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ABSTRACT

The five states of the Southwest--Arkansas, Louisiana, New Mexico, Oklahoma, and Texas--represent great diversity in economies, politics, educational settings, and resources. Despite this diversity, research indicates that rural small schools are concerned about the same issues as education as a whole. The purpose of this report is to present the common needs and conditions of rural education in the Southwest region, to describe the specific condition of each state's rural schools, economics, legislative mandates, demographics, educational indicators, and policies, and to serve as a catalyst for examining the challenges facing rural educators and the communities they serve. The report presents a comprehensive picture of the condition of rural schools in the region and of unique conditions of schools within each state. It contains three major sections: a regional overview, a description of Southwestern rural and small schools, and individual state profiles for the five states. The regional overview examines demographic and economic trends, legislative mandates, public education funding, rural education conditions and needs, and strategies for addressing regional needs, including economic development. The section on the description of rural small schools includes demographic information. Each state profile includes information on the economics affecting rural schools and discusses consolidation, the uses of technology, and education service centers. This document includes 87 references, 20 demographic tables, and 8 demographic maps. (TES)

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CONDITIONS AND NEEDS OF RURAL EDUCATION IN THE SOUTHWEST REGION

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The report represents a collaborative approach by the group director, Dr. Marianne Vaughan; project lead person, Dr. Gayla Lawson; project technical assistance associate, Mrs. Maria Torres; SEDL senior evaluator, Wes Hoover; and project consultant Martha Boethel. Don MacKenzie contributed to the initial data collection. Debbie Neilan, administrative assistant, directed the logistics of document production.

The valuable contributions from those involved in the design, content and production of the report represent our effort to capture and describe rural education in the vast, diverse and challenging Southwest Region.

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I. INTRODUCTION

A. Background and Purpose

The five states in the Southwest region represent great diversity in landscape and climate, in people and cultures, in political organizations, in economies, and in educational settings and resources. The region includes some of the nation's most densely populated metropolitan areas and some of the most rural areas. It has some of the nations richest and poorest counties and schools and some of the nation's highest, and lowest, percentages of public school enrollments among Black, Hispanic and American Indian students.

Texas, the second largest and third most populous state in the nation, compromises almost half of the Southwest region's land area and about 60% of its total population and school enrollment. Louisiana is the smallest state in the region yet, it is also the most densely populated. New Mexico, with more than a fifth of the region's land area, accounts for only five percent of the region's population and school enrollment. Arkansas is the most rural state in the region with almost half of its residents living in rural areas. Oklahoma is second in the percentage of rural residents, at 33%.

Public education in the Southwest region is characterized by diversity in the size and number of school districts, in funding sources and arrangements, in educational resources, in mandated educational legislation and reforms, and in the populations served. The region's rural small school districts are also tremendously diverse; in size, structure, composition and community context.

Information gathered from the literature on rural education, from the needs-assessment activities within the region, and from the policy-makers and educators in the five state region suggest that administrators, teachers and parents in rural small schools are concerned about the same issues confronting public education as a whole. These issues include: the financing of quality education and programs; improving student performance in basic skills and thinking and reasoning; providing services to at-risk students; reducing the numbers of dropouts; developing programs for early childhood education; and preparing students to successfully meet the challenges and skills needed for the future.

The purpose of this report is to present the needs and conditions of rural education in the Southwest region. It is designed to present information that describes the present condition of the region's rural schools, economies, legislative mandates, demographics, educational indicators and policies. It is also designed to serve as a catalyst to examine the challenges that lie ahead for rural educators and the rural communities they serve.

B. Approach

The report includes three major sections: a regional overview; a description of rural and small schools in the Southwest region; and individual state profiles for Arkansas, Louisiana, Oklahoma, New Mexico and Texas. It presents a comprehensive picture of the condition of rural schools in the region and the unique conditions of rural schools within each state.

The regional overview addresses four major topics: an overview including demographic and economic trends; public education in the Southwest including funding sources and legislative mandates; conditions and needs in the region's rural small schools; and strategies for addressing regional needs including economic development and rural revitalization. The section on the description of rural, small schools includes the data-base definition of rural schools and rural districts and the distribution of rural schools throughout the region.

The individual state profiles include information related to the rural and economic context of the rural schools in each state. The policy context examines recent and relevant education legislation as well as specific mandates and programs implemented in each state. The topics of consolidation, the uses of technology and the roles of education service centers are included in each profile and relate specifically to rural educators. Data and site specific information, unique to each state's rural small schools are also presented. (A companion document containing information related to rural service providers, collaborative rural programs and promising rural practices for each state is also available from SEDL.)

It is hoped that this report will contribute to the data base and knowledge of educators and policy-makers interested in improving the education for students in rural communities and schools. The challenges facing the rural community are intertwined with

those facing the rural school system. Responding to those challenges requires new and innovative approaches, accurate and detailed information, short and long-term effective leadership, and cooperative arrangements with community members and service providers.

II. REGIONAL OVERVIEW

A. A Demographic Overview of the Rural Southwest

A region of contrasts. The five states of the Southwest region represent almost 20% of the land mass of the lower 48 United States. Within this territory are great contrasts in landscape and climate, in people and cultures, in political organization and attitudes, and in educational settings and resources. The region includes:

- o topography ranging from deserts to semitropical coastlands, forests, swamps, and upland plains,
- o some of the nation's most intensely metropolitan, and most rural, areas,
- o areas with some of the lowest, and highest, unemployment rates in the United States,
- o some of the nation's richest, and poorest, counties and schools,
- o some of the country's highest, and lowest, percentages of public school enrollments among Black, Hispanic, and American Indian students, and
- o some of the country's highest, and lowest, percentages of public school students classified as limited-English proficient.

Texas, the second largest and third most populous state in the U.S., comprises almost half the Southwest region's land area and about 60% of its total population and public school enrollment. In contrast, New Mexico, with more than a fifth of the region's land area, accounts for only about five percent of its population and school enrollment. Louisiana, the region's smallest state, is also its most densely populated; Louisiana has more than nine times as many people per square mile than New Mexico. Perhaps surprisingly, Arkansas rather than New Mexico is the most rural state in the region; more than 48% of Arkansas residents live in rural areas. Oklahoma is second in the percentage of rural residents, at 33%. Texas is by far the most metropolitan of the five states; by 1986, 83% of all Texans were living in one of the state's 28 metropolitan areas.

Regional demographic trends. The region's population growth generally exceeds the national average. (See **Table 1.**) From the turn of the century through 1986, while the

nation's population tripled, New Mexico grew in population by more than 650%. During the same period the population of Texas grew by 447% and Oklahoma by 318%. Louisiana, with an increase of 188%, and Arkansas, with an increase of only 81%, are the only states that grew less than the national rate during this period.

During the past two decades in particular, patterns of population change in the Southwest have diverged from those for the nation as a whole. Unlike trends in the Northeast and Midwest, the 1970s were a decade of intensive urban growth in the Southwest. The energy boom drew job-seekers to cities in Louisiana, New Mexico, Oklahoma, and Texas; several New Mexico cities also attracted numbers of Eastern urbanites seeking a higher quality of life. However, other than the development of the Ozarks and other parts of Arkansas and New Mexico as retirement havens, the Southwest saw few signs of the "rural renaissance" that occurred in other regions through the 1970s.

Growth in all five states has slowed substantially during the 1980s. Texas and New Mexico have continued to experience the most rapid growth rates. According to a recent report by the Texas Department of Commerce, by the year 2025 Texas will reach a population of almost 30 million people, almost half of whom will be Hispanic or Black. Louisiana and Oklahoma, in contrast, both *lost* population between 1985 and 1988.

Yet the Southwest states do not show the general pattern of rural population decline that has occurred in other regions during this decade. (See Table 2.) Only 10 of the region's 413 nonmetropolitan counties lost more than 10% of their population between 1980 and 1986. The only large areas of rural population decline have been in the Texas Panhandle and adjacent parts of Southwest Oklahoma, and along the Mississippi River in eastern Arkansas and Louisiana. A number of counties adjacent to metropolitan areas in the five states grew rapidly, but the large majority of rural areas in the region remained relatively stable in population between 1980 and 1986.

Minority populations. The five states have significant minority populations. (See Table 3.) Arkansas, Louisiana, and Texas have relatively high percentages of Black residents. Louisiana is third nationally in the percentage of Black population; in Arkansas, six of the seven counties in the Mississippi River valley, along the state's eastern border, have Black populations greater than 40% of the total. New Mexico and Texas have large proportions of Hispanic residents; New Mexico of all the United States has proportionally

the largest population of descendants of Hispanic settlers who had emigrated long before the territory's incorporation into the United States. Oklahoma ranks second and New Mexico fourth nationally in the number of American Indian residents. New Mexico's American Indian population includes Apache, Navajo, Pueblo, and Zuni tribes; Oklahoma tribes include Cherokee, Comanche, Kiowa-Apache, Pawnee, and others.

As is the trend in other parts of the country, minority populations in the region are increasing at a rate faster than that of the population as a whole. The Black population in Louisiana, for example, increased by 8.8% from 1980 to 1985, compared to an overall population growth of 6.5%; even in Louisiana's rural areas, there was a 6.6% increase in Black population.

The most significant population increases, however, are among persons of non-English language backgrounds -- Hispanics and Asians. Hispanics in Texas and New Mexico increased by approximately 60% between 1970 and 1980, and such growth is expected to continue well into the next century. By the year 2025, Hispanics are projected to total almost 36% of Texas' population. In the 1980 census, Texas ranked fifth nationally in Asian-American population; since that date the Asian population in the state has mushroomed, with a 30% increase in Houston alone. The increases in Hispanic and Asian populations are due mainly to the huge influx of refugees, both legal and illegal, from Central and South America and Indochina. Mexican Americans also have the highest birth rates among the region's major population groups.

Economic conditions and trends. Arkansas is the poorest state in the region, although Texas has the greatest contrasts in wealth. The nation's richest county, with a per capita income of more than $34,000, is located in Texas. So is the nation's poorest, with a per capita income of only $3,312. Families throughout the region earn less than the national average, and a higher than average percentage live below the poverty line. As in other parts of the nation, per capita income is lower and poverty rates are higher among minority populations, female-headed households, and rural residents. (See Tables 4 - 7.)

State economies within the Southwest region still depend heavily on industries -- agriculture, mining (energy extraction), and manufacturing -- that are declining in the U.S.'s increasingly service-oriented economy. In Arkansas, for example, manufacturing

continues to be the largest industry despite a steady decline between 1980 and 1987. In Louisiana, mining contributes the largest share of the gross state product, although that share decreased by almost 10% from 1982 to 1986, (See Appendix B).

Such declines -- and particularly the precipitous drop in energy prices during the mid-1980s -- have contributed to substantial economic difficulties within the region. Unemployment rates have increased, with the highest percentages occurring among minority and rural populations. Bankruptcies and foreclosures have soared in boom-inflated areas. Shrinking state and local government revenues have led to budget crises in almost every state.

Reflecting the national trend, the service sector has claimed an increasing share of the region's employment and gross state product during this decade. Service sector employment in Oklahoma, for example, increased by almost 180% between 1980 and 1987. Services grew to become Arkansas' third largest and Louisiana's second largest employer by 1988. However, even this sector has been affected by the region's recession. The service industry in New Mexico increased by 55% between 1977 and 1987, but only by three percent from 1986 to 1987; other states have experienced similar slowdowns.

Rural areas have been affected most intensely by the region's economic woes. Overall, rural economies within the Southwest states are quite diversified. However, specific areas tend to be dependent on a single industry and, as in other regions, to be based on the very industries -- agriculture, mining, and manufacturing -- that are experiencing the greatest declines. Nearly a third of nonmetropolitan counties in the Southwest owe a major part of their economic well-being to agricultural income; almost a fifth are heavily dependent on energy extraction, (See Appendix B).

The one economic sector that is growing significantly in rural areas is income drawn from the in-migration of retirees. More than a third of the region's nonmetropolitan counties are classified as "retirement counties," deriving a major portion of their income from retirees. While retirement communities represent one of the more promising economic development strategies for rural areas, the strategy also has its drawbacks. Retirees -- who no longer have children in school and no longer need jobs -- tend not to

support increased public expenditures for education or economic development, (See Appendix B).

B. Public Education in the Southwest Region

Demographic trends. The region's public schools enroll more than five million students, kindergarten through high school; 60% of these are in Texas schools. Public school enrollments in the five states have fluctuated since the mid-1970s (see Table 8). Two states, Louisiana and Oklahoma, have consistently lost enrollment since 1975. New Mexico's enrollments continue to increase at a modest rate, but only Texas has experienced significant increases. Student ethnicity in the region's public schools (see Table 9) generally parallels that of the population as a whole, with the proportion of minority student enrollments slightly larger than that of the minority population in each state.

One disturbing statistic is that the number of high school graduates declined between 1975 and 1985, even in the two states whose overall student population increased (see Table 10). In Louisiana, where student enrollment declined by seven percent, the number of high school graduates dropped by almost 17%. New Mexico, despite a one percent increase in enrollment, experienced a 15% drop in high school graduates.

School district arrangements. The states vary substantially in the size and number of school districts. Louisiana has the smallest number of local education agencies (LEAs), with 66. However, in Louisiana, LEAs are organized to correspond to the state's county, or parish, boundaries; LEAs, then, tend to govern a larger-than-average number of schools in more than a single community. New Mexico's 88 school districts, in contrast, still include a substantial percentage of small, community-based schools. Arkansas, Oklahoma, and Texas all have proportionately large numbers of school districts, generally organized along community lines, though all the states also include a number of consolidated school districts.

Consolidation and reorganization, in fact, have changed the educational makeup of most of the states over the last several decades. The number of school districts in

Oklahoma, for example, decreased from 4,450 in 1946 to 613 in 1987; New Mexico school districts dropped from 463 in 1950 to 88 by 1986. However, the trend toward consolidation has slowed almost to a standstill in all the states except Arkansas, where reform legislation prescribes reorganization for districts unable to meet state standards.

Funding sources and arrangements. The states also vary significantly in the sources of funding for local school districts. Federal funds make up a relatively small proportion of the total -- though the percentage of federal funds for all states except Texas is higher than the national average of 6.7 percent. Where the proportions vary is in the percentage of state and local funds for local school districts. In Oklahoma, for example, state monies account for more than 80% of school funds, while in Texas local funding makes up just over half of the total.

Several states recently have made changes in funding allocations for local school programs. Texas, in particular, initiated a new school finance system as part of a massive legislative reform effort in 1984. The new system provided basic allotments per student, plus extra funds for special programs and regional variations in costs. Though the new system was intended to help equalize funding among Texas school districts, which vary tremendously in wealth and resources, 67 of the state's poorest districts brought suit, arguing that the new system still discriminates against poorer districts. On October 2, 1989, the Texas Supreme Court ruled the state's school finance system unconstitutional. Governor Bill Clements plans to appoint a task force that will recommend alternative systems and to call a special legislative session in the spring of 1990.

Educational resources. All five states have failed to keep pace with the national average in both per-pupil expenditures and teacher salaries, in spite of substantial increases over the past 15 years (see Tables 11-12). Arkansas, for example, tripled its average per-pupil expenditure between 1974 and 1985 -- an increase of more than $1,700 per pupil -- yet still fell more than $1,000 short of the national average. Teacher salaries doubled in each of the five states between 1975 and 1987. Yet only Texas increased teacher salaries by more than 10% in constant dollars between 1969 and 1986; Louisiana teachers lost three percent in constant dollars during the same period.

Pupil-teacher ratios within the region are generally on a par with those elsewhere (see Table 13). Oklahoma, at 16.9, had the lowest pupil-teacher ratio; New Mexico, at 19,

had the highest. Pupil-teacher ratios tend to be lower in the elementary grades and in rural schools.

Regional reforms. Like the rest of the nation, states in the Southwest have initiated a range of educational reforms since the early 1980s, from strengthened accreditation standards to career ladders to "no-pass, no-play" requirements. Constituencies throughout the educational system have welcomed school improvement efforts and incentives; however, many reform mandates have required substantial new expenditures at a time when school districts are struggling to maintain their existing budgets.

Reform mandates within the region focus increasingly on school improvement as it relates to the attributes of effective schools, and link incentives -- including both funding and autonomy -- to improvements in student achievement. Texas, for example, has initiated new, performance-based accreditation standards that are grounded specifically in school effectiveness correlates. New Mexico has established a host of new requirements for school districts, including curricular mandates for basic skills instruction. Arkansas requires remediation programs for districts whose students perform poorly on standardized tests, and mandates consolidation for districts unable to meet a variety of new standards. The Arkansas General Assembly also authorized development of a statewide effective schools project, identifying seven characteristics of effective schools; participating schools are to provide models of school improvement processes and outcomes.

C. Conditions and Needs in the Region's Rural, Small Schools

Still a rural region. In spite of its recent population growth, the Southwest region remains strongly rural in character. Small, rural schools still constitute a majority of all districts, and all school buildings, in most of the region's five states -- while enrolling less (sometimes much less) than a third of the total student population. Even in Texas, almost 50% of schools are rural and small; in 1986, the state still claimed at least four one-room schoolhouses. Arkansas has the greatest percentage of rural, small districts, at 81%.

Characteristics of rural, small schools. Available data suggest that rural, small districts in the Southwest region reflect the general characteristics of rural schools nationwide. As a whole, rural, small schools in the region tend to:

- o be poorer than other districts, with lower average per-capita income, higher poverty levels, and a narrower tax base,
- o offer lower salaries for both teachers and administrators than other districts,
- o have lower percentages of minority students and staff, including both instructional and administrative staff, and lower percentages of women administrators, than other districts, and
- o have lower dropout rates and pupil-teacher ratios than larger districts.

Very limited -- and mixed -- information is available concerning student achievement levels in the region's rural, small schools. A report on the 1985-86 Texas Educational Assessment of Minimum Skills (TEAMS) indicates that districts with enrollments of fewer than 1600 students consistently scored higher than districts with enrollments of more than 5,000 students. A similar New Mexico report dealing with the 1986-87 Comprehensive Test of Basic Skills (CTBS), however, yields somewhat different results. Small districts scored, on average, higher than districts enrolling 5000 - 30,000 students, but lower than districts with more than 30,000. The average scores for rural, small school districts were slightly below statewide averages in some skills areas and grade levels, and slightly above in others.

The region's rural, small school districts are also tremendously diverse -- in size, structure, composition, and community context. Texas, for example, includes school districts with enrollments of four and nine students as well as a substantial number enrolling a thousand or more students. Though there tend to be fewer minority students in rural, small schools, some districts in Texas and New Mexico have student populations that are almost 100% Hispanic; rural districts in Oklahoma and New Mexico have high percentages of American Indian students. Communities range from poor agricultural villages in the Louisiana bayous to wealthy communities in the Texas Panhandle whose districts boast per-pupil expenditures over $10,000.

Rural problems and needs. Because of their diversity, it is extremely difficult to characterize the Southwest's rural, small schools or to identify specific problems and needs that differ significantly from those of their metropolitan counterparts. SEDL's need-

sensing activities, as well as other needs assessments described in the literature on rural education, indicate that teachers and administrators in rural, small schools are concerned about the same basic issues that confront public education as a whole: financing quality educational programs; improving student performance, especially in basic skills areas and in thinking and reasoning; preventing dropouts and serving at-risk students; providing effective staff development; and assessing accreditation requirements and other state mandates. What differentiates the needs of rural, small schools is not a particular educational content, but rather a set of environmental factors that makes school improvement much more difficult in rural schools:

- The sheer numbers of rural schools, the relative isolation of many of them, and their small staffs and enrollments, make them costly to serve and thus a low priority for many external service providers.

- The small size of rural schools and the communities they serve intensifies the impact of any change in the environment, whether demographic, economic, or political. A gain or loss of 100 students, for example, can create major problems for a district enrolling only 1,000 students. Economic stress in areas with a narrow tax base and an aging population can be devastating. Studies have noted, in fact, that almost *everything* -- including strengths and weaknesses of staff as well as educational problems -- becomes "magnified" in small, rural schools (Barker, 1985, p. 9; Monk & Haller, 1986; Sher, 1983).

- The conservative nature of most rural communities can make educational change -- and many forms of external assistance -- an even more delicate and difficult process than it is in other school systems. As McLaughlin (1982) has noted, "The success of rural school improvement programs depends on how well they fit community needs as well as local educational needs." (p. 283) Herriott (1980) also describes an ill-defined "zone of tolerance" within which communities allow schools to function freely. (p. 13) His studies as well as others suggest that this zone is substantially narrower in small, rural communities than in larger urban or suburban areas, where both residents and school personnel tend to be more heterogeneous.

Perhaps the biggest threat to the health of rural education in the Southwest region is the economic malaise plaguing so many of the region's rural communities. As an OERI report on rural education and rural communities (Brown, 1989) concludes, "Economic stress is the issue of the '80s." (p. 20) The recent economic downturn has fed into a

discouraging cycle of decline: Local school and other public funds shrink along with property values. As the community becomes less able to maintain its infrastructure, it becomes less attractive to new economic enterprise. The lack of jobs, particularly in growth industries, discourages young people from settling in the community after high school or college; the community's human capital continues to shrink as its working-age residents move elsewhere. Local citizens become even more reluctant to support tax increases for education as they see high school diplomas become a ticket out of town. And so the community's economic and educational problems perpetuate themselves.

D. Strategies for Addressing Regional Needs

The potential for rural revitalization. In spite of the gloomy picture described above, there are sources of optimism concerning life and education in the rural Southwest. One source is the increasing concern for rural areas among the states, reflecting a recognition that rural communities have value and need to be sustained. Not surprisingly, perhaps, the region's most rural state is taking the lead in such efforts; in Arkansas, Governor Bill Clinton has established a Rural Development Action Program to assist rural counties in shaping their own futures. A number of other cooperative education and economic efforts are also underway in all five states.

Some experts even characterize current economic trends as a welcome change in the rural landscape. Swanson (1988), in an article in the *Journal of Rural and Small Schools*, argues that "the post-industrial era is a blessing for rural areas. It is now possible to maintain the integrity of rural communities while providing a comprehensive up-to-date curriculum. The need for school consolidation is virtually eliminated." (p. 6) It is true that the very structural changes that have eroded rural industries also make it less necessary for production to be concentrated in large units. The technical means exist for many rural areas to participate in the high industrial growth sectors of service, technology, and information development -- and for rural schools to access an array of instructional resources through distance learning technologies.

What is not yet in place are the institutional, material, and human resources necessary to transform rural economies and rural schools. As Knutson (1989) states:

> We can divide the problem into three parts. One is a human capacity component -- health and education. A second is an infrastructure

component -- roads, bridges, water treatment systems, school buildings, telecommunications systems. And third, there is a financing... component -- how do you get the money to do these things? How do we finance it at the local, state, federal levels? (p. 20)

Solutions to the problem of rural revitalization, however, *cannot* be divided, cannot be piecemeal. Education, in particular, cannot be considered in isolation from economic development. As Knutson and others have argued, what is needed is "an omnibus approach." (p. 22)

The school's role in economic development. Most experts agree that the hope for economic redevelopment in rural areas lies in shifting their dependence "from production of low-value, high-volume products like grain and simple manufactured goods to high-tech manufacturing and services." (Hornik, 1989, p. 68) Rural schools are a key factor in accomplishing such a shift, for several reasons.

First, quality of life considerations -- including the quality of public educational systems and resources -- have become increasingly important in companies' site selections for new enterprises. Rural schools must be attractive to companies that will be relocating key management staff and their families.

The local availability of human capital is another key element in a business's site selection. Rural schools must increase their capacity to provide students with skills and knowledge appropriate to the contemporary work place. According to Parnes (1986), "This means that schools should give increased attention to developing communication and computational skills, a basic understanding of the scientific method and of the elementary principles of natural and social science, and creative problem-solving ability in all students" (p. viii). Some rural schools are even teaching their students entrepreneurship via a variety of instructional strategies, including the establishment of student-run enterprises. Again, however, for such strategies to work, student enterprises must "fit into a niche in the community," complementing rather than competing with existing businesses; and the schools must work closely with the community at large in setting up such programs (Wall, et al., 1989, p. 16).

Both students and staff in rural schools are also perceived by many experts as essential community resources who can offer leadership, skills, and person-power in

carrying out local development efforts. Even the school plant itself represents a major investment often under-utilized in rural settings outside the traditional hours of 7:30 a.m. to 4:30 p.m., except for athletic events. An important part of the school's role, according to Reid (1989), is "helping rural communities understand and adapt to the changing world." (p. 15)

Many communities are beginning to use the school to initiate and support innovations similar to business incubators. *A Portfolio of Community College Initiatives in Rural Economic Development* describes two such projects in the Southwest, an advanced manufacturing demonstration project in rural Oklahoma and a model procurement program in Texas. These types of innovative support services are generally funded with federal or state funds that are difficult for inexperienced proposal writers to secure. Educators in rural communities are frequently experienced with proposal writing and possibly represent an untapped capacity for future economic pursuits, thereby augmenting possible future returns.

Technology. Depending on the perspective and the audience, technology is referred to as either the "godsend" or the "nightmare" of rural education. In this case, definition of the "beauty" or value of technology to rural education is not only in the "eye of the beholder," but in the understanding of the complex potential available. On the one side, technology holds great promise to transcend long distances, connecting students, teachers and experts for a variety of purposes. On the other side, the costs and logistics of hardware and software, the expertise needed for effective and efficient use, and the actual procurement and servicing can be overwhelmingly difficult problems for the small administrative units of a rural district. The variety of technologies that exist vary tremendously in costs as well as benefits or effects.

The correlation between technology use and educational improvement (as measured by student achievement) is still unknown. Enterprising statisticians can find numbers to support whatever side of the answer is desired, simply because research is not yet definitive, especially in the rural sector. However, reports to SEDL from rural teachers and administrators suggest that technology -- properly used -- can be, and is, extremely beneficial to rural schools.

In answer to the triple problems of isolation, economies of scale, and the need for specialized courses, distance learning technologies do offer promising solutions. A number of schools in the Southwest region have designed efforts to use distance learning technologies to improve achievement, offer additional courses, enhance student self-esteem, to offer staff development and promote community involvement. These programs vary from simple computer-assisted curriculum and instruction to interactive instruction via satellite, telephone, or networked computers. Some approaches integrate other technologies such as fiber optics, microwave, cable, slow scan TV, or Instructional Television Fixed Service (ITFS). Combinations of these technologies are as varied as the needs they are designed to fill.

At least four large networks in the Southwest provide satellite broadcasting of educational television offerings to students, educators, and others: the Midlands Consortium of the Arts and Sciences Extension at Oklahoma State University; TI-IN United Star Network in Texas; Southern Educational Resources Consortium Star Schools (SERC) in Arkansas, Louisiana, and Texas; and Instructional Television Fixed Service in Texas. Although Texas seems to predominate in terms of the location of these networks, the services are delivered multi-state with all the SEDL states able to receive a broad spectrum of services. The networks extend instructional opportunities to small numbers of students and educators at individual sites that would not be justifiable nor affordable otherwise. The extent of use by rural schools and the production of services for them varies with the networks; however, some are designed especially for this audience.

Less expensive uses of technology are frequently taken for granted. Use of video for instructional and enrichment activities, staff development, and even school board awareness/training is an option that is increasingly supported by state and intermediate agencies to extend their service delivery to small or remote locations. Another lower cost use of technology is audio-graphic teleconferencing. Several programs are operating in the region, (designed and operated from teacher-training components in universities -- Texas A & I, Texas Tech University, Louisiana State University, and others).

With any innovation, implementation problems take time and effort to solve. The costs of technology are not simple to compute. There are initial equipment costs and annual subscription or programming fees that might be simple to calculate. Less obvious

costs that are difficult to forecast involve utilities, scheduling changes, space, and personnel factors such as the use of instructional facilitators. The key to the benefits of technology may very well be the quality of training and support of the educators using it, rather than the quality of the technology itself. The on-going cost of staff training is frequently a major deterrent in initiating a technological innovation. Electric and agricultural cooperatives in three of the five Southwest states have assisted in the financial support of technology by completely funding acquisition of satellite dishes and other equipment for educational agencies in their areas.

Cooperatives and resource-sharing. The sharing of resources through collaborative efforts to accomplish specific goals is an increasingly popular strategy among rural school districts. Cooperative efforts offer alternatives to consolidation, allowing separate districts to maintain identity and autonomy yet extend their limited resources. As previously mentioned, various technology-related cooperatives offer extended or enriched course work and staff development programs. There are also other examples of sharing resources to provide services efficiently and effectively in the Southwest region.

Intermediate educational units have been operating in Texas for some twenty years, offering rural schools a diverse menu of services from special education assistance and extensive inservice training to detailed, computerized administrative functions such as payroll processing. Arkansas has had cooperative units offering similar services for the last four years; and Louisiana has new agencies created by recent legislation that are still in the formative stages. These entities also offer opportunities for rural schools to pool resources through them as fiscal agents for some collaborative efforts such as special and gifted education. The combined monies that are generally insignificant individual district amounts when combined become sufficient to deliver services in a cooperative mode.

Frequently geographically contiguous districts collaborate to deliver specialized services in order to share the expertise that one district alone could not afford. Examples of such collaboration vary from a rural Louisiana mobile van that travels to districts to assist with assessment of handicapped students to an Oklahoma program in which gifted

and talented students from five rural districts are bused to a central location for enriched curriculum and instruction.

Institutions of higher education also contribute to cooperative arrangements that are providing extended services to rural schools. All of the five states have at least one such collaborative effort. Colleges and universities work in cooperative efforts for research, administrative and teacher inservice training, additional certification, and extended curriculum and instruction programs. In most cases, their work does not focus specifically on rural schools, except in a limited number of examples like the Rural Education Center at New Mexico State University at Las Cruces and the Northeast Louisiana University Center for Rural and Small Schools.

Leadership: strategies for managing change. Effective leadership is critical in managing the challenges and changes in the rural setting. The roles and functions of the present-day rural school leader are complex, innovative and time consuming. In addition to the inherent management responsibilities, the rural superintendent in very small districts may also be the school principal, teacher, textbook custodian, school bus driver, and the grounds keeper. Because of this direct involvement with every phase of the school environment, rural school administration generally has an enormous influence over the school as most decisions are being made by the same person (Lawson, 1989).

It is estimated that superintendents now work 50 to 60 hours per week. They are also more involved with community groups, parent activities and other organizations outside the school system, spending time preparing speeches and making appearances at public functions. Moreover, current problems and issues are more complex, multifaceted and interconnected, demanding a new set of skills and competencies (Hord, 1989).

The management of change involves the understanding of the nature of the new idea, approach or program as well as the contextual variables in the implementation of the change. Kane (1989), suggests four general strategies for improving rural schools:

- Clearly define the nature of the improvement -- including anticipated outcomes, and the roles and responsibilities of service providers and local school personnel;
- Thoroughly assess the conditions that are likely to hinder the improvement effort and develop plans to cope with them;

- o Identify and address problems rather than their symptoms and accurately define difficulties in sustaining the effectiveness of improvement efforts; and
- o select strategies that either directly or indirectly enlarge a local school's capacity to improve and leverage available resources for improvement. (page 60)

Rural education leaders must continually search for the approaches and practices that are relevant to their community. Challenges for rural leaders involves the consideration of alternative ways and approaches, the redefining of roles and functions while adhering to the accepted norms and values of the community. and an acute sense of the educational needs in their rural communities (ERIC Cress Digest, 1989).

III. Rural and Small Schools in the Southwest Region

The literature on rural, small schools is filled with discussions about how, precisely, to define "rural" and "small." No consistent standards have been developed or generally agreed upon. Thus, the first major task that must be addressed in any regional profile of rural education is to establish definitions appropriate to that region. In defining "rural" and "small" in the Southwest region, SEDL has focused on the following factors:

- o enrollment and community size,
- o population density
- o proximity to metropolitan areas, and
- o the appropriateness of schools *and* districts as the unit of analysis.

In this section, SEDL's approach to defining rural and small with respect to both schools and districts is presented, as are the results of applying that approach to the schools and districts of the five Southwest states. The section begins with a definition of rurality, followed by a treatment of school and district size.

A. Defining Rural Schools and Districts

In order to develop a data-based definition of rural schools and rural districts, SEDL conducted analyses on the agency universe contained in the 1987-88 Common Core of Data (CCD) compiled by the Office of Educational Research and Improvement's (OERI) National Center for Education Statistics (NCES). For each school contained in the database, both school and associated district classifications were analyzed.

For the 1987-88 tape release, CCD was able to match the postal address of every school in the nation with an equivalent Census locality, thus allowing each individual school location to be sorted into one of seven categories:

Large Central City	Central city of a metropolitan area with (a) a population of 400,000 or more, or (b) a population density of 6,000 or more persons per square mile

Mid-size Central City	Central city of a Standard Metropolitan Statistical Area (SMSA) with (a) less than 400,000 population or (b) density of less than 6,000 per square mile
Urban Fringe of a Large City	Place within the SMSA of a large central city that is defined as urban by the Census
Urban Fringe of a Mid-size City	Place within the SMSA of a mid-size central city that is defined as urban by the Census
Large Town	Town not within an SMSA but with a population of 25,000 or more
Small Town	Town not within an SMSA with a population between 2,500 and 25,000
Rural	Place with a population under 2,500 and not within an SMSA

It should be noted that using a postal address as an indicator of service location may lead to occasional classification errors, since some schools may be on the rural postal routes of larger cities, thereby leading to an underestimate of the number of rural schools. Nonetheless, SEDL's efforts to identify discrepant cases suggest that no more than 2% of schools would need to be reclassified; the degree of underestimation, then, would not significantly alter the conclusions drawn from the analyses of these data.

Table 14 shows, for each state in the region, the distribution of schools across the seven CCD categories based on postal address. Rural schools in this classification are 52% of the total in Arkansas, 45% in Oklahoma, 31% in New Mexico, 26% in Louisiana, and 24% in Texas. Rural and small town schools combined include 81% of all Arkansas schools, 72% for Oklahoma, 61% for New Mexico, 55% for Louisiana, and 48% for Texas.

In sum, when looking at the distribution of rural schools in the region (defined as schools located in places with a population under 2,500) the proportions of rural schools across the region's states vary considerably, a variability that reaches a ratio of 2:1 when contrasting the extremes of Arkansas and Texas. Adding small town schools (defined as schools located in towns that have populations between 2,500 and 25,000 and that are

not included in any SMSA) adds a relatively constant percentage of schools (about 28%) to each state, thus increasing state percentages without changing the relative rankings among states.

As mentioned above, the 1987-88 CCD tape also contained for each school a classification of the associated school district. The classification scheme employed by CCD was as follows:

Metropolitan Area in a Central City	A district serving the central city of a metropolitan area
Metropolitan Area not in a Central City	A district serving a metropolitan area, but not its central city
Nonmetropolitan Area	A district not serving a metropolitan area

To derive a more precise definition of rural districts, SEDL constructed a coding scheme for school districts based on the two CCD classification schemes (the seven category school coding and the three category district coding). Crossing the two CCD schemes, the six categories included in SEDL's coding were as follows:

Rural Nonmetropolitan District	A district that (a) consists of 50% or more rural schools and (b) does not serve a metropolitan area
Rural District Adjacent a Metropolitan Area	A district that (a) consists of more than 50% rural schools and (b) serves a metropolitan area (but not its central city)
Small Town Nonmetropolitan District	A district that (a) consists of more than 40% small town schools and (b) does not serve a metropolitan area
Small Town District Adjacent to a Metropolitan Area	A district that (a) consists of more than 50% small town schools and (b) serves a metropolitan area
Nonmetropolitan District	A district not meeting the criteria above, but that (a) consists of more than 50% large town schools or does not serve the central city of a metropolitan area, and (b) consists of 50% or less central city schools

Urban District	A district not meeting the criteria above, but that (a) consists of more than 50% central city schools or (b) serves the central city of a metropolitan area

Table 15 shows, for each state in the region, the distribution of school districts across the six SEDL district codes derived from the two CCD coding schemes. Contrasting the district distribution with that of the school distribution reveals substantial increases in the percentages of rural nonmetropolitan districts relative to the percentages of rural schools for both New Mexico and Texas. The table indicates that the number of rural districts adjacent to metropolitan areas is significant in three states (Arkansas, Oklahoma, and Texas); and that the number of small town districts serving nonmetropolitan areas is substantial for all states, but especially so for Louisiana and New Mexico. When these two district types are added to the first, New Mexico, Arkansas, and Oklahoma have the highest percentage of rural or small town districts (each at around 87%); Louisiana represents the lowest percentage at about 67%; and Texas represents the mid-point between these groupings with about 76% rural and small town districts.

In sum, the contrasts in percentages of rural schools and districts across the states reveal the following:

- Schooling in Arkansas, and to a somewhat lesser degree, Oklahoma, is substantially rural, whether (a) referring to percentages of schools or districts; or (b) referring to exclusively rural or rural-plus-small-town classifications.

- Schooling in New Mexico is more moderately rural relative to Arkansas and Oklahoma when contrasting percentages of rural schools or rural-plus-small-town schools; however, New Mexico is equally rural to Arkansas and Oklahoma when contrasting the percentages of rural or rural-plus-small-town districts.

- Louisiana and Texas look quite similar when contrasting percentages of rural schools (though Louisiana has a somewhat larger percentage of small town schools). Both appear as the least rural of the five states on either school indicator (i.e., exclusively rural or rural-plus-small-town). However, when viewing rurality from a district vantage, Texas appears much more rural (approaching the level of Oklahoma) while Louisiana maintains the lowest percentage of rural or rural-plus-small-town districts (which is not surprising given that districts in Louisiana are co-extensive with its parishes).

The analyses above describe the Southwest states as significantly rural, whether rurality is viewed from a school or district perspective (though this difference in perspective is important in some states). However, an important question remains: To what degree are the rural schools of the region identified by reference to the rural districts of the region? An answer to this question will reveal the degree to which rural schools can be targeted by a strategy that targets rural districts.

The top two rows of Table 16 show, for each state in the region, the total number of rural schools and the number of such rural schools that are located in rural districts. For both Oklahoma and Texas, all rural schools are contained in rural districts. For Arkansas and New Mexico, only about three-quarters of the rural schools are contained in rural districts, while for Louisiana, less than half of its rural schools are contained in rural districts. If both rural and small town schools are considered, then in four of the five states almost all rural and small town schools are contained in rural and small town districts -- in the fifth state, Louisiana, almost 85% of such schools are contained in such districts. The implications of this result are straightforward. First, for the Southwest states, a focus on rural and small town districts will result in a focus on rural and small town schools. However, a focus on only rural districts, while adequate for reaching rural schools in Oklahoma and Texas, will exclude about a fourth of the rural schools in Arkansas and New Mexico, and more than half in Louisiana.

B. Defining Rural, Small Schools and Districts

Having derived ways of defining rural schools and districts, what can be said about the size of such schools and districts? In addition, what is the relationship between rurality and size: Are rurality and smallness highly correlated, or are there substantial numbers of small schools (or districts) that are not rural schools (or districts), and vice versa?

In answering these questions, SEDL first considered the number of students served in rural districts. Table 14 displays, for each state in the Southwest region, the total enrollment for each of the six types of SEDL-defined districts. As can be seen, student enrollments in rural districts are proportionally lower than enrollments in non-rural districts. Total enrollments in the two rural categories of districts come to 28% of the overall

student population in Arkansas, 27% in Oklahoma, 15% in New Mexico, and 13% in both Louisiana and Texas. Adding the enrollments of small town nonmetropolitan districts brings the total to 59% in Arkansas, 47% in Oklahoma, 45% in New Mexico, 31% in Louisiana, and 25% in Texas. Thus, the size of the student population served in rural school districts depends substantially on whether those districts that serve small town locations are counted. If they are counted, then the generalization for the Southwest region is that rural and small town districts account for 70-90% of a state's districts (see Table 15), but only serve 30-60% of the state's public school enrollment.

But what can be said about the average size of schools and districts that are rural? Table 18 displays the average size of **schools** (in numbers of students enrolled) within each of the six types of SEDL-defined districts. In general, the table reveals that schools in rural districts are smaller on average than schools located in non-rural districts. (Note that exceptions to this trend seem to appear in Louisiana and New Mexico schools located in rural districts adjacent to metropolitan areas. However, as shown in Table 15, each of these cases is based on a single school district, and thus, must be discounted in the generalization. Table 19 shows for each state the average **district** size (in numbers of students enrolled) for each of the six types of SEDL-defined districts. As was true in Table 18 for schools, the general trend is for rural districts to have smaller enrollments than non-rural districts (with the same exceptions in Louisiana and New Mexico that are based on single cases). In short, in the Southwest states, rural and small town schools and districts are generally smaller than their more metropolitan counterparts.

If rurality and smallness are correlated, is there a critical value of district size that would allow most rural districts to be identified without also identifying many non-rural districts? Table 20 shows the number of rural districts that would be included under different district-size limits; the table also shows how many other non-rural and non-urban districts would be included under the same size limitations. The table can be briefly summarized: With the exception of Louisiana, almost 90% of the rural districts in each of the four remaining states can be identified by employing a cutoff of 1,000 students, and the "cost" (in terms of including other districts that are not rural) is relatively small, as at least 80% of the set of districts so delineated will be rural. Increasing the cutoff to 1,500 will lead to a higher percentage of included rural districts, but at a cost of adding more

non-rural districts. In short, a district enrollment criterion of between 1,000 and 1,500 students seems reasonable under these analyses for Arkansas, New Mexico, Oklahoma, and Texas. For Louisiana, because of the mode of school district organization, no division of districts by enrollment level will define a population that includes a majority of rural districts, short of including all districts in the state. It is important to remember, however, that while rural districts may be largely captured by an enrollment cutoff in four of the five Southwest states, a substantial number of rural schools in two of these states (namely, Arkansas and New Mexico), are not associated with rural districts.

IV. STATE PROFILES

ARKANSAS

A. The Rural Context

Of the five states in the Southwest Region, Arkansas comes closest to fitting the designation of a rural state. Just over 40% of the 1980 population lives in rural places with fewer than 2500 inhabitants. There is much less metropolitan concentration than in the other four states, and the pace of urbanization is relatively slow. There are centers of rapid growth near Little Rock and some areas of nonmetropolitan growth, largely in resort and retirement communities made attractive by the picturesque Ozarks or the Hot Springs National Park.

Yet in most of the Ozarks, including those counties that are growing, the decades since the 1950s have been marked by chronic poverty and low personal incomes. Along the state's eastern boundary, counties in the Mississippi Valley have escaped the Ozark levels of poverty by losing population while other areas have benefited from an influx of retirees who do not, however, have children in the public schools.

Although the nonagricultural workforce grew by 12.5% between 1980 and 1987, the composition of employment by sector remained fairly stable with some exceptions. Manufacturing was still the largest employer while the service sector grew significantly to where it is now the third largest employer. Transportation, communication and utilities, finance, insurance and real estate had modest growth while government employment showed a modest decline. Agricultural employment declined steadily between 1980 and 1987.

Sectors projected by Woods and Poole Economics to experience the greatest growth between 1987 and 2000 include: state and local government (25%); finance, insurance and real estate (24%); service (24%); durable goods manufacturing (22%); and transportation, communication and utilities (18%). Sectors projected to experience slow or negative growth include mining (7%); construction (-8%); and farming (-34%). It is estimated that the service sector will be the major employer in the year 2000 (Kelly, 1988).

Rural Schools. Of the 329 independent school districts in Arkansas, more than three-fifths are all or mostly rural. Four out of five schools are in places with less than 25,000 population. About two-thirds of all school districts enroll less than 1000 students though only 18 have total enrollments of less than 200. The rural school district is the typical district but the most typical Arkansas schoolchild attends a small town school. Together, rural and small town school districts educate more than two-thirds of public school students in Arkansas.

B. The Policy Context

Legislation. Arkansas school policy in recent years has been dominated by an ambitious reform agenda. Under the leadership of Governor William Clinton, who has made educational improvement a priority, reforms since 1983 have focused most strongly on:

(1) increased standards for curriculum and for staff certification;

(2) formal accountability through annual accreditation and teacher and student competency testing; and

(3) increased school attendance and parent involvement.

Though it is perhaps too soon to gauge the educational effects of reform provisions, early studies (Center for Research and Public Policy, 1988; Winthrop Rockefeller Foundation, 1988) indicate significant improvement, particularly among larger school districts. However, one persistent barrier to successful reform is the lack of funds with which to implement the new requirements and programs. Arkansas has not fully recovered from the economic recession of the early 1980s, and the state's General Assembly has been reluctant to impose new taxes. The 1989 legislative session saw the approval of no new revenue sources for education; as a result, 70 local school districts will receive fewer state funds this year than in 1988.

Small, rural school districts, among the state's poorest, face tremendous difficulties in implementing reform mandates. Many measures require support strategies and increased expenditures. In order to increase student competency, necessary for accreditation, decreased student-teacher ratios are encouraged. This strategy is

supported by a course of teacher recruitment, education, staff development, and program incentives, all viewed as necessary to increase the number of prepared teachers. Small districts have made significant increases in local tax rates since 1983 (one reform measure required districts to increase local millage to a minimum rate of 16 mils), but total revenues have remained flat. In Parkin, Arkansas (enrollment 785), for example, the district has raised taxes twice. However, with property values continuing to decline and the state's coffers constrained, the district expects to have $70,000 less to spend next year than it did two years ago.

The state's new educational provisions mandate consolidation for districts that fail to meet or maintain accreditation and certification standards; a number of smaller districts, and some larger ones, are facing voluntary or involuntary consolidation. However, both lawmakers and the State Board of Education have worked to establish measures allowing districts time to meet prescribed standards.

Despite the intensive debate over specific issues, observers are positive about the overall results. As a former Arkansas Department of Education official, Dr. Paul Root, wrote in 1989:

> Every school district in Arkansas now offers physics, chemistry, music, art, computer science, foreign language, advanced math, advanced science and practical arts. Each high school offers at least 38 courses on a two year rotation basis. All schools are within the limits pertaining to classroom size. In the elementary schools of Arkansas, every student now has access to a guidance counselor and an elementary librarian. Every secondary school has access to a guidance counselor.

State agency rural division. To address rural education needs, the Arkansas Department of Education has established a Rural School Liaison Office.

Funding for isolated schools/allowances for small enrollments. A bill that would continue subsidies for the state's smallest school districts was vetoed this year. The "small school weighting" that has been used to adjust average daily attendance allowances for schools with enrollments of less than 360 (76 districts, 23% of the state total) will be phased out after the 1989-1990 school year under the state's "sunset"

provisions. Approximately 40 of the 74 districts with enrollments of 350 or less are defined as "isolated" school districts based on factors of enrollment, size of territory, miles of transportation, and quality of roadways. These qualify for an independent special allowance under a separate provision that is not subject to the "sunset" process.

Incentives for interdistrict cooperation. A legislative mandate provides schools with accreditation problems the option of combining their upper grades with a neighboring school district while retaining an accredited elementary program. The 77th General Assembly included procedures in Act 886 to allow two schools to form a model rural school consortium. Cooperative service centers, partially supported by the state, offer staff development activities to surrounding districts.

School consolidation. Districts that fail to meet accreditation standards, including those for course offerings and staff certifications, are expected to correct those deficiencies within two years. Otherwise, the State is empowered to order mandatory consolidation. No schools have been forcibly consolidated under this mandate, though rising standards and diminishing resources may have encouraged some to consider voluntary consolidation.

Between 1969, when a previous set of new school standards was enacted, and 1983 when the current reform efforts began, there were very few district consolidations in the state. Between 1983 and 1988, 34 of 365 districts went through voluntary consolidation for about a 10% reduction in the total number of Arkansas school districts. The largest recent wave of consolidations was in 1951, when the number of districts dropped from about 2,500 to below 600. Newly consolidated districts may still be rural and small. The Nevada school district, which consolidated five independent school districts in 1988, had a 1988-1989 enrollment of 886 students.

The State provides funds for consolidating schools to help meet required capital expenses. Funding provisions were recently amended to prevent larger districts that absorb small ones from receiving credit for students that were already enrolled; enrollments of the smaller schools now determine funding levels. Whether or not they are a positive incentive, such funds are probably necessary to make possible consolidations such as that Nevada County, in which several community school districts coalesced around a central location where the previous school had been closed.

Accreditation and review. Arkansas schools are reviewed annually for accreditation. As previously noted, schools that fail to meet requirements may have up to two years for rectification of problems, and can be recommended for mandatory consolidation. Arkansas has also initiated a "School Report Card" or indicators project, and is now beginning to define the measures to be used.

Curriculum and performance standards. Although the major acts of school reform were passed in 1983, the legislature has continued to enact amended school requirements. The focus of these additional standards has generally been to require schools to increase the scope of their course offerings, meet additional certification requirements, and attain higher levels of student achievement.

Taking curriculum and performance into consideration, the "Freedom of Choice" or 609th Act of the 77th General Assembly enables students to attend public schools other than the ones to which they are geographically bound. Restrictions apply and individual responsibilities increase but the long range intent is better schools through free competitions.

Teacher appraisal. Mandatory testing of teachers, enacted in 1983, was initiated in Arkansas relatively early as compared to the rest of the country. Recent discussion and debate have focused more heavily on the stringency of teacher certification requirements than on teacher performance appraisal.

Intermediate service centers. Staff development and related services are provided directly by the State and through a network of 16 regional education service cooperatives. The Arkansas service cooperatives serve a particular radius of miles rather than a fixed territory defined on county lines as is the case for Louisiana and Texas. The State employs the 20% block grant portion of its EHA Part B handicapped funds to support three types of cooperative services in special education. Some funds go to the intermediate educational service cooperatives, especially to assist smaller schools with students diagnosed as severely emotionally disturbed. Consultants for visual and hearing impairments are supported through the state schools for the blind and the deaf.

C. Rural School Profile and Demonstration Sites

Arkansas is considered the most rural of the Southwest region. Of the 329 school districts in Arkansas, more than half of them are rural nonmetropolitan, about one-fourth are small town nonmetropolitan and one tenth are rural adjacent to metropolitan. Over ninety percent of the rural districts in the state have student enrollments of less than 1000. It is estimated that one of every 10 Arkansas students attends a public school system of 550 students or less (Moritz, 1989). When the state's rural student population of 28% is added to the enrollment of small town nonmetropolitan districts, the total is 59%. The size of the student population in rural, small schools depends on whether the school districts characterized by small town locations are counted.

While Arkansas's smallest schools are considered among the poorest in the state, they also do not do well when compared to the state average achievement test scores. Statistics on the ten smallest districts (less than 161 students) when compared to the average Arkansas school indicate that test scores are lower in the 4th, 7th, and 10th grades on the Metropolitan Achievement Tests and that the drop-out rate is at or below the state average of 21%. At least two of the ten schools are considering consolidation.

The Arkansas RSSI demonstration sites. All six SEDL's RSSI demonstration sites in Arkansas are rural nonmetropolitan as defined in the previous section: Arkansas City School District, Cord-Charlotte, Emerson Public Schools, Izard Consolidated, Ouachita Schools, and Perry-Casa. Each of the districts have 750 students or less and are located in communities with less than 2500 population. They are also representative of the different quadrants of the state.

There are similarities and differences among the six sites as illustrated in the following table. They are similar in professional staff composition, number of buildings, pupil/teacher ratio, and drop-out rate. They all have a superintendent and a principal for each of the schools they report. Most of them have two schools, one housing grades K-6 with the other housing grades 7-12. There is generally a full-time counselor, a school nurse, and a Chapter 1 staff member. The pupil-teacher ratio ranges from 11:1 to 14:1. The drop-out rates, pronounced because of the small student enrollment, compare equally with the state drop-out rate.

Some of their differences include per pupil expenditure, percent of students bussed, ethnic composition, and percent of students on free lunch. The per pupil expenditures range from $4800 to $2280. In one of the school districts, 20% of the students are bussed, while the other districts report bussing 75% to 98% of the students. Almost all of the students are White in four of the districts: two report about 50% Black student population and less than 3% Hispanic and other ethnic group. To illustrate the extremes, five districts report less than 33% of their students on free lunch, yet one of the districts reports that 90% of its students are on free lunch. Three of the school districts have already experienced consolidation. These similarities and differences are illustrated in the following chart.

Selected Demonstration Site Data for Arkansas

School District	Per Pupil Expenditure	% of Students on Free Lunch	% Ethnic Composition W	B	Other	% of Students Bussed	Pupil/ Teacher Ratio
Arkansas City	$4800	90	55	45	-	20	12:1
Cord-Charlotte	$2544	31	98	-	2	96	11:1
Emerson	$2768	32	45	52	3	75	13:1
Izard	$2700	50	99	1	-	90	12:1
Ouachita	$2280	34	98	2	-	98	14:1
Perry-Casa	$2520	-	-	-	-	-	11:1

Site Specific Profiles

The **Arkansas City School District** is located in Desha County in Arkansas City in the southeast section of the state. With a per pupil expenditure of $4800, the school

district reports one K-12 school with 15 teachers and 177 students. In addition to the superintendent and a school principal, there is a counselor, a school nurse, a business manager, a Chapter 1 staff member, a gifted and talented coordinator, and a special education teacher. Of the 177 students enrolled, 55% are White, 45% are Black, and 90% are on free lunch. Almost all its students graduate from high school and 50% seek further education/training. Twenty percent of the students are bussed. The longest bus route is 80 miles long and takes about 1 hour.

The Arkansas City School District has been offering satellite transmitted academic resources: German by satellite and up to 2000 hours of inservice training for certified staff. The school has been a demonstration site for SEDL's RSSI for two years. The three areas considered as priority areas for improvement for the district are: parental involvement, indifference of students to academics, and school finance.

The **Cord Charlotte School District** reports two schools in Independence County, in northeast Arkansas: Cord-Charlotte Elementary and Cord Charlotte High School. Professional staff other than the superintendent, two principals, and 23 teachers, are a counselor, a nurse, a Chapter 1 person, a librarian, and an athletic services person. The total school enrollment at the Cord-Charlotte schools is 245, with 98% reported as White and 2% reported as other. Less than 35% of the student enrollment are on free lunch. Ninety-six percent of the students are bussed with the longest bus route being 30 miles long and taking an hour. The per pupil expenditure is reported at $2544.

The three main concerns of the Cord Charlotte School District are adequate financing, teacher certification problems (not able to find teachers in certain teaching areas), and long-range plans for a larger student population.

The **Emerson Public School District** is located in Columbia County in the southwest part of the state. There are two schools in the district: Emerson Elementary, grades K-6 and Emerson High, grades 7-12. Professional staff includes the superintendent, two principals, 29 teachers, two counselors, a nurse, a Chapter 1 staff person, the librarian, and two people involved in athletic services. Of the 390 students enrolled, 45% are White, 3% are Hispanic, 52% are Black, and about one third are on free lunch. The per pupil expenditure is $2768.18. Seventy-five percent of the students are bussed. The longest bus route is 76 miles and takes over 80 minutes.

The school district uses technology for Computer Assisted Instruction. It has an IMPAC Computer Lab that will accommodate 27 pupils at a time. The district's main concerns are more instruction for students in the use of higher order thinking skills and developing strategies to address student's negative attitudes toward school work and motivation.

Izard County Consolidated School in north Arkansas, also reports two schools: Izard County Elementary and Izard County High. In addition to the superintendent, two building principals, and 41 teachers, the professional staff consist of two counselors, a nurse, a Chapter 1 staff member, the librarian, two athletic services people, four special education persons, and a gifted and talented program coordinator. Over one half of the 475 students enrolled are on free lunch. One percent of the student population is Black, the rest of the students are White. A substantial number of the students are bussed on eight bus routes. The longest route is 19 miles and takes 90 minutes. The district reports an estimated $2700 as per pupil expenditure.

The Chapter 1 Junior High Programs appears to be strengthening the total learning program, both academically and physically. The concerns of the Izard County Consolidated Schools are student achievement in the basic skills, student health, and student placement.

Ouachita Public School District in Hot Spring County is southwest of Little Rock. The district reports two schools: Ouachita Elementary, grades K-6 and Ouachita High School, grades, 7-12. Additional staff besides the superintendent, two principals, and 29 teachers include a counselor, a curriculum and instruction person, a nurse, a librarian, and an athletic services person. Of the 396 students enrolled, 98% are White, 2% are Black, and 34% are on free lunch. Ninety-eight percent of the students are bussed. The longest bus route is 33 miles and takes 75 minutes. The school district's per pupil expenditure is about $2280.

The school district has a gifted and talented program to stimulate student interest and develop their problem-solving skills. The school district has been an SEDL RSSI demonstration site for two years, and will be considered an exemplar site for Year Three.

The district cites its concerns as: maintaining the state standards; increasing student performance on state minimum performance tests; and long-range building needs for school growth.

The **Perry-Casa School District** in Perry County reports two schools: Casa Elementary and Perry-Casa High School. In addition to the superintendent, two principals and 25 teachers, the district reports a half-time counselor, fifth-time nurse, a business manager, a chapter 1 person, a librarian, and an athletic service staff member. There is a total enrollment of 265 students. While 90% of the students graduate, only 25% seek further education/training.

The district makes use of computers for accounting and foreign languages purposes. Its concerns are improvement in basic skill test scores and staff development. A major concern in 1988 was another possible consolidation with a community 10 miles away. With Perry-Casa already bussing in students from the opposite direction, 20 miles away, some students would be 30 miles from the new community.

LOUISIANA

A. The Rural Context

Visions of Louisiana frequently include: New Orleans with the Mardi Gras, its banking districts and the Garden neighborhoods of stately homes; Bourbon Street with its honky-tonks and dixieland bands; the moss-bearded bayou country, impenetrable except by small boats; and the flat farming country of Winn Parish, the birthplace of Huey Long. Wayne King (*New York Times*, June 11, 1989) describes Louisiana with a variety of images including locusts, crawfish, voodoo, oil rigs, Creoles, catfish, jambalaya, magnolias, the Superdome, and oysters Rockefeller. Louisiana is thirty-third of the states in land mass and has approximately 4.4 million people, many of whom live along the southeastern rim. However, there are vast areas of wilderness, including the Atachafalaya Basin, the largest undeveloped Basin in the lower 48 states. Laws are derived from the Napoleonic Code and counties are called parishes.

Louisiana now has one of the lowest ranked per capita incomes and the highest unemployment rate. Half of the state's ninth graders will not graduate from high school and the adult literacy rate is 7.8%, the highest in the nation. An estimated 30,000 unskilled oil workers are unemployed, many skilled laborers have fled to other states and approximately 100,000 jobs have been lost. Businesses now pay approximately 50% of the state's tax burden, yet residents enjoy the lowest income and property tax rates in the country. Only 15% of the state's homeowners pay property taxes (King, 1989; McCartney, 1989; Davis, 1988).

The reliance on the energy industry has had serious consequences for the economy of Louisiana, as it has had for the other energy dependent states in the region. The downturn in oil prices has been largely responsible for the stagnation and negative growth in the economy. Historically, state revenue has been directly tied to mineral income in the form of severance taxes and royalty payments. In 1982, 41% of the total state revenue was generated from mineral income as contrasted to 19% in 1988. Bankruptcy filings and business failures increased dramatically between 1981 and 1987.

However, preliminary data in 1988 and 1989, suggest that the economy may be on the road to recovery (Albarado, 1989; Kelly, 1988). Although Louisiana still ranks fifth

from the bottom of the states in per capita income in 1987, the average personal income for each adult and child grew 6.8% in 1988, indicating a sustained economic recovery of nearly two years duration. The income growth areas include strong gains in construction, mining (including oil and gas drilling), water transportation and the transportation equipment manufacturing sectors. The sectors that will experience the greatest absolute growth include trade, services, and government. Of the 20,600 projected new jobs by 1990, those three sectors will account for 81% of the jobs. (Abarado, 1989; Kelly, 1988).

Rural Schools. Louisiana schools are organized into 64 parishes. The smallest, Tensas Parish, enrolls slightly over 1,500 students. Only three parishes have total enrollments of less than 2,000. Because they are so large, few of Louisiana's parish districts are exclusively rural. Because the parishes are internally diverse, school-by-school data is needed to reveal rural schools within more urbanized parishes. Three urban parishes (Orleans, East Baton Rouge, and Caddo) plus suburban Jefferson Parish enroll more than a fifth of the state's public school students.

B. The Policy Context

Legislation. In 1988, a new Governor, Buddy Roemer, was elected on a platform that included the upgrading and restructuring of education throughout the state. During the 1988 legislative session, the Children First Reform Legislation was signed into law. It represents Louisiana's serious commitment to improving the quality of its school system. This act prescribes the development of a performance-based teacher appraisal system, a school incentive program linked to a data collection system for educational indicators, and a reorganized system of intermediate educational service centers.

To facilitate the merger of the legislated reforms into Louisiana's Master Plan for Elementary and Secondary Education, the reform initiatives have been categorized according to the four major objectives identified by the Board of Elementary and Secondary Education: to clarify goals and set standards; to improve practice; to monitor results; and reward success. The Master Plan includes long range goals through the year 2006 (when children born this school year will graduate), and a three-year action plan with specific goals, action steps, and time lines.

Louisiana has begun to set high standards for student success through criterion referenced tests for grade level promotion and high school graduation and additional course requirements for high school graduation. Additional objectives established by the Board of Elementary and Secondary Education are to improve the practice of education by creating tools for effective leadership, ensuring quality instruction, preparing children for life-long success; and creating partnerships for reform (Market Research and Issues Management, Inc., 1989).

State Superintendent Wilmer Cody has proposed to work toward "decentralization" of accountability by exchanging greater flexibility in detailed prescription for higher levels of school performance and student retention. The law itself requires extensive consultation with administrative and professional stakeholder groups in the process of developing teacher appraisal and educational indicator systems. Fiscal problems related particularly to the slump in the oil industry pose some obstacles, however, Louisiana is by tradition a "low tax" state, having, until recently, used direct oil revenue to displace or prevent taxation. In 1989, state voters rejected a referendum proposed as a cornerstone of the governor's program to raise taxes for a variety of initiatives, including educational service centers. The State Board and the Department of Education are finding ways to create the structure for implementation of "Children First" at lower levels of resources than were hoped for when it was enacted.

Intermediate service centers. Louisiana's existing network of education service center has evolved from an earlier group of staff development centers and was reorganized under the Children First Act. The eight regional service centers will serve as a major vehicle for implementing educational reform and will provide on-site assistance to systems and schools in implementing local plans for improvement. A major responsibility of the centers will be the administration of the statewide teacher evaluation process. Regional service center directors will be among the first trained as assessors/evaluators for the Teacher Internship and Teacher Evaluation Programs.

School consolidation. School consolidation has been regarded as a local parish concern and detailed statistics are not readily available. Some consolidation has occurred due to economics. Availability of classroom space is an issue in districts with old and/or asbestos filled buildings. When decisions to consolidate have been made rapidly for

accreditation or safety reasons there has been nominal transferal to private schools. Some parishes have practiced considerable internal consolidation. West Feliciana, for example, maintains one elementary school, one junior high, and one high school, all located on adjacent campuses in St. Francisville. The smallest parish, Tensas, on the other hand, has seven schools.

Information and data collection. An Annual System Report to the State Department of Education is filed by the local Superintendent. The State has collected extensive educational data. However, since the data had been aggregated at the parish level, rural or small school statistics are difficult to obtain. The Progress Profiles mandated by the Children First act provide for the establishment of a data base for educational planning and increased accountability. The "report card" indicators provide for an assessment of the current status of education in each school individually. The legislation specifies 14 suggested indicators, including dropouts, attendance, graduation rates, expulsions and suspensions, and class size, but gives discretion to the State Board in defining these and other elements of the "report card." Quality, equity, consistency and efficiency have been goals of the creators of the data collection system.

Technology and communications. The state is a participant in the Southern Educational Resource Consortium's Star Schools project. The Louisiana School for Science, Mathematics, and the ARts, a state-sponsored magnet institution, has made available an innovative system for delivering advanced and specialized courses transmitted by fiber optics to relatively small classes of students using an interactive computer system. Students do not see the teacher, but can view art works and other graphic images and can communicate actively via an "electronic blackboard."

The "Star Schools" program focuses on helping rural and inner city high schools where teachers certified in certain subjects may not be available. Japanese, Russian, advanced placement economics and discrete mathematics are the course offerings available. College credit and in-service programs for teacher training will also be offered through the system. In the fall of 1989, 10 New Orleans area schools will be a part of the 32 schools in 20 Louisiana parishes that will participate in the growing program. At this time, the state has more star schools than any other state in the consortium and expects to increase its participation threefold (Snow, 1989).

Accreditation and review. Accreditation requirements have taken the form of detailed prescriptive standards for physical plant, curriculum, facilities, and credentials. The Department of Education intends to move toward more performance-based standards. However, the foundation for such a system, as provided in the Children First act, will require substantial time, planning and finances in order to be fully implemented.

According to the Louisiana Department of Education, each school system participates in an accreditation program and receives a classification based on a fifth-year-on-site verification of the Annual System and School Reports. Classification categories are: **accredited; accredited provisionally**, where one or more programs have deficiencies in standards, the system is advised to make corrections and improvement is expected prior to the next school year; or **accredited probationally**, which represents major deficiencies as regards staff, curriculum, special student services, health and safety regulations, or physical plant. If deficiencies are cited after being accredited probationally for one year the system is declared **unaccredited**. In addition to accreditation, each school within a system must apply for and receive an approval classification category in order to receive state and federal funds. These categories parallel those of accreditation.

Curriculum and performance standards. Louisiana's basic high school graduation requirements are high and are designed for college-bound, rather than all secondary students. Current discussion and planning revolve around how to best bring flexibility to school curricula, allowing students to pursue interests in business, marketing, or health occupations, and particularly, how to adjust the mathematics curriculum to be adequate, consistent, and student-inclusive.

Teacher appraisal. The Children First act prescribes a teacher appraisal system based chiefly on observations of work in the classroom. Methods and measures for appraisal of teaching behaviors are being developed and pilot tested with the involvement of Louisiana State University. Training of assessors and evaluators in use of the instrument will follow. There is a strong commitment that the Teacher Internship Program, which focuses on assessment and support of first year teachers, and the Statewide Teacher Evaluation System, which provides evaluation and ranking of teachers every five years, become a means for teacher growth and ongoing improvement. Each local educational governing authority adopts a system of personnel evaluation which includes

staff development wherein staff members participate in policy development and inservice activities to improve instruction and the administration of educational programs. An annual report is filed with the State Department of Education.

Rural emphasis. The educational indicator or "report card" project will increase the visibility of individual rural schools, because they are prescribed by law to be reported for each school building. Currently, the State has collected educational data only at the district level, and the statistics do now show the differences, or lack of differences, among urban and rural schools within the same parish. Nonetheless, the state agency has maintained a substantial awareness of and sensitivity to rural schools. In general, the State has attempted to insure that "model" and pilot programs for early childhood education, reading instruction, "at-risk" students. parent involvement, dropout prevention, and special education are implemented in rural as well as urban settings.

C. Rural School Profile and Demonstration Sites

Perhaps the least rural of the five states in the region may well be Louisiana, because of parish, as opposed to school district, configuration. Each of the 66 parishes have more than 1500 students. Thirty-three percent are classified as rural nonmetropolitan and thirty-two percent are small-town nonmetropolitan, for a combined total of 65%. These 43 (65% of the 66) parishes contain 45% of the public schools and enroll 31% of the students in the state. The average per pupil expenditure reported in 1988 is $3308.

The Louisiana RSSI demonstration sites. The two demonstrations sites participating from Louisiana are Tensas Parish and West Feliciana Parish, both rural, nonmetropolitan. Both parishes enroll less than 2500 students and the sites are located in communities that are less than 2500 population. There are more differences than similarities when reviewing selected site data presented in the following table. Tensas Parish reports six schools while West Feliciana reports two elementary schools and a high school. There is not much difference in the pupil/teacher ratio between the parishes. Tensas has a greater Black student population and more students on free lunch than does West Feliciana. The drop-out rate at Tensas is 1% while West Feliciana reports 6%. The number of professional staff member is 123 at Tensas and 141 in West Feliciana.

Selected Demonstration Site Data for Louisiana

School District	Per Pupil Expenditure	% of Students on Free Lunch	% Ethnic Composition W	B	Other	% of Students Bussed	Pupil/ Teacher Ratio
Tensas	$2395	82	36	63	1	57	15:1
West Feliciana	$4110	44	49	50	1	98	16:1

Site Specific Profiles

Tensas Parish is located in northeastern Louisiana with its central office in St. Joseph. It reports six schools: three elementary, a secondary, and two both elementary and secondary. School size averages 263 students and 18 teachers. In addition to the 106 teachers, the superintendent, and the six principals, the staff includes: two curriculum and instructional persons; a nurse; a business manager, three Chapter 1 people; three librarians; a vocational coordinator, and a food service person. About 99% of the students graduate and 50% seek further education/training. More than half of the 1573 students are bussed on 19 bus routes. The longest bus route is 40.2 miles and takes at least 55 minutes.

The Parish was one of the school improvement sites selected to participate in RSSI's Year 2 activities. The top priority as identified by a parish-wide team consisting of administrators and teachers is the improvement of internal and external communication with staff, parents, and community. Strategies to address the priority issue are well underway for the year 1989-90. Because of this commitment to school improvement through systematic staff development, the Parish will be an exemplar site for RSSI for Year 3. Tensas Parish lists its concerns as an increasing need for trained and certificated teachers, a need for improved student performance, and a need for educational materials and supplies.

The West Feliciana Parish is located in the southeastern part of Louisiana with its

central office in St. Francisville. It reports three schools: two pre-K - 6 and a high school. In addition to the superintendent, three principals, and 127 teachers, there are: two counselors; three curriculum and instruction people; a nurse; a business manager; a Chapter I staff member; a migrant coordinator; and an athletics services person. Ninety-eight of the 2,047 students are bussed on 30 bus routes. The longest route is 38 miles, which takes about an hour and a half.

The Parish offers adult, GED preparation, and continuing education. It lists the need for increasing state financial support, raising basic academic skills, and encouraging support for the children's academic progress as areas of concern.

NEW MEXICO

A. The Rural Context

New Mexico, the Land of Enchantment, is also a land of contrasts. The Indian reservations, Pueblos, and Hispanic villages of northern New Mexico, nestled among National Forest lands, form an image of "Tierra Encantada." Santa Fe with its carefully preserved and reproduced adobe architecture is the least metropolitan state capital in the Southwest Region. Some of the best ski country in the world is in nearby Taos. Rural New Mexico is also the "pinto" country of cattle ranches stretching from Clayton to Hobbs and Carlsbad on the eastern side of the Rio Grande and has a history of range wars and a tradition of frontier individualism. Rural New Mexico is also the mining quarter in the Southwest corner of the state, where the towns of Deming (population 10,000) and Lordsburg (population 3,000) skirt the edge of the Mimbres, Elk, Mogollon, Tularosa, and Mingas Mountains and where Silver City (population 10,000) names the dreams that build Grant County, the one remaining center of active metals mining in the state.

High unemployment rates and low growth rates in income and jobs characterized the economy of New Mexico in 1986. New Mexico, along with the energy dependent states of Texas, Oklahoma, and Louisiana all recorded declines in the total number of nonagricultural jobs. Mining, including metal mining, nonmetal mining and oil and gas extraction, suffered significant employment losses. In 1986, personal income related to the mining sector fell 10.3%, causing problems for the income-dependent trade and service sectors within many mining communities. The unemployment rates in nonmetropolitan areas are double those of the metropolitan areas. Of New Mexico's 33 counties, 18 had double digit unemployment rates in 1986 (Sunwest, 1986).

The federal government employment subsector combined with employment related directly or indirectly to federal expenditures comprise an important element of the economy of New Mexico. Approximately 86,000 jobs, including military, were directly dependent upon federal spending in 1985, approximately 16% of the total civilian and military nonagricultural workforce. The state continues to benefit from research dollars spent on the Strategic Defense initiative projects at Los Alamos National Laboratories, Sandia National Laboratories, the White Sands Missile Range and the Ground Based Free Electron Laser Technology Integration Experiment (Sunwest, 1986).

New Mexico was the last state to enter the union, prior to Alaska and Hawaii and was not admitted to full statehood until after more sparsely populated Arizona. When New Mexico was admitted, its first state constitution made bilingualism official in the legislature and in the schools. In contrast to neighboring Texas and California, whose Mexican ancestry populations swelled with immigrants during the Revolutionary years from 1900 to 1920, New Mexico's northern Hispanics are mostly descendants of those who lived there when the territory was annexed by the United States in 1845. New Mexico's population growth since 1910, more than a seven-fold increase, has been largely urban White from the other states. People of Spanish origin are still more than 35% of the state population, and more than 45% of the population in rural areas.

Rural Schools. The Land of Enchantment has some of the most geographically inaccessible schools in the Southwest Region, including a number that are most easily reached from the state capital in Santa Fe by going through Durango, Colorado. In a few districts, teachers may commute as far as 50 miles from ranches or neighboring towns, sometimes in the next county. There are rural schools that enroll less than eighty students. With a total enrollment of more than 6,500 , Central Consolidated School District Number 22, administers 15 schools ranging from 150 to 700 in enrollment, dispersed across 2,700 square miles and including most of New Mexico's portion of the Navaho Indian Reservation.

B. The Policy Context.

Legislation. New Mexico has adopted a number of "first wave" reform elements including student performance standards, class size restrictions, and new curriculum requirements, but the provisions have been phased in one at a time rather than in a single comprehensive reform. Despite its history of rapid growth, New Mexico has the smallest population of the Southwest states, and accordingly, the smallest state education agency. The state agency has devoted much to its own time and energy to accreditation oversight and to helping the schools meet reform requirements it has encouraged local schools in rural areas to form voluntary networks for planning of staff development and school improvement. The network in northern New Mexico is particularly active and has developed some collaborative activities with New Mexico Highlands University

At the same time, schools in the state have been presented with legislative mandates for curriculum development and class size limitations. Faced with these challenges, the state agency has elected to concentrate its own resources to assist districts to implement mandated change and encourage voluntary local initiatives to develop networks of mutual support among rural schools. Several of the state's higher educational institutions have responded with collaborative efforts to assist rural school networks in identifying and meeting their needs for staff development and other services. The universities may hold the most promise for activating networks among rural schools that are not currently involved in collaborative efforts and for designing staff development programs that incorporate comprehensive schoolwide planning with appropriate levels of administrative and faculty involvement.

The educational reform actions have increased expectations for both school districts and students. Two comprehensive programs of the Evaluation, Testing and Assessment Unit help to identify, provide data, and track the at-risk student. Early identification of poor student achievement in critical content areas coupled with remediation of identified areas of weakness will lead to increased achievement, enhanced self-concept and potential reduction in the dropout rate.

Curriculum and Performance Standards. The New Mexico State Department of Education (SDE) was directed by the 1986 Legislature, through the Public School Reform Act, to "identify measurable essential competencies and determine the criteria for mastery." The essential competencies: mathematics, science, social studies, and language arts, were subject to extensive, statewide field review in spring 1987. These competencies form the basis of the New Mexico Achievement Test which was first administered in spring 1989 to grades 3, 5, and 8. This important indicator for determining student mastery and promotion recognizes the student's prominent language. The 39th Legislator has further recognized New Mexico's linguistically diverse population and allows the communication skills unit necessary for graduation to be fulfilled by a language other than English.

Teacher Appraisal. A response to concerns about the quality of public education and educators began in 1980 with a Staff Accountability Study. This evolved into three provisions implemented in 1983. Two of the provisions sought to strengthen requirements

for licensing and certification through tests of knowledge at certain points during preparation and prior to initial certification. The third provision deals with the evaluation and support of demonstrated competency by teachers and administrators.

Experimentation with and implementation of a performance based pay system with a teacher performance evaluation plan has been under way since 1984. Beginning in 1986, each school district implemented a performance evaluation system based on a minimum of six statewide and district competencies.

Special Needs. New Mexico has employed the EHA Part B handicapped block grant portion to establish ten regional center cooperatives to provide special education resources to rural areas of the state. The Division of Vocational Rehabilitation also supports 15 counselors dispersed through the state, 12 of whom are in nonmetropolitan locations.

Information and Data Collection. The Evaluation, Testing, and Data Management Unit of the State Department of Education analyses, summarizes, and publishes detailed profiles of individual school districts. There is no distinction made between urban or rural districts in presentation. However, since there are only a few urban districts, a summary for nonmetropolitan districts can be obtained by subtracting those figures from the statewide totals.

Technology and Communications. American Indian schools, are target participants in the Star School Network conducted by TI-IN of San Antonio, Texas. Some higher education and business leaders have been engaged in discussions aimed at a state plan or statewide consortium for educational technology.

New Mexico Consolidation. There are currently 88 districts in the state varying in size from 60 to 79,850 students. Of these, 32 are rural districts enrolling fewer than 500 students. Of these rural districts, 16, or almost a fifth of the state, enroll fewer than 250 students.

The current Public School Code contains several statutes related to consolidation of school districts (22-4-3 through 22-4-28 NMSA 1986) and creation of new districts within existing districts (22-4-2 NMSA 1986). In all cases the statutes require the actions to be in the best interest of public education in the state. In 1987, the Legislative Education Study Committee began a comprehensive study focusing on consolidation of small

districts and on limitation of large districts. Taking as an assumption that there must be an optimum size for districts as regards student learning and operational cost effectiveness, they created and studied several simulated district clusters.

After considering finances, the quality of instruction, test scores and dropout rate statistics, they concluded that small was not necessarily educationally or socially disadvantaged, nor was large necessarily less expensive. They recommended that any action should not be considered unless it can be shown that the students would benefit from significant educational improvement and there would be significant financial savings.

C. Rural School Profile and Demonstration Sites

New Mexico represents some of the most striking contrasts and diversities of any state in the southwestern region with large populations from three distinct cultural groups, Hispanic, Native American and White. Several factors must be considered before describing rural schools in New Mexico. First, organizational structure may show quite large districts (in terms of student population) that are in actual fact a consolidation of many relatively small rural schools. Second, because almost one-fourth of New Mexico's rural schools are contained in non-rural districts, the rurality concept may be misinterpreted. For these reasons, it is important to consider schools (rather than districts) when understanding the true rurality of the state.

Of New Mexico's 648 schools, almost 31% are rural. When added to the 193 schools in small towns, the total rises to 60%. Approximately 55% of the student population attend only 10 of the states 88 districts. The average student population in urban schools is 671, the rural average is 165. The small town nonmetropolitan average is 379. The extreme contrasts in size of school, size of rural district, location and accessibility added to the contrasts in cultural and ethnic composition create challenges for a state active in the reform movement. The vast diversity of the rural schools be exemplified by sample descriptions of SEDL demonstration schools, all of which are classified as rural nonmetropolitan.

The New Mexico RSSI Demonstration Sites. The enrollment size targeted for the demonstration effort in New Mexico is rural nonmetropolitan. The populations of the four sites vary in ethnic composition, including schools with a majority of White students, a

majority of American Indian students, a majority of Hispanic students and a mixture of the three groups. Diversities besides geographic locations and the economic environment include variations in student performance and proportions of "at-risk" students.

Selected Demonstration Site Data for New Mexico

School	% of At-Risk	# of Students on Free Lunch	% Ethnic Composition W	H	AI	Other	# of Students (ADA)	% Drop Out Rate
Cuba	30	482	20	35	45	0	658	7
Dulce	30	381	1	2	97	0	587	3.6
Fort Sumner	0	162	68	32	0	0	385	6
Vaughn	10	127	11	88	0	1	223	0

Site Specific Profiles

Cuba Independent School District is in the northwestern quadrant of New Mexico between the Nacimento Mountains and the Santa Fe National Forest. The 658 students attend three schools, a K - 5, a middle 6 - 8, and a traditional 9 - 12 high school. The superintendent has one assistant, 2 principals (one serves K - 8), a counselor, a nurse, a business manager, two Chapter 1 staff, a food services person, a person for buildings and grounds, and .50 person for curriculum and instruction. With 45 teachers there is a student/teacher ration of 12:1.

The cultural diversity of the student population into three almost equal groups, White, Hispanic, and American Indian, provides an interesting portrait of the New Mexican population. The district is on a main artery of the state's roadways, and is less than an hour's drive to the capital. Cuba is the middle sized district of the three in Sandoval County. The large group of students that are labeled "at-risk," are indicative of the three major concerns of the school -- absenteeism, drop-outs, and drug abuse.

A focus on computer programs and staff development represent two strategies for school improvement. Cooperative arrangements with institutions like New Mexico Highlands University provides advanced course work for teachers. While a large

percentage of students graduate (85%) from high school, only some 20% go on to college or further education/training.

Dulce School District is not far from Cuba, however, the additional sixty-plus miles north places it slightly south of the Colorado border. On the reservation of the Jicarilla Apache, the school of 587 has a 3% minority of White and Hispanic students. Unlike many rural schools, teachers may drive further than the students due to the remoteness of the district. Of the 90% of the students who graduate, about 35% go on to other educational/training experiences. The 3.6% drop-out and 30% "at-risk" rate, absenteeism, student achievement and substance abuse are major concerns.

There are three schools, a K - 5, a 6 - 8, and a 9 - 12, each with its own principal. The district with 39 teachers has a superintendent, a curriculum director, 3 counselors, a nurse, a business manager, a Chapter One person, a librarian, and an athletic services person. Special programs include migrant, gifted and talented, English as a Second Language (ESL), bilingual, and a Title IV-A. There are also special offerings for staff, such as college courses offered on site, a teacherage for staff housing, and numerous visits from special programs such as the New Mexico Natural History Museum and the Los Alamos project that add to both the staff development programs and student curriculum.

Fort Sumner Municipal School District in the east-central part of New Mexico is the only school in De Baca County. It is an agricultural community. The three schools (K-5, 6 - 8, 9 - 12) have 385 students and 29 teachers. The counselor and the librarian teach half-time. There are 3 professionals shared in Chapter 1 and Special Education and a nurse, a superintendent, and one athletic services person. Characteristic of much of the southwestern quadrant of the state, the student population is 68% White and 32% Hispanic. Almost 50% of the students are on free or reduced lunch programs. With 85% of the students coming to school on buses, weather and scheduling for special events can be problematic. One of the ten bus routes is 58 miles long.

With 94% of the students graduating and 60% seeking further educational opportunities, it is clear that there is a relatively small "at-risk" problem, although about 6% of the students do drop out. The greatest concerns of the administration as expressed in the data collection survey dealt with political and policy issues rather than curriculum, instruction, or achievement.

Vaughn Municipal School District, like Fort Sumner, is in the ranching area of east-central New Mexico. A small district with only 223 students and 18 teachers, it has a high graduation rate (97%) with 68% going beyond high school. The student population is composed of 11% White, 88% Hispanic, and 1% Black, with a 10% drop-out rate. A superintendent, 2 principals for the two schools (K - 6 and 7 - 12), a counselor, a librarian, and 2 Special Education staff comprise the staff. Only 22% of the students ride on the two bus routes. The longest bus route is 39 miles.

Administration reports that the secondary school mathematics program is a program of special pride and offers advanced course work. Topics of concern include parental involvement, new ways to motivate students, and findings ways to extend the experiences and opportunities for students. The isolation factor for secondary students in both academic and social activities is typical for schools such as Vaughn.

OKLAHOMA

A. The Rural Context

The Oklahoma economy is on the rebound after the difficult times for oil, gas and agriculture after the last five years. Agriculture plays a more important role in the state than it does in the nation at large and many of the surrounding states. Approximately 75% of Oklahoma's total land area is devoted to farming, particularly the raising of cattle and wheat production. However, over the past 25 years, the importance of the agriculture sector has declined in terms of its contribution to the state economy. Sectors of the economy which continue to grow include services, insurance and real estate, indicating more economic diversity in the state. Major economic events which effect the economy of Oklahoma include: fluctuating petroleum prices; fluctuating interest rates; depreciation of the dollar; farm price declines; and federal tax law changes (Oklahoma Department of Commerce, 1987).

Rural Schools. Oklahoma is primarily a rural state. There are only three metropolitan areas, Tulsa, Oklahoma City and Lawton, in the state. The rest of the state includes small towns, villages and communities. Of the 611 school districts, three-fourths have less than 1000 average daily attendance; two-thirds have less than 500 average daily attendance. There are 75 districts with less than 100 students. Most of Oklahoma's isolated school districts, located in counties with less than 15 persons per square mile, are located in the western part of the state, primarily in the northwestern quarter.

B. The Policy Context

Legislation. Senate Bill 183, the "Oklahoma 2000 Education Challenge Act," was passed by the 1989 Legislature and signed into law by governor Henry Bellmon on May 31. The purpose of the act is to establish programs and requirements needed to ensure that by the year 2000: All children will be ready to do first-grade schoolwork when they are enrolled in the first grade; at least 90 percent of students entering first grade each year will ultimately graduate from high school; at least 50 percent of the graduates of each of Oklahoma's high schools will have demonstrated mastery as seniors at or above

national average levels of accomplishment; and at least 80 percent of the graduates of Oklahoma's high schools will be fully prepared to begin college work. (Oklahoma State Senate, 1989 Regular Session; Oklahoma Educator, 1989).

Major changes in the current law and new laws contained in the bill include a variety of measures designed to improve the quality of education in the school system. Indicators of progress will be developed for all grades and applied so that educators, students, parents and communities receive sufficient information about individual and school performance to permit recognition, reinforcement and replication of accomplishment when it is occurring and identification and correction of deficiencies when it is not.

The act requires the State Board of Education to establish an Oklahoma Educational Indicators Program to assess and report the performance of public schools and school districts. Starting in late 1989, the SBOE will publish an annual report including such indicators as test scores, dropout rates, graduation rates, and pupil-teacher ratios for each school. The Oklahoma School Testing Program is expanded to include grades 3, 5, 7, 9, and 11. A norm-referenced writing assessment will be administered to every student in grades 7 and 10. A criterion-referenced test will be developed and administered to all students in the 12th grade to indicate mastery of basic and higher-order competencies.

Each school with a student average score in the lowest percentile of Oklahoma students and whose student average score falls below the national average score are required to develop a program of action which addresses their low achievement. Each school reporting low performance for three consecutive years is required to be declared academically at risk by the SBOE and appropriate means of intervention must be recommended.

Accreditation requirements include local plans for inservice development with individual skill reinforcement or remediation that teachers may be required to undertake. Local schools must develop an annual curriculum evaluation. Class size limitations have been encouraged amidst some controversy in the past. However, the 1989 Legislature, in HB 1202, set the limits at grades one through three at 22 students per class for the 1989-90 school year and 21 per class for 1990-91. A schedule of limits for kindergarten

for the first time has been imposed, decreasing from 25 students per class in 1989-90 to 22 students per class during and after the 1992-93 school year.

Using its EHA Part two 20% block grant portion, the State has established 22 regional service centers that provide testing and related services for children with disabilities. The Oklahoma Early Intervention Act, HB 1618, a response to new federal requirements and opportunities, requires various state agencies, most notably the Departments of Education, Health, Mental Health, and Human Services, coordinate planning, budgeting, and provision of services to infants and toddlers with disabilities and, to some extent, services for their families. A coordinated funding plan must also be submitted by October 1, 1989 and each September 1 thereafter to the Governor, Speaker, and President Pro-Tempore.

State Agency consultants and coordinators for curriculum and inservice training maintain field offices at eight different locations outside of Oklahoma City. Although these are not fully staffed field offices, the consultants provide a wide variety of services to the local school districts in their service areas.

Consolidation. Prior to becoming a state in 1907, Oklahoma was divided into Indian Territory and Oklahoma Territory. The Territorial Legislature, in 1890, adopted school laws which left the responsibility for education to each community. One-room, one-teacher, eight-grade schools were within walking distance of every rural family. Teachers were certified by passing examinations prepared by the Territorial Department of Education. In 1911, the State Board of Education was created and was given authority to consolidate school districts. Consolidation legislation in 1947 stated that if the average daily attendance fell below 13 in any elementary district, it would be annexed unless it was an isolated district (Dale, McKinley, 1986).

Current legislation encourages consolidation through additional funding and changes in school board election and selection procedures. In 1989, the Oklahoma Voluntary School Consolidation Act, SB 74, was passed. This act establishes a $750,000 fund from which the State Board of Education is authorized to help consolidating districts of less than 4000 pupils. A one-year allocation of money can be used for equipment, furnishings and personnel. The act also gives consolidated school districts absolute preference for three years for awards of a number of grants including grants from Library

Resources and from the Instructional Cooperative and Technical Education (CTE) programs.

Yet another provision of SB 74 allows small districts to take into a consolidation the financial advantage that small districts receive in the calculation of their formula entitlement. For the first two years of consolidation, whatever extra money would have gone into the consolidating school districts by virtue of their being small goes to the newly consolidated district, no matter how large. The law further encourages consolidation by allowing a consolidation election to be called by a petition of 30% of the qualified school electors of each district or by resolution of each local board rather than the previously required majority decision.

Small school cooperatives. In order to assist the small school districts of Oklahoma in meeting the increased graduation requirements and the new college admission standards, the Legislature appropriated monies for small school academic cooperatives. The cooperatives were funded by competitive grants funded through the Office of Rural Education in the State Department of Education.

After a consideration of isolation and density factors, a small/rural school district was defined as having an average daily attendance of 800 or less. In 1985, this included 484 districts. Cooperatives included a district of 800 average daily attendance or less and an institute of higher education or other school district of any size.

During the 1985-86 and 1986-87 school years, 110 cooperatives were funded, representing over 196 districts. Circuit riding teachers, shared resources, shared facilities and shared services are among the cooperative arrangements established. Districts joined together to provide classes in math, science, foreign languages, computer education and music. Of the state's 611 school districts, over three hundred have participated. (Folks, 1987; Garrett, 1987).

An example of a shared facility cooperative is that of Challenge 85, on the banks of Lake Hudson in Mayes County. The three small rural school districts of Salina, Locust Grove, and Chouteau combined to renovate a cooperative facility to house high achieving high school students from the three districts for a one-half day of advanced science, math, computer education and foreign language.

Satellite instruction. In cooperation with the Oklahoma State University and the Oklahoma State Board of Education, 90 Oklahoma rural schools are participating in a program of instruction via satellite. The curriculum includes German, Physics, Calculus and Trigonometry. A certified grade level teacher is present in the rural classroom and facilitates the program. Software and electronic mail are available for this project. These programs bring courses to rural students that otherwise may not have been available. (Folks, 1987; Garret, 1987)

The small schools cooperative funds have provided assistance for four rural school districts in Beaver County in the northwestern panhandle area. These districts formed a rural school telecommunications cooperative that includes a completely interactive, audio and visual instructional program for students in each site (Garrett, 1987).

C. Rural School Profile and Demonstration Sites

Oklahoma has had little consolidation of small districts in recent years. There are currently 75 districts, 12% of the total, with less than 100 students, and 232 districts, 38% of the total, with less than 250 students. More than 80% of Oklahoma's 611 school districts enroll less than 1,000 students. Forty-nine percent of the districts are rural nonmetropolitan, 15% are rural adjacent to metropolitan, and 20% are small town nonmetropolitan. The 392 rural districts, 64% of the total, enroll 27% of the state's public school children.

One hundred forty seven of the districts are county "dependent" elementary level, offering from six to nine grades of instruction and sending their students to nearby high schools. Not necessarily located in rural areas, they are governed by independent boards, receiving their funds from local counties. Eighty-six of the dependent schools represent 22% of all rural districts and account for seven percent of rural school enrollment. Thirty -nine of the dependent districts represent 24% of all small town districts. Enrolling from 30 to 502 students each, they account for four percent of small town school enrollment. The 10 urban dependent schools account for one percent of urban school population.

American Indians in Oklahoma are more likely to live in rural areas. Of the 116 Oklahoma school districts with American Indian enrollments of more than 30%, three-

fourths are rural. The 91 rural districts with more than 30% American Indian enrollment represent nearly one-fourth of all rural school districts in the state.

As a general rule, student-teacher ratios tend to be lower at smaller schools. SEDL's data for most of the Southwest states shows that smaller districts have lower student-teacher ratios. There is a substantial variation in student-teacher ratios for the smallest school districts in Oklahoma. The overall state average for all public school districts is 16:1 according to figures of the 1988-89 QED School Guide.

The Oklahoma RSSI Demonstration Sites. RSSI demonstration sites were selected on the basis of enrollment, rurality, and geographic location. Seven of the sites are rural nonmetropolitan and one is small town nonmetropolitan. There is great diversity among the sites. Extremes among the eight sites include the range in per pupil expenditure, from $2258 to $5029; in percent of students on free lunch, from 14% to 86%; in percent of pupils bussed, from 45% to 95%; and the pupil - teacher ratio, from 8:1 to 27:1.

The student ethnic composition of the sites varies with the geographical location. Sites in the northwest part of the state are predominantly White. Those in the northeast and east sections of the state contain substantial numbers of Native American students with one site reporting 85%. Those in the southwest report some Hispanic enrollment. Black student population is less than 10% in four of the sites while White student enrollment ranges among the sites from 15% to 98%.

Selected Demonstration Site Data for Oklahoma

School District	Per Pupil Expenditure	% of Students on Free Lunch	% Ethnic Composition W B Other	% of Students Bussed	Pupil/ Teacher Ratio
Adair	$2521	14	62 - 38	73	16:1
Bell		85	15 - 85	95	17:1
Carmen-Dacoma	$5029	22	- - -	-	8:1
Geary	$3600	50	84 5 11	-	13:1
Lone Grove	$2443	17	98 - 2	51	16:1
Shidler	$3406	25	98 1 1	75	15:1
Snyder	$2258	58	80 7 13	45	27:1
Weleetka	$3263	86	47 8 45	60	13:1

Site Specific Profiles

Adair Independent School District in Mayes County reports three buildings, K-5, 6-8, and 9-12. District staff consist of a superintendent, an assistant superintendent, three building principals, 53 teachers, two counselors, and a librarian.

Seventy-five percent of the students are bussed on nine bus routes. The longest bus route is 35 miles, and takes 90 minutes. Seventeen percent of the students are reported as "at risk." Eighty-three percent of the students graduate from high school and 65% seek further education and training.

Programs offered at Adair include Migrant, Chapter 1, Gifted and Talented, and German by Satellite. Adair is especially proud of its German by Satellite program, taught by a German professor from Oklahoma State University and monitored by a faculty member at the home school. The district's concerns are securing additional funding and facilities.

Bell Dependent School District is in Adair County, one of the most economically depressed areas of the state. Its one building is in the outskirts of the Stilwell community and houses grades K-8. In addition to the superintendent/principal and the nine teachers, the district staff includes a librarian and an athletic services person. The assistance of a speech therapist and other special education personnel is obtained through cooperative arrangements.

Eighty-five percent of the students are Cherokee. The drop-out rate for students in grades 5 to 7 was 8% for 1983-84. District records forecast that only 25% of Bell's students will graduate from high school.

Programs offered at Bell include Migrant, ESL, and Special Education. The district is especially proud of a computer based Bilingual Instruction Model Application of multi-sensory, computer controlled, curriculum modules. Its main concerns are raising the level of student achievement, raising the attendance, and the development of a pre-school skills program. The school leadership team ranked parental involvement as their number one priority for the year 1989-90.

Carmen-Dacoma Independent School District is in Woods County. The district experienced consolidation in 1968. The elementary school, K-8, is now in Dacoma, while the high school, 9-12, is in Carmen, 11 miles away. The longest bus route is 22.5 miles and takes 45 minutes. Predominantly White, the student population all graduate from high school, 90% of the graduates seeking further education/training. The district reports only 1% of its students as being "at risk."

Selected as a RSSI demonstration site for the improved teaching of thinking, Carmen-Dacoma's superintendent not only endorsed and led the effort, he was also the trainer for the five training sessions during the first year.

The district staff consists of a superintendent, two principals, 22 teachers, a Chapter 1 person, a librarian, and an athletic services person. It offers Migrant education, Chapter 1, Title II EESA, and Chapter II ECIA. It is especially proud of its computer education program consisting of an elementary computer lab where students in grades K-8 work at least 30 minutes per week; a word processing and computer network lab for high school students; and a state-of-the-art Apple computer lab and other audio-visual equipment for its German by Satellite program from Oklahoma State University. Its

concerns include maintaining a quality instructional system with declining resources; academic improvement through the use of thinking and reasoning skills; and the use of technology to prepare students for the 21st century.

Geary Independent School District in Blaine County reports two buildings, K-7 and 8-12. In addition to the superintendent and two principals, the staff consists of 35 teachers, a school counselor and a librarian. The district graduates 95% of its students from high school and reports that 55% of the graduates seek further education. It considers 8% of its students as "at risk".

During 1987-88, the district was involved in a comprehensive management by objectives effort. Among the programs it offers is Migrant education. Its concerns are improving academic attainment of low SES students, improving overall academic student achievement; and increasing higher level order thinking skills.

In Carter County, the **Lone Grove Independent School District** is the only one of the demonstration sites that is small town non metropolitan. Its professional staff includes a superintendent, three principals, 75 teachers, and 11 other central office staff people. The student body is predominantly White. Ninety-nine percent of the students graduate and 50 percent seek further education and training. Five to fifteen percent of the students (depending on age) are considered "at risk." Over half of the students are bussed on 11 bus routes. The longest route takes 75 minutes.

The district offers Chapter 1 and Gifted/Talented programs. It is especially proud of its computer literacy program in grades 7-9 and the teaching of advanced computer skills in high school, including word processing and accounting programs. Priorities for the district include providing special education services; improving reading instruction in grades 7-9; and motivating students.

Shidler Independent School District is in Ottawa County. It reports two school buildings and a total enrollment of 298 students. Its professional staff include the superintendent, two principals, 20 teachers, one-fourth time counselor, one-third time librarian, and an athletic services person. Ninety-nine percent of the predominantly White student population graduate and 60% seek further education. Two percent of the students are considered "at risk." The 75% of the students requiring bus transportation are bussed on six bus routes, with the longest route taking about 75 minutes.

The district offers Chapter 1 and Special Education. It is especially proud of its music program. Its main concerns are financing programs and finding quality teachers.

In Kiowa County, the **Snyder Independent School District** reports four school buildings with an enrollment of 545 students and a teaching staff of twenty teachers. Other professional staff include the superintendent, three principals, a counselor, three Chapter 1 teachers, a librarian, and two migrant staff persons. Ninety percent of the students complete high school and 60% of the graduates seek further education and training.

In addition to adult education, the district offers Migrant and Chapter 1. In 1987, the district received special recognition for its secondary migrant education project by the Secretary's Initiative to Improve the Education of Disadvantaged Children. Documented successes of the migrant project included increases in graduation rate, honor roll attainment, and extracurricular participation by secondary migrant students.

The **Weleetka Independent School District** is in Okfushee County. The district reports 4 schools, four principals, and 35 teachers. Other staff include the superintendent, a half time counselor, an athletic services person, and an audio-visual coordinator. While 20% of the 467 students are considered "at risk," 95% graduate with 30% seeking further education/training. Forty-five percent of the students enrolled are Native Americans and 8% are Black.

The district offers Chapter 1, Gifted and Talented, and German by Satellite programs. It is especially proud of its woodworking program in which students build furniture for their own use. Its priorities are improving course offerings, increasing achievement scores, and financing an adequate curriculum.

TEXAS

The Rural Context

The name Texas is from "Tejas", an Indian word meaning friendly. Texas is the largest of the five states. El Paso in the western mountains is roughly half-way between Houston and Los Angeles. Houston is about halfway between El Paso and Jacksonville, Florida. Texas includes the huge, wide-sky panorama of the panhandle-plains the awesome mountains of West Texas and the dense forest and sparkling lakes in the east. It includes the seashores of the sunny Gulf Coast region, the majestic hill country in central Texas, and south Texas with its bougainvilleas, citrus groves and Mexico just a bridge away.

It is also the most urban and populous state in the region. Eighty-three percent of Texans live in urban areas and Texas is the only state in the country with three metropolitan areas with a population greater than one million, Dallas, Houston and San Antonio. Texas has the largest number of metropolitan areas (twenty-eight).

The dramatic downturn in the Texas economy in 1987 was due primarily to the oil price collapse of early 1986 and had a dramatic effect on state revenues. Revenue from gas and oil production declined 17.2% and 30.7% respectively between the years 1985-87. The one tax category that showed a substantial increase was revenue from motor fuels, due to a tripling of the gas tax rate to 15 cents per gallon. Recent projections indicate that all economic regions are expected to grow, however, those regions with broad based economies will grow faster than energy dependent regions (Kelly, 1988).

Recent data indicate that the economic recovery is beginning. One significant indicator of the economic climate of a state is the extent to which large corporations locate their company headquarters in that state. Texas ranks third in the country with the number of Forbes 400 private company headquarters per million residents. Only New York and Missouri rank higher. Additional employment gains will be in the areas of electronic component manufacturing, computer and data processing, research and development, and manufacturing including the petrochemical industry (Kelly, 1988).

In Texas, farming is still a major economic activity of almost a third of the counties, with distinctive types of farm economy in the eastern, southern, western, and northern

quadrants of the state. The farming counties include: 29 counties in the Panhandle region, dominated by grain, grain and soybean, or grain and livestock farming; 12 counties dominated by cattle and goat grazing in western Texas. Four counties in the which produce two to four quick-growth crops of lettuce, spinach, and other leafy vegetables; three specialized citrus-growing counties of the lower valley; and 14 mixed "truck" farming counties in widely spaced areas of southeast Texas. Several of the more coastal counties produce rice, although peanuts and soybeans are also important.

While the state's major industries -- oil and gas, construction and finance, insurance and real estate -- were on the decline over the past five years, public schools as an industry continues to grow. Growth in the public schools has out-paced that in trade, manufacturing and services, three industries that have increased their contribution to the state economy over the past five years.

The 1988, the state government spent $12.85 billion on public schools -- kindergarten through the eighth grade. The Comptroller's office estimated that public schools contributed at least $33.3 billion or 10.2% to the gross state product. Only trade, finance, insurance and real estate, and manufacturing and services pumped more into the economy than education spending. Teachers and other school employees, who numbered 411,000 in 1988, had $8.5 billion in salaries to spend in the Texas economy. Texas' 1062 independent school districts spent another $4.35 billion with state businesses. School jobs now represent 6.2% of the total Texas employment, nine-tenths of a percent less than the energy industry (Blackstone, 1989).

Rural Schools. Texas has 5,750 separate public school campuses. There are 1,368 individual schools in rural locations. SEDL's CES code for school districts identifies 574 of the state's 1,063 school districts as predominantly rural, and another 307 as predominantly small town districts. The average rural district enrolls just over 700 students. The average small town district enrolls just over 2,250 students. Together, rural and small town schools are educating just over a third, 34% of public school students in Texas.

Houston and Dallas, each more than twice as large as the third largest district in Texas, together enroll 10% of Texas public school students. With the addition of Fort Worth, El Paso, San Antonio, Austin and Northside, these eight largest school districts

enroll 20% of the states total enrollment. It would take approximately 850 of the smallest school districts to obtain the same 20% of the statewide enrollment.

B. The Policy Context

Texas is growing in both size and heterogeneity. By 1990, Texas will be the second most populous state in the nation with a projected school enrollment of approximately 3.5 million -- an increase of more than eight percent since 1986. The student population is characterized by increasing proportions of ethnic and racial minorities. Among children aged four to seven, there is likely to be over a ten percent increase in the Hispanic population, over a five percent increase in the Black population, and less than a four percent increase in the White population. Already in 1986, the ethnic distribution of first graders is 50.5 percent White, 15.2 percent Black, and 32.5 percent Hispanic. Thus, the wave of minority-become-majority has already reached the schools. This burgeoning minority representation is likely to continue through the next decade and into the next century.

These demographic developments pose educational challenges, for an increasing percentage of the children entering school comes form groups that have traditionally left school early. In 1980, 70 percent of Whites but only 40 percent of Hispanics and 60 percent of Blacks over the age of 25 had graduated from high school. Only 66 percent of Hispanics who entered the ninth grade in 1979 stayed in school until their senior year, and only 59 percent graduated. Texas ranked near the bottom, 38th among the 50 states, in 1980, in the proportion of its population, aged 25 or older, that completed high school. High school completion is among the state's highest priorities (Long-Range Plan of the State Board of Education for Texas Public School Education, 1987).

Legislation. The Long-Range Plan for Texas Public School Education was mandated by House Bill 72 the education reform legislation, and enacted by the 68th Texas Legislature. The goals of the Texas Long-Range Education Plan are:

Goal 1: Student performance. All students will be expected to meet or exceed educational performance standards.

Goal 2: Curriculum. A well-balanced curriculum will be taught so that all students may realize their learning potential and prepare for

productive lives.

Goal 3: Teachers and teaching. Qualified and effective teachers will b e attracted and retained.

Goal 4: Organization and management. The organization and management of all levels of the educational system will be productive, efficient, and accountable.

Goal 5: Finance. The financing of public education will be equitable to all students in the state.

Goal 6: Parent and community involvement. Parents and other members of the community will be partners in the improvement of schools.

Goal 7: Innovation. The instructional program will be continually improved by the development and use of more effective methods.

Goal 8: Communications: Communications among all public education interests will be consistent, timely, and effective.

A wide variety of programs were designed to ensure the successful implementation of the education goals including a performance-based accreditation system, a comprehensive mandatory student testing program, teacher assessment and career ladder, administrator assessment, and a well-balanced curriculum.

Regional Educational Service Centers. The regional education service centers (RESC) in Texas have been in operation for 20 years. In this time the centers have evolved into regional institutions designed to assist school districts in a broad range of cooperative efforts. Regional education service centers participate as service agencies in the planning, development, coordination, implementation and evaluation of educational programs within the 20 regions of the state. The operations of the centers are keyed to the objective of making quality ideas, services, information, and teaching materials available to local school districts.

The service centers form a comprehensive statewide service delivery system. Within that system, the centers demonstrate may commonalities, particularly in terms of services delivered and the methods for providing those services. All centers are charged with providing services in certain core areas which reflect mandates from statute and State

Board of Education rule. Because of differences among the regions, each center uniquely tailors its operations of meet the needs of school districts within the region.

The State Board of Education's **Long-Range Plan for Texas Public School Education** provides a framework for achieving quality education in Texas' public schools. Regional education service centers play a key role in this statewide effort. Additionally, the service centers operate in accordance with state and federal laws, federal regulations, rules of the State Board of Education, and the provisions of the **State Plan for Regional Education Service Centers.** The flexibility which they bring to the education structure along with their close contact with the school districts ensures a strong cooperative effort in the implementation of new educational standards, expectations, and initiatives.

Since passage of HB 72 in 1984, the 20 regional education service centers have focused their efforts in the areas of school accreditation, curriculum development, and staff training. Exemplary of these efforts has been the training of over 13,000 certified appraisers in support of the Texas Teacher Appraisal System, and assistance to virtually every school district in the development and implementation of curriculum which support the State Board of Education Mandates contained in 19 TAC Chapter 75, Curriculum. The centers have furthermore played a crucial role in the implementation of the Public Education Information Management System (PEIMS) by training district staff in the PEIMS data standards and assisting districts in collecting, editing and submitting PEIMS data (Biennial Report on Regional Education Service Centers, 1989).

Texas Small Schools Project. Initiated with TEA support in the 1970s, the Texas Small Schools Project eventually left the jurisdiction of the state agency as an independent organization to unite with the Texas Association of Community Schools (TACS). Although it has a substantially rural focus, TACS has defined its membership and concerns somewhat more broadly to encompass the interests of school districts that have not more than one high school within the district. As such TACS potentially represents a large number of Texas schools both in rural areas and elsewhere. The organizations' mission has focused largely on providing administrative services to member districts, with some role in monitoring policy concerns. TACS and TEA still sponsor an annual series of workshops for community schools.

Funding for isolated schools/allowances for small enrollments. There are a variety of adjustments in state foundation funding for districts in various circumstances. For rural and small school districts, these fall into two major categories. A "small schools adjustment" is applicable to districts with under 1,600 average daily attendance, increasing for smaller size. There is a higher multiplier for the small schools adjustment when applied to districts covering more than 300 square miles of land area. An independent "sparsity adjustment" is available to districts that are located more than 130 miles from the nearest alternative highs school. Several sparsity adjustment formulas grade down to include school districts with current enrollment of as few as 30 students. Districts smaller than that size cannot receive a sparsity adjustment.

Incentives for interdistrict cooperation. There have been a number of cooperative projects in the state for school districts. One area where the State has been active is in the formation of pilot regional planning groups for vocational education within regional labor markets, with the joint involvement of JTPA private industry councils, public higher educational institutions including community colleges, universities, and technical institutes, and a large majority of independent school districts in the labor market region. Although the urban and the rural pilot projects are just really under way, the State's involvement reflects a desire to foster interagency as well as interdistrict cooperation focused on regional concerns.

School consolidation history and practices. The abundance of very small school districts in Texas appears to embody a strong state tradition of independent local schools. Yet the state has experienced mass consolidations as others have. In 1947, the Gilmer-Aiken Act defined the structure of state foundation funding and established the current state agency structure, replacing the elected state superintendent with an appointed Commissioner answerable to an elected Board. The same act reduced the number of Texas school districts sufficiently to account for most of the drop from approximately 6,400 to 1,100 between 1940 and 1978.

Technology and communications. In 1988 the State Board of Education adopted a long-range plan for educational technology in Texas schools, and in 1989 the legislation was enacted in response to the plan. Although the legislation preserves the framework of the plan, funds were not available to carry out its ambitious proposals to provide school

districts with technological hardware, courseware, and requisite training. Instead, the board was mandated to restudy the proposed activities and develop a financing plan for the next legislative session. Funds were appropriated for limited pilot activities and for establishing the nucleus of a Center for Educational Technology. The state agency has also begun establishing electronic communications with all districts through an extensive local area network called TEA-NET. The Long-range Technology Plan calls for establishing TEA-NET connections with all districts and for strengthening direct district access to the State's Public Education Information Management Systems (PEIMS).

The state participates in the Southern Educational Resources Consortium Star Schools project. The TEA Office of Technology attempts to assist smaller districts with the purchasing of educational technology equipment and software. The TI-IN network of San Antonio broadcasts classroom and inservice instruction to schools in a number of states, and has secured its own Star Schools network targeted primarily at rural American schools. TI-IN operates independent of State support but has collaborated with regional service centers, particularly in providing foreign language instruction under new State curriculum requirements.

Information and data collection. The PEIMS system includes a classification of districts on a scale ranging from urban to rural. Major urban districts include the eight largest school districts serving the metropolitan areas of Houston, Dallas, San Antonio, Fort Worth, Austin, Corpus Christi, and El Paso. Major suburban districts are those surrounding the major urban districts. Other central city districts and other central city suburban districts are defined for other large cities. Independent town is a designation given to the largest districts in counties with a population between 25,000 and 100,000. Non-metro fast growing districts are those with at least 300 average daily attendance, or between 300 and 720 average daily attendance but without a 20% growth rate, that do not fall within one of the major metropolitan areas. TEA reports data by district type as well as by nine levels grouped by average daily attendance. PEIMS collects critical data on student performance, staffing and fiscal matters. Poorly performing campuses and districts are identified for priority state attention and technical assistance.

School finance. The Texas Supreme Court, in October, 1989, declared the state's method of funding public education unconstitutional. The legislature must develop a plan

to reduce the disparities between rich and poor districts by May 1, 1990. The plan must address whether the new system will require new taxes and the most appropriate method of funding to best meet the mandate. The ruling in the Texas case, Edgewood v Kirby, was viewed as positive by state officials, lawmakers, and education lobbyists. The decision is expected to influence school finance suites in other states and add to the momentum to reduce inequities in school funding systems (Newman, 1989).

C. Rural School Profile and Demonstration Sites

Texas' land mass, population, number of school districts, topographical features, and economies, present a diverse rural school picture. With 1,063 school districts, 574 are designated as rural and small. When those schools are added to the small town schools (many of which consider themselves rural), the total is 804. The 76% of Texas school districts that are rural or in small towns enroll only 25% of the state's students in 12.4% of the states schools.

The Texas RSSI demonstration sites. The similarities and differences of the sixteen sites with whom the RSSI has worked in the last two years are presented in the following table. The districts range in ADA from 42 students to 1,994 students. Per pupil expenditures range from a low of $3033 in Cameron to a high of $8,986 in Allison. The ethnicity of students includes various proportions of Black, White and Hispanic students, ranging from 100% White/Other in Allison, to 100% Hispanic in Valley View. The percent of students passing the TEAMS test range from a low of 34% to a high of 88%. Dropout rates range from zero to 36%.

Selected Demonstration Site Data for Texas*

School District	Per Pupil Expenditure	# of Students ADA	% Ethnic Composition W B H	% of Drop-outs	TEAMS
Abernathy	$4557	926	45 4 54	13	75
Allison	$2986	72	100 0 0	0	88
Beckville	$4600	609	85 14 1	0	60
Bishop	$3934	1345	32 1 64	24	74
Cameron	$3033	1625	53 25 22	18	71
Cushing	$3369	469	89 8 3	2	70
Dilley	$3961	909	19 0 81	6	45
Fabens	$2795	1994	5 1 94	36	48
Greenwood	$3529	1253	90 0 10	15	80
Henrietta	$3914	975	97 1 2	11	84
Johnson City	$3161	511	85 0 15	0	77
Lyford	$3642	1489	7 0 93	17	63
Seagraves	$4190	680	37 8 55	19	75
Valley View	$3707	1180	0 0 100	8	34
Waelder	$5457	184	8 28 64	1	40
Woodson	$6000	106	94 0 6	1	63

* The sites shown on this table reflect the demonstration sites for 1987 - 1988 and for 1988 - 1989 years of RSSI activities.

Site Specific Profiles of Representative School Districts.

Abernathy Independent School District is in the Panhandle of Texas some twelve miles from Lubbock. With 926 students, almost half are White and half Hispanic. The staff is composed of a superintendent, 3 principals for the three schools (PreK - 5, 6 - 8, and 9 - 12), 76 teachers, 8 Chapter 1 staff, 2 counselors, and a nurse, business manager, librarian, curriculum person, and athletic support person. The district has programs for migrant and for gifted and talented. It serves as the center for a special education cooperative effort with several neighboring districts.

An increased use of technology includes trained staff, a computer lab and software programs. The district priority issue selected for attention through systematic staff development is improvement of reading skills. The issue and strategies to address reading improvement were planned by a district team of administrators and teachers, in August, 1989.

Small town district nonmetropolitan. In the east-central part of the state, **Cameron Independent School District** represents the largest of the Texas sites with its five schools graded as follows: P - K, 1 - 2, 3 - 5, 6 - 8, and 9 - 12. The schools vary in size from the preschool with 183 students and 8 teachers to the high school, which is the largest with 476 students and 34 teachers. The student population is 47% ethnic and 53% White with almost 50% of the students on free or reduced lunch programs. The district has a superintendent, five principals, three librarians, two counselors, and one person each for curriculum and instruction, Chapter 1, business management, nursing, food service, and athletics.

The per pupil expenditure is close to the state average for rural districts. The state test scores are higher than average. The administration suggests that the instruction is strong especially in the preschool program. Their major concerns revolve around facility improvement and expansion, additional staff, and expanded vocational and pre-vocational offerings.

Rural district adjacent to a metropolitan area

Greenwood Independent School District represents an unique profile, partially explained from its historical foundations and partially from the economic shifts in the state. Adjacent to the Midland-Odessa area, the 122 square mile district is ten miles east of Midland. Begun in 1908 to serve area ranches, the district encompassed six other districts in 1925, and was built on its present site in 1949 (the high school was added in 1972). A unique characteristic is that while there are several churches in the area, there is no town. Greenwood (named after two missionaries to the area) is basically the school and the town. The ties to the school are understandably strong due to the historical perspective.

The organizational pattern is: a primary school, K - 3, with a principal, 22 teachers, and 457 students; an intermediate schools 4 - 6 with a principal, 18 teachers and 301 students; a junior high school with a principal, 15 teachers and 194 students; and a high school with a principal, 23 teachers and 301 students. Of the 1,253 students, only 136 are on free or reduced lunch: there are no migrant, ESL, or bilingual students. There are programs for Chapter 1, gifted and talented, remedial reading, special and vocational education. With the superintendent, the staff includes 2 counselors, a curriculum and instruction director, a nurse, a business manager, and one person each for business management, athletics, buildings and grounds, and food services.

There are major concerns related to financial constraints and their impact on staff-development, on-going programs, and future improvement efforts.

At the southern extreme of the state is Valley View Independent School District, unique in its own way, and diverse from Greenwood. Located in Hidalgo county, all the students are Hispanic. Two schools, a Pre-K - 5 with 651 students and a 6 - 9 schools with 401 students, have a total of 67 teachers. All students are bussed on 15 routes, the longest being 28 miles. The students go on to high school in the adjacent consolidated area high school that serves the three adjacent towns of Pharr, San Juan and Alamo. Each school has a principal and a counselor. Among the other staff positions are a superintendent, 4 persons for athletic services, 2 supervisors, a federal programs director, a business manager, and a nurse.

Many programs are offered for the students who are almost all eligible for free

lunch. These programs include migrant, Chapter 1, ESL, bilingual, special education, gifted and talented and instructional TV programs. There are many professional development opportunities for teachers. Major concerns include increasing student achievement scores and increasing parental involvement.

Rural nonmetropolitan

Allison Independent School District, the smallest of the site schools, is located in the far north eastern part of the Texas panhandle near the Oklahoma border. It has 72 students (35 belonging to teachers) and spends $ 8,986 per student. The all White student body has 13 teachers, a superintendent and a principal for the K - 12 campus. Teachers are paid on a scale that is on the high end of the state scale and a teacherage is available. Achievement rates are very high and almost all students continue on to higher education opportunities. Of the 72 students, 21 participate in the free or reduced lunch program. The focus for improvement is on writing, reading, and computer skills.

Beckville Independent School District, located in deep East Texas is in the same rural classification as Allison, but quite different. The 609 students, 103 of whom qualify for free or reduced lunch, are predominately White with a 14% Black population. Each of the three schools, (K - 5, 6 - 8, and 9 - 12,) has a principal and together have a total of 44 teachers. Other staff include the superintendent, a counselor, a nurse, persons for Chapter One, athletic services, gifted and talented, and two librarians. Most of the Hispanic students are migrant students. There are programs for gifted and talented, and a special art education program that is the pride of the district. Major targets for improvement include: skills in mathematics, writing and language arts; higher basic skills test scores, increased use of technology in classroom instruction; and higher student motivation. Five percent of the student body are classified as "at-risk" and the drop-out rate is reported as very low by the school. Ninety-eight percent of the students graduate and 60% go on to higher educational institutions.

Bibliography

_____. (1989, April). *ERIC digest: Using technology to improve the curriculum of small rural schools.* Charleston, WV.

Administrators' handbook for elementary, middle, junior high and high schools (1987-88) State of Oklahoma, Department of Education, p. 14.

Albarado, S. (1989, August). Louisiana's average income rose in 1988. *Morning Advocate.* Baton Rouge, LA.

Askins, B., Schwisow, J., Martin, S., & Brooks, J. (1987, October). *A partnership approach in developing a model for improved student learning and teacher renewal in rural/small schools.* Paper presented at the National Rural and Small Schools Conference, Arlington, VA.

Barker, B.O. (1987). *Interactive Distance Learning Technologies for Rural and Small Schools: A Resource Guide.* ERIC MINI-REVIEW, Rural Education Las Cruces: New Mexico State University. ERIC Clearinghouse on Rural Education and Small Schools.

Barker, B.O. (1986, Winter). Where two or three are gathered together: A profile of one-teacher schools. *Texas Tech Journal of Education*, pp. 35-40.

Blackstone, K.B. (1989, October). Beating Texas' economic curve. *Morning News.* Dallas, TX.

Brown D.L. (1989, May). Demographic trends relevant to education in nonmetropolitan America. In Office of Educational Research and Improvement (Ed.). *Rural education: A changing landscape*, (pp. 19-30). Washington, D.C.

Cooper, K.J. (1987, September). Hispanic population rises 30% as growth outpaces rest of U.S. *Austin American-Statesman*, p. 5.

Dale, D., & McKinley, K. (1989). *School consolidation and/or reorganization: Experiences from the past lessons for the future.* (a position paper presented by The Organization of Rural Oklahoma Schools) (OROS), p. 6.

Dale, D., & McKinley, K.H. (1986, July). *Alternate instructional delivery systems for rural and small schools.* Stillwater, OK: Oklahoma State University.

David, J.E., (1988, January). 'Jim Bob' Moffett spreads the gospel of tax reforms - freeport-McMoRan's boss is out to convert Louisiana. *Business Week.* pp. 72-73.

Davis, J. (1988-89, Winter). Culture and change in the small school. *The Rural Educator*, pp. 4-7.

Despite counties of rich and poor, Texas is average. (1988, April). *Austin American-Statesman*, p. B3.

ERIC Clearinghouse on Rural Education and Small Schools. (1989, March). *ERIC CRESS digest: Nontraditional education in rural districts.* Charleston, WV.

Exerpts from unanimous Edgewood ruling. (1989, October). *Education Week.*

Fisher, D., & Knutson, R. (1989, September). Rural southwest in the year 2002: Implications for educational policy. Notes on presentations at Arkansas, Oklahoma, Louisiana, New Mexico, and Texas rural issues forums. Available from Southwest Educational Development Laboratory, Austin, TX.

Forbes, R. H (1985). *State policy trends and impacts on rural school districts.* Presented to the National Rural Education Forum, Kansas City, MO.

Galvin, P.F., & Bruce, R. (1989, Spring). Technology and rural education: The case of audio-graphics telecommunication. *The Rural Educator*, pp. 9-13.

Graves, D. (1988, March). Impoverished schools found throughout state. *Austin American-Statesman*, pp. A1.

Green, G. (1988-89, Winter). An analysis of the attitudes of school board members in Oklahoma. *The Rural Educator*, pp. 14-18.

Herriott, R.E. (1980, March). *Federal initiatives and rural school improvement: Findings from the Experimental Schools Program.* Cambridge, MA: Abt Associates, Inc.

Hobbs, D. (1989, May). *Education reform and rural economic health: Policy implications.* Charleston, WV: Appalachia Educational Laboratory.

Hodgkinson, H.L. (1986, December). *Texas: The state and its educational system.* The Institute for Educational Leadership, Inc. Washington, D.C.

Honeyman, D.S., Thompson, D.C., & Wood, R.C. (1989. June). *Financing rural and small schools: Issues of adequacy and equity.* Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools.

Hoover, W., Foley, D., Boethel, M., & Smith, M.L. (1989). *Staff development in rural, small schools: A view from rural educators in the southwest.* Austin, TX: Southwest Educational Development Laboratory.

Hord, S. (1989). *Images of superintendents' leadership for learning.* Sponsored by the Meadows Foundation, the Department of Education, OERI, Washington, D.C., & the Southwest Educational Development Laboratory, Austin, TX.

Hornik, R. (1989, March). Small-town blues. *Time*, pp. 66-68.

Hull, R. *Tradition of sharing: Cooperative programs in rural schools. Journal of Rural & Small Schools* (1:1), pp. 22-24.

Indicators of educational quality among Arkansas school districts: 1983-1988. (1988, December). University of Arkansas at Little Rock, Center for Research and Public Policy.

Kane, C. (1989, May). Implementation of promising practices: Necessary conditions. In J. D. Stern (Ed.), *Rural education - a changing landscape* pp. 55-60. Washington, D.C.: Educational Networks Division, Office of Educational Research and Improvement.

Kelly, B., (1988, Fall). *Economic, demographic, and social profiles for Arkansas, Louisiana, New Mexico, Oklahoma, Texas and the southwest region*. (Draft copy) Available from Austin, TX: Southwest Educational Development Laboratory.

Kennedy, R. L., Gentry, D.L., & Coyle, L. *Size, expenditures, MAT6 scores, and dropout rates: A correlational study of Arkansas school districts*. University of Central Arkansas, Conway: Center for Academic Excellence.

King, W. (1989, June). *Bad times on the Bayou* - Louisiana is a state in crisis: Economic, environmental, racial. *The New York Times Magazine*.

Knutson, R., Fisher, D. (1988, Fall). Focus on the future. Options in Developing a New National Rural Policy, Rural Development Policy Workshops. (Executive Summary). College Station, TX. Texas A & M University, Department of Agricultural Economics.

Lawson, G. (1989). *An analysis of a staff development intervention in rural schools*. Doctoral dissertation, the University of Texas at Austin.

Learning by satellite, (a brochure offered by the Arts and Sciences Teleconferencing Service -A National Network Providing Equal Access to Rural High Schools, OSU.

Legislative Education Study Committee. (1987, December). *Report on consolidation and limitation of New Mexico school districts*. Santa Fe, NM.

Long-range plan for technology of the Texas Board of Education, 1988-2000 (December 1988, p. 26) Texas Education Agency.

Louisiana Department of Education, Office of Reform Coordination: Management and Oversight. (1989). *Louisiana education reform initiatives from the first day on*. Louisiana Board of Elementary and Secondary Education & Louisiana Department of Education.

Master plan for elementary and secondary education (1989, March). Baton Rouge: Louisiana Department of Education.

Matthews, B. (1985, 1986, 1987, 1988). *State recognition program annual report*. Little Rock: Arkansas Department of Education.

McLaughlin, M. (1982). What worked and why. In Nachtigal, P. (Ed.). *Rural education: In search of a better way*, pp. 279-286. Boulder, CO: Westview Press.

McRobbie, J., & Berliner, B. (Eds.). (1989, July). *Looking ahead to the issues for rural schools*. Proceedings papers Spring 1989. San Francisco: Far West Laboratory for Educational Research and Improvement.

McRobbie, J., & Berliner, B. (Eds.). (1989, July). *Looking ahead to the year 2000: Issues for rural schools*. Proceedings papers Spring 1989. San Francisco: Far West Laboratory for Educational Research and Improvement.

Moritz, G. (August, 1989). Do small schools measure up? *Arkansas Gazette*.

Multiple curriculum study. (1987, March). Office of Research and Development, Louisiana Department of Education.

National Association of Towns and Townships. *Harvesting hometown jobs: An audio-visual production user's guide*. Washington, D.C.

National Education Association (September, 1989). *Rankings of the States, 1989*. West Haven, CT: NEA Research.

New Mexico State Department of Education. (1987). *Statewide school dropout study, 1986-87. Statewide school dropout study, 1986-87*. Santa Fe, NM.

New Mexico Progress Economic Review of 1986. *Sunwest*

Oklahoma Department of Commerce in cooperation with Oklahoma State University and The University of Oklahoma. *Economic Report to the Governor 1987*.

Orfield, G., Monfort, F., & Aaron, M. (1989, March). *Status of school desegregation, 1968-1986*. Alexandria, VA: National School Boards Association.

Parnes, H.S. (1986). *Developing human capital*. Columbus, OH: National Center for Research in Vocational Education.

Penn, D., (et.al.) (1987). *Economic report to the governor, 198* Oklahoma City: Oklahoma Department of Commerce.

Phillips, R., Nachtigal, P., & Hobbs, D. (1986) *The Mid-Missouri small school computer consortium: Training teachers on their own time*. Las Cruces, NM: ERIC Clearinghouse on Rural Education & Small Schools.

Phillips, R., Nachtigal, P., & Hobbs, D. (1986). *The Mid-Missouri Small School Computer Consortium: Training teachers on their own turf*. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools.

Policy Research Project on Education, Technology, and the Texas Economy. (1988). *Education, technology, and the Texas economy. Volume I: Economics of education*. Austin: LBJ School of Public Affairs and the Texas Education Agency.

Pollard, J. S., (1986, February). *Analysis of education-related legislation and regulation for the states of Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.* Austin: Southwest Educational Development Laboratory.

Reid, J.N. (1989, May). *Rural areas in the 1980s: Prologue to the 21st century.* Charleston, WV: Appalachia Educational Laboratory.

Reid, J.N. (1988, December). Rural areas in the 1980s: Prologue to the 21st century. (An abstract). Presented at *Risky Futures -- Should State Policy Reflect Rural Diversity*, at the Policy and Planning Center Annual Symposium, Louisville, KY.

Rincones, R. (1988, January). *Exploring alternatives to consolidation.* (Report No. EDO-RC-88-05). Las Cruces: New Mexico State University, College of Education.

Rood, M., Mackenzie, D., & Torres, M. (1988). Learning pre-employment skills in a student-owned enterprise. *Promising Practices.* Austin, TX. Southwest Educational Development Laboratory, Austin, TX).

Root, P. (1989, Winter). *School improvement in Arkansas, perspectives in educational administration* (*1*: (2), 1-3). University of Central Arkansas College of Education

Rosenfeld, S.A., Bergman, E.M., & Rubin, S. (1985, December). *After the factories: Changing employment patterns in the rural South.* Research Triangle Park, NC: Southern Growth Policies Board.

Rural economic development in the 1980s: Preparing for the future. (1987, July) Washington, D.C: U.S. Department of Agriculture.

Rural, Small Schools Initiative. (1989, August). Austin, TX: Southwest Educational Development Laboratory.

School financing in Texas is ruled unconstitutional. (1989, October). *Education Week*, 20,1.

Selland, K., Shahidullah, M., & McCraw, J. (1987, October). *Demographic state of the state: A report to the Governor and Legislature on demographic trends for the state of Oklahoma.* Oklahoma Department of Commerce.

Snow, K. (1989, August). Program shoots for the stars. *Times-Picayune.* New Orleans, LA.

Sher, J.P. (1989, May). *Challenging the comfortable stereotypes: Rural education and rural development.* Charleston, WV: Appalachia Educational Laboratory.

Snapshot: 1987-88 school district profiles (Publication No. FS9 742 02, April 1989). Austin: Texas Education Agency.

Stephens, E.R., & Turner, W.G. (1988). *Leadership for rural schools*. Arlington, VA: American Association of School Administrators.

Stephens, E.R. (1988, December). (*Implications of economic, social, and educational developments in rural america for rural school systems*). Presented at AEL's Third Annual State Educational Policy Symposium; Louisville, KY.

Stephens, R. E. (November, 1988) *The changing context of education in a rural setting* Educational paper No. 26. Charleston, WV.

Stephens, E.R. (1988, November). *The changing context of education in a rural setting*. Occasional Paper 26. Charleston, WV: Appalachia Educational Laboratory.

Strategic Economic Policy Commission. (1988, April). *Texas: Economic trends & strengths & weaknesses*. Austin, TX.

Swanson, A.D. (1988, Fall). Role of technology in the education reform of rural schools: Implications for district consolidation and governance. *Journal of Rural and Small Schools*, pp. 2-7.

Texas Education Agency. (1987, January). *1986-1990 Long-Range Plan of The State Board of Education for Texas Public School Education*. Austin, TX.

The superintendent: Linking education and economic development. Austin, TX: Southwest Educational Development Laboratory.

Thomas, M.G. (1989, April). *A Portfolio of Community College Initiatives in Rural Economic Development*. Kansas City, MO.

Thomas, M.G. (1988, April). *Profiles in Rural Economic Development*. A Guidebook of Selected Rural Area Initiatives. Kansas City, MO.

U. S. Department of Commerce, (1983). *County and city data book, 1983*. Washington, D.C.: U.S. Department of Commerce, Bureau of the Census.

Wall, M. (1986, March). Technological options for rural schools. *Educational Leadership*, pp. 50-52.

Wall, M., Luther, V., Baker, K., & Stoddard, S. (1989, Spring). Schools as entrepreneurs: Helping small towns survive. *The Rural Educator*, pp. 14-17.

Wall, M. (1986, March). Technological options for rural schools. *Educational Leadership*, pp. 50-52.

Wilson, D.J. (1989, June). Grim days foreseen for rural hospitals. *Houston Post*.

APPENDIX A

TABLE 1: POPULATION CHARACTERISTICS OF THE SOUTHWEST REGION

		Arkansas	Louisiana	New Mexico	Oklahoma	Texas	Region	U. S.
Land Area (in thousands of square miles)		52.1	44.5	121.3	68.7	262.0	548.6	3,539.3
Population (in thousands), 1980		2,286	4,206	1,302	3,025	14,229	25,048	226,546
Percent of population in non-metro areas, 1980		48.4	31.4	27.9	32.7	20.4	26.7	26.3
Percent of population growth	1970-1980	18.9	15.4	28.1	18.2	27.1	23.2	11.4
	1980-1986	3.8	7.0	14 3	9.2	17.3	13.2	--
Population density per square mile, 1986	metro	131.0	252.0	120.0	160.0	292.0	--	--
	non-metro	32 0	43.2	7.6	24.2	14.9	-	--

TABLE 2: POPULATION TRENDS IN THE REGION'S NONMETROPOLITAN COUNTIES, 1980-1986

	Arkansas	Louisiana	New Mexico	Oklahoma	Texas	Region
Number of Nonmetropolitan Counties, 1980	65	40	28	62	202	397
Percent of Total Counties	87%	62%	90%	81%	80%	82%
Nonmetropolitan CountiesThat Lost Population, 1980-86	23 (35%)	4 (10%)	3 (10%)	13 (21%)	55 (27%)	98 (25%)
Nonmetropolitan Counties with More Than 5% Population Loss, 1980-86	3 (5%)	1 (2%)	1 (3%)	5 (8%)	22 (11%)	32 (8%)
Nonmetropolitan Counties with More than 10% Population loss, 1980-86	0	0	0	0	12 (6%)	12 (3%)
Nonmetropolitan Counties with more than 10% Growth, 1980-86	10 (15%)	6 (15%)	14 (45%)	12 (17%)	58 (29%)	100 (25%)
Nonmetropolitan Counties with More Than 20% Growth, 1980-86	0	1 (2%)	3 (10%)	0	27 (13%)	31 (8%)

TABLE 3: RACIAL AND ETHNIC DISTRIBUTION OF THE POPULATION IN THE SOUTHWEST REGION, 1980

Race / State	White	Black	American Indian	Asian and Pacific Islander	Other/ Unknown	Persons of Spanish Origin *
Arkansas	82.7%	16.3%	.6%	.3%	.1%	.7%
Louisiana	69.3%	29.5%	.3%	.6%	.3%	2.4%
New Mexico	76.0%	1.8%	8.2%	.6%	13.4%	36.6%
Oklahoma	86.0%	6.3%	5.7%	.7%	.8%	1.9%
Texas	79.4%	12.0%	.4%	.9%	7.3%	21.0%
U.S. Average	83.4%	11.7%	.7%	1.6%	2.6%	6.5%

* Persons of Spanish origin may be of any race.

TABLE 4: MEDIAN FAMILY INCOME IN THE SOUTHWEST REGION, 1980 (In Dollars)

		Arkansas	Louisiana	New Mexico	Oklahoma	Texas
For All Families	Statewide	14,600	18,100	16,900	17,700	19,600
	In Rural Areas	12,700	16,900	16,200	15,100	17,400
For Black Families	Statewide	9,100	10,500	--	--	13,000
	In Rural Areas	8,400	9,400	--	--	9,900
For American Indian Families	Statewide	--	--	10,800	13,500	--
	In Rural Areas	--	--	10,000	12,100	--
For Spanish Origin Families	Statewide	--	--	13,500	--	13,300
	In Rural Areas	--	--	12,200	--	9,900
For Female-Headed Households	Statewide	7,700	7,800	9,400	9,100	9,700
	In Rural Areas	7,300	7,100	8,000	8,000	8,800

TABLE 5: PER CAPITA INCOME IN METROPOLITAN AND NONMETROPOLITAN AREAS, 1984
(In Dollars)

State	Metro Areas	Nonmetro Areas	Nonmetro as % of Metro
Arkansas	9,858	8,523	86.5
Louisiana	11,077	8,274	74.7
New Mexico	13,052	8,604	65.9
Oklahoma	11,097	9,932	89.5
Texas	12,120	10,933	90.2

TABLE 6: POVERTY RATES IN THE SOUTHWEST REGION

		Arkansas	Louisiana	New Mexico	Oklahoma	Texas
Poverty rates in metro areas, 1979		15.2	16.0	14.5	10.8	13.6
Poverty rates in nonmetro areas, 1979		20.6	23.1	20.4	17.0	18.8
Poverty rates in nonmetro areas, 1982		21.1	23.8	19.4	19.0	18.8
Nonmetro Counties with "persistent poverty"	Number	13	9	3	10	5
	% of total	20	22	10	16	2

TABLE 7: METRO AND NONMETRO UNEMPLOYMENT RATES, 1987

State	% Unemployed Metro	% Unemployed Nonmetro
Arkansas	6.9	8.9
Louisiana	11.0	15.8
New Mexico	6.6	10.9
Oklahoma	6.8	8.2
Texas	8.4	8.8
United States	8.7	11.4

TABLE 8: PUBLIC SCHOOL ENROLLMENT* IN THE SOUTHWEST REGION, 1975-1987

	1975 Enrollment	1985 Enrollment	% Change 1975-85	1987 Enrollment	% Change 1985-87
Arkansas	457	433	-5.3	436	0.7
Louisiana	847	788	-7.0	786	-0.3
New Mexico	275	278	1.1	285	2.5
Oklahoma	595	592	-0.5	586	-1.0
Texas	2,813	3,132	11.3	3,226	3.0

* in thousands

TABLE 9: ETHNICITY OF THE REGION'S PUBLIC SCHOOL STUDENTS, FALL 1984

	% White	% Black	% Hispanic	% Asian or Pacific Islander	% American Indian
Arkansas	73.9	25.3	0.3	0.5	0.1
Louisiana	55.5	42.5	0.8	1.1	0.1
New Mexico	44.9	2.2	43.4	0.7	8.7
Oklahoma	76.4	9.9	2.0	1.2	10.6
Texas	56.6	13.9	27.9	1.4	0.1
United States	71.2	16.2	9.1	2.5	0.9

TABLE 10: HIGH SCHOOL GRADUATES IN THE SOUTHWEST REGION, 1975-1985

State	# Graduates, 1975	# Graduates, 1985	% Change, 1975-1985
Arkansas	26,836	26,342	-1.8
Louisiana	47,691	39,742	-16.7
New Mexico	18,438	15,622	-15.3
Oklahoma	37,809	34,626	-8.4
Texas	159,487	159, 234	-0.2

TABLE 11: PER-PUPIL EXPENDITURES IN THE SOUTHWEST REGION, 1975-1986

	1974-75	1981-82	1983-84	1984-85	1985-86
Arkansas	893	1,841	2,235	2,482	2,658
Louisiana	1,130	2,590	2,694	2,990	3,187
New Mexico	1,114	2,703	2,928	3,153	3,195
Oklahoma	1,027	2,673	2,859	2,850	3,146
Texas	1,063	2,229	2,784	3,124	3,298
United States	1,365	2,726	3,173	3,470	3,752

TABLE 12: TEACHER SALARIES IN THE SOUTHWEST REGION, 1975-87 (In Dollars)

	1975-76	1981-82	1983-84	1985-86	1986-87	% change in constant dollars, 1969-70 to 1986-87
Arkansas	9,595	14,506	16,929	19,519	19,904	7.1
Louisiana	10,657	17,930	18,400	20,303	20,054	-3.1
New Mexico	10,806	18,690	20,571	21,817	23,977	4.4
Oklahoma	9,702	16,210	18,630	21,419	22,060	8.8
Texas	11,318	17,582	20,170	24,463	24,588	15.1
U.S. Average	12,600	19,274	21,917	25,201	26,551	4.4

TABLE 13 PUPIL-TEACHER RATIOS IN THE REGION'S PUBLIC SCHOOLS, 1975-86

	1975	1984	1985	1986
Arkansas	21.5	18.0	17.5	17.5
Louisiana	20.6	19.0	18.6	18.5
New Mexico	21.3	18.7	18.8	19.0
Oklahoma	20.0	16.9	16.6	16.9
Texas	19.6	17.6	17.3	17.3
United States	20.4	18.1	17.9	17.8

TABLE 14: NUMBER OF SCHOOLS BY COMMUNITY TYPE, 1987-88
(Percentage of Total Given in Parentheses)

Community Type	Arkansas	Louisiana	New Mexico	Oklahoma	Texas	Total
Large Central City	-	122 (8.0)	--	138 (7.5)	996 (17.3)	1256 (11.4)
Mid-size Central City	158 (12.6)	291 (19.1)	113 (17.4)	192 (10.4)	1193 (20.7)	1947 (17.7)
Urban Fringe: Large City	16 (1.3)	98 (6.4)	--	83 (4.5)	540 (9.4)	737 (6.7)
Urban Fringe: Mid-size City	37 (3.0)	140 (9.2)	60 (9.3)	36 (2.0)	194 (3.4)	467 (4.2)
Large Town	32 (2.6)	33 (2.2)	83 (12.8)	68 (3.7)	67 (1.2)	283 (2.6)
Small Town	354 (28.2)	438 (28.8)	193 (29.8)	504 (27.4)	1392 (24.2)	2881 (26.2)
Rural	657 (52.4)	398 (26.2)	199 (30.7)	818 (44.5)	1368 (23.8)	3440 (31.2)
Totals	1254	1520	648	1839	5750	11,011

TABLE 15: NUMBER OF SCHOOL DISTRICTS BY SEDL DISTRICT CODE, 1987-88
(Percentage of Total Given in Parentheses)

District Code	Arkansas	Louisiana	New Mexico	Oklahoma	Texas	Total
Urban	10 (3.0)	9 (13.6)	2 (2.3)	28 (4.6)	122 (11.5)	171 (7.9)
Non-metropolitan	13 (4.0)	9 (13.6)	8 (9.1)	30 (4.9)	60 (5.6)	120 (5.6)
Small town adjacent to metropolitan	17 (5.2)	4 (6.1)	--	38 (6.2)	77 (7.2)	136 (6.3)
Small town non-metropolitan	77 (23.4)	21 (31.8)	28 (31.8)	123 (20.1)	230 (21.6)	479 (22.2)
Rural adjacent to metropolitan	34 (10.3)	1 (1.5)	1 (1.1)	91 (14.9)	132 (12.4)	259 (12.0)
Rural non-metropolitan	178 (54.1)	22 (33.3)	49 (55.7)	301 (49.3)	442 (41.6)	992 (46.0)
Totals	329	66	88	611	1,063	2,157

TABLE 16: NUMBERS OF RURAL AND SMALL TOWN SCHOOLS LOCATED IN RURAL AND SMALL TOWN DISTRICTS

(Percentages are Given in Parentheses)

School Type in a Location Type	Arkansas	Louisiana	New Mexico	Oklahoma	Texas
Rural Schools in the State	657	398	199	818	1368
Rural Schools located in Rural Districts	470 (72%)	173 (43%)	156 (78%)	817 (100%)	1368 (100%)
Rural Schools located in Rural and Small Town Districts	635 (97%)	300 (75%)	194 (97%)	817 (100%)	1368 (100%)
Rural and Small Town Schools in the State	1011	836	392	1322	2760
Rural and Small Town Schools located in Rural and Small Town Districts	989 (98%)	692 (83%)	387 (99%)	1321 (100%)	2760 (100%)

TABLE 17: ENROLLMENTS (in thousands of students) OF SCHOOL DISTRICTS BY SEDL DISTRICT CODE, 1987-88
(Percentage of Total Given in Parentheses)

District Code	Arkansas	Louisiana	New Mexico	Oklahoma	Texas
Urban	103.1 (23.6)	330.8 (42.1)	100.2 (35.2)	164.0 (28.0)	1647.3 (51.1)
Non-metropolitan	33.7 (7.7)	168.2 (21.4)	56.8 (20.0)	96.3 (16.4)	477.0 (14.8)
Small town adjacent to metropolitan	43.7 (10.0)	40.4 (5.1)	--	50.2 (8.6)	285.8 (8.9)
Small town non-metropolitan	134.3 (30.8)	146.2 (18.6)	85.2 (29.9)	117.7 (20.1)	406.0 (12.6)
Rural adjacent to metropolitan	21.3 (4.9)	3.8 (0.5)	8.2 (2.9)	63.1 (10.8)	209.3 (6.5)
Rural non-metropolitan	100.0 (22.9)	96.7 (12.3)	34.3 (12.0)	94.6 (16.1)	200.7 (6.2)
Total	436.2	786.0	284.8	586.1	3226.2

TABLE 18: AVERAGE SIZE OF SCHOOLS (in number of students) BY SEDL DISTRICT CODE, 1987-88

District Code	Arkansas	Louisiana	New Mexico	Oklahoma	Texas
Urban	539	600	671	355	600
Non-metropolitan	441	548	489	402	620
Small town adjacent to metropolitan	520	506	--	348	545
Small town non-metropolitan	445	407	379	252	379
Rural adjacent to metropolitan	292	478	683	207	321
Rural non-metropolitan	244	392	165	150	210
Statewide	326	430	280	213	350

TABLE 19: AVERAGE SIZE OF SCHOOL DISTRICT (in thousands of students) BY SEDL DISTRICT CODE, 1987-88

District Code	Arkansas	Louisiana	New Mexico	Oklahoma	Texas
Urban	10.3	36.8	50.1	5.9	13.5
Non-metropolitan	2.6	18.7	7.1	3.2	8.0
Small town adjacent to metropolitan	2.6	10.1	--	1.3	3.7
Small town non-metropolitan	1.7	7.0	3.0	1.0	1.8
Rural adjacent to metroplitan	0.6	3.8	8.2	0.7	1.6
Rural non-metropolitan	0.6	4.4	0.7	0.3	0.5
Statewide	1.3	11.9	3.2	1.0	3.0

TABLE 20: RURALITY AND SCHOOL DISTRICT SIZE, 1987-88
(Percentages of School District Type in Parentheses)

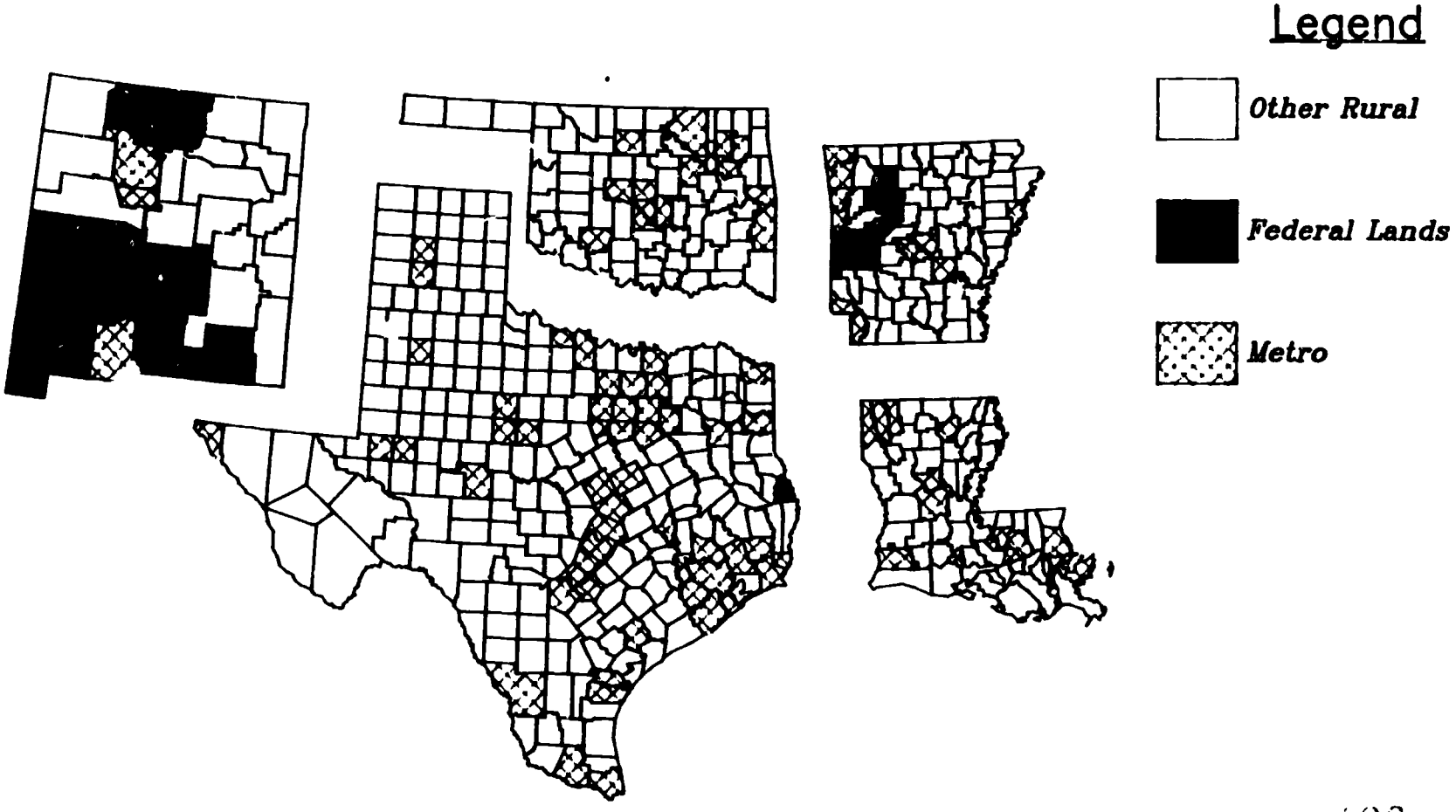
District Type and Size Criterion	Arkansas	Louisiana	New Mexico	Oklahoma	Texas
Rural Districts:					
Less than 1,000 Students	198(93%)	0(0%)	45(90%)	389(99%)	506(88%)
Less than 1,500 Students	207(98%)	0(0%)	46(92%)	392(100%)	544(95%)
More than 1,500 Students	5(2%)	23(100%)	4(8%)	0(0%)	30(5%)
Rural, Small Town, and Non-metropolitan Districts:					
Less than 1,000 Students	223(70%)	0(0%)	49(57%)	483(83%)	608(65%)
Less than 1,500 Students	259(81%)	0(0%)	52(60%)	520(89%)	697(74%)
Percent of Districts That Are Rural When Criterion is:					
Less than 1,000 Students	89%	--	92%	81%	83%
Less than 1,500 Students	79%	--	88%	75%	78%

APPENDIX B

Farming Dependent Counties

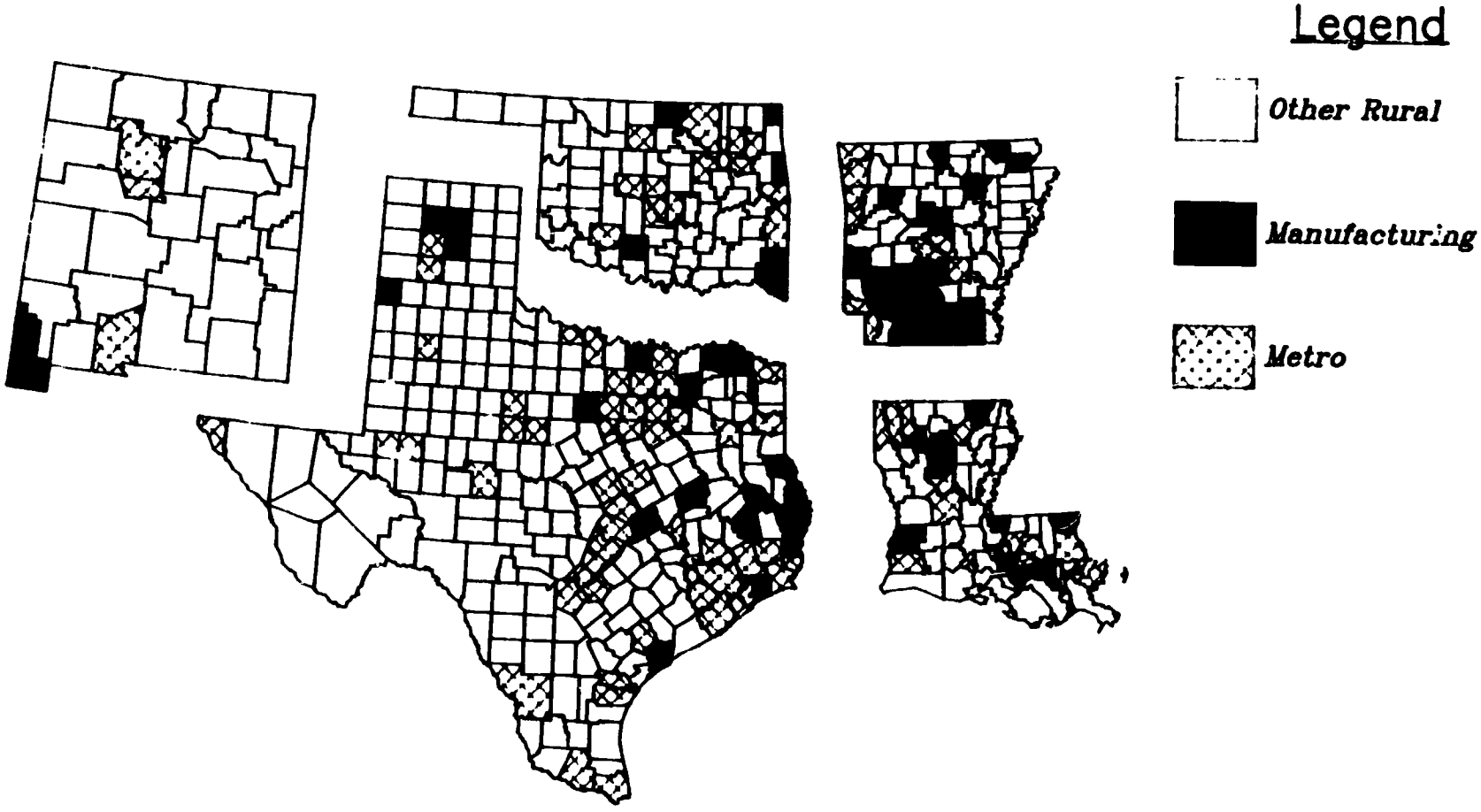
Source: USDA, Economic Research Service

Federal Lands Counties



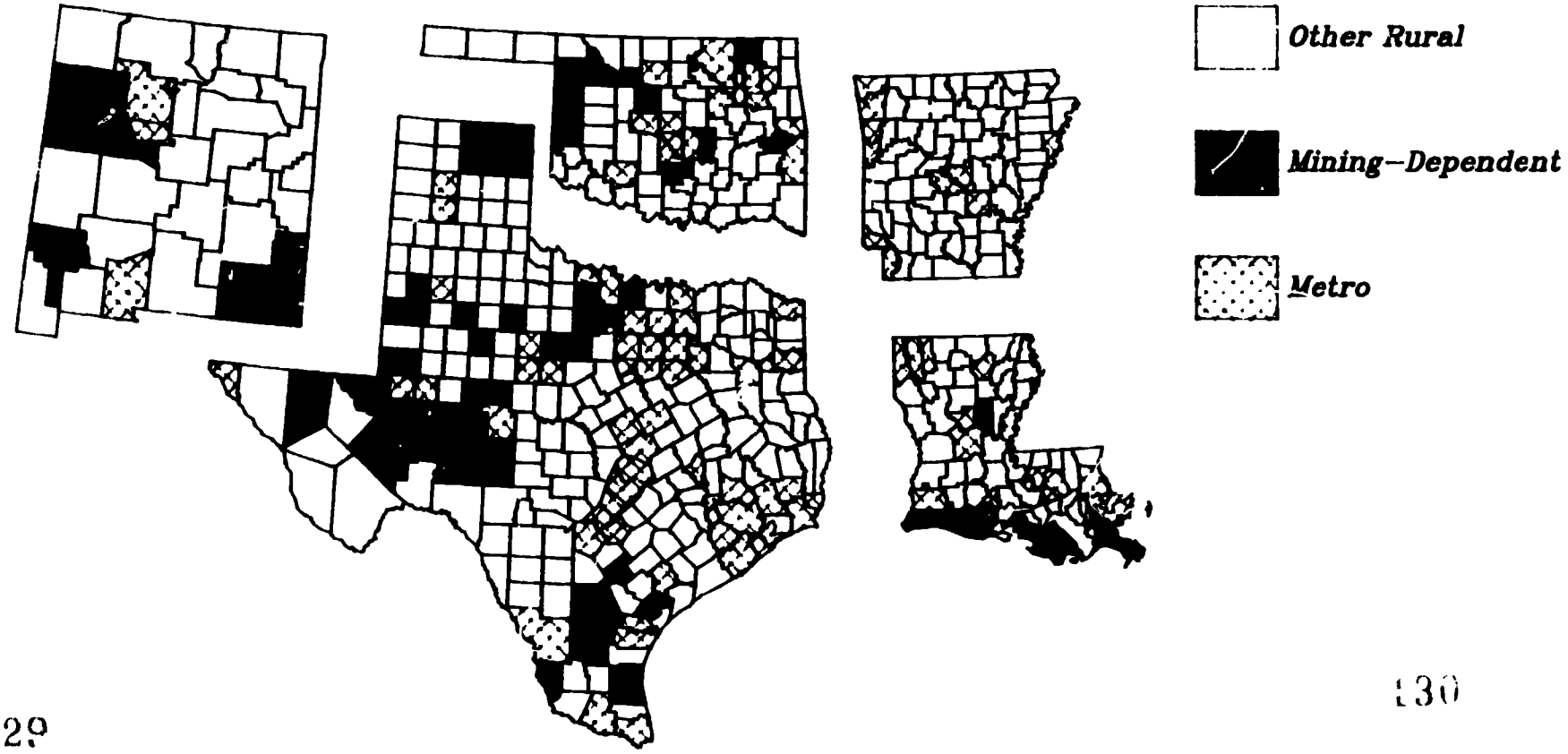
Source: USDA, Economic Research Service

Manufacturing–Dependent Counties



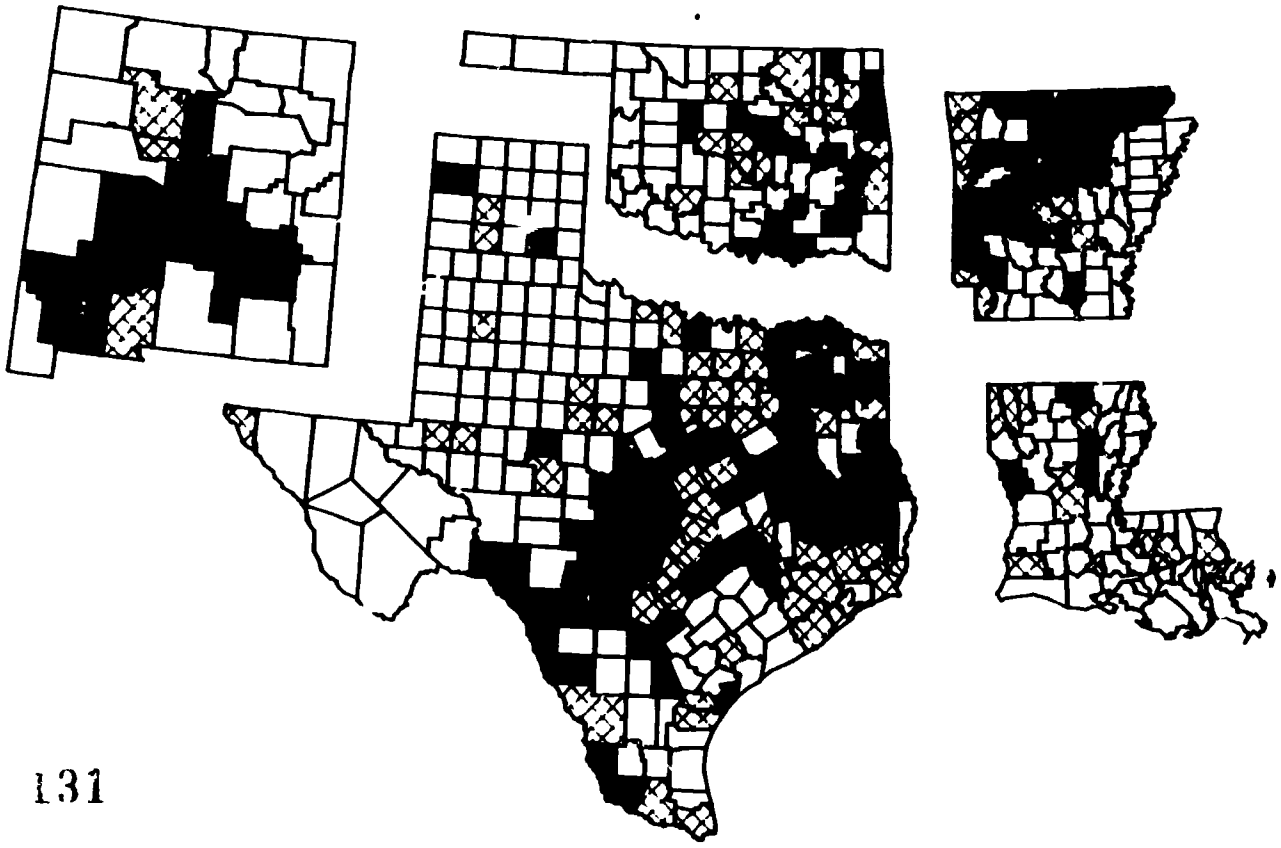
Source: USDA, Economic Research Service

Mining–Dependent Counties



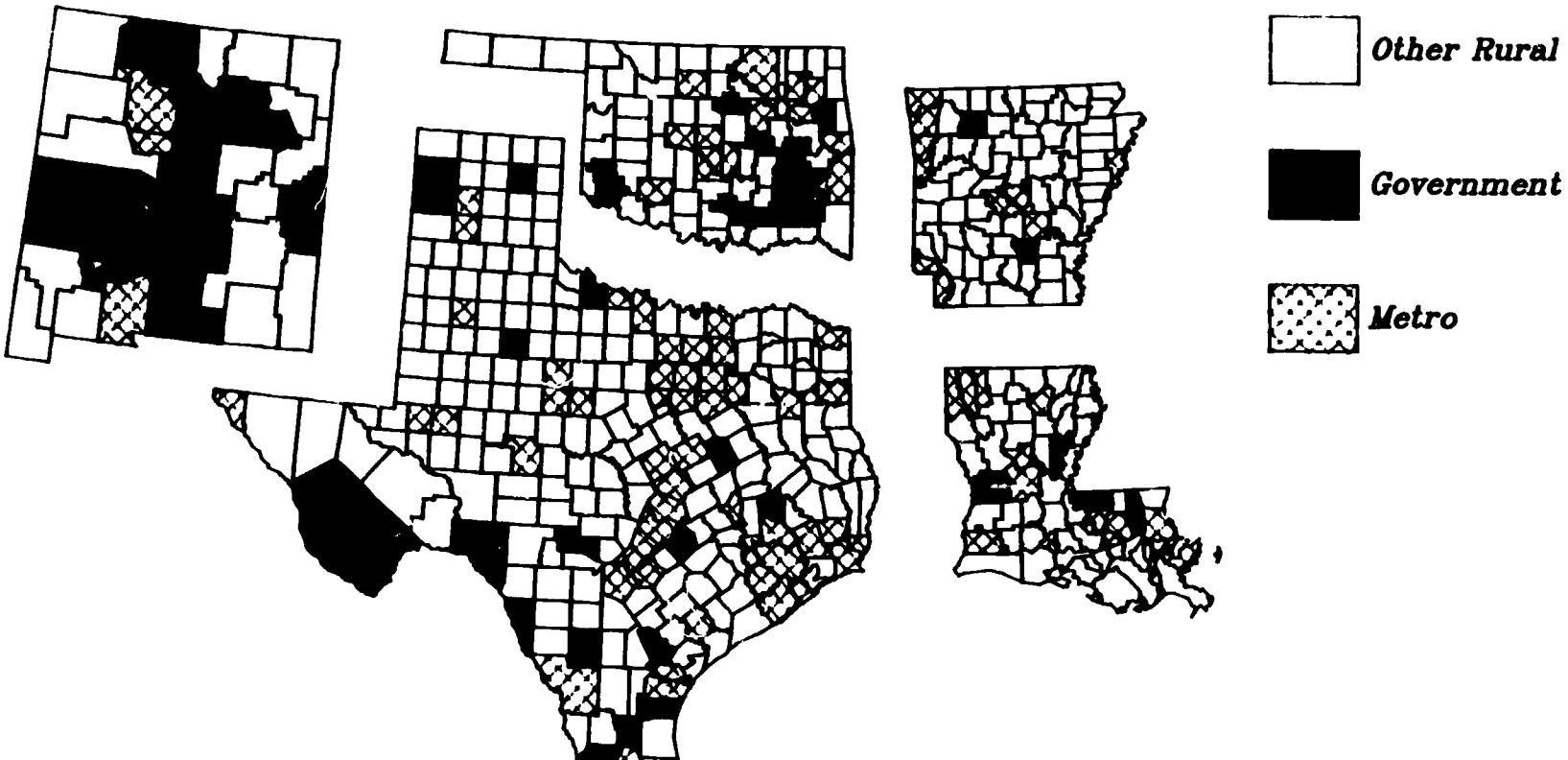
Source: USDA, Economic Research Service

Retirement Counties



Source: USDA, Economic Research Service

Specialized Government Counties



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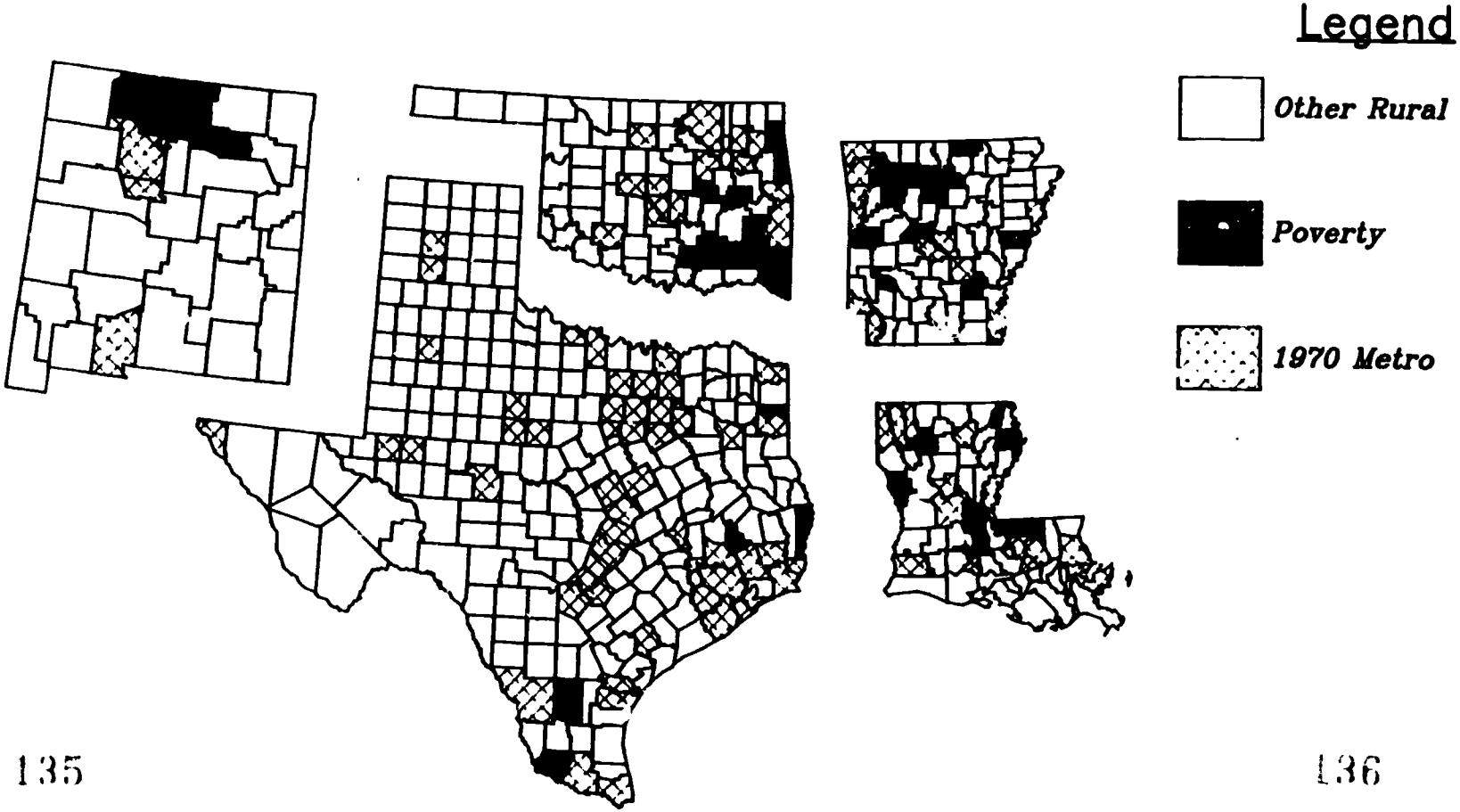
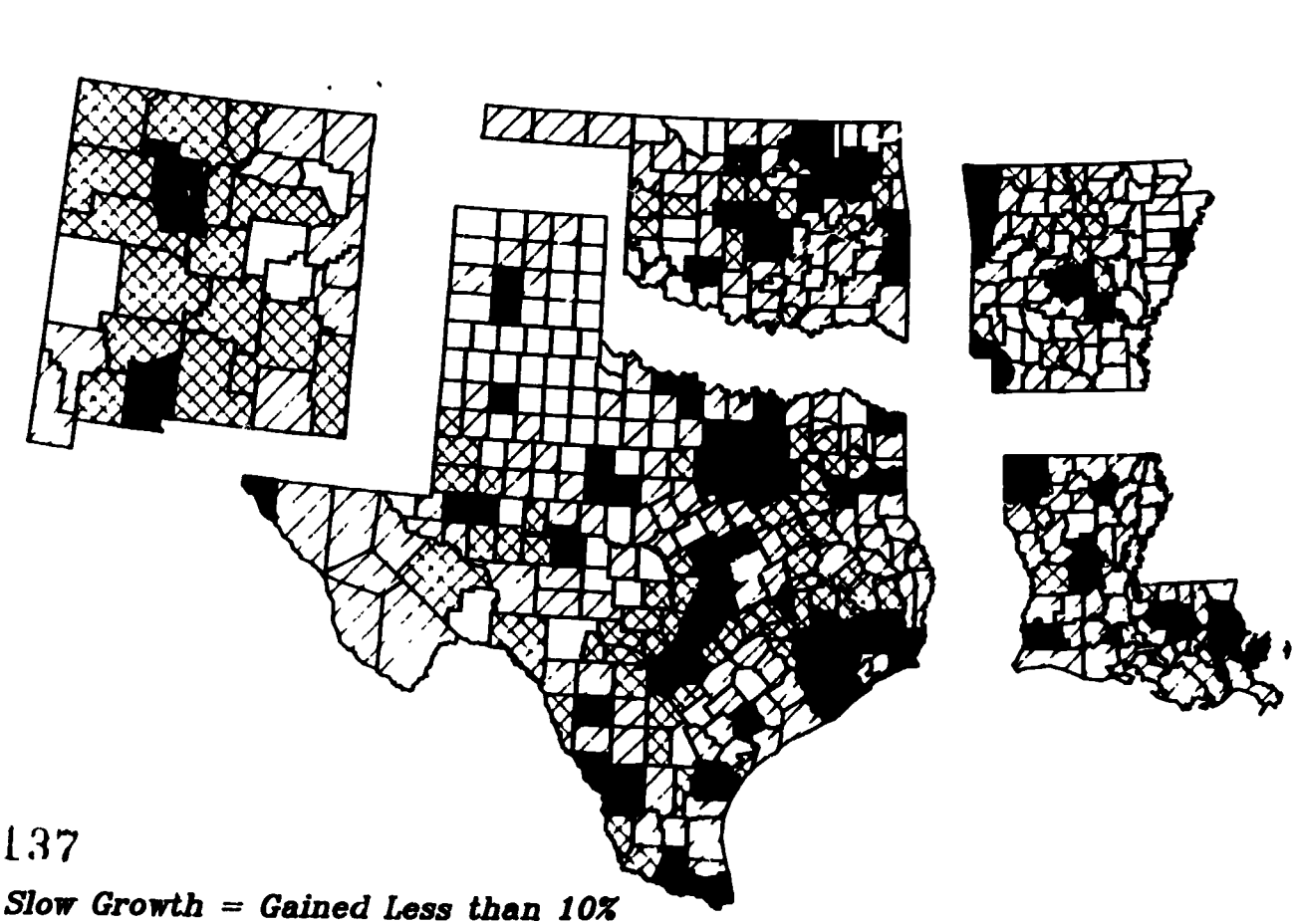
Source: USDA, Economic Research Service

Persistent Poverty Counties



Source: USDA, Economic Research Service

Percent Population Change 1980 to 1986



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Slow Growth = Gained Less than 10%

Rapid Growth = Gained Greater than 10%

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