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**Rural Research Needs
and Data Sources for
Selected Human Services
Topics**

**Volume 1: Research
Needs**

Final Report

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EXECUTIVE SUMMARY

The U.S. Department of Health and Human Services (DHHS) is an essential partner in protecting and enhancing human capital and self-sufficiency throughout rural America. According to a report prepared by the DHHS Rural Task Force, the department administers some 225 programs, services, and grants in rural areas. In 2002, based on task force findings and input from rural research experts, DHHS announced its goal of conducting more and better research to inform state, local, and federal policymakers about the needs of rural communities, with a particular emphasis on human services topics.

As a first step, staff members in the Office of the Assistant Secretary for Planning and Evaluation (ASPE) formulated a study to learn more about social and economic conditions and trends in rural areas, identify high-priority family and community needs, and assess current knowledge about such needs and the services available to meet those needs in rural areas. The project's main goal was to identify data that could support empirical research, whether sponsored by DHHS or other entities, on understudied issues. ASPE contracted with Mathematica Policy Research, Inc. (MPR) to conduct the Social and Economic Conditions in Rural Areas study. This report describes the study's activities and findings and presents information on 80 data sources that could be used by the research community to study select human services topics in rural areas.

The Rural Context

For a better understanding of human services conditions in rural America, we first needed a clear picture of rural areas themselves. During the first phase of the project, MPR reviewed secondary sources describing social and economic conditions and trends in rural areas. The picture provided by the review is complex, because rural areas are neither demographically nor economically homogeneous. However, all rural areas share two distinct features. First, rural areas are changing. The second characteristic that unites rural areas is their differences from urban areas.

The rural population makes up 17 percent of the total U.S. population, or 49 million people, spread over 80 percent of the nation's land mass. The proportion of the total population that is rural continues to shrink, although urban expansion, high immigration and birth rates, and immigration of retirees have all boosted population in some rural areas. In addition to changes in population size, rural areas also are becoming more diverse racially and ethnically.

The economic picture of rural areas is mixed. Lower levels of human capital distinguish rural labor markets from urban ones. Unemployment rates have been similar in rural and urban areas since the 1990s, but residents of rural areas are more likely to be underemployed. Wages in rural areas are lower than those in urban areas. Poverty rates are higher, but the cost of living is lower, so official measures may overstate somewhat the impact of rural poverty. Rural poverty is persistent, however: 95 percent of "persistent-poverty" counties are rural.

Rural areas, as a whole, are more disadvantaged than urban ones across numerous physical health indicators, and access to health care facilities is more limited. Rates of mental health disorders do not differ appreciably between urban and rural areas, however. Rates of health insurance coverage are similar in rural and urban areas, though private insurance is less common in rural areas, and spells without insurance coverage are longer. About 9 percent of homeless assistance provider clients are located in rural areas, though this measure may understate rural homelessness somewhat. Data are not available to estimate rural rates of domestic violence.

Research shows the structure, access to, and use of, social supports and institutions to be different in rural and urban areas. Lack of transportation is a key barrier to employment and to accessing services in rural communities. Nearly 40 percent of rural counties have no form of public transportation. Rural schools are smaller and provide fewer resources for their students than schools in urban areas. However, rural teachers report safer learning environments, less student misbehavior, and less student alcohol and drug use than teachers in central cities. Rural families are less likely than urban ones to use formal child care, but informal child care arrangements offer advantages that may be important to rural parents, including lower child care expenditures. Rural families are more likely to report earnings, and less likely to be on welfare, though welfare recipients in rural areas face more employment barriers than their urban counterparts, including low skills, a lack of transportation, and child care problems. Since the passage of welfare reform in 1996, welfare caseloads have fallen faster in rural than urban areas.

Geographic and sociocultural factors, along with low population densities and limited organizational resources, affect service delivery in rural areas. Studies suggest that these and other rural characteristics provide benefits to recipients of social services in rural areas, as well as imposing costs.

Review of Existing Research on the Three Focal Topics

Based on the review and discussions with rural experts, three human services issues were selected as focal topics for the literature and data compilation: (1) work supports for low-income families, (2) substance abuse, and (3) child welfare services. Although many rural human services issues could benefit from additional empirical research by the research community as a whole, there were compelling reasons for focusing on these three topics for the study. Support for finding and maintaining employment is particularly valuable for low-income families in rural areas, where economic and community conditions can make it difficult to secure steady employment and achieve self-sufficiency. Recent evidence suggests that the prevalence of drug and alcohol use and abuse among youth and adults in rural areas is becoming as high as, or higher than, the prevalence in urban areas. Finally, the possible effects of child maltreatment on children, families, and communities are substantial in rural areas as well as in urban ones, but empirical research on topics related to child welfare has mostly excluded rural areas.

A review of recent empirical literature on each topic, including a discussion of research gaps, was produced during the second phase of the project.

Work Supports for Low-Income Families. In the late 1990s, Congress overhauled welfare and workforce development programs. Implementing the changes has been challenging

in both rural and urban areas. Building the service network required to engage Temporary Assistance for Needy Families (TANF) recipients in work-related activities may have been a difficult challenge for rural sites, but rural areas also enjoyed some advantages in implementing and operating TANF and One-Stop workforce development programs. While employment conditions and geographic isolation of rural areas can make job placement and workforce development more difficult, rigorous studies of welfare reform programs do not support the notion that rural clients have less access to TANF employment services or participate in them at lower rates. Existing studies do not offer consistent results regarding the effects of welfare reform programs for rural clients. Welfare reform has been comparatively well studied in rural areas, but the effects of work supports are not ascertained in many existing studies. Research is needed on workforce development services offered through rural One-Stops, and on transportation and child care subsidies in rural areas.

Substance Abuse. Long thought of as an urban issue, substance abuse has emerged as an issue in rural areas as well. The rates of use and abuse in rural areas are still lower than the rates in urban areas; however, in recent years differences have narrowed. Tobacco use is more common in rural areas than in urban areas for both youth and adults. Alcohol use is also more common among rural youth than urban youth, but less common among rural adults than urban adults. Studies of youth and adult drug use indicate that the prevalence of illicit drug use is declining and remains lower in rural areas than in urban areas, although rates vary by type of drug. Increases in the production and trafficking of illicit drugs in rural areas have raised concerns about potential impacts on rural crime, drug use, and even rates of child abuse and neglect, though evidence of these impacts has not yet been found.

Empirical research confirms that substance abuse services differ between rural and urban areas, and that treatment access is limited in rural areas, although the effects of these constraints have not been examined empirically. To understand the implications of substance abuse in rural areas and to design services to meet the needs of rural clients, additional research is necessary on rates of substance use and abuse in rural areas, especially among racial/ethnic, cultural, and other population subgroups; on the availability of treatment and prevention services; and on the effectiveness of those services.

Child Welfare. Empirical research on child welfare, including maltreatment and child welfare services, has traditionally focused on urban areas where caseloads are largest. Comparisons of rates of child maltreatment in rural and urban areas over time have not been conclusive, and are based on very small samples. Foster care caseloads grew more quickly in rural than urban areas from 1990 to 1999, and the characteristics of children placed in foster care, and foster care spells and outcomes, differ between rural and urban areas. For example, compared with children in urban areas, rural children placed in foster care are more likely to return to their families to live, rather than be adopted.

Child welfare services and practices differ between rural and urban areas, but little can be said about how access to and use of child welfare services differ. The effectiveness of child welfare services has not been studied in rural areas. Further research is needed on all aspects of rural child welfare to understand better the prevalence of child maltreatment, the services available in rural areas, and the use and effectiveness of services.

Data Sources Available to Conduct Research on the Focal Topics

During the project's third phase, information about data that could be used to study the focal topics in rural areas was collected from three sources: federal, nonfederal, and state. *Federal* data sources include national and regional surveys and databases collected or sponsored by federal agencies. *Nonfederal* data sources include surveys or databases collected and sponsored by private agencies or organizations. *State* data sources are administrative or monitoring data collected by state agencies.

MPR collected information on 19 national data sources and one multistate data source that include rural observations and identifiers and thus can be used to study aspects of one or more of the three focal topics. Information on 60 state administrative data sources was also collected from 23 states that have at least 30 percent of their populations living in rural areas, or that have high poverty rates and high proportions of rural residents (but less than 30 percent). Volume 2 of this report describes characteristics of each data source—for example, its purpose, sample size, number of rural records and rural sampling methodology (if any), and confidentiality or other restrictions that might limit our access to the data.

Implications of Study Findings

Rural America is diverse, ever changing, and different from the urban areas in which most Americans live. The story of differences between rural and urban areas is not a simple one—rural life offers families both advantages and disadvantages. Nevertheless, in contrast to urban areas, rural areas experience at least one disadvantage: less is known about their human and social services conditions, the social services they need and use, and the effectiveness of those services.

One of the difficulties in conducting rural research is finding suitable data. The federal and nonfederal data sources described in this report are well known and have characteristics that make them valuable for rural human services research, though not ideal. They are collected mainly for the purpose of research and so are characterized by rigorous and well-defined sampling and/or data collection methodologies and instruments. Most are from ongoing studies or included multiple waves of data collection. Their data are in the public domain, are readily accessible for research, and are supported by codebooks and other published documentation. Several research gaps identified in this report could potentially be addressed by researchers using documented federal-nonfederal data sources. For example:

- The Survey of Income and Program Participation could be used to study participation in work support programs and services in rural areas, including job training, job subsidies, and transportation assistance.
- The National Longitudinal Survey of Youth (1997 panel) oversampled black and/or Hispanic respondents. It could potentially be used to examine training, participation in government assistance programs, and alcohol and drug use patterns for these understudied groups living or working in rural areas.

- The Alcohol and Drug Services Study collected information from treatment facilities, which were oversampled from rural areas, so information on treatment services is available on nearly 500 facilities located in nonmetro counties. It is thus a potentially rich source of useful descriptive information on rural substance abuse treatment needs and services.
- Data from the National Educational Longitudinal Study could be used to estimate rates of smoking and alcohol/drug use for students in rural schools, and to correlate measures of use with school, community, and family factors, to explore risk factors and support the development of rural prevention approaches.
- Longitudinal Studies of Child Abuse and Neglect data could potentially be used to construct detailed case studies to describe child and family experiences in rural child welfare systems.

State administrative data sources such as those included in this report also have both strengths and weaknesses for research. They are relatively inexpensive for researchers to obtain compared with surveys or original data collection, typically contain very large samples, and generally contain consistent data elements. Data can often be linked over time or across programs to provide longitudinal and comprehensive information on program use. An especially important benefit of administrative data for rural research is the availability of detailed geographic identifiers for each record, which facilitate the identification of rural observations and their classification into multiple typologies—though researchers would have to work closely with state agencies to use these identifiers, to ensure confidentiality and protect privacy. Because administrative data are not collected for research, however, users must invest time in understanding, cleaning, and structuring such data to prepare them for analysis. Variations in data quality may raise reliability issues, and inconsistencies in identifiers may hamper data linkages. There are several examples of rural research gaps that might be addressed using the state administrative data sources documented in this report:

- Although complete national data on the use of child care and transportation subsidies are currently unavailable, numerous states (for example, Iowa, Oklahoma, South Carolina, South Dakota, and Wyoming) maintain databases on child care assistance or include flags for receipt of child care and transportation vouchers in their TANF or family service databases.
- National data on Workforce Investment Act (WIA) services are unavailable currently, but several states collect detailed data on WIA services, which could be used to examine the types of services rural One-Stop clients receive.
- States provide child welfare data to the federal government’s Adoption and Foster Care Analysis and Reporting System. Some states maintain or are developing state databases that included additional data elements not required for reporting, however. Data from these states could support more detailed analysis of child welfare systems in rural areas than can be conducted using data made available through the federal source.

- States provide information on substance abuse treatment and child welfare to the federal government, which removes (or does not collect) detailed geographic identifiers such as zip codes. By working with the states to ensure confidentiality and privacy protection, researchers can use detailed geographic identifiers to examine rural facilities and clients.

Enhancing Rural Human Services Information

Better data and more research on rural human services are needed and would be valuable. The various findings of this study suggest that entities that fund or sponsor research on rural or human services topics, as well as the organizations and individuals who plan and conduct such research, could take steps to improve the quantity and quality of rural human services information:

- ***Include Rural Populations, Areas, or Systems in More Studies.*** Entities that sponsor or conduct human services research—particularly through large national or regional studies and surveys—should more often include rural people, areas, or systems in studies.
- ***Incorporate Rural Sites into Program Evaluations.*** Since nearly one-fifth of the nation’s population live in rural areas, differences in the impacts and costs of programs that serve rural families could be large, both in social and in budgetary terms. Therefore, including rural sites and samples in evaluations, or conducting evaluations specifically designed for rural areas, could improve rural programs and policies.
- ***Oversample Rural Sites and Populations.*** Rural populations are small. This can make statistical analysis less precise or preclude the use of sophisticated analytic approaches. Oversampling of rural areas is an important option for improving rural research, conducting more sophisticated analyses, and better identifying significant rural findings or rural-urban differences. It is particularly important when there may be differences among racial/ethnic, cultural, or other demographic or community subgroups.
- ***Report Rural Findings.*** Many national and regional studies do include rural sites. But if rural issues are not a specific focus of the study, or if key findings do not differ between rural and urban sites, report authors generally do not include discussions of rural experiences and findings in published reports, or even provide information on the breakdown of sample members by rurality. Providing such information could help answer many important rural research questions.
- ***Make Better Use of Existing, Detailed Rural Classification Systems.*** Detailed and informative classifications of rural areas have been developed for use in demographic and economic studies. To date, however, they have been little used in research on poverty and human services issues. As a result, little information is available to study variation across diverse rural areas, or to capture the complexity of rural-urban differences. To the extent possible, rural data should include geographic identifiers

that can support use of detailed rural classification typologies, and researchers should make more use of alternative rural classification approaches.

- ***Disclose Rural Definitions and Classifications Used in Studies.*** Study authors should disclose the definitions used to classify rural observations. Failure to do so makes it difficult to interpret rural research findings, as well as to summarize and synthesize findings across studies.
- ***Add Information to Make Small, Region-Specific Rural Studies More Generalizable.*** The rural human services research literature is composed largely of small, region-specific studies. Findings from such studies can be useful, in the absence of nationally representative studies. Their generalizability could be improved, if, in addition to including operational definitions of rurality, authors provided detailed descriptions of rural samples, along with descriptive and demographic information on rural study sites.

I. INTRODUCTION

The U.S. Department of Health and Human Services (DHHS) is an essential partner in protecting and enhancing human capital and self-sufficiency throughout rural America. According to a report prepared by the DHHS Rural Task Force, the department administers some 225 programs, services, and grants in rural areas (U.S. Department of Health and Human Services 2002). In 2002, based on task force findings and input from rural research experts, DHHS announced its goal of conducting more and better research to inform state, local, and federal policymakers about the needs of rural communities, with a particular emphasis on human services topics.

As a first step, staff in the Office of the Assistant Secretary for Planning and Evaluation (ASPE) formulated a study to learn more about social and economic conditions and trends in rural areas, identify high-priority family and community needs, and assess current knowledge about such needs and the services available to meet them in rural areas. The project's main goal was to identify data that could support empirical research on understudied issues by the research community as a whole. ASPE contracted with Mathematica Policy Research, Inc. (MPR) to conduct the Social and Economic Conditions in Rural Areas study. This report describes the study's activities and findings and presents information on 80 data sources that could be used to study three rural human services focal topics.

Chapter I introduces the project and provides background information and rural definitions, as described below. Chapter II provides an overview of the rural environment in the United States from the human services perspective. This chapter first presents information on rural people and settings, including demographics, labor markets, poverty and income, and welfare. Next, it describes health and well-being in rural areas: physical and mental health, substance

abuse, homelessness, domestic violence, and child maltreatment. The current status of social supports in rural areas, such as schools, health insurance, and work supports, is then described. The final section of Chapter II identifies numerous challenges, created by rural geography and cultural characteristics, that may affect the delivery of human and social services.

In Chapter III, we describe how the focal topics were selected on which the project was focused: work supports for low-income families, substance abuse, and child welfare. We then present a review of the existing empirical literature on each of these topics as they apply in rural communities, along with a discussion of the methodological shortcomings of this literature and the research gaps across the three topics.

Information on data sources that can be used to study the project's specific topics is contained in the second volume of this report, "Data Sources." The project report is separated into two volumes to make information more accessible to both readers of the report and users of the data source information. People with an interest in rural issues and research should find Volume 1 ("Research Needs") useful as a summary of current rural conditions and trends, an in-depth discussion of three important rural topics, and a summary of rural research and data priorities and needs. These readers may not be interested, however, in the detailed information that Volume 2 provides on specific data sources. Others, on the other hand, may be interested primarily in using the information in Volume 2 to seek data for use in specific studies on rural areas, or on the substantive topics addressed by this project. Chapter I in Volume 2 describes project findings. In addition to emphasizing the need for additional information on rural human services conditions and the importance of data with which to address gaps in the research, the chapter suggests opportunities for the entire research community to address research gaps using the data sources identified by the project. It also suggests strategies that might further strengthen rural knowledge and data.

This introductory chapter begins by providing background on the origins of this project and its main objectives (Section A). It then describes the activities undertaken during the three main project phases: collecting rural background information, identifying a selected number of focal topics related to human services, and collecting information on sources of data that can be used to study these topics in rural areas, in Section B. Chapters II and III of Volume 2 provide detailed information on how data sources were identified and documented. Section C discusses alternative definitions and classifications of “rural” territory and populations, a complex yet important topic for readers of this report and for producers and consumers of rural research.

A. ORIGINS OF THE PROJECT

Rural America is a diverse mix of people and places. According to the U.S. Department of Agriculture’s Economic Research Service (ERS), rural America comprises 2,052 counties, contains 75 percent of the nation’s land, and is home to 17 percent (49 million) of the U.S. population. The nonmetro population grew by 5.3 million, or 10.3 percent, during the 1990s, but growth has steadily diminished since 1994–1995. As in the nation as a whole, the rural economy and its traditional occupations have been transformed by changing technologies and globalization. Furthermore, contrary to long-held assumptions about the homogeneity of rural communities, important differences exist in their economic structures, race and ethnicity, and cultures. Finally, while some view rural American communities as places removed from the troubles and stresses of modern life, rural families are no longer isolated from crime, substance abuse, or other ills traditionally associated more with urban areas. These trends may have important implications for the development of human services policies and program implementation in rural areas.

In 2001, DHHS created the Rural Task Force with representatives from each DHHS agency and staff office to examine DHHS programs, regulatory policies, barriers to providing services,

and strategies to improve DHHS services in rural communities. The task force also received comments from 450 organizations and individuals. The Rural Task Force Report (U.S. Department of Health and Human Services 2002) found that DHHS lacked a common definition of “rural”; that although more than 225 DHHS programs served rural communities, it was often difficult to access these resources; and that the Department’s policy development process did not consistently consider rural concerns. The report included a number of recommendations to improve rural health and social services coordination within DHHS.

The task force noted that the progress made in building a body of descriptive research on rural health delivery systems over the previous decade had not been matched by similar research progress on rural human services. To stimulate rural human services research, the task force suggested the development of a “tool kit” for researchers both within and outside DHHS. This tool kit would consist of an inventory of major federal databases on population characteristics, human services–related conditions, and access to and use of human services, and would contain geographic information appropriate for identifying rural areas and populations. Thus it would be useful for rural studies. Researchers at the Rural Policy Research Institute (RUPRI) suggested that rural researchers also needed a similar inventory of state data that met these criteria.

B. PROJECT APPROACH AND ACTIVITIES

For the compilation of such a tool kit, the Social and Economic Conditions in Rural Areas study was designed (1) to summarize rural conditions and trends based on a review of available research and data, (2) to select a few “focal topics” for in-depth research on the incidence and prevalence of human services problems and the availability of specific types of services in rural areas, and (3) to compile information about data sources suitable for research on the focal topics in rural areas and describe the availability of these data for research. Each of these objectives was addressed during three distinct project phases, which are described below.

Establishing the Context and Selecting Focal Topics

In the first phase of the project, MPR conducted a review of secondary sources describing social and economic conditions and trends in rural areas. Existing studies and reports on rural demographics, economics, health status, human services conditions, and social services delivery were examined. The review identified numerous human services as being particularly relevant to rural people and communities, as well as to the mission and services of DHHS (Table I.1).

Criteria were developed to guide the definition and selection of focal topics. It was decided that focal topics should be those with impacts on well-being and self-sufficiency for a broad swath of rural families—and with the potential to be different from impacts in urban areas. Topics should involve services and programs for which DHHS had primary or substantial responsibility. Focal topics should not already be well covered by existing rural health research. Based on the findings of the background report, these criteria, and various discussions with experts and among project staff, three human services issues were selected as focal topics for the literature and data compilation: (1) work supports for low-income families, (2) substance abuse, and (3) child welfare services.

TABLE I.1

**RURAL HUMAN SERVICES–RELATED CONDITIONS AND TOPICS
IDENTIFIED IN BACKGROUND REVIEW**

Condition/Topic	
Adolescent pregnancy	Government assistance
Child care	Homelessness
Child support	Housing
Child welfare	Long-term care
Crime	Low-income work supports
Disabilities	Mental health
Domestic violence	Obesity
Education	Poverty
Employment	Substance abuse
Food security	Transportation

There is strong motivation for selecting each topic. Work supports for low-income families address the interrelated problems of poverty, underemployment, and labor market limitations that are highly prevalent in rural areas. Substance abuse, a significant and growing problem in rural communities, is linked with multiple social problems, including health issues, violent or criminal behavior, family violence, and unemployment. Substance abuse programs and services are limited and face unique service barriers in rural areas. In addition to adoption and family reunification, the child welfare system addresses the problem of child maltreatment and associated negative consequences, including health and mental health issues, cognitive outcomes, and effects on socio-emotional development. What makes this a key topic are the increasing numbers of child maltreatment cases, systemic weaknesses in the child protective system, and the lack of empirical studies of rural child welfare needs and systems.

Reviewing Literature on the Focal Topics

To lay the groundwork for the project's main goal of compiling information on data sources that can be used to study these topics, MPR reviewed the literature on each focal topic. The review included studies of the incidence and prevalence of substance abuse and child maltreatment, and the availability and utilization of work support, substance abuse treatment or prevention, and child welfare services. It also assessed gaps in, and barriers to, rural service delivery, and the overall effectiveness of the services in rural areas. The review identified the gaps and methodological shortcomings of existing research for each focal topic.

Compiling Information on Data Sources

Information about potential sources of data was collected during the project's third phase. The project's Statement of Work specified three types of data sources for possible inclusion in the compilation: federal, nonfederal, and state. *Federal* data sources included surveys and

databases collected or sponsored by federal agencies. *Nonfederal* data sources included surveys or databases collected and sponsored by private agencies or organizations. *State* data sources included administrative or monitoring data collected by the states. Data sources relevant to the focal topics selected during the project were to be documented in a user-friendly format that provided information on the characteristics of the data source—for example, its purpose, sample size, number of rural records and rural sampling methodology (if any), and confidentiality or other restrictions that might limit access to the data.

During this phase, MPR collected information on 19 national data sources and one multistate data source that include rural observations and identifiers and thus can be used to study aspects of one or more of the three focal topics. To identify state administrative data sources, MPR also contacted 25 states in which at least 30 percent of the population lives in rural areas, or with either high poverty rates or relatively high proportions of rural residents (but less than 30 percent according to the 2000 Census). In all, information on 60 state administrative data sources was collected.

Thus, this report provides information on more than 80 sources of data that potentially can be used to study child welfare, substance abuse, and work supports for low-income families in rural areas. Since none of the data sources is exclusive to rural people or areas, each could also be used for research that includes nonrural sites or sample members, or to compare rural and nonrural characteristics, experiences, or services. Some of the sources include information on additional topics important in rural areas, such as mental health or education.

C. DEFINING “RURAL”

What does it mean for an area or population to be classified as “rural”? What criteria are used to identify rural places and persons? Who establishes the criteria? These are important

questions for readers of this report, as well as users of rural research or data, to consider. This section describes the major definitions and classifications used in rural research.

There is no single, standardized definition used to designate populations and places as rural or urban. Rural areas may be defined by population size, population density, commuting patterns, or other measures of isolation. The use of alternative definitions can affect what data are available for research on rural topics and can even change research conclusions. For instance, some regions or populations that are considered rural under one definition may be classified as urban under another. To use rural literature or to conduct rural research, individuals must be aware of the alternative definitions of rurality and of their implications.

Definitions used most commonly in rural research are those developed by the U.S. Census Bureau, the Office of Management and Budget (OMB), or the U.S. Department of Agriculture's Economic Research Service (ERS). These definitions are designed primarily for statistical and research purposes. Some definitions are based on population levels and densities. Others include additional criteria, such as the spatial and functional relationship between rural and urban labor markets. Still others use economic or policy characteristics (Table I.2).

Making matters even more complex, urban-rural definitions or typologies are modified or updated from time to time, typically in conjunction with the release of data from the decennial census. These modified or updated versions are not necessarily fully compatible with earlier versions, so knowing which versions have been used to classify data is important for comparing studies or combining data. While a full discussion of these classification systems is beyond the scope of this report, general descriptions are provided below. Additional information on

TABLE I.2**AN OVERVIEW OF RURAL DEFINITIONS AND CLASSIFICATIONS**

Entity and Classification	Classification Criteria	How Classification Criteria Are Applied
U.S. Census Bureau urban-rural areas	Total population and population density. All areas NOT designated as urbanized areas or urban clusters are classified as rural	Open country and settlements with fewer than 2,500 residents
U.S. Office of Management and Budget metropolitan and nonmetropolitan counties	Population, and economic linkages (as measured by commuting). All counties outside the boundaries of metro areas are classified as nonmetro counties	Metro areas are central counties with one or more urbanized areas, plus outlying counties that are economically tied to them as measured by commuting
ERS-USDA Rural-Urban Continuum Codes	Population size of metro area, degree of urbanization, and “physical adjacency” to a metro area	All U.S. counties and county equivalents are grouped according to their OMB-designated metro-nonmetro status. Nonmetro counties are then classified according to the aggregate size of their urban population and their physical adjacency to a metro area or areas
ERS-USDA Urban Influence Codes	Economic opportunities, as measured by population size, urbanization, and physical adjacency to larger communities	Nonmetro counties and county equivalents are divided into groups by their adjacency to a metro area and whether or not they have their “own town” of at least 2,500 residents
ERS-USDA Rural-Urban Commuting Areas	Urbanization, population density, and daily commuting flows, including the direction of commuting	Designations are made by census tracts rather than counties. Areas are divided into metro, large town, small town, and rural areas—then subdivided further based on commuting patterns

TABLE I.2 (continued)

Entity and Classification	Classification Criteria	How Classification Criteria Are Applied
ERS-USDA County Typology Codes	Economic and social characteristics	All U.S. counties and county equivalents are classified according to six non-overlapping categories of economic dependence and seven overlapping categories of policy-relevant themes

Source: ERS-USDA. Briefing Room, Measuring Rurality. Available at [www.ers.usda.gov/Briefing/Rurality].

various statistical classifications based on these definitions and used in data source descriptions is provided in Volume 2, Table I.1.¹

Census Bureau and OMB Definitions

Two key methods of classifying rural areas are those used by the Census Bureau and the OMB. Most of the other definitional approaches discussed below are based on these two definitions.

The Census Bureau maintains definitions of urban, urbanized, and rural areas for classifying census data. It has been doing this since the early 20th century, for purposes of distinguishing settlement patterns. Under the Census Bureau’s approach, open spaces and settlements with fewer than 2,500 residents are considered rural. Urban areas consist of places with larger populations and also include any densely settled areas around them. The basic geographic unit for Census Bureau urban-rural classifications is the census tract. Census tracts can contain both

¹ For additional information about rural definitions, readers are referred to the ERS website at [www.ers.usda.gov]. Links to information about census and OMB definitions are also available at that site.

urban and rural territory, which means that the population and housing units in them are classified partly as urban, partly as rural.

Earlier versions of the census have not differentiated between urban areas of differing sizes, but in March 2002 the Census Bureau defined two different types of urban areas: urbanized areas and urban clusters.² Second, and more relevant to the study of rural areas, beginning with Census 2000, urban and rural designations are no longer dependent on place boundaries, such as the statutory limits of incorporated cities and towns. Under this approach, a single county can now encompass both urban and nonurban (rural) areas, and a single urban area can overlap multiple town, city, or county designations.

The OMB maintains a national classification system applied to Census Bureau data. The federal government uses this system for both statistical reporting and allocating federal funds. Under the system, OMB designates metropolitan (metro) areas. Territory not included in these areas is nonmetropolitan (nonmetro). Metro and nonmetro areas are not synonymous with urban and rural census areas. Furthermore, OMB designations are applied at the county level, not at the census tract level.³ That is, all territory within a single county has a uniform designation.

Before 2003, OMB-defined metro areas included central counties with one or more cities of at least 50,000 residents or an urbanized area of 50,000 or more, plus total area population of at least 100,000. Counties outside these central counties were included in the metro area if they were tied economically to the central counties, as measured by commuting patterns, and if they

² A city of 50,000 or more is considered to be an urbanized area. Most are large cities, but any population nucleus with 50,000 or more people in it, whether it is a city or not, is considered an urbanized area, as long as it has a core area with a population density of at least 1,000 people per square mile. It may also include adjoining fringe territory with at least 500 people per square mile. Areas with populations of at least 2,500 but less than 50,000 are designated as urban clusters. These are small towns and cities and the built-up territories around them. An urban cluster can cross political boundaries, as happens when small towns and cities have adjoined incorporated or unincorporated towns or suburbs.

³ In some states, county equivalents are used.

displayed “metropolitan character” based on their population density, urbanization, and population growth.

In June 2003, OMB modified the rules governing metro and nonmetro classifications. Criteria were simplified, and a new classification was added. Under the new system, metro areas are now defined for all urbanized areas (as defined by the Census Bureau), regardless of the total population of the area. Outlying counties are included if 25 percent or more of their civilian labor force commutes to the core county daily, with no requirements about metropolitan character. Of more importance for readers of this report, OMB now subdivides previously undifferentiated nonmetro counties into two distinct types: micropolitan and noncore. Any nonmetro county with an urban cluster of at least 10,000 people is designated as the central county of a micropolitan (micro) area. Outlying counties are included in the micro area if 25 percent or more of their civilian labor force commutes daily to the core county, or if 25 percent of their employment force consists of commuters from the core county. All counties not included in metropolitan or micropolitan areas are considered noncore counties.

On the basis of the 2003 census and these definitions, OMB has classified all counties in the United States as metropolitan (1,090 counties), nonmetro micropolitan (674 counties), and nonmetro noncore (1,378 counties).

ERS Typologies

Use of census and OMB rural/urban and nonmetro/metro definitions may tend to oversimplify settlement patterns that have become increasingly complex across the United States. To account for additional factors, such as remoteness or type of economic activity, that affect rural areas and distinguish them from urban areas, and to create finer distinctions within both rural and urban categories, ERS has created several taxonomies and typologies for

classifying rural areas. These include (1) rural-urban continuum codes (RUCCs), (2) urban influence codes, (3) rural-urban commuting areas (RUCAs), and (4) county typology codes.

Rural-Urban Continuum Codes. RUCCs are classifications applied to counties based on their OMB metro or nonmetro status; total county population; and, for rural counties, adjacency to a metropolitan county. This results in a nine-part county classification (Table I.3). The codes were first developed in 1975 and have been updated several times since. A new 2003 version of the RUCCs has been created to reflect changes in OMB’s procedure for identifying metro areas in the 2000 census, as described above, plus changes in the way the Census Bureau measures urbanicity and rurality, also described above.

TABLE I.3
RURAL–URBAN CONTINUUM CODE CLASSIFICATIONS

Code	Description
Metro Counties	
1	Counties in metro areas of 1 million population or more
2	Counties in metro areas of 250,000 to 1 million population
3	Counties in metro areas of fewer than 250,000 population
Nonmetro Counties	
4	Urban population of 20,000 or more, adjacent to a metro area
5	Urban population of 20,000 or more, not adjacent to a metro area
6	Urban population of 2,500 to 19,999, adjacent to a metro area
7	Urban population of 2,500 to 19,999, not adjacent to a metro area
8	Completely rural or less than 2,500 urban population, adjacent to a metro area
9	Completely rural or less than 2,500 urban population, not adjacent to a metro area

Source: U.S. Department of Agriculture, Economic Research Service 2004b.

Urban Influence Codes. This county-based classification reflects the size of county populations, the size of the largest city in the county, and adjacency to a metropolitan county. Rural counties are classified not only by their size, but also by their access to larger economies (Table I.4). These categories are intended to be helpful in analyzing trends or issues related to population density and metro influence. Originally developed in 1993, the classifications were changed in 2003 based on information from the 2000 census and OMB’s new delineation of metropolitan area boundaries, as described above.

TABLE I.4
2003 URBAN INFLUENCE CODE CLASSIFICATIONS

Code	Description
Metro Counties	
1	Large: in a metro area with at least 1 million residents
2	Small: in a metro area with fewer than 1 million residents
Nonmetro Counties	
3	Micropolitan: adjacent to a large metro area
4	Noncore: adjacent to a large metro area
5	Micropolitan: adjacent to a small metro area
6	Noncore: adjacent to a small area metro with town of at least 2,500 residents
7	Noncore: adjacent to a small metro area and does not contain a town of at least 2,500 residents
8	Micropolitan: not adjacent to a metro area
9	Noncore: adjacent to micro area and contains a town of 2,500 to 9,999 residents
10	Noncore: adjacent to micro area and does not contain a town of at least 2,500 residents
11	Noncore: not adjacent to a metro/micro area and contains a town of 2,500 or more residents
12	Noncore: not adjacent to a metro/micro area and does not contain a town of at least 2,500 residents

Source: U.S. Department of Agriculture, Economic Research Service 2004c.

Rural-Urban Commuting Areas. This census-tract-level designation classifies U.S. census tracts using measures of urbanization, population density, and daily commuting from the 1990 decennial census. The level of detail of the 30 classifications that result is more than can be fully covered or enumerated in this report.

The RUCA classification contains two levels. Whole numbers (1 to 10) delineate metropolitan, large town, small town, and rural commuting areas based on the size and direction of the relevant census tracts' largest commuting flows. These 10 codes are further subdivided to permit stricter or looser delimitation of metropolitan and nonmetropolitan settlement, based on secondary commuting flows. Altogether, 30 classifications make up the coding scheme, although codes can be collapsed when this level of detail is not appropriate.

A zip code approximation of the RUCA codes has also been developed, because the zip code is often the smallest geographic identifier available in data. Information on the approximation is available at the Washington, Wyoming, Alaska, Montana, and Idaho Center for Health Workforce Studies at the University of Washington and from the ERS.

County Typology Codes. The objective of this county-based classification system, developed in 1979, is to capture key elements of economic and social diversity, both of which are thought to be relevant to policymaking. The 2004 county typology classifies all U.S. counties according to six non-overlapping categories of economic dependence and seven overlapping categories of policy-relevant themes (Table I.5).

A Note on Terminology Used in This Report

Many of the studies cited in this report use OMB definitions of metro and nonmetro counties. Thus, generally—but not always—the use of “metro” and “nonmetro” terminology indicates that the study is based on county-level data identified using the OMB criteria in effect

TABLE I.5

2004 ERS COUNTY TYPOLOGY CODES, METRO AND NONMETRO COUNTIES

Economic Dependence Typologies (Non-Overlapping—Each U.S. County Receives One Designation) and Number of Counties Classified	Policy-Relevant Theme Typologies (Overlapping; Counties Can Be Assigned Multiple Designations) and Number of Counties Classified
<p>Farming-dependent (440 total, 403 nonmetro): Either 15 percent or more of average annual labor and proprietors' earnings derived from farming during 1998–2000, or 15 percent or more of employed residents worked in farm occupations in 2000.</p>	<p>Housing stress (537 total, 302 nonmetro): 30 percent or more of households had one or more of these housing conditions in 2000: lacked complete plumbing, lacked complete kitchen, paid 30 percent or more of income for owner costs or rent, or had more than one person per room.</p>
<p>Mining-dependent (128 total, 113 nonmetro): 15 percent or more of average annual labor and proprietors' earnings derived from mining during 1998–2000.</p>	<p>Low-education (622 total, 499 nonmetro): 25 percent or more of residents 25–64 years old had neither a high school diploma nor a GED in 2000.</p>
<p>Manufacturing-dependent (905 total, 585 nonmetro): 25 percent or more of average annual labor and proprietors' earnings derived from manufacturing during 1998–2000.</p>	<p>Low-employment (460 total, 396 nonmetro): Less than 65 percent of residents 21–64 years old were employed in 2000.</p>
<p>Federal/state government-dependent (381 total, 222 nonmetro): 15 percent or more of average annual labor and proprietors' earnings derived from federal and state governments during 1998–2000.</p>	<p>Persistent poverty (386 total, 340 nonmetro): 20 percent or more of residents were poor as measured by each of the last 4 censuses, 1970, 1980, 1990, and 2000.</p>
<p>Services-dependent (340 total, 114 nonmetro): 45 percent or more of average annual labor and proprietors' earnings derived from services (Standard Industrial Classification [SIC] categories of retail trade; finance, insurance, and real estate; and services) during 1998–2000.</p>	<p>Population loss (601 total, 532 nonmetro): Number of residents declined both between the 1980 and 1990 censuses and between the 1990 and 2000 censuses.</p>

TABLE I.5 (continued)

Economic Dependence Typologies (Non-Overlapping—Each U.S. County Receives One Designation) and Number of Counties Classified	Policy-Relevant Theme Typologies (Overlapping; Counties Can Be Assigned Multiple Designations) and Number of Counties Classified
Nonspecialized (948 total, 615 nonmetro): Did not meet the dependence threshold for any one of the above industries.	Nonmetro recreation (334 designated nonmetro in either 1993 or 2003, 34 were designated metro in 2003): Classified using a combination of factors, including share of employment or share of earnings in recreation-related industries in 1999, share of seasonal or occasional use housing units in 2000, and per capita receipts from motels and hotels in 1997.
	Retirement destination (440 total, 277 nonmetro): Number of residents 60 and older grew by 15 percent or more between 1990 and 2000 due to in-migration.

Source: U.S. Department of Agriculture, Economic Research Service 2004d.

Note: In contrast to earlier ERS county typologies, the 2004 county typology codes were developed for all 3,141 counties, county equivalents, and independent cities in the United States. Table I.5 shows the total number of metro and nonmetro counties in each category.

when the study data were collected. Studies pertaining to demographic and economic conditions may use “rural” and “urban” because they are citing census-based information and thus are using the Census Bureau’s definitions. Relatively few studies, other than those that focus on demographic and economic conditions, use census definitions, however, because their data do not generally include the necessary geographic identifiers to implement census definitions.

In the chapters that follow, we generally adopt the same rural terminology used by the source, or sources, from which the information is drawn. When the studies cited utilize classification systems other than those discussed above, we indicate and briefly describe (where

possible) the type of classification being used. We use the terms “rural” and “urban” in this report both when referring specifically to census-based definitions and when speaking generally about rural concepts, issues, or phenomena.

II. RURAL AMERICA: AN OVERVIEW

For a better understanding of human services conditions in rural America, we must first have a clear picture of rural areas themselves. This picture is complex, because rural areas are neither demographically nor economically homogeneous. Rural areas differ not only by geographic location and their proximity to metropolitan areas, but also across a spectrum of demographic, economic, and social characteristics. However, all rural areas share two distinct features. First, rural areas are undergoing many changes. The population is changing in size and diversity, the industry that fuels rural labor markets is changing, and the social conditions characteristic of rural areas are changing. For example, in 2000, there were nearly 2.6 million Hispanics living in nonmetro areas—a 63 percent increase since 1990. In rural areas once dominated by agricultural and manufacturing jobs, service and retail are now the fastest-growing industries. These changes have both negative and positive aspects.

The second characteristic that unites rural areas is their differences from urban areas. Rural areas have distinct labor markets and infrastructure. For example, low-wage jobs dominate in rural areas, and geographic dispersion affects the availability of child care and public transportation. The characteristics of poverty in rural areas also are distinct from those in urban areas. The poverty rates for children, the elderly, and female-headed families in rural areas are proportionately higher than in urban areas. Poverty also tends to be more persistent in nonmetro areas than in metro ones—95 percent of persistent-poverty counties are classified as nonmetro.⁴ Characteristics of rural areas, such as geographic dispersion, limited access to specialized staff, and sociocultural factors, can also affect the availability, use, and effectiveness of social supports

⁴ Persistent-poverty counties are defined as counties in which the poverty rate was 20 percent or higher in every decennial census between 1960 and 2000 (Miller and Weber 2003).

and services. Differences such as these may have both negative and positive implications for rural communities.

In this chapter, we provide a context for understanding the needs specific to rural areas by briefly surveying their socioeconomic conditions, including demographics, labor markets, and poverty (Section A). In Section B, we survey the status and prevalence of health and human services–related conditions in rural areas, such as poor physical and mental health, substance abuse, domestic violence, homelessness, and child maltreatment, and the availability of services to meet these needs. Next (Section C), we look more closely at the availability and characteristics of services and social supports in rural areas, including transportation, education, child care, welfare, work supports, and health insurance coverage. We conclude in Section D by identifying social and cultural factors thought to affect the quality, availability, use, and cost of many needed services in rural areas.

While our review focuses on challenges and potential problems rural areas face, many aspects of rural life provide advantages to rural families. Furthermore, as Chapter III shows, seeming disadvantages, such as more limited physical access to some services and programs, do not always translate to lower levels of program participation or poorer outcomes for rural people.

A. RURAL DEMOGRAPHICS AND ECONOMICS

Demographic and economic conditions in rural areas have changed considerably over time. For example, some rural areas have continued to grow, even as the rural portion of the U.S. total population has decreased. The role of agricultural industries and manufacturing, which once dominated rural economies, has declined in importance for several decades. Examining trends such as these provides a context for understanding rural human services conditions and needs.

Demographics

The 49 million people who live in rural areas constitute 17 percent of the total U.S. population. Rural residents are spread over 80 percent of the nation's land mass. However, the ratio of the rural population, as defined by the population in nonmetro counties, to the total population continues to shrink. From 1970 to 2000, the population in nonmetro counties grew by just under 30 percent, while the U.S. population as a whole grew by almost 40 percent (Beale 2001). More than 1,000 nonmetro counties have lost population since 2000 (U.S. Department of Agriculture, Economic Research Service 2004f). Population losses have been concentrated in the rural counties in the Great Plains and in counties isolated from urban areas, with very low population densities and few natural amenities (Egan 2003; McGranahan and Beale 2002).

In other areas of the country, the rural population has grown. The South and West together accounted for more than three-fourths of rural population growth during the 1990s. In the rural South, population growth resulted partly from the expansion of urban populations into surrounding rural territory. In the West, high immigration, especially among Hispanics, and high birth rates boosted rural population growth. In addition, rural "recreational counties," those close to water or with a desirable recreational climate and scenic features, grew by around 20 percent as they attracted new residents and retirees and retained existing population (Johnson and Beale 2002). Most recreational counties, which represent 15 percent of all nonmetro counties, are in the Upper Great Lakes, in northern New England, and the Rocky Mountains.

In addition to changes in population, rural areas are becoming more diverse racially and ethnically. Racial and ethnic minorities now make up 17 percent of nonmetro residents in the United States (U.S. Department of Agriculture, Economic Research Service 2004f). Much of the growth among racial and ethnic minorities in rural areas resulted from immigration. In the 1990s, the nonmetro Hispanic population grew by 70 percent—including a substantial permanent

migration of laborers to the rural Midwest from Mexico. This growth in the Hispanic population alone accounted for a quarter of all nonmetro population growth for the decade. The Black nonmetro population grew by 12 percent, Native Americans by 21 percent, and Asians by 32 percent. Increased immigration accounts for much of the growth of Asian populations in nonmetro areas, particularly along the East Coast (U.S. Department of Agriculture, Economic Research Service 2002).

Family structure has changed over time in rural areas, where, for example, female-headed households are now the fastest-growing type (Marks et al. 1999). In addition, during the past three decades, rural household size has decreased: rural households now have fewer children under age 18 than they once did; more households in 2000 than in 1990 reported having no children. Nonmetro areas also have an above-average number of older people (Beale 2001). Nonmetro populations are already older than metro ones, as people age 60 or older make up nearly 20 percent of the nonmetro population but only 15 percent of the metro population, and the populations of rural areas are continuing to age more rapidly than those of urban areas.

Rural areas may be less prepared than urban ones to meet the needs of their aging populations. Elderly people in rural areas are more likely to live alone after age 75 and appear to have a greater need for long-term care services than elderly people in urban areas (Hawes et al. 2003). Use of long-term care services, as well as resources to support long-term care, differ substantially between rural and urban areas. The proportion of elderly people who are in nursing homes is higher in large towns, small towns, and isolated rural areas than in urban areas, and it is highest in small-town rural areas (Phillips et al. 2003).

Economics

Contrary to popular perception, rural economies are not driven mainly by agricultural industries. In 2001, just over 4 percent of nonmetro earnings stemmed from agriculture, forestry,

and fishing combined (U.S. Department of Agriculture, Economic Research Service 2004g). As in urban areas, the service sector has emerged as a dominant source of earnings in rural areas. Consumer service industries, including retail stores; food services; and health, education, and personal services, accounted for 22 percent of nonmetro earnings in 2001. Government and manufacturing are also major sources of rural earnings. The government sector, which includes (1) federal, state, and local governments, including state and local schools, colleges, hospitals, and prisons; (2) military bases; and (3) headquarters of state and federal parks and forests, also accounted for 22 percent of nonmetro earnings in 2001, and manufacturing accounted for 19 percent.

Lower levels of human capital, as well as a larger share of employment in extractive and manufacturing industries, have historically distinguished rural labor markets from urban ones. However, labor markets in rural areas have been shifting over the past several decades, and rural and urban job structures appear to be converging, as industry and occupation mixes are becoming more alike in rural and urban areas (R. Gibbs 2002). In 1970, agriculture, forestry, mining, and manufacturing combined provided 37 percent of all employment for nonmetro residents (Beale 2001). By 2000, however, the proportion had declined to 26 percent. Service and retail industries have accounted for most of the rural job growth for several decades. The service sector accounted for 34 percent of nonmetro employment in 2002, compared with 40 percent in metro areas, while manufacturing accounted for 13 percent in metro and nonmetro areas (U.S. Department of Agriculture, Economic Research Service 2003a).

From the 1950s on, attracting manufacturing firms was a key economic development strategy for many rural areas. However, this no longer holds the same promise in domestic rural areas. Low rural wages helped attract manufacturing jobs to rural areas, but lower foreign wages are now attracting U.S. manufacturing offshore. High-tech manufacturers, which require high-

skilled labor, along with infrastructure and technology that is not available in many rural areas, have clustered in urban areas. The manufacturing sector was also hard hit by the recession that began in 2000. In the manufacturing sector, textiles and apparel suffered the most since the 2000 economic downturn; these industries, located disproportionately in nonmetro areas, lost more than a quarter of all employment between 2000 and 2003 (U.S. Department of Agriculture, Economic Research Service 2004e). By mid-2004, however, manufacturing jobs, particularly in durable goods sectors, had recovered somewhat in both metro and nonmetro areas.

Unemployment rates have been similar in rural and urban areas since the 1990s, but residents of rural areas are more likely to be underemployed. Rural unemployment was slightly higher than urban unemployment in the latter part of the 1990s. In 2002, however, the nonmetro unemployment rate dipped below the metro rate—5.4 percent compared with 5.6 percent (U.S. Department of Agriculture, Economic Research Service 2003a). Underemployment—which takes into account discouraged workers, involuntary part-time workers, and low-income workers—has consistently been higher in rural places than in urban ones during the past 30 years (Slack and Jensen 2002). Rural low-income people are more likely than urban people to be unemployed or in part-time employment (Wang and Findeis 2003). Rural low-income people also spend more time than their urban counterparts in involuntary part-year or seasonal unemployment.

In rural areas, wages are lower than those in urban areas, and industries with low-skill, low-wage jobs often dominate employment opportunities (Marks et al. 1999). Almost one in four rural workers older than 25 earned less than the poverty threshold for a family of four (\$18,390) in 2002. The rural low-wage employment rate was more than 7 percent higher than in urban areas (U.S. Department of Agriculture, Economic Research Service 2003c).

Shortages of human capital are a problem that characterizes rural areas. Among people age 25 or older as of 2000, 16 percent in nonmetro areas had graduated from college, compared with 27 percent in metro areas. The shortages have been attributed to two main differences between rural and urban areas: (1) rural educational attainment is lower, and (2) there is an outmigration of the “best and brightest” from rural communities (Loveless 2003; Lichter and Jensen 2002). Rural students are less likely than urban ones to enter high school. After they enter high school, however, rural students are less likely than students in urban areas to drop out. Although rural students are just as likely to attend some college as students in urban areas, they are less likely to complete two- or four-year degrees (Loveless 2003). In addition, people in rural areas who attain higher educational levels often seek and find employment outside their own rural communities (Marks et al. 1999).

Poverty and Income

Poverty affects a larger percentage of households in rural areas than in urban ones, and it is more persistent in rural areas.⁵ Although poverty *trends* have been similar in rural and urban areas since the 1960s, rural poverty *rates* have consistently been higher. In 2001, the nonmetro poverty rate was 14 percent, which was three points above the rate in metropolitan areas. Child poverty rates in rural areas in 2001 also were larger than in urban areas—20 percent, compared with 15 percent (U.S. Department of Agriculture, Economic Research Service 2003b).

Despite these differences, living in rural areas is estimated to cost about 16 percent less, on average, than living in urban areas (Nord 2000). This means that the official poverty rate may

⁵ Families and unrelated individuals with total money incomes less than the official poverty threshold are classified as poor. The poverty thresholds were calculated as three times the cost of a minimally adequate diet. “Total money income” includes pretax income and cash welfare assistance, but excludes noncash benefits, such as food stamps and Medicare. Poverty thresholds are updated annually for price changes by the Census Bureau. More information, and tables of poverty thresholds for different years by household composition, can be found on the U.S. Census Bureau’s website.

overstate rural economic hardship compared with that in urban areas. Rural counties do, however, account for 95 percent of counties in “persistent poverty” (Miller and Weber 2003). Persistent-poverty counties are concentrated in the “Black Belt” and Mississippi Delta in the South, Appalachia, the lower Rio Grande Valley, and counties containing Indian reservations in the Southwest and Great Plains.⁶ Poverty rates have been found to vary across the rural-urban continuum and across geographic regions (Miller and Weber 2003). Poverty rates are higher—from 14 to 17 percent—in smaller, more isolated rural counties than in fringe (suburban) counties (8 percent) and metro counties and nonmetro counties with urban populations of 20,000 or more adjacent to metro areas (12 to 13 percent).⁷ Regional differences also exist. By the end of the 1990s, nonmetro poverty rates in the South and the West were about equal (at about 16 percent) and were higher than in the Northeast and Midwest by 5 to 6 percentage points.

Non-Hispanic blacks had the highest incidence of nonmetro poverty in 2001, at 31 percent (Jolliffe 2003). Also poor were 25 percent of nonmetro Hispanics, compared to 11 percent of nonmetro, non-Hispanic whites. Poor rural minorities are geographically concentrated in the South and Southwest (Probst et al. 2002). For example, 70 percent of poor nonmetro African Americans live in six Southern states—Alabama, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina, and 73 percent of all poor nonmetro Hispanics live in five Southwestern states—Arizona, California, Colorado, New Mexico, and Texas.

Female-headed nonmetro families have the highest poverty rate of any type of family (U.S. Department of Agriculture, Economic Research Service 2004f). More than 37 percent of people living in nonmetro, female-headed families are living in poverty, which is 10 percentage points

⁶ The Black Belt is a region that covers nearly contiguous counties in 11 states from Virginia to Florida to Texas and is predominantly rural, agricultural, and African American.

⁷ The study compared rural, fringe (suburban), and urban counties, as defined by the 1993 RUCCs.

higher than the metro rate for female-headed families. In comparison, about 16 percent of people living in nonmetro families headed by men live in poverty, as do 7 percent of husband-wife-headed rural families—compared to 12 percent and 6 percent, respectively, in metro areas.

B. RURAL WELL-BEING

In this section, we review health and human services conditions in rural areas. Rural areas, as a whole, are more disadvantaged than urban ones across numerous physical health indicators, and access to health care facilities is more limited. However, rural areas experience about the same rates of mental health disorders as urban areas, and have lower rates of homelessness. Urban-rural comparisons in rates of drug and alcohol abuse differ, depending on the type of substance, measure of use, and age group. Few data are available for estimating the prevalence of domestic violence and child maltreatment in rural areas.

Physical Health

General measures of overall health show that adults in rural areas experience poorer health than those in urban areas (Eberhardt et al. 2001). People in rural areas have more limitations in their activity caused by chronic health conditions than those in urban areas. Rural areas also report a higher prevalence of chronic disease, including heart disease and cancer (Gosschalk and Carozza 2003). Although infant mortality rates from 1996 through 1998 were similar in metro and nonmetro counties, age-adjusted death rates for children, young adults, and seniors are higher in nonmetro counties than in metro ones; however, these rates vary by region of the country and by gender (Peck and Alexander 2003; Eberhardt et al. 2001).⁸

⁸ Age adjustment is used to compare risks of two or more populations at one point in time or one population at two or more points in time. Age-adjusted rates should be viewed as relative indexes rather than actual measures of risk. Age-adjusted rates are computed by the direct method by applying age-specific rates in a population of interest to a standardized age distribution, in order to eliminate differences in observed rates that result from age differences in population composition (National Center for Health Statistics Definitions, available at: [www.cdc.gov/nchs/])

Cigarette smoking and obesity are serious health risk factors and affect a higher proportion of rural people than urban people. Higher percentages of adults, adolescents, and youth in rural areas smoke compared with their urban counterparts (Weisheit and Donnermeyer 2000). Rural adults, particularly minority adults, are at greater risk for obesity and overweight than those in urban areas (Patterson et al. 2002).⁹ Obesity was once more common in urban youth; however, current indicators suggest that it is worsening among rural youth (Tai-Seale and Chandler 2003). Factors that may contribute to higher rates of overweight and obesity in rural areas include a lack of nutrition education, decreased access to nutritionists, fewer physical education classes in schools, and fewer exercise facilities.

According to the 1990 Census, rates of disabilities are higher in rural areas than in urban ones—23 percent, compared to 18 percent, respectively. Between 11 and 15 million people with disabilities live in rural America—about half of them with a severe disability—although rates vary depending on how “rural” and “disability” are defined (Seekins et al. 1998). Rural and nonrural school districts serve similar percentages of students in pre-kindergarten through grade 12 with disabilities (U.S. Department of Education 1995). Studies have shown that people with disabilities have lower educational attainment than other people and that they are more likely to be poor. People with disabilities who live in rural areas also face limited access to specialist physicians, rehabilitation and occupational therapists, and other specialists critical to those with disabilities.

(continued)
datawh/nchsdefs/ageadjustment.html].

⁹ Measures of overweight and obesity are based on the body-mass index, calculated from measures of height and weight.

Because of ongoing concerns about the lack of health care facilities, such as hospitals and clinics, and the absence of health care professionals in rural areas, many studies of rural access to health care have been conducted. One study found that although rural and urban populations are about equally likely to have a source of ongoing health care (nearly 90 percent) and a usual primary care provider (77 percent), rural residents are less likely to have regular access to their usual primary care provider during evening or weekend hours (Gamm et al. 2003a). In addition, depending on the definition of “rural area,” it appears that, although up to 25 percent of the nation’s population live in these areas, fewer than 9 percent of active physicians in the United States and 14 percent of practicing primary care physicians provide services in rural areas (Gamm et al. 2003a).

Mental Health

Mental disorders affect 20 percent of the overall population in a given year, including about 20 percent of children and adolescents and up to 25 percent of those age 65 and older (Gamm et al. 2003b). Evidence is fairly consistent that rates of mental health disorders do not differ appreciably between urban and rural areas, although some differences are evident in treatment-seeking and suicide rates (Hartley et al. 1999). Underutilization of mental health services is a feature of most settings, but substantial evidence exists that underutilization of mental health services is higher in rural areas than in urban ones (Gamm et al. 2003b). The lack of anonymity in rural areas makes people uncomfortable about seeking help and disclosing personal mental health histories; sufferers may also fear subsequent discrimination in housing, employment, or health insurance (National Institutes of Mental Health 2002).

Suicide rates, which are sometimes used as a proxy measure for serious mental disorders, are higher in nonmetro counties, with the differences between urban and rural counties being the

greatest for men (Eberhardt et al. 2001). Suicide rates range from 12 to 15 per 100,000 in metro counties but average 17 per 100,000 in nonmetro ones.

Despite the similarities in the rates of mental disorders in urban and rural areas, access to services varies greatly. Rural areas have fewer mental health professionals, and fewer rural hospitals offer inpatient psychiatric services (Gamm et al. 2003b; Wagenfeld 2000). Mental health services for children are also generally less available in rural areas. Ninety-five percent of rural counties with populations between 2,500 and 20,000 lack a child psychiatrist (Wagenfeld 2000).

Substance Abuse

For many years, rural distance from the combined urban ills of crime, social disorganization, poverty, and drug availability was thought to afford rural people some protection against problems associated with drugs (Cronk 1997; Weisheit and Donnermeyer 2000). However, according to the National Center on Alcohol and Substance Abuse at Columbia University (2000), drug and alcohol use among young teens was higher in rural areas than in large urban centers, while drug and alcohol use by adults was about the same in both areas. Furthermore, it appears that rural areas are being hard hit by the proliferation of methamphetamine labs, dangerous and illegal operations established in remote areas to escape detection by law enforcement (O'Dea et al. 1997). A major concern in rural communities is that the increasing prevalence of these labs will lead to increased use of the drug by rural people.

Substance abuse prevention and treatment services in rural areas are more limited than those in urban areas. In addition to shortages of professionals who could help identify substance abuse and supervise treatment, some rural settings have only a single alcohol or drug treatment provider serving an extensive area. Rural substance abuse treatment clients travel greater distances to receive treatment and have fewer providers from which to choose than those in

urban areas. Rural access to substance abuse treatment may also be limited because of differences in health insurance coverage compared to urban areas (Hutchinson and Blakely 2003), as discussed in Section C of this chapter. Chapter III presents detailed information on rural substance abuse.

Homelessness

When the 1996 National Survey of Homeless Assistance Providers and Clients was conducted, homeless clients were located disproportionately in central cities (71 percent) (Burt et al. 1999). Only 9 percent of the homeless clients surveyed lived in rural areas. However, these data exclude people who are experiencing homelessness and are not getting assistance or services or whose current living situation puts them at risk of homelessness. Since rural areas have fewer shelters, homeless families are more likely to live in unstable situations, such as in their cars or with relatives. For these reasons, the proportion of homeless people that live in rural areas may be somewhat higher than the survey indicates.

In rural areas, homelessness seems to be more pronounced in primarily agricultural regions (National Coalition for the Homeless, March 1999) and in areas experiencing economic distress (Burt et al. 1999). The rural homeless are more likely to be white, female, married, currently working, and homeless for the first time, and for a shorter period of time, than the urban homeless (National Coalition for the Homeless, March 1999).

People who are homeless, whether in rural or urban communities, often experience additional, complicating health and behavioral problems (Burt et al. 1999). Therefore, to address the needs of homeless people and their families, service providers must often cope with multiple additional barriers to stability and employment. However, the ability of rural areas to meet the needs of people who are homeless is limited (Aron and Fitchen 1996; Bachrach 1992). Small towns typically have no shelters and few social workers, which leaves churches, community

groups, and volunteers to fill the void.¹⁰ Only 5 percent of targeted homelessness assistance funds go to rural communities, which may be unable to compete for grant funds because they lack necessary staff and resources.

Domestic Violence

In the general population, about 22 percent of women report having experienced domestic violence in their adult lives (Lawrence 2002). Few data are available to suggest the incidence and prevalence of domestic violence and sexual assault in rural areas or to compare them with urban rates. Studies do suggest, however, that the availability of services for victims of domestic abuse in rural areas is more limited than in urban areas (Weisheit and Donnermeyer 2002).

Child Maltreatment

Limited research exists on the prevalence of child abuse and neglect and the use of foster care in rural areas compared to urban ones. The national incidence of child maltreatment in 1993 was estimated to be 23.1 per 1,000 children (Sedlak and Broadhurst 1996). This included rates of 5.7, 3.2, and 3.0 per 1,000 for physical, sexual, and emotional abuse, respectively, and rates of physical, emotional, and educational neglect of 5.0, 3.2, and 5.9, respectively. Available studies suggest that there are not significant differences in rates or changes in abuse or neglect for rural counties, compared to urban and suburban counties (Sedlak and Broadhurst 1996; Weisheit and Donnermeyer 2002).

In a recent study that examined the processing of child sexual abuse cases, Ménard and Ruback (2003) found that the child victimization rate did not vary across rural/urban location or

¹⁰ Aron and Sharkey (March 2002) find that faith-based nonprofits run about a third of all homeless assistance programs, but they administer a greater proportion of such programs in urban areas than in rural ones.

economic status.¹¹ However, higher abuse reporting, substantiation, and sentencing rates—stages in the processing of child sexual abuse cases—were positively associated with urban areas, and differences were statistically significant. This was true even though social conditions, poverty rates, county spending per capita, and the percentage of stranger assaults—factors that might explain rural-urban differences in case processing—were held constant.

Although comprehensive research on foster care in rural areas is lacking, one study compared the foster care experiences of children in urban and rural areas in 10 states between 1990 and 1999 (Wulczyn and Hislop 2002).¹² The study found that (1) most of the children admitted to foster care in non-urban counties were white and were adolescents rather than infants; (2) spells of care were shorter in non-urban and secondary urban counties than in primary urban counties, and differences in spells were not due solely to population differences; and (3) rates of family reunification and of adoption were lower in non-urban areas than in primary and secondary urban areas. Chapter III presents detailed information on child maltreatment and child welfare.

C. SOCIAL AND WORK SUPPORTS IN RURAL AREAS

The previous discussion intentionally focuses on potential rural disadvantages; however, economic and social conditions, along with rural health and human services needs, are not uniformly better or worse than in urban areas. Their impact on rural communities and families depends to an extent on the availability of public and private institutions and programs. Rural

¹¹ The study examined the processing of child sexual abuse cases, including victimization and reporting, substantiating, and sentencing, in urban and rural counties in one state. A case is substantiated when a protective services official investigates a case and finds evidence of abuse (Ménard and Ruback 2003).

¹² For the report, counties were assigned to one of three classes: (1) primary urban counties (counties served by each state's largest child welfare system), (2) secondary urban counties (all counties outside the primary urban counties but with 75 percent or more of residents living within an urbanized area), and (3) non-urban counties (all those not included in the first two classes).

schools can help build human capital. Work supports available to low-income families may enhance self-sufficiency through training, or through child care or transportation assistance. Private and public health insurance help increase access to health care. Research shows that the structure, access to, and use of these social supports and institutions are different in rural areas and urban ones.

Transportation

Families need reliable transportation to get and maintain employment, attend school, and reach social services providers. Many surveys of welfare recipients and of welfare and other social services agencies in rural areas show that lack of transportation is a key barrier to employment and to accessing services in their communities. Geographic dispersion, low population densities, and some harsh environments and poor road conditions limit access to schools, child care, work, and social and medical services. Public transportation is unavailable to many rural low-income people. The Community Transportation Association of America (1994) reported that nearly 40 percent of rural counties had no form of public transportation. Only limited service was available to another 28 percent of counties. A small portion of the population in rural areas relies on public transit, and serving those who live in isolated areas is expensive. In rural areas adjacent to urban boundaries, funding for public transportation may be inadequate.

The need for reliable automobiles and the need to travel long distances can make operating private vehicles costly for rural low-income families. This expense is reflected in welfare spending for transportation support services. In 2000, out of \$11 million one rural state spent to provide support services to current and former welfare recipients, 77 percent was spent on transportation assistance and car repairs (Plein 2001).

Rural Schools

Rural public elementary and secondary schools, which enroll 27 percent of the nation's students, are smaller and provide fewer resources for their students than schools in urban areas (Loveless 2003). On average, rural schools enroll 392 students, compared with 663 for urban public elementary and secondary schools. Rural schools spend an average of 10 percent less per student than urban schools, and they usually have higher costs and lower revenues, even though rural residents contribute a greater proportion of their income to schooling. Because rural schools are smaller and have limited resources, there are fewer alternative schools, school counselors, and extracurricular activities, and for older students, there may be fewer special programs for pregnant students, enriched academic resources such as advanced-placement classes, or GED testing centers.

Rural schools report difficulty attracting and retaining teachers. The American Association of School Administrators reports that the shortage affects all subject areas, but particularly math, science, and special education (Collins 1999). Teachers and principals in rural schools tend to be younger than in urban ones and have less education, training, and experience. They are paid less, receive fewer benefits, and change jobs more frequently, possibly because of social, cultural, and professional isolation.

These apparent disadvantages may be offset, however, by advantages unique to rural areas (Marshall 2001). For example, rural residents gave their schools and teachers higher ratings than did either urban or suburban residents (Loveless 2003). Rural teachers report certain attractive working conditions more frequently than teachers in central cities—including safer learning environments, less student misbehavior, and less student alcohol and drug use. Rural schools also tend to have increased parental involvement, along with higher rates of teacher and staff participation in community affairs (Lee 2001).

Child Care

The availability of child care helps support working parents and affects child well-being and school readiness. Empirical studies of child care in rural areas are sparse, but available information indicates that rural families are less likely than urban ones to use formal child care, and they spend less on child care. Only 26 percent of rural children under age 5 are cared for in child care centers, compared to 35 percent of children nationwide (Beach 1997). Nearly all rural children are cared for by family members, friends, and neighbors. These informal “kith and kin” arrangements offer advantages that may be important to rural parents, however. Many rural parents value leaving their children with someone they know, and children may receive more individual attention in these settings. In addition, costs may be lower. On average, mothers in metro areas paid \$80 a week for child care in 1997, while those in nonmetro areas paid \$56 a week. Because of lower rural incomes, however, the proportion of income spent on child care was the same in both areas.

Rural child care providers face logistical obstacles specific to rural areas—such as geographic isolation and limited resources for assistance or training (Beach 1997; Colker and Dewees 2000). In addition, resources available to metro child care providers—such as libraries, material and equipment suppliers, training, and the support of specialists and professional associations—are less available in rural areas. Fewer potential employees with specialized credentials are available in rural communities. However, informal, personal, collaborative relationships may be more common in rural areas and may provide children with social capital and a more stable child care system—potential strengths that child care studies may neglect (Beach 1997).

Welfare Receipt

Welfare is designed to assist families living in poverty with basic income, help them find and advance in employment, and secure their long-term well-being. Studies show that welfare dynamics differ in rural and urban areas and that the results of the 1996 welfare reforms also differed in those areas, as well as in persistently poor rural areas compared with rural areas overall.

Rural welfare recipients differ from urban recipients in their characteristics and their experiences on welfare. They tend to have shorter spells on assistance than their urban counterparts and to cycle on and off aid more frequently, and they are more likely to be married (McConnell and Ohls 2002). Rural welfare recipients have higher work participation rates than urban recipients, but they tend to have lower salaries and lower rates of health insurance coverage (Meckstroth et al. 2002; Ponza et al. 2002; Burwick et al. 2004). Throughout the 1990s, poor families headed by single females in nonmetro areas were more likely than those in metro areas to report earnings and less likely to receive welfare assistance (Lichter and Jensen 2002). The percentage of nonmetro poor households that were headed by single females and that reported earnings rose from 59 percent in 1995 to 72 percent in 1999, compared with an increase from 51 to 65 percent in metro areas over the same time period (Weber et al. 2003).

In 1997, the year after the passage of welfare reform, 21 percent of the nation's welfare recipients lived in rural areas. Over the next several years, the nation's welfare caseload declined overall, but declines were greater in rural areas. By 2003, just 14 percent of the nation's welfare recipients lived in rural areas—although the portion varies substantially by state—with most recipients concentrated in counties with high unemployment and low median income (U.S. General Accounting Office 2004). Studies indicate that persistent-poverty counties, which are overwhelmingly rural, have also experienced rapid TANF caseload decline, accompanied by an

increase in hardship among poor residents (Harvey et al. 2002). The lack of jobs, transportation, and child care in these persistently poor areas has meant more TANF recipients working in informal labor markets and drawing on extended family, friends, and local food pantries to replace public assistance.

Work Supports

Welfare recipients in rural areas face more employment barriers than their urban counterparts (Meckstroth et al. 2002; Ponza et al. 2002; Burwick et al. 2004). These barriers include low skills, a lack of transportation, and child care problems. The TANF program gives states substantial flexibility in using funds to support employment-focused activities that address some of these barriers, such as on-the-job training, job search, or vocational training. The federal and state workforce investment system also offers programs and services that help low-income and other people identify job opportunities or gain the skills they need to attain stable employment, mainly through local One-Stop centers. Logistical support services—mainly child care and transportation—are also available to low-income working families through TANF and One-Stop programs, as well as through other federal and state sources.

Implementing recent major changes in the welfare and workforce development systems has challenged state and local agencies, rural and urban alike. Rural challenges and experiences have differed from those in urban areas, however. Creating partnerships, outsourcing, and services integration appear to pose challenges in rural areas—especially those that are remote or isolated (Richer et al. 2003; Nightingale et al. 2002; Pavetti et al. 2000). These difficulties may be due to a lack of available partners, such as nonprofits, community colleges, public agency offices, or in some rural areas, even for-profit businesses. Employment conditions and geographic isolation of rural areas can make job placement and workforce development more difficult for service providers.

Although the challenges of rural service delivery are substantial, some characteristics of rural agencies and communities can be an advantage to service providers and their clients. For example, some types of programs work better in small, close-knit rural areas where services are more flexible and personal connections are common (John J. Heldrich Center for Workforce Development 2002). One study of welfare reform in 12 rural counties in four states found that counties not adjacent to metropolitan areas were as likely as counties adjacent to metro areas to have most services available within 10 miles (Pindus 2001)—such as TANF, food stamps, or Medicaid eligibility, transportation, child care, GED classes, or workforce development services. Two studies of welfare reform programs showed little difference in rural and urban participation in government-sponsored activities (Fraker et al. 2002; Miller et al. 2000). In at least one study, rural participants were observed to be much *more* likely than urban clients to participate in employment preparation activities (Meckstroth et al. 2002). In a study of WIA services in Missouri, Torufa (2002) examined service use among 340 workers laid off during the first quarter of 2001. He found that rural dislocated workers participated in WIA core services at a greater rate (13 percent) than urban dislocated workers (3 percent). Chapter III provides more information on work supports, including assistance with transportation and child care.

Health Insurance

About 20 percent of the 41 million uninsured people in the United States live in rural areas—this is roughly proportional to the nation’s rural population (Ziller et al. 2003).¹³ The nonelderly population in rural nonadjacent counties, however, is more likely to be uninsured than the nonelderly population in rural-adjacent and urban counties—23.7 percent compared with 18.5 and 17.9 percent, respectively. Residents in rural nonadjacent counties have the lowest rate

¹³ Ziller et al. (2003) use RUCCs to describe differences in health insurance coverage for urban and rural areas.

of private health insurance. In fact, nearly 60 percent of the uninsured in rural nonadjacent counties are low-wage workers, many of whom work for small businesses that do not offer health benefits. Adults in rural nonadjacent counties are twice as likely as adults in urban ones to be covered by Medicaid. However, even though people in rural areas have higher rates of Medicaid coverage, there is a high rate of uninsured people in these areas. Furthermore, rural populations are more likely to be older and in poorer health than those living in urban areas. They are also somewhat more likely to have certain chronic conditions, such as heart disease and diabetes. Rural residents have longer periods without insurance than those in urban areas, and they are less likely to seek services when they cannot pay for them (President's New Freedom Commission on Mental Health 2003).

D. CHALLENGES FOR RURAL HUMAN SERVICES

Throughout the chapter, several characteristics of rural areas and organizations that may limit the availability of human services in rural areas, reduce their use by rural families, or have negative effects on rural practitioners have emerged. Limited access to jobs, transportation, and child care results from the geographic dispersion. Low levels of college graduates in rural areas affect the labor markets and the availability of the specialized staff needed to deliver services. Other factors, such as social stigma, affect the use of treatment for mental health conditions and substance abuse. The following section provides an overview of the factors that affect the delivery of rural human services and social supports. Although many challenges exist, some characteristics of rural areas may benefit rural service delivery. To conclude, we highlight a few studies that detail some positive factors associated with delivery of human services in rural areas.

Geographic dispersion, combined with low population densities and physical isolation, reduces physical access to services and increases per capita costs of services compared with urban areas (Bushy 1997; Marshall 2001; Friedman 2003). Rural families may need to travel

long distances to reach child care providers, schools, social services offices, treatment facilities, and program providers. Doing so may be costly or impractical, because of a lack of public transportation, rugged terrain, or unpredictable weather conditions.

Sociocultural factors also affect service delivery. These factors may keep rural families from seeking or receiving assistance, particularly for sensitive health and behavioral problems. Rural locations are characterized by greater acquaintance density and a social climate of informal control, mistrust of government, and reluctance to seek outside assistance (Weisheit and Donnermeyer 2000; Ménard and Ruback 2003).¹⁴ Rural citizens value privacy, but close rural community and family ties make anonymity difficult to protect (Harding et al. 2000). The conflict between the desire for privacy and the difficulty in maintaining anonymity may further reduce the likelihood that rural families will report, or seek help with, sensitive human services problems, such as poor mental health or domestic violence. A rural tradition of voluntary social support through family and friends or community groups, instead of through fee-based formal public or private agencies, can also reduce or delay the seeking of treatment and services by rural families in need (Bushy 1997).

Low population densities and limited organizational resources make it difficult for rural programs and communities to support specialized staff (Bushy 1997; Landsman 2002). Rural social workers and case managers, or other professionals in rural areas, may have fewer opportunities for continuing education and training than those in urban areas. They may also experience professional isolation. Recent increases in local administrative workloads associated with devolved social programs such as health, child care, workforce training, and transportation are especially acute in rural counties (Friedman 2003).

¹⁴ “Acquaintance density” refers to the extent to which people in a community know one another—including, for example, perpetrators and victims of crimes, along with law enforcement personnel, or people with behavioral health problems and local treatment provider staff.

Rural agency administrators and staff express concern that human services programs and policies are created with urban issues and environments in mind, instead of being designed for, or adaptable to, the particular needs and circumstances of rural areas (Templeman and Mitchell 2002; U.S. Department of Health and Human Services TANF Roundtable 2002). Administrators also say that it is difficult to recruit college-educated professionals in rural communities. This is due largely to lower college completion rates in rural areas and the tendency of many who do complete college to leave rural areas for urban regions and opportunities (the rural “brain drain”). Finally, rural organizations may have less access than those in urban areas to grants or other funding sources—rural organizations are less likely to employ grant writers, and some funding sources are targeted more to urban areas (Bushy 1997; Friedman 2003).

Despite the challenges to the delivery of services, some studies also suggest that the infrastructure of rural areas has several benefits. For example, informal, personal, collaborative relationships in rural child care settings may provide children with social capital and may create a more stable child care system. One study in Maine found this stability, plus a “community gossip network” that allowed parents to shop around for child care, to be important advantages for parents in rural areas (Peroncell 2000). As mentioned earlier, rural teachers report certain attractive working conditions more often than teachers in central cities, and rural schools also tend to have increased parental involvement. Other evidence suggests that rural social workers experience higher levels of job satisfaction than their urban counterparts and have greater autonomy and decision-making power, as well as less demanding workloads (Landsman 2002). Several studies of problems that social workers commonly encounter in working conditions found no significant differences in the rate at which rural and urban practitioners experienced such problems (Landsman 2002).

III. RURAL RESEARCH ON SELECTED HUMAN SERVICES

Many rural human services issues could benefit from additional empirical research on the prevalence of conditions, such as domestic violence, homelessness, and mental health, and on the availability, use, and effectiveness of rural services. ASPE and MPR selected three specific topics for in-depth study for this project: work supports for low-income families, substance abuse, and child welfare.

In this chapter, we examine the rural empirical literature on each of these topics. The first was selected because support for finding and maintaining employment is particularly valuable for low-income families in rural areas, where economic and community conditions can make it difficult to secure steady employment and achieve self-sufficiency. The second was selected because recent evidence suggests that the prevalence of drug and alcohol use and abuse among youth and adults in rural areas is becoming as high as, or higher than, the prevalence in urban areas. The third topic, child welfare, was selected because the possible effects of child maltreatment on children, families, and communities are substantial in rural areas as well as in urban ones, but empirical research in this area as well as on related topics, such as foster and kinship care programs and preventive services, have traditionally been conducted in urban areas.

We begin with work supports (Section A), focusing on the operation, use, and effectiveness of welfare- and workforce development-related job preparation and employment services, and logistical supports for employment (transportation and child care).¹⁵ Next, in Section B, we discuss substance abuse, including use, abuse, prevention, and treatment services for tobacco, alcohol, and drugs. Third, we consider the prevalence of child maltreatment in rural areas and describe child protective services, foster care, and other services related to child welfare (Section

¹⁵ Our review of work supports excludes cash assistance and income supports, such as TANF payments, unemployment insurance, and the Earned Income Tax Credit.

C). The chapter concludes with a discussion of methodological limitations of existing rural research on all three topics and the overall gaps in the rural work supports, substance abuse, and child welfare literatures (Section D).

A. WORK SUPPORTS FOR LOW-INCOME FAMILIES

Although rural areas are diverse, they tend to be characterized by higher poverty and lower income, fewer job opportunities, and lower human capital than metropolitan areas. This suggests that the need for, and use of, work supports may differ between rural and urban areas. Geographic isolation and dispersed populations, spatial inequalities in transportation and child care, and limited local government administrative skills and resources with which to implement decentralized programs all present potential barriers in the implementation and operation of rural work support programs (Marks et al. 1999).

Rural welfare-to-work and work support programs and services receive little attention in the research literature. Yet information on these programs and services is necessary to guide decisions about policies and programs intended to help rural low-income families secure employment and move toward self-sufficiency. What services and programs make up the work support system in rural communities, and how does their implementation and operation differ compared with those of urban areas? Do rural families participate in available programs and use available services? How effective are work supports in rural areas?

Implementation and Operation of Work Support Services

Because many low-income people face substantial barriers to becoming and staying employed, the federal government and states offer work supports to help them get jobs and move toward self-sufficiency. In the late 1990s, Congress revamped two of the nation's primary sources of such assistance: the welfare and workforce development programs. The Personal

Responsibility and Work Opportunity Reconciliation Act of 1996 established TANF as a time-limited welfare program that requires work to retain benefits and permits states to provide various job preparation and employment activities and services. In 1998, Congress replaced the main workforce development system (the Job Training and Partnership Act, or JTPA) with the U.S. Department of Labor (DOL) Workforce Investment Act, or WIA. The TANF program, which states administer with oversight from DHHS, provides states substantial flexibility in using funds to support employment-focused activities. DOL's WIA system offers programs and services that help low-income people and others identify job opportunities or gain the skills they need to attain stable employment through a system of local One-Stop service centers. In addition, logistical support services to help people maintain employment—mainly child care and transportation—are funded by TANF or other federal and state dollars, and are available to low-income working families through TANF and One-Stop programs, as well as through other sources. In 1997, Congress also provided a temporary source of additional funds to support welfare reform by establishing the DOL Welfare-to-Work grants program (WtW).

Implementing the major changes in the welfare and workforce development systems has been a challenge for state and local agencies in both rural and urban areas. Rural challenges and experiences have differed from those in urban areas, however. For example, building service networks, providing transportation, and finding work opportunities may have been more difficult in rural areas (Berlin 2002).

Common strategies for establishing a service network for implementing welfare reform have included creating inter-agency partnerships, outsourcing some program elements, and integrating existing services. However, building the service network required to engage TANF recipients in work-related activities may have been a difficult challenge for rural sites (Berlin 2002)—especially those that are remote or isolated. A study of the role of intermediaries in linking

TANF recipients with jobs found that the tendency to transfer at least some responsibility for providing employment-related services to intermediaries (such as private employment agencies or nonprofit organizations) was stronger in urban areas than in rural ones (Pavetti et al. 2000). A study of the DOL WtW program found that, among WtW grantees, which generally relied on subcontracts with outside entities to provide direct services, rural sites had fewer partners than others (Nightingale et al. 2003). A study of work supports offered through One-Stops found that few rural One-Stops offered comprehensive services. Of the nine rural One-Stops surveyed, just two had taken steps to integrate work support services that other agencies offered (Richer et al. 2003). These differences in rural and urban implementation may be due to differences in program design, but they also could be attributable to a lack of available partners, such as nonprofit organizations, community colleges, public agency offices, or even for-profit businesses in some rural areas. For example, lower population densities in rural areas make it more difficult to support some specialized services, such as specialized education or job training (Duncan et al. 2002).

Rural areas may have enjoyed some advantages in implementing and operating TANF and One-Stop programs, however. For instance, one study suggests that the lack of local community organizations and agencies to partner with also may mean less competition for resources and clients and less “turf-grabbing” across agencies (John J. Heldrich Center for Workforce Development 2002). The study also suggested that some types of programs work better in small, close-knit rural areas where services are more flexible and personal connections are common. Rural TANF caseworkers and service providers interviewed for a GAO study of rural TANF programs identified several strengths of rural programs, including more frequent staff collaboration and personal attention to clients (U.S. General Accountability Office, September 2004).

The employment conditions and geographic isolation of rural areas can make job placement and workforce development more difficult for service providers. Directors in several rural One-Stops reported that their counties depended heavily on a single industry, such as agriculture, or even on a single employer (Richer et al. 2003). When that industry or employer suffered a downturn, One-Stops had an influx of new customers and a dearth of employment placement opportunities at the same time. Geographic isolation also created difficulties for One-Stops in disseminating information and making services available to clients who lived far from them.

Approaches used by providers in rural areas reflect some of these factors. For example, because of ongoing high rates of unemployment and severe employment dislocations and shortages, providers in West Virginia have long relied on community work experience programs to help welfare recipients and other disadvantaged workers gain employment experience and meet work requirements by working in public or nonprofit organizations (Plein 2001). Work experience placements were an important component of a WtW program that served 29 rural counties in West Virginia beginning in 1998 (Perez-Johnson et al. 2002). Rural TANF programs respond to geographic and economic factors, as well as a lack of transportation and child care services, through a variety of strategies. Many use nontraditional methods of connecting clients with services to avoid the need for clients to travel back and forth to provider sites or find child care for their children (U.S. General Accountability Office, September 2004). These methods include, for example, providing “virtual” social services through telephone and computer contacts with clients, using distance learning technology and home visits, and operating a workforce mobile lab that can be transported from site to site across rural areas.

Although rural areas pose several challenges, a study of One-Stops suggests that some challenges to providing One-Stop services are common in rural, suburban, and urban areas alike (Richer et al. 2003). For example, One-Stop directors from urban as well as rural regions wanted

to hire more or better-qualified staff. Transportation was perceived as a barrier in all geographic areas too, although, for urban and suburban sites, the main challenge was trying to modify public transit routes to accommodate One-Stop locations. In some states, WIA One-Stops must coordinate with TANF agencies to provide employment services and case management to TANF recipients. A lack of support from local TANF agencies, negative attitudes among One-Stop staff toward TANF recipients, and turf conflicts among agencies mandated to partner with One-Stops affected the provision of work supports to TANF clients in all geographic areas as well.

Differences in the cost of work support programs between rural and urban areas may not be directly related to rural factors. In the national evaluation of WtW grants, urbanicity was not strongly associated with differences in costs per placement, placement rates, or costs per participant across WtW programs (Perez-Johnson et al. 2002). Instead, program strategies and service approaches had greater influence on program costs.

Work Support Services Access and Use

For rural low-income families, limited local service capacity and the long travel distance to existing services may create barriers to accessing work supports. For example, Fletcher et al. (2002) highlight several rural Iowa communities in which job search assistance for welfare recipients is available only at certain times or on certain days of the week. In other towns, these services do not exist at all, so clients must travel up to 40 miles to obtain them. However, several rigorous studies of welfare reform programs do not support the notion that rural clients have less access to TANF employment services or participate in them at considerably lower rates. For example, an evaluation of Iowa's TANF program reported differences of 3 percentage points or less in rural and urban clients' participation in PROMISE JOBS, the program's mandatory employment and training component (Fraker et al. 2002). Similarly, a study of the Minnesota Family Investment Program (MFIP) showed that fewer rural clients participated in

employment and training activities, but rural-urban differences were small—just 3 to 5 percentage points (Miller 2000).

In at least one study, rural clients were observed to be much *more* likely than urban ones to participate in employment preparation activities (Meckstroth et al. 2002). Surveys of participants in Nebraska’s Employment First program found that about two-thirds of rural clients had participated in employment activities in the previous year, while only half of urban clients had done so. Rural clients were significantly more likely to have participated in every specific activity reported—job search, job readiness training, and education—and had more frequent contact with Employment First case managers. Researchers suggested several possible reasons for the higher participation in Employment First among rural clients. Clients may have had stronger connections with staff because of the tight-knit social fabric common in rural communities. In addition, a system with fewer service providers may allow staff to recognize clients and connect them with available resources more easily. Finally, because of lower staff turnover rates, case managers in rural areas tended to be more experienced than their urban colleagues, and their caseloads were somewhat smaller.

Evaluations of WtW grant-funded programs and of rural WtW demonstration programs also indicate that rural sites are not at a particular disadvantage in terms of program participation. The two rural programs in DHHS’s evaluation of WtW grants (St. Lucie County, Florida; and West Virginia) reported participation rates generally on par with those of other programs (Fraker et al. 2004). Among all the WtW evaluation sites, participation rates for employment activities ranged from 68 to 89 percent. In St. Lucie County, 78 percent of enrollees received at least one type of employment preparation service in the year after they entered the program. For West Virginia, the participation figure was 87 percent.

There seem to be few studies that indicate the share of eligible rural job seekers who participate in WIA programs. In a study of WIA services in Missouri, however, Torufa (2002) examined the service use among 340 workers laid off during the first quarter of 2001. He found that rural dislocated workers participated in WIA core services at a greater rate (13 percent) than urban dislocated workers (3 percent).

Use of Transportation and Child Care Assistance

Many low-income workers need help with logistical matters, particularly transportation and child care, to engage in job search or stay employed after they have found a job. Transportation and child care assistance programs focus on making these services more widely available and affordable to low-income people, who may secure transit passes or vouchers, or child care subsidies, through TANF, WtW, or One-Stop services and programs.

A study of the implementation of eight rural low-income-focused transportation projects that were supported by Job Access and Reverse Commute (JARC) grants administered by the U.S. Department of Transportation found that JARC-funded services had been successfully implemented in rural areas (Stommes et al. 2002). Implementation challenges were common to rural transit systems. These challenges included high per-rider costs due to long distances and low population densities, as well as funding disruptions at the national, state, and local levels. Simultaneous implementation of new welfare, workforce training, and transit programs resulted in slowdowns in initial implementation and contributed to frequent turnover among staff in the projects. The study also noted continuing unmet demand for transportation services, however, especially to jobs with nonstandard work schedules.

The limited use of formal child care in rural areas may result in less take-up of child care subsidies. In a study of 354 rural low-income mothers in 15 states, Walker and Reschke (2003) found that fewer than one-third of the mothers with children under age 6 used public child care

subsidies. Mothers who did not receive subsidies may have paid for the care themselves or exchanged goods or services for child care. Mothers also may not have needed the subsidies because their child care arrangements cost little or nothing; many indicated that a relative provided free care or that the child received care through Head Start or school. Moreover, researchers noted that mothers felt that applying for child care subsidies was not worthwhile, because it was too confusing or burdensome, and payments were too unreliable. The authors suggested that a closer study of potential barriers to the use of subsidies was needed. They also noted that greater supports should be made available for “kith and kin” child care providers, the number of child care facilities in existing community spaces should be expanded, and coordination across systems was needed to provide child care access.

Effectiveness of Rural Work Support Services

Information on the impacts of work support services and programs is limited overall, including for rural areas. Currently, the best source of information on overall program impacts of work-first programs that include work support components is the evaluation literature on welfare reform and welfare waiver programs. Observed impacts in evaluated programs cannot necessarily be attributed to work supports, however, since individual program components are not evaluated in isolation. In this section, we describe the lessons from this rural literature, including an ongoing study of rural welfare-to-work strategies that should provide additional information. In addition, a few small studies provide some information on the effectiveness of rural transportation and child care programs.

Existing studies do not offer consistent results regarding the effects of welfare reform programs for rural clients. For example, MFIP had positive effects on rural employment and earnings for single parents, although the effects were higher in urban areas, and effects on earnings in rural areas diminished during the second year of the evaluation (Miller et al. 2000).

In contrast, Iowa's welfare reform program did not produce significantly different impacts in employment or earnings for rural and urban clients (Fraker et al. 2002).

Although some studies suggest that rural welfare recipients are more likely than their urban counterparts to find employment, the jobs they secure are not as good as those in urban places. MPR's nonexperimental study of Nebraska TANF clients found that, a year after being selected into the sample of TANF clients for the study, rural clients were more likely than urban ones to be employed and off TANF. However, employed urban clients tended to have jobs that paid better and offered more benefits (Meckstroth et al. 2002). Similar differences in employment outcomes were observed between rural and urban sites in the WtW grants program. For example, enrollees in the West Virginia program, a rural site, had more favorable employment outcomes than those in many of the other sites, but their mean hourly wage rate (\$5.75) was notably lower than in other rural and urban sites (Fraker et al. 2004).

A rigorous study of welfare-to-work programs in rural areas, funded by the Administration for Children and Families, is currently under way. The Rural Welfare-to-Work Strategies Demonstration Evaluation (RWtW) will assess the impacts of two programs: (1) Illinois Future Steps, in which career specialists from a local community college provided employment-focused case management and job placement assistance to TANF recipients and other low-income volunteers in southern Illinois; and (2) Building Nebraska Families, in which master's-level professionals from the University of Nebraska Cooperative Extension provided preemployment life skills education to hard-to-employ TANF clients in 52 rural Nebraska counties. Using a random assignment design, the RWtW evaluation will determine what difference the Future Steps and Building Nebraska Families programs make in clients' employment, family functioning, and long-term well-being.

Programs that subsidize vehicle purchases may have a positive effect on employment among low-income people in rural areas. This conclusion is suggested by a study of the Good News Garage, a vehicle donation and sales program for people moving from welfare to work in Vermont. Lucas and Nicholson (2002) use econometric models to assess the effects of this program and find positive effects of the car ownership program on earned income and the probability of employment. Another rural program, Tennessee First Wheels, provided interest-free car loans and ownership support to employed welfare, Medicaid, and child care assistance clients throughout Tennessee. In focus groups, clients who participated in First Wheels indicated that owning a car improved their lives, particularly by helping strengthen their motivation and sense of control (Burwick et al. 2004).

B. SUBSTANCE ABUSE

According to the National Institutes of Health (NIH) and the Substance Abuse and Mental Health Services Administration (SAMHSA), substance abuse and its related problems are among society's most pervasive health and social concerns. In 1995, the economic cost to the nation of alcohol and drug abuse was estimated to be over \$2.75 billion, or more than \$1,000 for every person in the United States (U.S. Department of Health and Human Services November 2000). Besides their economic costs, problems with drugs and alcohol impose additional burdens. Alcohol use is associated with homicide, suicide, marital violence, child abuse, and high-risk sexual behavior. Heavy drinking increases the risk for liver disorders, cancer, high blood pressure, and stroke. The illegal use of drugs is associated with injury, illness, disability, crime, domestic violence, and death. Substance abuse also is linked with a reduced probability of employment and thus can affect family self-sufficiency.

To understand the extent of substance abuse in rural areas and its potential impact there, policymakers must have information about its prevalence, treatment, and prevention. What is the

current prevalence of substance abuse in rural communities, and how do rural prevalence rates vary across rural areas and compare to urban rates? Do rural communities have access to treatment and prevention resources? Are such resources effective? We examine these questions next.

Prevalence of Substance Use, Abuse, and Dependence in Rural Areas

In spite of the growing evidence that rural areas are no longer sheltered from substance abuse problems to the degree they may have been in earlier decades, the latest published National Survey on Drug Use and Health (NSDUH) reports that both substance *use* and substance *abuse* are less common in nonmetro areas than in metro areas among all people age 12 or older (Office of Applied Studies 2003a). Overall, people in nonmetro areas are less likely than their counterparts in metro areas to use alcohol or illicit drugs. Illicit drug or alcohol *abuse or dependence* combined (measured during the 12 months before the study) also is lowest in nonmetro counties, and, in nonmetro counties, abuse or dependence is lowest in the most rural areas. Tobacco use, however, is more common in nonmetro areas.¹⁶

Yet substance abuse is a complex issue that cannot be fully assessed by using a few measures applied to the overall population. Conclusions about the scope and magnitude of rural substance abuse problems will differ, depending on which substances, use or abuse measures, and population groups are being studied or described. Below we examine recently published findings on the *use* of tobacco, alcohol, and illicit drugs, and on the *abuse of, or dependence on,*

¹⁶ In addition to health risks directly associated with tobacco use, smoking is a risk factor for drug and alcohol use. Smokers surveyed for the 2002 NSDUH were more than three times as likely as nonsmokers to use illicit drugs or to engage in binge drinking or heavy alcohol use. Therefore, tobacco use is important to consider in the context of overall substance abuse.

alcohol and illicit drugs, separately for rural youth and adults.¹⁷ We then review what is known about drug and alcohol use and abuse among racial/ethnic and cultural groups in rural areas. Finally, we ask how the increasing prevalence of illicit drug laboratories in rural areas may be affecting rural communities.

Use of Tobacco Among Rural Youth. Tobacco use is more prevalent among rural than urban youth. Among youth ages 12 through 17, twice as many in the most rural areas report cigarette use in the past month as those in large metro areas—21 versus 11 percent, respectively. Twelfth-graders in nonmetropolitan statistical areas (non-MSAs) are about twice as likely to use smokeless tobacco as those in other MSAs and almost three times more likely to use smokeless tobacco as 12th-graders in large MSAs (Table III.1).¹⁸

TABLE III.1

PERCENTAGE OF 12TH-GRADERS REPORTING USE OF CIGARETTES AND SMOKELESS TOBACCO IN THE PAST MONTH, BY POPULATION DENSITY

Population Density	Cigarettes	Smokeless Tobacco
Large MSA	24.8	3.4
Other MSA	26.2	5.7
Non-MSA	30.1	11.9

Source: Johnston et al. 2003a. Statistical significance of these differences is not reported and could not be tested with the information available.

¹⁷ Abuse and dependence represent escalating levels of substance use disorders and are defined by criteria established by the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders*.

¹⁸ For a definition of MSAs, see Table II.1 in Chapter I of Volume 2 of this study. “Non-MSAs,” as defined in Johnston et al. (2003a), are analogous to nonmetro or rural areas.

Use of Alcohol Among Rural Youth. Alcohol use is also more pervasive among rural than urban youth. In 2002, past-month alcohol use was higher in nonmetro counties than in large or small metro counties (Table III.2). Breaking nonmetro counties down by levels of rurality suggests that alcohol use was most common for youth in the most rural counties (Office of Applied Studies 2003b; not shown).

TABLE III.2

PERCENTAGE OF PERSONS AGES 12 TO 17 REPORTING ALCOHOL USE, BINGE ALCOHOL USE, OR HEAVY ALCOHOL USE IN THE PAST MONTH, BY COUNTY TYPE

County Type	Type of Alcohol Use		
	Any Alcohol Use	Binge Alcohol Use	Heavy Alcohol Use
Large Metro	17.1	10.1	2.1
Small Metro	17.6	10.3	2.5
Nonmetro	19.0	12.6	3.5

Source: Office of Applied Studies (2003b). Statistical significance is not reported, but chi-squared tests we conducted indicate that differences are significant at $p < .05$.

Note: Binge alcohol use is defined as consuming five or more drinks at the same time or within a couple of hours of each other on at least 1 day in the past 30 days. Heavy alcohol use is binge drinking on each of 5 or more days in the past 30 days.

These differences are not new and have potentially serious consequences for rural youth. For more than 20 years, alcohol use by high school seniors in rural areas matched or exceeded that by urban high school seniors (Weisheit and Donnermeyer 2000). Because of the association between drinking and driving, combined with the need for rural youth to spend more time on the roads due to greater distances and an absence of rural public transit, alcohol use may have greater risks for rural youth than for those in urban areas. Edwards (1997) found that alcohol use

caused more problems—for example, fighting with other children or their parents, having car accidents, or being arrested—for rural than for urban youth.

Use of Illicit Drugs Among Rural Youth. In contrast to tobacco and alcohol use, the current prevalence of illicit drug use among youth ages 12 to 17 is lower in nonmetro counties than in large metro ones (Table III.3). Use of illicit drugs is lowest in the most rural areas (not shown).

TABLE III.3
PERCENTAGE OF PEOPLE AGES 12 TO 17 REPORTING USE
OF ANY ILLICIT DRUG IN THE PAST MONTH,
BY COUNTY TYPE

County Type	Past-Month Use
Large Metro	11.4
Small Metro	12.4
Nonmetro	11.0

Source: Office of Applied Studies (2003b). Statistical significance is not reported, but chi-squared tests we conducted indicate that differences are significant at $p < .05$.

Use of illicit drugs among youth varies by drug type. The proportion of 12th-graders using any illicit drug is lowest in non-MSAs, but rural 12th-graders are less likely to use marijuana and more likely to use other illicit drugs than urban (large or other MSA) 12th-graders (Johnston et al. 2003a) (Table III.4). Non-MSA 12th-graders are almost 25 percent less likely than large- and small-MSA 12th-graders to use marijuana (17.4 percent compared with 22.9 percent), but they are around 10 percent more likely, on average, to use other illicit drugs (12.2 percent compared with 10.8 percent).

TABLE III.4

**PERCENTAGE OF 12TH-GRADERS REPORTING USE OF ILLICIT DRUGS
IN THE PAST MONTH, BY DRUG TYPE AND POPULATION DENSITY**

Population Density	Any Illicit Drug	Any Illicit Drug Other than Marijuana	Marijuana
Large MSA	26.5	10.8	22.9
Other MSA	26.3	11.2	22.7
Non-MSA	22.1	12.2	17.4

Source: Johnston et al. 2003a. Statistical significance of these differences is not reported and could not be tested with the information available.

Rural areas are diverse, and patterns of drug use may vary in rural communities with different characteristics. Two studies show that, within rural areas, youth in communities considered the most rural have lower rates of drug use. Donnermeyer and Scheer (2001) compared drug use by 12th-grade students from 1976 to 1997 across six types of rural locations, as determined by the farm, country, or small-town status of respondents' current schools, and where they mostly grew up. Nearly two-thirds of the comparisons of past-year use of alcohol, marijuana, and illicit drugs showed no significant differences. When differences were found, however, nearly all revealed less substance abuse for the region considered more rural. Edwards (1997) also made intra-rural comparisons of substance use among 12th-graders, from 1992 through 1994. She found a lower aggregate level of drug use among youth in rural communities with populations less than 2,500 than in larger rural communities.¹⁹

¹⁹ Both studies used different data sources and different definitions of rural areas. Neither study examined tobacco use.

Problem Use of Alcohol and Drugs Among Rural Youth. For underage children, or when illicit substances are involved, use of any amount of alcohol or drugs is a problem. From a clinical perspective, however, problem use of alcohol or drugs is indicated by heavy use, or by abuse or dependence. Problem drinking among 12- to 17-year-olds, as measured by binge drinking and heavy alcohol use, is higher in nonmetro counties than in large or small metro counties (Table III.2). Moreover binge drinking is highest in the most rural counties (Office of Applied Studies 2003b; not shown). The prevalence of abuse and dependence is not reported in the NSDUH by county type separately for drugs and alcohol. However, the combined prevalence of past-year illicit drug and alcohol abuse or dependence for 12- to 17-year-olds in 2002 was about 9 percent in large, small, and nonmetro counties but higher in the most rural nonmetro counties, at 11 percent. Among all 12- to 17-year-olds in the NSDUH sample reporting drug or alcohol abuse or dependence, about one-third report abuse or dependence on alcohol only, slightly more than a third on illicit drugs only, and the rest (slightly less than a third) on both alcohol and illicit drugs (this information is not broken out by county metro status).

How, if at all, has the prevalence of youth substance abuse changed over time? As mentioned earlier, alcohol use has persistently been more common among rural youth. In the past three decades, drug use among youth has declined in all community types. The proportion of high school seniors using any illicit drug *in the past year* peaked in 1979 in large MSAs, small MSAs, and non-MSAs (Johnston et al. 2003a). In 1979, there were appreciable differences in the prevalence of past-year drug use, with large MSAs having the highest rate (61 percent) and non-MSAs the lowest (48 percent). Drug use declined from 1979 to 1992, when the proportion of 12th-graders using any illicit drug in the past year converged in all three areas, at 27 percent.

Adult Tobacco, Alcohol, and Drug Use in Rural Areas. Rural adults are more likely than adults in urban areas to use tobacco but less likely to use alcohol or illicit drugs. Rural adults also are less likely to be problem users of alcohol. Comparisons of adult drug abuse and dependence between rural and urban areas are not available.

Like rural youth, rural adults are somewhat more likely than their counterparts in urban areas to use tobacco. Past-month use of cigarettes and smokeless tobacco for adults between ages 18 and 34 in nonmetro and large metro areas was higher in nonmetro areas (Johnston et al. 2003b).

Past-month adult alcohol use is also more common in metro counties (large and small) than in nonmetro ones (Table III.5). A comparison of nonmetro counties shows that alcohol use was lowest in counties considered the most rural (Office of Applied Studies 2003b; not shown). Like alcohol use, *problem* alcohol use (as measured by binge and heavy drinking) is lower in

TABLE III.5

PERCENTAGE OF PEOPLE AGE 18 OR OLDER REPORTING ALCOHOL USE, BINGE ALCOHOL USE, OR HEAVY ALCOHOL USE IN THE PAST MONTH, BY COUNTY TYPE

County Type	Type of Alcohol Use		
	Any Alcohol Use	Binge Alcohol Use	Heavy Alcohol Use
Large Metro	58.4	24.6	6.8
Small Metro	55.2	25.9	8.5
Nonmetro	45.7	21.2	6.4

Source: Office of Applied Studies (2003b). Statistical significance is not reported, but chi-squared tests we conducted indicate that differences are significant at $p < .01$.

nonmetro counties than in large metro ones. A comparison of nonmetro counties shows that binge use and heavy alcohol use are lowest in the most rural counties (5 percent of adults reported heavy alcohol use—Office of Applied Studies 2003b; not shown).

The NSDUH provides evidence that past-month use of illicit drugs among adults is less prevalent in nonmetro counties than in metro ones (Table III.6). A second study confirms this pattern, but finds that differences across geographic areas are modest (Johnston et al. 2003b). Looking at individual drugs, the National Center on Addiction and Substance Abuse at Columbia University (CASA) (2000) found no statistically significant differences in past-month adult use of cocaine, hallucinogens, heroin, stimulants, sedatives, and analgesics by population density. Marijuana use did differ significantly, however, at around 10 percent for nonmetro areas, compared with 13 and 16 percent in large and small metro areas, respectively. Information on the prevalence of drug abuse or dependence among adults in rural areas is not reported by either the NSDUH (Office of Applied Studies 2003b) or Johnston (2003b).

TABLE III.6
PERCENTAGE OF PEOPLE 18 OR OLDER REPORTING USE
OF ANY ILLICIT DRUG IN THE PAST MONTH,
BY COUNTY TYPE

County Type	Past-Month Use
Large Metro	8.3
Small Metro	8.5
Nonmetro	6.1

Source: Office of Applied Studies (2003b). Statistical significance is not reported, but chi-squared tests we conducted indicate that differences are significant at $p < .01$.

As with trends for youth, past-year use of illicit drugs by 19- to 25-year-olds has also declined from 1979 levels (CASA 2000). In 1979, 54 percent of this age group in large metro areas had used illicit drugs during the past year, while 43 percent in rural areas had done so. The gap narrowed through the 1980s, as use declined more steeply in large metro areas. By 1993, differences were not statistically significant, and use prevalence ranged from 22 to 26 percent across county types.

Racial/Ethnic and Cultural Differences in Rural Areas. Studies show considerable variation in substance abuse by race/ethnicity. In 2002, past-month illicit drug use among those 12 or older (not classified by rurality) was highest for American Indians/Alaska Natives and blacks, at about 10 percent (Office of Applied Studies 2003a). Nine percent of whites, 7 percent of Hispanics, and 4 percent of Asians reported past-month use. Rates varied substantially among Hispanic subgroups, at 10 percent for Puerto Ricans, 7 percent for Mexicans and Cubans, and 5 percent for Central or South Americans. Rural racial and ethnic differences in substance use and abuse are important to pinpoint, as they may imply the need for language-specific or culturally sensitive treatment or prevention efforts. Unfortunately, few empirical estimates exist for these subgroups in rural areas.²⁰

Most of the research literature on substance abuse issues in the African American population has focused on alcohol problems, and little of the research includes rural areas (Dawkins and Williams 1997). Studies focusing on rural African American adolescents as described by Donnermeyer (1992) have found lower or equivalent levels of alcohol, marijuana, and hard-drug

²⁰ Most of the substance abuse research on rural ethnic groups has examined Native Americans. We do not address results of these studies in this review, however, because it was concluded that Native American rural issues represent a distinct rural subtopic that could not be addressed adequately or appropriately in the current project.

use compared with those of white adolescents, although one study found a higher lifetime prevalence of marijuana use for rural African American adolescents.

Two empirical studies done in the 1980s that quantified alcohol consumption among migrant farmworkers in New York State reported similar findings as described by Watson (1997). About one-fourth of the migrants in both studies appeared to engage in a pattern of heavy or binge drinking, usually on weekends or during work downtimes, such as rainy days.²¹ Men drank more than women. In both studies, the presence of family members along with the men living in migrant camps was associated with less drinking.

Availability and Use of Treatment and Prevention Services in Rural Areas

Literature on the delivery of services in rural areas has identified many rural characteristics that may limit the availability of human services in rural areas, reduce their use by rural families, or negatively affect rural practitioners. These characteristics include geographic dispersion and low population densities, constrained organizational resources, the difficulty of supporting specialized human services staff, and cultural factors that may limit the seeking of help. Empirical research confirms that substance abuse services differ between rural and urban areas, and that rural treatment access is more limited. The effects of these constraints on rural communities have not been examined empirically.

Substance abuse services and funding in rural areas are more limited than those in urban areas (Hutchison and Blakely 2003). Per capita treatment costs are high in rural areas because low population densities make it difficult for treatment providers to achieve economies of scale (CASA 2000). In 1993, in more than 1,500 rural counties, there were no practicing

²¹ Both studies were based on samples drawn from migrant camps in rural counties in western and southern New York. One sampled 217 respondents: 70 percent African Americans and 30 percent Haitians. The second included 246 migrants: 65 percent Hispanic, 13 percent black, 9 percent Jamaican, 5 percent Haitian, and 8 percent “other.”

psychologists, psychiatrists, or social workers—professionals who could help identify substance abuse and supervise treatment. It is not unusual in rural settings to find only a single alcohol or drug treatment provider serving an extensive area (National Association of State Alcohol and Drug Abuse Directors 2002). Instead, rural substance abuse treatment is often provided through hospitals; in 1986, 40 percent of rural substance abuse and mental health services were based in hospitals—more than twice the rate of that in urban areas (CASA 2000). However, only one in ten rural hospitals offer such treatment services, compared with about one in three urban hospitals (Hutchison and Blakely 2003).

Possibly because substance abuse has long been viewed as an inner-city problem, per capita funding rates for one major source of federal substance abuse assistance are higher in urban areas. In federal Substance Abuse Services Block Grant funding formulas, urban residents between ages 18 and 24 are double-weighted, but rural residents are not. One study estimated that, to achieve funding equity between rural and urban areas, up to 22 percent of the Substance Abuse Services Block Grant would have to be reallocated among states (Caulkins et al. 1999).

Furthermore, rural substance abuse treatment is less specialized than in metro areas. For example, only 7 percent of rural substance abuse treatment providers specialize in both drug and alcohol abuse, compared with 18 percent in urban areas. Rural communities often lack detoxification and psychiatric services, and jail may be used for observation of patients with substance abuse or psychiatric symptoms (Cellucci et al. 2003). The nationwide shortage of youth-oriented treatment is even more acute in rural areas, where only 11 percent of providers target youth, compared with 15 percent in metro areas; in addition, fewer rural treatment programs are tailored to women with children (CASA 2000).

Overall access to treatment is more limited in rural areas as well. Rural clients travel greater distances to receive treatment and have fewer providers from which to choose (Office of Applied

Studies 2003c). While people with substance abuse problems living in the most urbanized regions would have to travel less than 2 miles, on average, to reach the nearest treatment facility, those in nonmetro counties with a city would have to travel 6 miles on average, and those in nonmetro counties without a city (the most rural regions in the study) would have to travel 13 miles. Nearly 100 percent of adults with substance abuse problems in the most urbanized areas had at least two treatment facilities within 15 miles of their residence, but only 44 percent in nonmetro areas without a city lived within 15 miles of two or more facilities.

Rural access to substance abuse treatment may be limited because a smaller proportion of people have health insurance coverage in rural areas than in urban ones. Those living outside metro areas also depend more on public insurance, which has complex reimbursement policies and regulations that can limit or delay access to substance abuse treatment (for example, by requiring treatment provision or supervision by a physician) (CASA 2000).

In 2002, treatment rates as measured by the percentage of the overall population that received treatment in nonmetro areas were lower than in metro areas among people age 12 or older, but so were rates of illicit drug or alcohol dependence or abuse (Office of Applied Studies 2003a). An estimated 0.9 percent of people age 12 and older who lived in large metropolitan counties reported receiving treatment at some time during the past 12 months to reduce or stop drug or alcohol use, or to treat medical problems associated with the use of illicit drugs or alcohol. The rate in small metro counties was 1 percent. In nonmetro counties however, just 0.6 percent received treatment. The rate was lowest—only 0.4 percent—in the completely rural counties, which also had the lowest rates of abuse or dependence.

One way to make a rough estimate of potential urban-rural disparities in receiving treatment is to compare the proportions of people in each type of county reporting substance abuse or dependence with the proportions reporting treatment receipt. Because of slight discrepancies in

how the NSDUH findings are presented by county type, precise calculations are not possible. Roughly, however, those in nonmetro counties reporting abuse or dependence—including those in the most rural counties—are about half as likely to have received treatment as those in small or large metro counties.

These disparities may result not only from differences in the availability of, and access to, treatment, but also from other factors. For example, some research has suggested that treatment-seeking behavior may differ for rural residents with substance abuse problems, in comparison with those in urban areas. Leukefeld et al. (1992) found that rural residents were not kept away from their work or school by alcohol to the extent reported by urban residents; possibly, as one result, they had the lowest level of seeking help for substance abuse problems. A later study of problem drinkers, however, did not find differences in treatment seeking (Cellucci et al. 2003).

Effectiveness of Treatment and Prevention in Rural Areas

Several major studies have shown that drug treatment is beneficial (U.S. General Accounting Office 1998). The major evaluations of drug treatment effectiveness report reductions in self-reported drug use and crime one year after treatment from any of three treatment approaches regardless of drug type: residential long-term, outpatient drug-free, or outpatient methadone maintenance. Studies have shown that better outcomes result from longer treatment episodes, and that outpatient treatment reduces drug use as much as residential treatment. Little empirical knowledge about treatment effectiveness for rural substance abuse services exists, however (Cellucci et al. 2003). There may be no reason to expect that treatment effectiveness would vary with rurality, but we found no information on substance abuse treatment evaluations conducted in rural areas, and no national evaluation reports that provided rural information, even in some studies that indicated that they included rural sites.

There have been a handful of studies of rural prevention programs, however. School- and family-based prevention programs have been tested and found effective in rural areas. A five-year study involving 859 students in four rural Colorado counties found improvements in academic achievement and a reduction in past-month use of alcohol, tobacco, or other drugs for students who participated in one school-based program as they progressed from the fourth to the eighth grade, compared with a preceding student cohort that had not participated (Zavela 1997). The program included comprehensive health education, along with skill-building activities, academic enhancement and improvement programs for at-risk students, parent education and involvement, alternative youth and family activities, youth councils, and youth leadership training. Transportation was provided for students and their families for evening and weekend programs. Alternative drug-free activities were well attended—possibly, the author suggests, because there were few other family and child activities in the rural communities studied.

Two family-based prevention programs implemented in rural settings led to improvements in parental management and in the quality of the parent-child relationship (Scaramella and Keyes 2001). Later studies of one program found significant reductions in substance abuse as well. These results were consistent with results for the program in urban areas and for a similar program implemented in both rural and urban settings. Neither study used an experimental evaluation design, however.

Drug Production in Rural Areas

News reports on the production and use of methamphetamines (“meth”) in rural areas have raised concerns about rural drug production and trafficking and their potential impacts on rural crime, drug use, and even rates of child abuse and neglect (Johnson 2004; Pierre 2003; Schwartz 2001). Rural drug production and trafficking are less well understood than rural drug use (Weisheit and Donnermeyer 2000), but limited empirical research, based mostly on criminal

justice data, does provide some information. Production of illicit alcohol continues to be a lucrative business in parts of rural America. Several reports suggest that meth, designer drugs, crack cocaine, and marijuana are all produced in rural sites and that, not surprisingly, marijuana is cultivated almost exclusively in rural areas. In addition, most meth laboratories seized are in rural sections of the country, predominantly in the western and southwestern United States (Weisheit and Donnermeyer 2002; O’Dea et al. 1997), and the number of such seizures has been growing rapidly.

Several factors have been suggested to account for the increasing prevalence of rural drug production and trafficking. Improvements in rural highway systems and the large number of airstrips for corporate farms and crop dusters have made rural areas important transshipment points for drugs destined for cities (Weisheit and Donnermeyer 2000). Saturated urban drug markets, low drug prices, increased competition, and police pressure have led crack distribution organizations to develop new markets, including in rural areas. For example, street gangs have moved eastward from the Los Angeles area to rural areas across the United States, particularly to the Southeast (O’Dea et al. 1997).

A major concern in rural communities is that increasing meth production will make meth easily available and lead to an increase in use, particularly among rural youth. Although there are anecdotal reports that meth use in rural areas is increasing, national data do not bear this out. In 1999, past-year meth use was more common among nonmetro 12th-graders, at 6 percent, than among their counterparts in large and small metro areas, at 4 percent (CASA 2000). By 2002, however, annual prevalence rates were lower for all 12th-graders than in 1999, except in small MSAs (SMAs) (Johnston et al. 2003a), even though law enforcement raids of illegal labs were increasing. In 1999, there were no significant differences by county type in the percentage of adults age 18 or older who had ever used meth, and lifetime use by adults at that time ranged

from 2 to 3 percent in all areas (CASA 2000). These percentages represent averages across all nonmetro areas, however, including regions where the production or use of meth is common and those where it is uncommon, and could underestimate the prevalence of meth use in the areas where production is most intensive.

C. RURAL CHILD WELFARE

Concerns about child maltreatment and the operation of the child welfare system are growing throughout the United States. Increases in the number of maltreatment cases, systemic weaknesses in the child protective system, and the changing nature of family problems have made child welfare a priority at the federal and state levels (U.S. General Accounting Office 1997). Other long-term difficulties associated with child maltreatment are school failure and, in adulthood, lost wages and lower income—already substantial problems for rural communities.

Empirical research on child welfare, including maltreatment and child welfare services, has traditionally focused on urban areas, where caseloads are largest. Maltreatment rates, child welfare services, and service use could be different in rural areas, however. It is known that poverty, parental work status, and family structure—specifically, the absence of fathers—are all linked with child maltreatment (Paxson and Waldfogel 1999). Rates of poverty and child poverty are higher in rural communities. However, the proportion of children living in two-parent families in rural areas is also higher than in urban areas; although this rate has declined over the past several decades, the proportion remains slightly above the national average (Lichter et al. 2003). In addition to differences in maltreatment rates, access barriers could reduce the availability and effectiveness of child protective services, foster care, or other interventions—or, as with the work supports system, geography and other rural characteristics may not lead to differences in service access.

In this section, we examine the limited empirical literature on child welfare in rural areas of the United States. We provide information on the incidence of child abuse and neglect in the United States and attempt to assess whether rural incidence is likely to be higher or lower than national averages. We then describe what is known about the child welfare system in rural areas, including the effectiveness of services. As the review shows, the existing literature on rural child welfare is too sparse to provide a full picture of child welfare in rural areas.

Child Maltreatment, Foster Care, and Adoption

The Child Abuse Prevention and Treatment Act defined child maltreatment as any recent act or failure to act on the part of a parent or caretaker that results in death, serious physical or emotional harm, sexual abuse, or exploitation; or an act or failure to act that presents an imminent risk of serious harm (DePanfilis and Salus 2003). There are four commonly recognized types of child maltreatment: neglect, and physical, sexual, or psychological maltreatment. Evidence suggests that maltreatment is associated with short- and long-term negative consequences for children's physical and mental health, cognitive skills and educational attainment, and social and behavioral development (Chalk et al. 2002).

To form a picture of child welfare issues and services in rural areas, we need to know something about the rate at which rural children experience maltreatment and are placed into foster care, and the rate at which such children return to their families. According to the National Child Abuse and Neglect Data System (NCANDS), in the United States in 2002, state CPS agencies investigated reports of possible maltreatment involving 3.2 million children, or about 44 of every 1,000 children (U.S. Department of Health and Human Services 2004). Subsequent investigations confirmed ("substantiated") that just over a quarter of these children were indeed victims of some form of maltreatment, which translates to a child maltreatment

victimization rate of 12 of every 1,000 children under age 18 in the national population.²² Most of the substantiated cases were categorized as child neglect. This victimization rate is 20 percent less than it was in 1993, when the rate of child abuse and neglect peaked at 15.3 per 1,000 children under age 18. Published data available to date through NCANDS do not disaggregate state-level reports by county type or population density, however.

Little information is available on child maltreatment rates in rural areas. One national study, the National Incidence Study of Child Abuse and Neglect (NIS), does compare estimates of maltreatment in metro and nonmetro areas, but results over time have been inconclusive. The NIS-1, conducted in 1980, found that abuse rates were higher in rural counties than in major urban ones. In 1986, the NIS-2, using a broader definition of harm, found higher rates of abuse in urban counties. The NIS-3, conducted in 1993, compared some measures of maltreatment between metro and nonmetro areas and found no statistically significant differences (Sedlak et al. 1996). Small rural samples also limit the reliability of estimates derived through the NIS.²³

A state study examined the processing of child sexual abuse cases in rural and urban areas of Pennsylvania and concluded that the rate of child sexual abuse was higher in rural areas than in urban areas (Ménard and Ruback 2003). This study used three types of administrative data from 25 urban counties and 42 rural counties—rape crisis center data, reports from CPS, and judicial sentencing information. A separate analysis of the rape crisis center and CPS data sets found higher rates of child sexual abuse in rural counties, although the difference was statistically significant only for the rape crisis center data. Other forms of child maltreatment were not examined. Combining all data sources, the study found that rural counties had significantly

²² A case is substantiated if a protective services official investigates a case and finds evidence of abuse or neglect.

²³ For example, only 4 of 42 counties in the NIS-3 (1993) were rural.

higher rates of abuse reporting and substantiation, even when social conditions, poverty rates, county spending per capita, and the percentage of stranger assaults—factors that might explain rural-urban differences in case processing—were held constant.

Children removed from their homes by CPS agencies are placed in foster care or kinship care arrangements. The foster care caseload, which grew nationwide by 42 percent from 1990 to 1999, grew at a much faster rate in non-urban areas than primary urban areas in nine states (Wulczyn and Hislop 2002).²⁴ Over a 10-year period, foster care first admissions grew by 9 percent in non-urban counties in the states studied, compared with a 14 percent increase in secondary urban counties and a 26 percent decline in primary urban counties.

Studies provide evidence that the characteristics of children placed in foster care, and foster care spells and outcomes, differ between rural and urban areas. Most of the children admitted to foster care in non-urban counties are white and are adolescents rather than infants (Wulczyn and Hislop 2002). Spells of care are shorter in non-urban counties than in primary urban counties, and differences in spells are not due solely to population differences among counties, such as race/ethnicity, age at foster care entry, or type of primary care. A study that examined foster care placements for children who had been in out-of-home care for 12 months in urban and rural areas found that the number of risks present in the household at the time children were placed in foster care was significantly higher in rural study areas than in urban ones. This suggested to the authors that cases may have to be more severe in rural areas for children to be placed in foster care (U.S. Department of Health and Human Services 2001a). Risks included such factors as

²⁴ The study used data from the Multistate Foster Care Data Archive, described in Chapter II of Volume 2 of this report. For this report, counties were assigned to one of three different levels of urbanization—urban, secondary urban, and non-urban—based on the size of the child welfare system and other urban characteristics.

children's physical and mental health problems, and social and substance abuse services received by children's caregivers or to which children's caregivers were referred.

A study examining emergency shelter home placements found differences in ages and in reasons for placement between rural and urban children.²⁵ Using a random sample of 91 rural and 328 urban youth selected from the cases of children placed in a shelter home in Sioux City, Iowa, from mid-1985 to 1990, Van Hook (1994) examined patterns associated with emergency shelter placement and discharge of rural children. Rural children were at the greatest risk for placement in emergency shelter homes during their teen years, and they tended to be somewhat older at placement than urban children. Rural youth also were more likely than urban youth to be placed in emergency shelters as a result of parental reports of acting out or "ungovernable behavior" or because they were awaiting group home placement. Children from urban areas were more likely to be in emergency shelters because they had run away or needed protective custody.

After they have been placed in foster care, children who are not returned to their families may be placed for adoption. Compared with children in urban areas, rural children are more likely to return to their families to live, rather than be adopted. Two studies found lower rates of legal adoption in rural areas. Wulczyn and Hislop (2002) found that rates of adoption were 12 percent in non-urban counties versus 21 percent in primary urban counties, while rates of family reunification were sharply higher in non-urban counties—56 percent, compared with 43 percent in primary urban counties. According to the study, two-thirds of all children placed in foster care in non-urban areas were returned to their families or went to live with another

²⁵ Emergency shelter homes provide temporary residential care for children when family members or other adults cannot provide care. The emergency shelter admitted children from infancy through age 17 who were not currently under the influence of substances and did not have a history of serious violence toward others.

relative. In the National Survey of Child and Adolescent Well-Being (NSCAW), conducted in 92 study areas, rates of legal adoption were also found to be lower in rural counties than in urban ones (U.S. Department of Health and Human Services 2001b).²⁶

The NSCAW also found that CPS, foster care, and kinship care practices differ in rural and urban areas. Rural county CPS agencies provided family preservation services to a smaller proportion of their child welfare cases than those in urban counties; across all agencies, however, family preservation services were rare, provided to less than 1 percent of cases (U.S. Department of Health and Human Services 2001b). Kinship placement and specialized foster care were less common in rural areas. When children were placed in kinship foster situations, kinship care families in urban counties were more likely than those in rural counties to receive foster care payments and to be subject to normal foster care licensing requirements.

Child Welfare Services in Rural Areas

The structure and operation of child welfare systems may also vary between rural and urban areas. For example, large jurisdictions may have different CPS staff assigned to screen and investigate reported cases of child maltreatment; in rural and smaller agencies, however, one worker may perform both functions (U.S. Department of Health and Human Services 2004).

The NSCAW found that rural counties were less likely than urban ones to offer neighborhood CPS services or to use satellite offices in addition to the main county CPS office (U.S. Department of Health and Human Services 2001b). The ratio of CPS workers (investigative workers) to direct service workers (non-investigative workers, such as in-home service or foster care workers) was higher in rural counties, as was the ratio of child welfare

²⁶ Seventy-three percent of the study areas, called primary sampling units, were those in which more than half the population lived in a Census Bureau-defined urban area; the remaining 27 percent were designated as rural. See Table I.2 in Volume 2 for a definition of primary sampling units.

supervisors to direct service workers. Subcontracting of services for family reunification, foster care, adoption placement, and foster/adoptive parent recruiting was less common in rural counties than in urban ones. Rural areas were characterized by less racial/ethnic diversity among CPS staff members and their clientele.

Child protective systems have essentially the same responsibilities in rural and urban areas, but the literature on social work practices in rural areas suggests that rural child welfare workers face unique challenges. In addition to geographic barriers and transportation difficulties, these problems may include professional isolation and lack of opportunities for continuing education and training. However, a study examining the organizational environment of child welfare and other social services agencies found that, although rural practitioners were less likely than their urban counterparts to be specialists or to hold social work/professional degrees, rural child welfare workers in fact reported some advantages over their urban counterparts (Landsman 2002). Practitioners in rural and smaller agencies reported remaining in their positions longer, having greater autonomy and decision-making authority, and having more opportunity for professional growth than practitioners in urban and larger agencies. Rural practitioners also reported less-demanding workloads and stronger job satisfaction, more commitment to the organization, intent to stay with the agency, and stronger support in their local communities.

The Use of Child Welfare Services in Rural Areas

There is limited information about access to and use of child welfare services in rural areas. We found two studies reporting the availability of foster care families or homes, and two studies that addressed access: one to child welfare services, the second to foster care training.

The National Survey of Current and Former Foster Parents in nine states found that utilization patterns varied by urbanization. Rural foster homes were more likely to have no foster children in the home at the time of the survey (42 percent) than suburban homes

(39 percent) or urban homes (27 percent) (U.S. Department of Health and Human Services 1993). More recently, a study of administrative data in New Mexico, Oklahoma, and Oregon found that homes in rural or nonmetropolitan counties had higher rates of placement turnover than homes in urban counties; that foster parents caring for at least one adolescent were more likely to be found in rural than urban areas; and that rural foster parents had shorter median lengths of service in foster parenting than urban foster parents (D. Gibbs 2005).

Despite finding a general pattern of fewer services in rural areas, combined with barriers related to social stigma and geographic distance, Van Hook (1994) found that rural children were more likely than urban children to have received counseling and services. And, in a descriptive study of training programs that assist foster and adoptive parents in rural areas of Oregon, Whitmore (1991) found that CPS agencies faced barriers to training foster parents in rural regions. These barriers included lack of enough program staff, the need to travel great distances to meet with families, and shortfalls in funding. To address these barriers, programs combined adoptive and foster applicant parents in training classes, developed foster parent support groups, or expanded other community support groups to address the needs of foster parents.

Effectiveness of Rural Child Welfare Services

Studies of the effectiveness of CPS, foster care, or other child welfare services are rare, and we found only a single study that addressed effectiveness in rural areas. In a nonexperimental study, Cowen (2001) evaluated how the presence of crisis child care in a rural area affected child maltreatment rates. The treatment group for the study included all families who lived in four counties in a rural Midwestern state and who had referred themselves to crisis child care. Rural counties implementing crisis child care programs had a 13 percent decrease in the incidence of child maltreatment following implementation of the crisis care program. During the same period, there was no decline in comparison counties not implementing the program.

D. LIMITATIONS AND GAPS IN RURAL RESEARCH ON THE FOCAL TOPICS

For two main reasons, additional rural research is needed on all three of the focal topics. First, methodological constraints or study shortcomings limit the reliability or generalizability of many studies cited. Some of these limitations, such as small samples, are difficult to avoid when conducting rural research. In addition, however, there are important issues specific to each topic that have not yet been addressed in rural sites or using rural samples. In this section, we summarize these research limitations and gaps.

Limitations of Existing Research

Several shortcomings, some of them endemic to rural research, affect our ability to fully describe current prevalence, services, and service use and effectiveness in rural areas among the three focal topics. Some studies are region- or site-specific, rely on small samples, or lack rigorous research designs. Those studies that rely strictly on administrative data are hampered by lack of consistency in the definitions and processes used to collect the data by agencies in different states or within states, and are not able to examine issues as comprehensively as would be possible if survey data were also utilized. Even studies that include multiple rural areas and relatively large sample sizes often do not permit analysis between rural areas or among rural population subgroups. This is because even large samples may not permit subgroup analysis, or studies may not provide geographic identifiers that can be used to classify different types of rural areas. Some important national studies omit information on rural samples and study sites.

Broad conclusions about rural issues cannot be made without representative data, which are currently unavailable for many human services topics in rural areas. For example, Fletcher's assessment of car ownership patterns among low-income families in rural Iowa drew information from only seven communities (2000). The evaluation by Zavela (1997) of a school-based substance abuse prevention program involved four rural counties in a single state. Whitmore's

descriptive study of foster parent training (1991) and analysis by Ménard and Ruback (2003) of child sexual abuse case processing are both limited to single states.

Small sample sizes may prevent statistically significant conclusions or otherwise further reduce the applicability of rural research within or across sites from which data are drawn. The rural sample in Van Hook's 1994 study of emergency placement shelters included 328 urban cases but only 91 rural cases; a single shelter in one community served all the rural cases. Cowen's study (2001) of crisis child care used a sample of just 127 families in four rural counties from a single state. Because, by definition, rural places have small populations, such small samples are difficult to avoid.

The lack of rigorous study methods makes it difficult to assess the effectiveness of rural services across all focal topics. Although the MFIP evaluation (Miller et al. 2000) and Iowa evaluation (Fraker et al. 2002) did use experimental designs, few other studies of rural work supports programs did so. The Nebraska Employment First evaluation (Meckstroth et al. 2002) and the national evaluation of the WtW grants program (Fraker et al. 2004; Nightingale et al. 2002; Perez-Johnson et al. 2002) did not include control groups.²⁷ Research by Lucas and Nicholson (2002) on the Good News Garage rural transportation program relied on econometric techniques and used small samples to reach conclusions on effectiveness. No experimental evaluations of the WIA One-Stop programs have been undertaken—in rural or urban areas. Zavela's study (1997) of a rural substance abuse prevention program, which had a relatively large sample of 859 students, had no control or comparison group; neither did the studies of

²⁷ The WtW grants program evaluation was designed as a random assignment study, but the experimental design could not be implemented, as a result of sharp TANF caseload declines that resulted in much smaller WtW program samples than anticipated. The Nebraska Employment First Evaluation originally included plans to assess the effects and cost-effectiveness of alternative approaches for moving welfare recipients into gainful employment and longer-term economic self-sufficiency using a random assignment study design. A follow-up survey of single-parent welfare recipients to examine recipients' welfare and employment experiences and challenges and use of services was substituted in its place.

family-based prevention programs described in Scaramella and Keyes (2001). Cowen's evaluation of crisis child care (2001) included comparison counties but did not use a matched comparison design to select those counties.

Administrative data are a major source for information on child welfare, nationally as well as in rural areas. In their study of rural foster care, Wulczyn and Hislop (2002) used data from the Multistate Foster Care Data Archive, which collects foster care placement data from state agency databases. For their analysis of sexual abuse rates, reporting, and processing, Ménard and Ruback (2003) analyzed records from rape crisis centers and CPS agencies throughout the state, along with sentencing records. Administrative data from these CPS agencies are compiled in NCANDS and NIS-3 as well. NIS-3 also collects administrative records from police departments, courts, public health agencies, schools, day care centers, and hospitals. However, no consensus exists on definitions to identify child maltreatment (Thomlison 2003), so it may be difficult to combine, interpret and compare such records across jurisdictions. Perhaps more importantly, administrative data tell only part of the story—in welfare evaluations, for example, they are used to provide accurate information on employment and earnings, but surveys provide richer information on why people take or leave jobs, for example.

Rural areas are not homogeneous, yet the selection of limited rural indicators for data collection or use of simple rural-urban classifications in studies and reports makes it impossible to explore variation among rural areas. Multi-categorical taxonomies that capture rural variation, such as RUCCs or other ad hoc rural classifications, have seen increasing use in the rural health literature and limited use in the literature on rural substance abuse (Donnermeyer and Scheer 2001; Edwards 1997). Only simple metro-nonmetro or rural-urban classifications are found in the rural work supports and child welfare literature, however.

Finally, several large national studies of work supports, substance abuse, and child welfare have included rural sites but fail to report results for rural areas. A study of WIA implementation in eight states included several sites with rural service areas, but it did not comment on rural operations or issues or on rural-urban differences (Barnow and King 2003). A report on job training effectiveness in 16 service delivery areas under WIA's precursor, JTPA, included at least four sites in predominantly rural areas (Orr 1995). Site population densities were reported, but results were not reported by urbanicity. The National Treatment Improvement Evaluation study (U.S. Department of Health and Human Services 1997), a study of substance abuse treatment, was limited to sites with geographically clustered programs meeting minimum-size criteria. Although some of the evaluation sites may have included rural areas within their service regions, the study did not report on variations in implementation or outcomes by geographic area or population density, nor were variables reflecting these factors included in statistical models. The National Study of Child Protective Services Systems and Reform Efforts (Walter R. McDonald & Associates, Inc. 2001) examined CPS policies and practices in 300 U.S. counties but did not compare urban and rural counties or address rural issues, even though it did include rural sites.²⁸

Research Gaps

The review of rural trends and conditions presented in Chapter II and the in-depth discussions of the project's focal topics in this chapter illustrate the lack of adequate rural research on many important human services issues. For some focal topic issues, rural research exists but is hampered by methodological limitations. In these cases, existing studies might have to be replicated or similar studies conducted using data or analytic approaches that avoid or

²⁸ However, these data may be available for researchers to run analyses.

minimize these shortcomings. Re-analyses of existing data (for example, using alternative rural classifications) also may be useful.

However, many important aspects of the focal topics described in this chapter have simply not been studied in rural areas. For example, existing studies do not provide estimates of the prevalence of child maltreatment in rural areas or evidence of the effectiveness of rural substance abuse treatment programs. In this section, we identify these gaps in rural research on work supports for low-income families, substance abuse, and child welfare.

Work Supports for Low-Income Families. Welfare reform has been comparatively well studied in rural areas, but the effects of work supports are not ascertained in many existing studies. Research designs used by the welfare reform evaluations cited in this chapter do not allow the isolation of impacts of employment and training services on rural welfare recipients. Like most of the evaluations of job-focused welfare programs done over several decades, the studies we have included evaluate a package of policy and service changes rather than individual program components. As one example, MFIP incorporates both employment services and work incentives in the form of high disregards for earned income. That study's impact evaluation does not separately assess the effects of income disregards and employment services or other noncash supports.

Additional information on access to work supports in rural areas would be valuable. As noted above, existing research on welfare reform programs offers mixed conclusions regarding rural clients' receipt of employment services. Reviews of the effects of welfare programs in rural areas, such as Whitener's (2003) summary of lessons from rural welfare reform, tend to focus on changes in caseloads and employment impacts, rather than on questions of access and participation.

Little research exists on rural access to and participation in WIA services. While research on the implementation and operation of One-Stop Centers and WIA-related programs is lacking overall, rural areas have been left out of the few studies that do exist. For example, one report on service provision under WIA in eight states excluded rural sites because evidence from earlier studies showed that the tendency to transfer employment support responsibilities to intermediary organizations, a focus of the study, was stronger in urban areas (Macro et al. 2003). Yet the feasibility and success of outsourcing employment and other social services is important in rural communities.

Research on transportation assistance and child care subsidies provides little evidence of the impacts of these work supports in rural areas. Debate over the most effective means of increasing the mobility of low-income rural people—through expansion of public transportation or car ownership programs—could be informed by rigorous evaluations of each of these options. The receipt and effects of child care subsidies in rural areas also merit further examination, to determine how to maximize the benefit of this support for rural low-income parents. For example, although studies such as the one by Walker and Reshke (2003) of rural mothers on welfare offer some qualitative information on why rural low-income parents do not use child care subsidies extensively, systematic investigation of this issue would be beneficial.

Substance Abuse. While several major national studies of substance abuse incidence and prevalence include information on rural areas, there is a lack of research on rural substance abuse treatment and prevention services. For example, while research has documented many differences and disparities in rural treatment resources compared with urban ones, the effects of these differences on access to treatment and treatment effectiveness are lacking. Infrastructure disparities could worsen outcomes for rural communities but, as welfare reform literature suggests, may not necessarily do so. It could be that rural treatment facilities, while not as

geographically convenient as those in rural areas, may have shorter wait times to program entry. Treatment program staff members may be less specialized than their counterparts in urban areas, but they may have smaller caseloads, or they may have clients with greater personal and family supports to aid in their recovery from addiction or dependence.²⁹ Understanding whether even well-tested treatment approaches have greater or lesser impacts in rural areas than in urban ones could lead to improvement in outcomes in both areas. Given differences in rural culture, family structure and size, and school facilities and funding, additional tests of rural substance abuse prevention programs would also be valuable. Experimental studies of treatment and prevention are particularly important for establishing impacts of these services in rural areas.

Studies of substance abuse issues particular to rural areas are also important. For example, it seems plausible that the proliferation of methamphetamine production in rural areas could lead to increases in drug use among rural youth or adults. In addition, the presence of these illegal activities could also affect local crime rates or other aspects of the social, community, and even physical environment. Given the potential scope of such problems, careful rural studies would be worthwhile.

Child Welfare. The overall gaps in rural child welfare research are substantial. There has been little significant effort to develop or support a rural perspective or focus in child welfare research. Little current, reliable national information exists on the incidence or prevalence of child maltreatment in rural areas.

While useful descriptive studies exist, more rigorous and comprehensive studies are needed to better describe the rural child welfare system as well. Research needs include the structure,

²⁹ During the past decade, rural health research has provided a great deal of empirical information about the health care infrastructure of rural areas (see, for example, Larson et al. 2003). Some of this research, including that on rural behavioral health, has included consideration of substance abuse treatment (see, for example, Stamm 2003), but this consideration often has been incidental.

operation, access to, and use of CPS services, foster and kinship care programs, preventive and remedial services and programs, and interventions with child abuse victims and perpetrators. Support is also needed for rigorous assessments of the impacts and effectiveness of child welfare services, programs, and interventions overall, including in rural areas.

Much of the existing literature on rural social work, including in the child welfare arena, has derived from practice experience of study authors, or from anecdotal reports, rather than from systematic empirical research (Landsman 2002). Again, rigorous studies of rural social work practice and organizational factors could provide useful guidelines to rural policymakers, particularly administrators.

Subgroups. In addition to the gaps specific to each of the focal topics described above, research on all three topics fails to include or permit the analysis of conditions, services, or impacts among rural subgroups. For example, the prevalence of substance use, abuse, and dependence on drugs and alcohol may differ among rural racial/ethnic groups and migrant groups. As described earlier, however, information on substance abuse prevalence for racial/ethnic or cultural subgroups in rural areas is limited and outdated. In addition, immigrant groups represent a growing proportion of many rural communities, so specialized studies of their needs may help policymakers and programs serve these new and growing community groups.

This dearth of subgroup information characterizes not only the substance abuse literature, but the literatures on rural work supports and child welfare as well. Often, the lack of information is simply a function of small sample sizes that do not permit subgroup analysis. For example, since the NIS-3 includes data from just four rural counties, subgroup analysis within these four counties would not be meaningful. Furthermore, subgroup analysis may be limited in rural studies by concerns about confidentiality. Studies may have to be specially designed or may need to include many rural sites or be nationwide, to support estimates of incidence and

prevalence of child maltreatment or to estimate program impacts among racial/ethnic groups in rural areas. Because rural areas are becoming more diverse, such studies will likely become more important.

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