delivered meals. The chore services program is designed to maintain elderly, chronically ill, developmentally disabled or other disabled adults in their own homes and prevent unnecessary (and more expensive) residential care placement. The volunteer chore program is funded through the Senior Citizens Service Act and links volunteers with people "who need for chore services is not being met by the chore services program." The caregiver respite program is designed to provide breaks for informal caregivers in a variety of settings, and thus encourage informal care and reduce the need for residential placement. [Washington Research Council, 1988, p. 4]

Van (1990, p. A-1) reports that the American Heart Association intends to launch a nationwide campaign aimed at making automatic defibrillators available in office buildings and other public places. This is expected to significantly raise the survival rate of cardiac death victims. A case example of this type of delivery system is easy-to-use fire extinguishers installed in public places, etc.

The evaluation by the focus group suggested the following **advantages**: incapacitated (home-bound) clients and wealthy clients receive services; people are served in a familiar environment and enabled to remain at home; also, in-home observation provides important information that can enhance service delivery.

The **disadvantages** were seen as being increased costs of travel (both travel and the time spent in travel); possible increased costs for individual equipment at the home; and problems in providing follow-up.

Physical Linkage Through Telecommunications

This strategy for service delivery to remote locations or to special groups is reported being used to overcome distance in all seven social service functions, as reported by the focus group members.

Health systems

Parker, et al. (1990) note that telecommunications plays an especially valuable role in emergencies and health services in rural areas where distances are so great. Haber and Bernstein (1990, p. 5) report that telecommunications link big city hospitals with small rural hospitals that often do not have the resources to provide many services. This strategy allows doctors in rural clinics to send moving images of a brain scan to specialists at hospitals hundreds of miles away.

Health care in the rural U.S. is currently in a state of crisis as a result of several trends. One trend is the increased reliance on specialists for the diagnosis and treatment of medical problems. Another is increased costs to rural hospitals purchasing and maintaining equipment needed for modern medical care. The problems faced by these hospitals are low occupancy rates and too few specialized doctors to warrant the cost of equipment. At the same time, new insurance rates are limiting hospital stays, forcing those rural patients who need specialized care to leave urban hospitals promptly and return to their distant homes, even though they may need close monitoring. [Parker, et al., p.45]

A modern telecommunications infrastructure offers potential solutions to these problems. The availability of expert systems, available via computer modems, can enable general practitioners to diagnose and treat their patients with the help of specialists, without sending their patients to urban hospitals. Similarly, if post-surgery patients can be hooked up to monitoring systems connected to urban medical centers, they may be able to return to their distant homes sooner and with less risk than before -- while saving on the cost of a hospital stay. [Parker, et.al, p. 45]

"Telemedicine" is the use of telecommunications technologies for remote examinations and monitoring of patients, transmissions of X-rays and electrocardiograms, and for consultations and continuing education.

Another cost-saving yet effective means of delivering primary health care is the use of paraprofessionals in rural locations. Telecommunications links between rural clinics and regional hospitals or health centers can be used for consultation and supervision. In Alaska, village health aides are in daily contact with doctors in regional hospitals via an audio conferencing satellite circuit, using village earth stations also used for telephone and broadcasting. The system allows doctors to oversee the aides' diagnoses and

treatment plans; many patients who previously would have had to be evacuated to a hospital can safely remain in the village. A computerized recordkeeping system allows medical staff to access and update patient records from any location. It also allows staff to monitor people who need special attention, such as patients with pacemakers or tuberculosis, or children requiring vaccinations. [Parker, et al., p. 46]

The economic benefits to a village can be dramatic. The costs of travel to a distant city and hospitalization can be 21 times that of telemedicine for patients in rural communities and more than 40 times that of telemedicine for patients in the most isolated areas. [Parker, et al., p. 46]

Education

How to provide specialized instruction is perhaps the biggest challenge facing rural education, according to Parker, et al. Small high schools are unable to offer a wide array of vocational and college preparatory classes, and the problem has grown worse as the rural population has declined, causing enrollments in rural schools to drop.

Telecommunications technology offers many solutions beyond reconsolidation of school districts, the path often chosen in earlier years of this century. Rather than transporting students for even greater distances to create a critical mass of students, telecommunications can take educational opportunities to students, and reach adults as well, with interactive and broadcasting services.

One successful distance-learning model is the TI-IN network, based in Texas, which uses satellite communications to reach rural schools. TI-IN offers specialized courses in foreign languages, mathematics and science, enrichment courses, and staff development programs. At the graduate level, the National Technological University (NTU) offers satellite-transmitted technical courses to employees at their workplaces throughout the country; they do not have to leave the worksite to go to graduate school. [Parker, et al. pp. 46-47]

Swanson (1988, p. 6) suggests that in the post-industrial society, high technology can enable rural areas to preserve all that is of value in the community school without sacrificing the quality of education, although there will still be an urgent need for regional cooperation. In the past, this cooperation has been characterized by transporting students and teachers to central places where information and training were provided; increasingly, this cooperation will be characterized by transmitting information from central places to the places where people are. The new trend will be characterized by decentralization, diversity, and individualization.

Martinez-Brawley and Brawley (1984, 27-30) demonstrate how the rural news media can be used effectively and without substantial cost for consultation, education, and prevention activities. In the authors' view the most critical ingredient of this strategy is the personal relationships between rural residents, rural media, and mental health practitioners. These relationships can

lead to more developed and closer working arrangements through which the therapeutic and educational potential of local newspapers, radio stations, and local television channels can be developed. Through such an effort, the media can provide the information about: 1) common issues relating to emotional and social growth and adjustments encountered by couples, parents, children, the elderly, etc.; 2) common sense information regarding responses to stress (unemployment, loss, etc.); 3) information and clues that might help kin and friendship identify and deal with problematic or pathological conditions; 4) information and supportive messages for the purpose of strengthening vulnerable groups by interpreting their needs to community and to potential natural helpers; 5) information for the purpose of educating the community about the cost/benefit advantages of providing promotional/preventive/supportive services that will obviate individual/family/neighborhood/community crises; and 6) information for the purpose of sensitizing a range of community agencies, institutions, and individual actors about the needs in the community for growth-promoting and health-maintaining programs and activities.

A good example of application of this strategy is the Delaware - Chenango Board of Cooperative Education Services (BOCES) which uses an audiographic teleconferencing system to deliver instruction to students at various locations. This system permits instructors and students at each location to communicate by voice, typing, writing on a graphics tablet, or sending hard copy by fax machine. During the 1988-89 school year, it was used to deliver advanced placement calculus and English courses. [SDRC No. 128, 1990, p. 55] Audiographics is also being used in Colville, Washington to serve several outlying communities.

Evaluation of the Audio Graphics Model

On the positive side, this approach offers an inexpensive means of expanding instruction to small schools. It is designed to be highly interactive and encourages students to be active learners. The equipment lends itself to readily be used by right-brain learners and by visual and kinesthetic learners who are frequently overlooked in the traditional classroom.

The major drawback of the system is that it requires teachers to adapt traditional classroom materials to take advantage of the strengths of the equipment and humanize the technology. It requires that teachers be trained in audiographic instruction techniques and students in the use of the system. Some minor disadvantages of the system include possible inadequacy of old rural phone lines, high cost of instruction where classes require toll calls, difficulties in standardizing the schedules of participating schools, and resistance from teachers. [SDRC No. 128, 1990, pp. 55-56]

Deaton and Clark (1987, p. B-3) report a case example of using a teleconferencing format for delivering foster care instruction in rural Montana. The system used a state-wide telephone network and written programmed instructional materials to provide professional training to remote regions of the state using cost effective means. In a similar development, Jewell (1990) reports a five-state Northwest educational consortium the Pacific Northwest Educational Telecommunications Partnership (PLTCT) embarking on the construction of a satellite

communications teaching system for rural schools. The broadcasts are expected to deliver some upper level high school courses that would not normally be available at smaller rural schools. Haber and Bernstein (1990, p. 5) report that "Star Schools" and Med Link links small rural schools, via state-of-the-art telecommunications to educational programs from more affluent, urban areas. This, according to the reporters, will enable school children in isolated areas to learn advanced placement calculus or organic chemistry from experts all over the country.

Yet another impressive application is the Interactive Television Project established by three rural New York school districts and the Board of Cooperative Educational Services (BOCES) for the purpose of exploring cost-effective delivery of relatively specialized courses to their students. A camera, several monitors and sound equipment at each location allow the four instructors and the students at each school to see and hear each other. The concept of interaction is the key to maintaining the integrity of the classroom. [SRDC No. 128, 1990, p. 59]

Evaluation of the Interactive Television Model

On the positive side, the system allows small, participating schools to expand instruction. It is nearly as effective as live teaching, especially for motivated students. The technology offers an alternative to school district consolidation which often meets with resistance from local residents. The infrastructure might also be used for adult extension, college courses, and the like.

The system is not without limitations. The implementation of the technology requires a very large initial investment of financial and human resources. This will vary with distances between schools and the numbers of students and school involved. To achieve cost-effectiveness, there must be a commitment to the technical services. Teachers must also be committed on a long-term basis. [SRDC No. 128, p. 59]

Libraries

Libraries are important information and cultural resources in rural communities. Yet they cannot provide a service now increasingly common at many urban libraries, namely online access via telephone lines to databases around the country. One impediment to offering this service is the lack of high-quality telephone lines for data transmission. Even where these lines exist in rural regions, however, the cost of using them may be prohibitive if a phone call crosses local service area boundaries or jurisdictions of more than one telephone company. A rural library in Washington, for example, found that it would have to pay \$8,000 per year for online access to an "information gateway" (a telecommunications service in a nearby urban center that provides access to direct links with various database services). Access to television channels, via both broadcast and cable, is another important cultural need for rural regions. Although cable television is rapidly penetrating most incorporated areas, even in rural counties, little has been done to assure its availability in unincorporated rural areas. It is important that the city limits no longer be a demarcation between those who can and cannot enjoy access to cable

television. Although satellite antennas offer one possible solution, they are unaffordable for many households. One solution is to allow a broader waiver for unincorporated rural areas from FCC rules prohibiting cross-ownership of telephone and cable television services. [Parker, 1989, et al., p. 49]

The Intermountain Community Linkage Information Service, a multi-state Kellogg-funded demonstration project, linked scattered rural communities with universities, Cooperative Extension, and library resources. Local libraries and Extension agents provided the "doorway" component of the three basic ingredients (origin-gateway-doorway) for many data base systems. Although evaluation has not been completed, staff reports that rural libraries experienced an increase in usage due to the project and want to continue the system on private funding. [Wilde, 1990]

Transportation

Parker, et al. contrast the information age era of differentiated markets and targeted products and services with mass society-oriented services, in which the more one tries to meet the needs of the average consumer, the more likely one will not meet the needs of anyone in particular. Instead of buses running standard routes, making frequent stops whether or not there are passengers, arriving at a single terminal, a more realistic model for serving contemporary travel needs may be the flexible point to point services that airport vans and overnight delivery services are now developing in rural communities. The essence of these services is home pickup and delivery to the desired destination and two-way radio communication which allows last minute changes in routes. Telecommunications not only helps make transportation services more responsive to customers, but also enables carriers to budget their time and minimize mileage costs, thereby maximizing revenues. [Parker, et al., p. 44]

Evaluation of Telecommunications by Focus Group

An overall evaluation of telecommunications as an approach to maintaining rural service delivery by the focus group of practitioners identified the following **advantages**: people can access information not available locally; there is a potential to reach a greater number of people with information; conversely, more education can be provided to special, targeted groups. Administrators felt that scheduling, dispatching, routing, and billing functions can be handled very cost-effectively through telecommunications. Finally, training and self-diagnosis skills can be transmitted to clients or their caregivers.

On the other hand, **disadvantages** included: extra cost for equipment; impersonal method of delivery; lack of community skills to use the technology; lack of availability of the technology; and problems in conducting follow-up.

RESEARCH AND POLICY ISSUES

This study suggests numerous policy issues and research questions. Each policy issue will be followed with one or more related research questions needed to inform the policy decision.

1. A fundamental policy issue is the cost-quality tradeoff in overcoming distance.

One research problem is to differentiate between the economic cost of geographic distance within the rural area and the cost of distance between the area and other external places. How do organizational, institutional and technological approaches contribute differently toward lowering the costs and improving the quality of social services delivery *within* rural areas, and *between* the rural area and the rest of the world.

2. Should the state or federal government establish a strategy of policy innovation and implementation? How can the government learn from alternative approaches and how to effectively incorporate these lessons into public policy?

Research is needed on the relative applicability of alternative approaches across service functions. Are similar advantages found in each service function and are the same disadvantages found in each? What mechanisms can ensure that policy makers have adequate and appropriate information on innovative social service organization and delivery models and their effectiveness? How are policies linked to service delivery?

3. What kinds of investment should be made in social services infrastructure? What service outcomes are desired?

Research is needed on performance-based measures of outcome beyond the number of clients served. What information base is needed to measure and evaluate performance outcomes of alternative strategies for social service organization and delivery? Will choosing some alternatives undermine the economic vitality, values and social development of the local community?

4. Why improve rural social services, and what are the relative priorities between urban and rural social services delivery?

What criteria can help define equity: cost or expenditure of inputs, quality and quantity of outputs, distributional impacts, other performance measures? What indicators of service quantity and quality can aid decision making? What are the returns on investment in social services infrastructure in terms of welfare or quality of life, and in providing conditions that ensure community economic vitality?

5. How does policy reconcile ideals of community-level decisionmaking and responsiveness to individual needs with categorical program funding structure and requirements?

Research is needed on the processes by which decentralization of authority can best occur while centralization of accountability can be maintained.

6. Would consolidation or cooperation (or which form of cooperation) be more beneficial to rapid growth areas or rural communities outside the path of economic growth?

Research is needed to identify what problems and needs can be more effectively resolved in specific rural contexts through interagency cooperation vs. consolidation. For example, is privatization equally applicable in all types of areas, or does it present problems unique to small, remote communities?

Which key organizations need to be involved in a coordination effort? What decision rules affect who should be considered the lead agency and what is expected of each organization? What are the various options for coordination? For instance, should coordination be voluntary or mandatory, direct or indirect, formal or informal, vertical or horizontal? What elements need to be coordinated - resources, organization, delivery, or rules? At what level should coordination take place - individual case level, community-base level, agency line staff level, categorical program level, or all levels?

7. A related policy issue is establishing the appropriate mix of physical and social components of the social services infrastructure? What balance of "high tech" and "high touch" is most effective for reaching people in communities outside the path of growth?

Research questions include: How do alternative service delivery strategies differ in the level of civic infrastructure needed by the rural community or the human capacity and economic means needed by the clientele to effectively access the social service? Do some approaches require stronger community cohesion, if not community control, than still exists in the information age?

8. Should rural areas continue to have a disadvantage in long-distance telecommunications?

The research need is for analysis of alternative institutions designed to ensure equal access to telecommunications infrastructure.

9. A policy issue on funding is determining the most effective use of public funding (federal, state and local) in social service organization and delivery.

How have the local agencies responsible for service provision survived during this era of fiscal austerity and unstable funding? What techniques have most effectively leveraged public funds to mobilize public and private sector resources needed for social services delivery?

SUMMARY

People in rural communities, particularly those outside the path of growth, face fundamental challenges in accessing quality social services. This paper offers a framework for thinking about a "social services infrastructure" as reported in the literature and by practitioners in the field. The policy issues and related research needs can lead to opportunities for strengthening social services organization and delivery in rural areas.

Low population density and geographic isolation are identified as the unique characteristics that distinguish rural from urban areas in the organization and delivery of social services. Overcoming distance presents problems of increased cost, lower service quality, or doing without. Consolidation and cooperation are two basic approaches to solving these problems to achieve economies of scale and professional quality at lower per unit cost with implications for local control, responsiveness to individual preferences, community choice, competition, and innovation. Along with the public choice approach, various notions of infrastructure are presented as building blocks for a "social services infrastructure." From a traditionally narrow physical interpretation, the definition of infrastructure is broadened with the framework of public overhead capital to include a strong and resilient civic (or social) infrastructure to match the need for sound physical infrastructure. The idea of a telecommunications infrastructure was included to recognize that rapid changes in the technology of the information society present challenges and opportunities for the organization and delivery of rural social services.

At a conceptual level, the social services infrastructure may be defined as the total set of organizations (public and private) providing social services to people in a community. It also includes the institutional framework and the rules within which people and organizations operate. As one attempts to operationally define the somewhat elusive concept of a "social services infrastructure," the inquiry into strategies faces the difficulty of "mixing apples and oranges" as one examines alternative approaches. Some help in this differentiation is provided by a four-component taxonomy: resources, organization, delivery and rules. This framework for thinking about a social services infrastructure and its multiple dimensions in a more systematic manner suggests a critical distinction between alternative forms of service organization and service delivery approaches which frames the subsequent analysis.

What kinds of service functions the term "social services" should include is a key definitional issue. Stam differentiated community services into three groups according to their output orientation. These are **physical services** which influence, alter, and determine the physical and biological environment of a community, **physical-people services** which influence both the physical-biological environment of a community and the behavior patterns of individuals in the community, i.e., joint physical and social services affecting the environment of the community, and **people services** which directly affect the individual in a nonphysical sense and therefore affect the social environment of the community members (often referred to as human services). Focusing on those services that influence the behavior patterns of individuals in the community and the social environment of the community members, the analysis examined seven categories

of social service functions: 1) aging/geriatric care (expanded to long-term care), 2) education and libraries, 3) health systems (hospitals and public health), 4) mental health, alcohol and drug counseling, 5) public safety (police and fire protection), 6) social welfare, and 7) transportation.

Two major forms of service organization are consolidation and interlocal cooperation. Three types of cooperation are sharing arrangements (personnel or facilities), contracting with private sector provider (privatization), and inter-agency coordination. Alternative service delivery approaches can be utilized by either the consolidation or interlocal cooperation form of service organization. The approaches are presented in several categories: sharing arrangements, service extenders, home-based delivery and physical linkage through telecommunications. Sharing arrangements, also introduced above as an alternative form of service organization, include several alternative delivery approaches: circuit riders, community center facilities, and case management. Service extenders is a concept for extending the service beyond the scope of what could be provided through direct contact by a professional through use of volunteers, natural helpers or natural networks. Home-based delivery of services previously offered through complex institutional arrangements may become increasingly possible through the technological revolution. Physical linkage through telecommunications in an innovative infrastructure strategy for delivering services to students at remote locations or to special groups.

The social services infrastructure is difficult to characterize in terms of responsibility for delivery of service and sources of funding. Responsibility for service delivery, while generally at some level of local government, varies not only between service functions, but often within each function. Sources of funding are even more diverse, as well as unstable and dispersed among the local, state and federal levels of government, user fees, charity and other private sources. Considerable variation exists between states as well. Furthermore, while local government has historically assumed responsibility for delivery of some social service functions, the assumption of responsibility by local government for other social service functions has been relatively recent. In still other service functions in which county government has historically been responsible, the nature of local responsibility has become dramatically more complex to include coordination of diverse delivery approaches and mobilization of multiple sources of funding.

This preliminary analysis explored which alternative organizational strategies and which service delivery approaches are being applied by which service functions. Data were gathered through a review of social services literature, contacts with a few program managers knowledgeable about innovative service delivery, and a focus group interview with selected local administrators delivering social services in rural areas. The results presented in Table 2 suggest that the two basic organizational strategies, consolidation and interlocal cooperation, are applicable across a broad spectrum of the social services infrastructure, as examples of both approaches were found in every social service function. Similarly, the matrix in Table 3 shows each service delivery approach being applied in all the social service functions. Beyond providing examples of applications across a broad range of social services, the analysis listed advantages and disadvantages of each approach as documented in the literature or by the interviews or focus group.

It is noteworthy that many of these applications observed involve a combinations of approaches that provide access to both a broad range of equipment and a full complement of personnel with varied levels of training. Consider the organization of expertise and the array of equipment available to handle trauma cases. The first responder may be a co-worker, family member or total stranger trained in CPR. Emergency medical technicians rushing to the scene are linked by radio and other telecommunications with physicians and other specialists who can supervise on-site diagnoses and prescribe treatment with the mobile unit's sophisticated equipment without having direct contact with the patient. One can likewise envision comparable approaches utilizing appropriate combinations of expertise and technology to organize and deliver other social services to people in remote areas. Speculate how creative delivery approaches, drawing on the best aspects of telecommunications, home-based delivery, service extenders, and integrated case management, could be combined with state-of-the-art organizational approaches, e.g., community-based services, to achieve more efficient, effective and high quality service.

Perhaps the fundamental issue is how to link a critical mass of appropriate professional expertise and/or technical skills with diverse community and individual needs in an accessible and cost-effective manner that addresses the problems of overcoming distance in rural areas. The response to this question must consider the nature of consumer demands in the information age. Parker, et al. contrast the information age era of differentiated markets and targeted products and services with the mass society-oriented services, in which the more one tries to meet the needs of the average consumer, the more likely one will not meet the needs of anyone in particular. In the organization and delivery of social services, this difference is reflected in the tension between: 1) the differentiated markets reflected in community-based services with client-level service and coordination; and 2) the institutional rigidity of categorical program agencies and other funding sources. Whether information technology can help link the diverse community and individual needs effectively with the appropriate combination of professional expertise and technical skills will depend in part on the nature of investment made in the social services infrastructure, and the relative attention given to its physical and social components.

In conclusion, this analysis has attempted to integrate theory from economics of public choice with social services administration practice, as reported by literature and field practitioners, to develop a framework for thinking about a "social services infrastructure." The inquiry examined the hypothesis that rural social services infrastructure holds promise for small, remote communities outside the path of growth. For at least two decades, Niles Hansen has argued for social overhead capital investment in lagging rural regions to improve the quality and productivity of the human resource base that will make them more competitive economically and induce economic overhead capital investment over time. Since that time, the telecommunications revolution has emerged as an essential though not sufficient factor in offsetting the rural space and distance penalty. Investment in a rural social services infrastructure, as described in this report, is not only important for effective delivery of high quality social services, but is also a necessary ingredient for assuring community economic vitality.

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APPENDIX A. MANAGERS OF SELECTED PROGRAMS INTERVIEWED

Categories of Social Service Functions

Education

Ray Smith, Director, Rural Education Center, WSU College of Education (Interviewed by Ron Faas, November 28, 1990)

Health Systems

Keith Baldwin, Associate Director, Eastern Washington Office of Rural Health, and Steve Meltzer, Director, Area Health Education Center, WSU - Spokane. (Interviewed by Ron Faas, November 29, 1990)

Social Services, General

John Burbidge, Institute for Cultural Affairs, Seattle, WA 98122. Conducting survey of Innovations in Cost-Effective Human Service Delivery. (Interviewed by Ron Faas, November 26, 1990)

Alternative Service Delivery Approaches

Community Centers - Co-location

Mike Jacobson, Psychology Department, Niagara University, Buffalo, NY. "One-stop shop" rural service center (settlement house model). (Interviewed by Lois Irwin, December 3, 1990)

Telecommunications & Distance Learning

Helen Beirne, Human Resource Development, Anchorage, AK (NPC Board, source of leads). Cross-training in policy and social work; Telelinking - skills, hospitals & community health centers; Teletutoring - minor surgery, practitioners, satellite. (Interviewed by Lois Irwin, December 4, 1990)

Glen Wilde, Utah State University. Information contact for Intermountain Consortium on Learning and Information Services. (Interviewed by Lois Irwin, December 3, 1990)

APPENDIX B. FOCUS GROUP PARTICIPANTS INTERVIEWED

Judy Allen, Director, Whitman County Community Action Center, Pullman, WA

Lucy Burton, Distance Learning Coordinator, Extended University Services, Washington State University, Pullman, WA

Karl Johanson, Director, Whitman County Council on Aging, Colfax, WA

Gary Mullica, Chair, Eastern Subregional Council, Partnership for Rural Improvement, representing Washington State Grange, Springdale, WA

Judy Patterson, Director, Eastern Washington University Community Service Center, Cheney, WA

Mary Selecky, Director, Northeast Tri-County Health District, Colville, WA

Focus group convened by Lois Irwin, Program Associate, Partnership for Rural Improvement, Community Colleges of Spokane, December 20, 1990.