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ABSTRACT

This report provides demographic, statistical, and other indicator data related to rural education in the Mid-Atlantic region of Delaware, Maryland, New Jersey, and Pennsylvania. The data are intended to aid state rural assistance councils in developing plans to improve rural schools. One obstacle to consistent policy implementation is the difficulty in defining a "rural" area due to demographic changes. Using school districts as the major unit of analysis, the report describes rural environments, educational policies and needs, characteristics of rural schools and students, and the scope and nature of service delivery systems, for each state and the region as a whole. Persistent problems include poverty, scarcity of resources, high dropout rates, and the difficulty of delivery of resource services to rural administrators and teachers. Areas of special concern to local administrators were instructional effectiveness, development of higher order reasoning skills, staff development, inadequate financial base, and equality of opportunity for excellence. This analysis is an initial step toward the formation of a coordinating agency for information exchange among the Mid-Atlantic states. Some national organizations addressing rural needs are listed. Appendices include the results of rural needs assessment surveys and selected data on rural schools and students for each state. Contains 25 references. (RAH)

PROFILES OF RURAL EDUCATION IN THE MID-ATLANTIC REGION

Submitted to:

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PREFACE

This report provides profiles of the characteristics of rural environments, schools, and students in each state of the Mid-Atlantic region: Delaware, Maryland, New Jersey, and Pennsylvania. Members of the Rural Assistance Councils (RACs) in each state will review these profiles and verify all of the data and descriptive information presented in this report. The RACs will use the revised profiles as the basis for preparing a plan for rural school improvement in each state. In sum, these profiles are viewed by RBS as an initial picture of the status of rural education in the region.

The report was developed by RBS staff as part of the FY 88 Rural Education Initiative. Jacqueline Stefkovich coordinated the preparation of this document. Other RBS staff contributing to the development of sections of the report were: Arlene Large, Joseph D'Amico, Mercedes Fitzmaurice, Doris Harris, John Connolly, Russ Dusewicz, Fran Beyer, and John Hopkins. Peter Robinson designed the cover page and maps. Several consultants participated in the writing and editing of the document including Thomas Donlon, David Kirkpatrick, and Sandra Bromfield. Harold Hodgkinson and Janice Outtz provided demographic data and wrote the rural environment sections for each state.

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INTRODUCTION

This section provides an explanation of the purpose of this report. The organization of the report is then described.

Purpose of the Report

In many ways, this report represents a pioneering effort to gain information about rural education within the Mid-Atlantic region. The region is marked by its major metropolitan population centers, and by the inevitable and pressing urban problems and issues that these generate. By their sheer size and force of numbers these metropolitan centers tend to dominate the region and to diminish the attention that is given to rural concerns.

Rural concerns are being addressed in some states in the region. Maryland has an ongoing rural education initiative, and there has been notable attention given to rural education in the past in Pennsylvania. Fundamentally, however, a focus on rural life within the region has been placed on aspects other than education (e.g., agriculture). It is RBS' hope that this report will provide OERI the information that it needs to stimulate and implement an agenda for rural education which will have beneficial effects for the Mid-Atlantic region. This report and the processes that it reflects only constitute a beginning.

The primary purpose of this report is to fulfill a request from the Office of Educational Research and Improvement (OERI), U. S. Department of Education, for information regarding the status of rural education in the Mid-Atlantic region which is composed of Delaware, Maryland, New Jersey, Pennsylvania, and Washington, DC. In view of its entirely urban character, the District of Columbia is not considered in the report.

The OERI request directed RBS and each of the eight other regional educational laboratories to provide certain specified information about the various states in each region:

- the policies, formulas, definitions, etc., with respect to rural education that are found in each state
- the environment within which the rural schools in each state operate
- the characteristics of rural students in each state
- the characteristics of rural schools in each state
- the service delivery systems that are available within each state for the support of efforts aimed at the improvement of rural education.

At a joint meeting of OERI staff and directors of the rural education projects in Washington, DC on January 31 and February 1, 1989, it was decided that neither OERI nor the regional laboratories would attempt to standardize the ways in which the individual states defined and organized the requested information within the various categories. The decision to avoid what was viewed as premature standardization was made in recognition of the idiosyncratic nature of rural education in each state, and to avoid disrupting the forces that have shaped such idiosyncrasy until they are themselves better understood. Further, it was recognized that the processes of standardization, while undoubtedly of potential value, would themselves require additional time and resources.

However, OERI did request that to the maximum extent possible the information gathered should be drawn from available resources through the rural data bases of the regional laboratories. RBS has used the Rural Assistance Council (RAC) which it formed in each state to expand the survey data, to interpret the findings, and to synthesize the interpretations. Thus, RBS has continued to respect the basically idiosyncratic nature of

rural education within the several states of the region, but has been sensitive to the OERI request, as well.

Organization of the Report

In responding to the OERI request for a profile of each state in the Mid-Atlantic region, RBS has chosen to prepare a combined report with specific sections devoted to the individual states. Two major considerations have determined this course.

First, the preparation of a comprehensive report has enabled RBS to formulate descriptions and discussions of the region as a whole. While the region does not function as a single entity, and regional data are not as well organized and available as state data, nonetheless valid generalizations can be made about the region and an understanding of rural education can be facilitated by a regional perspective.

Second, while the state profiles are idiosyncratic, a common process was used across the states to develop this report and a combined report avoids repetitive descriptions of the process. An example of such a process-related topic is the difficulty encountered in developing definitions of rural, and the background for this difficulty in the educational literature. Further parsimonies of expression can be seen in the description of region-wide service delivery systems.

The report is organized into eight sections, four of which are devoted to profiles of the individual states. Following this introduction is a background section in which the process used in the development of the profiles is described and discussed. Sections three through six focus on the individual states: Delaware, Maryland, New Jersey, and Pennsylvania. Each state profile consists of several subsections, organized to reflect

the descriptive dimensions that were set forth in the request for information from OERI:

- the rural environment within the state
- the policies, definitions, and needs* pertaining to rural education within the state (three subsections)
- the characteristics of the rural schools within the state
- the characteristics of the rural students within the state
- the scope and nature of the service delivery systems available to rural education within the state.

Section seven provides what is essentially a regional profile, paralleling in most respects the profiles of the individual states. The final section, section eight, provides a summary and statement of conclusions. Included within this section is a preview of the future for rural education within the Mid-Atlantic region.

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*The original contract called for "state policies, formulas, definitions, etc. for rural education." RBS decided that the "etc." should include needs, as this was an important component of the laboratory's FY 87 and FY 88 Rural Education Initiatives. RBS omitted from this document a section on formulas because no state in the Mid-Atlantic region has a formula for rural education. In a few instances, state formulas, while not aimed specifically at rural education, do have an influence on rural schools (e.g., Pennsylvania's Small District Assistance Grants). Instances such as this are included in the discussion of state policies.

BACKGROUND

The process used to develop the profiles of rural education presented in this report is described and discussed in this section. The first step in the process was to confront the problems involved in defining rural education. The second step was to form innovative organizational structures in the four states -- Rural Assistance Councils (RACs) -- to establish for each state a definition of rural education and to organize programs to address the needs of rural schools. The third step was to create a data bank of information concerning rural schools in order to develop the data needed for this report and to lay a foundation for future developmental work in the region. In sum, three topics are addressed in this section: problems encountered in defining rural education, the role of the Rural Assistance Councils, and development of the rural education data base.

Problems in Defining Rural Education

Defining "rural" is a lot like giving up smoking, in the old story about how easy it is to give up smoking -- "I've done it dozens of times." It has to be easy to define the term, for it is done (and re-done) all the time -- with about as much effectiveness as the quitting of smoking. Nor is it any easier when the goal is to define "rural environment" or "rural education." The literature is replete with failed efforts to achieve a commonly accepted definition.

At a conference in Louisville, KY in 1988, one speaker asserted that there were as many as 56 definitions of "rural." This is possibly apocryphal; it is nonetheless certain that the federal government alone "had as many as nine major operating definitions at one time" (Cornman, 1984). Such diversity is a reflection of an underlying reality; as Jonathan Sher has

written: "The simple fact is that rural people, rural communities, and rural conditions are so diverse that one can find evidence to support nearly any characterization" (Sher, 1977).

There is no sharp line between rural and urban environments. Essentially, there is a continuum of environments, fundamentally differentiated by population density, from the remote regions of Alaska to the crowded streets of New York City (Nachtigal, 1982). But somehow, the difficulty lies not in reaching a satisfactory definition of "urban," or "suburban," but of "rural." There is a tendency to define rural by default, and to see it as all that is non-urban. Inevitably, this indirect definition fails to achieve coherence and opens the door for marked confusion.

Some "defining" characteristics are actually anachronisms, e.g., the view that rural America is still primarily centered in agriculture. With the exception of certain well-publicized areas of the country, this is no longer true. By 1980, fewer than ten percent of all jobs in rural areas involved farming (Cornman, 1984). Today, of course, this percentage would be even lower. Pennsylvania, for example, now has fewer than 50,000 farms remaining. Many of these are operated only part-time by "farmers" whose cash income is generated from non-farm sources. Even when all such persons are considered "farmers," the Commonwealth's farm population is less than two percent of its total population, and no more than six percent of the 3,500,000 persons who constitute Pennsylvania's "rural" population (using the Census Bureau definition of a rural area as one with 2,500 or fewer residents outside of contiguous urban areas). Within the Mid-Atlantic region, and more broadly throughout the United States, farming is no longer the hallmark of the rural areas.

The 2,500 or fewer persons used by the Census Bureau as its working definition of a rural area is a very stringent criterion. Sher (1977) has proposed a somewhat more relaxed definition, described as "Combination Rural Rural," which incorporates the census definition but expands it to include "all non-metropolitan places between 2,500 and 10,000." Sher labeled his definition as "the most permissive" and, at the same time, "the most reasonable." Nonetheless, it is seldom used today.

Nor is it the most permissive. A recent project defined rural America as "all areas having less than 50,000 inhabitants and located outside standard metropolitan statistical areas (SMSAs)...." As noted in the project literature: "So defined, rural America contains about 25 percent of the U.S. population and 90 percent of its natural resources."

A somewhat more complex definition was offered by the National Rural and Small Schools Consortium at an October 1986 conference. Rural areas were defined as having fewer than 150 persons per square mile, or areas where 60 percent of a county's population live in communities of fewer than 5,000. This definition, while reflecting a conference consensus, has yet to be generally adopted. Nor has the more whimsical but graphically compelling definition of rural as any place that is "at least 50 km from a McDonalds" (Williams, 1987).

In the face of such difficulties, it is common practice to simply use the term without definition. Thus, one study of 178 rural health and sociology publications from 1971 to 1980 found that 43 percent of the authors did not define the term in any way. An additional 48 percent used a "local" or "homemade" definition. Only 23 percent used a formal, external definition such as the census definition (Rios, 1988). (Overlapping categories lead to a total greater than 100 percent.)

Even the former National Rural Center settled for working definitions rather than attempting to define "rural" precisely (Cornman, 1984). While total population and isolation from population centers are clearly two factors that help to define "rural," neither leads to a clear-cut line between "urban" and "rural." A pragmatic outcome of the confusion is a failure to formulate programs that will deal with, perhaps even recognize, rural problems and issues. Public officials in any area tend to be conservative; they have a problem in developing programs where no agreed-upon definition is available.

This is regrettable. By any definition, rural areas are needy areas. Unemployment is 31 percent higher in such areas. Per capita income is 25 percent lower. The poverty rate is one-third greater. Above-average expenditures for health care are required by a greater proportion of the older citizens. Above-average expenditures for education are required by a greater proportion of the younger citizens. The cycle of economic depression and recovery is slower than it is for urban areas, with a consequent ever-widening gap between rural and urban sectors.

Defined or not, one conclusion about "rural" seems apparent: rural programs are desperately needed.

If developing a definition of rural people, rural communities, and rural conditions is so difficult, it can be no surprise that it is even harder to define rural districts, rural schools, and rural students. Five different definitions were used in the 1986 publication The Condition of Education, prepared by the National Center for Education Statistics in the U.S. Department of Education. Even multiple definitions, however, were an improvement on past practice: prior to March 1983, the publication did not report any data on districts with fewer than 300 students. This effectively

eliminated about 25 percent of the nation's school districts. The Center itself reports that, in 1987, 4,461 of the nation's then 15,579 school districts had fewer than 300 students (telephone interview, 1989). Since most school reorganization had been completed by 1980, these 1987 data are reasonable approximates of the 1983 data (Kirkpatrick, 1989).

Criteria of proximity to urban centers can produce seemingly anomalous definitions. The Appalachia Educational Laboratory (AEL), which serves a four-state region comprised of West Virginia, Kentucky, Tennessee, and Virginia, has proposed that a rural school district is one in which at least 75 percent of the population resides in a non-metropolitan area (AEL, 1988). Such a schema effectively "weights" both urban and rural citizens; each "urban" dweller has a de facto weight equal to three times that of a "rural" citizen. Three times as many rural citizens are needed to characterize a region as rural as are needed to characterize it as urban.

Even studies that conclude that any definition will be inadequate will find themselves constrained to adopt one, as in the 1989 West Virginia study that defined rural areas as those counties where there were ten or fewer students per square mile (Schools in Crisis, 1989). Some measure of the truly rural nature of West Virginia is reflected in the finding that 25 of the state's 55 counties would meet this stringent definition.

There is seemingly much greater diversity in rural districts than in urban/suburban ones. An extreme example of this was provided by a study of nine very small elementary schools in Colorado ranging in size from three students to 26. Efforts to categorize these tiny schools resulted in six separate classifications (ERIC/CRESS, 1989).

Such diversity is reflected in rural schools within the Mid-Atlantic region, as well. Some rural districts contain industry, some do not. Some are prosperous, most are not. Some contain small towns or population centers, some do not. Some are primarily agricultural; others are primarily devoted to extractive industries; still others rely on tourism or on other economic bases. Rural areas vary in the amount of public land which is excluded from a property tax. Some rural districts show declining enrollments in their schools, yet others are experiencing rapid increases.

Such diversity will inevitably confound the processes for dealing with rural education. It will tax the development of policy; it will complicate the implementation of practice. Nonetheless, states are increasingly adopting the maximally effective definition that can be developed, whether by the SEA, as in New York; by the legislature, as in Arkansas; or by both (Rios, 1988).

The need for a working definition, however imperfect, has also been recognized by each of the Rural Assistance Councils. Within the framework of RAC activity, the states within the Mid-Atlantic region have moved to formulate workable, state-specific definitions of rural. The task was, for RBS and for the rural initiative, of formidable difficulty.

The Role of the Rural Assistance Councils

The Rural Assistance Councils (RACs) formed by RBS have played a major role in developing definitions of rural education and in designing and developing the data base for this report. A brief overview of the RACs and their role in the development of this report is provided below.

A major focus of RBS activity during the second year of the Rural Education Initiative was the establishment of four RACs, one in each of the

four states: Delaware, Maryland, New Jersey, and Pennsylvania. These innovative organizations provide RBS with access to the persons and the information needed to improve rural schools in the region. The councils are each comprised of between five and seven individuals from within the state, specifically selected because they have an interest in educational issues and an expertise that can be uniquely valuable to the rural schools and districts within their state. Each council is small enough to work effectively and responsively on the problems addressed, but has a membership with sufficiently varied experience to be able to deal with a wide range of issues.

While RBS sponsors the RACs, the councils are independent. In particular, they are independent of the establishment institutions within the state. While they reflect the interests of established institutions, as appropriate, they do not represent these institutions. The members serve as individuals whose task is to represent the interests and concerns of everyone within the state with respect to the goal of excellence in rural education. The membership of the RACs is quite diverse and not limited to those with a prior or primary identification as "rural educator;" about one-third of the members are identified with organizations with established interests in rural education. The present and former members of the various RACs are shown in Table 1.

RBS staff are integrally involved in the operation of each RAC. They sit as members of the RAC and are responsible for the coordination of RAC activity. Since this activity is primarily of a planning or advisory nature, operating procedures for a RAC are defined by the council itself, as is the schedule of meetings. Since the RAC has a state focus, rather than a regional one, each RAC meets independently of the others. However, there is

Table 1

Present and Former Membership of the
Rural Assistance Councils

Delaware

Dr. Wilmer E. Wise, Director
Research & Evaluation
Department of Public Instruction

Dr. James H. VanSciver (Chair)
Superintendent
Lake Forest School District

Mrs. Jane Mitchell
Master
Delaware State Grange

*Mr. Carl Slayback, President
New Castle County Vocational-
Technical School District

Mr. Sherman Stevenson
Executive Vice President
Delaware Farm Bureau

Mr. Lloyd W. Harrington, Jr.
Administrative Assistant
Laurel School District

Mr. John F. Lynch, Jr.
New Castle County Vocational-
Technical School District

Maryland

Dr. William J. Cotton, Director
Eastern Shore of Maryland
Educational Consortium

Dr. William Burroughs
Superintendent of Schools
St. Mary's County Public Schools

Dr. H. DeWayne Whittington
Superintendent
Prince William County Public Schools

Dr. Jerry Kunkle
Superintendent
Cecil County Public Schools

Dr. Jerome J. Ryscavage
Superintendent
Garrett County Public Schools

Ms. Kathy Lins
Director
Rural Schools Enhancement Project

Dr. William R. Ecker
Superintendent of Schools
Caroline County Public Schools

Dr. Harold Winstanley
Superintendent
Allegeny County Public Schools

Dr. William H. Potter
Superintendent
Dorchester County Public Schools

Lois Martin, Executive Director
Governor's Commission on School
Performance

*Indicates former member.

Table 1 (continued)

New Jersey

Dr. Steven Berkowitz
Chief School Administrator
Elmer Borough Board of Education

Assemblywoman Dolores G. Cooper
2nd District
Atlantic City

Dr. Leonore K. Farrah
Superintendent
Brigantine Public School District

Dr. Stephen A. Kalapos
County Superintendent
Cumberland County Office

Dr. Daniel R. Mastrobuono
Superintendent
Palmyra Public Schools

Dr. Norman A. Rosenfeld
Superintendent
Bedminster Township Schools

*Dr. Madeline C. Redmond
Superintendent
Washington Township Schools

Pennsylvania

Dr. Arnold Hillman
Executive Director
Riverview Intermediate Unit

Mr. Joseph F. Bard, Chief
Office of Advisory Services
PA Department of Education

Dr. J. Dennis Murray
Coordinator
Rural Services Institute
Mansfield University

Dr. Lanny Ross
Superintendent
Northern Bedford School District

Mr. Jack Shaw
Superintendent
Sullivan County School District

Mrs. Charylene Philp
Superintendent
Austin Area School District

Dr. David W. Kirkpatrick
Executive Director
PA Association of Rural & Small Schools
(Ex-Officio)

*Indicates former member.

an awareness of the value of contact and exchange of information, and inter-RAC communication is both encouraged and facilitated by the RBS coordinators. As appropriate, RACs may meet as a group to discuss broader issues, to share ideas, and to promote a network of associations. The first such meeting was held on June 25, 1989 as part of the Maryland Rural Schools Conference.

The contributions of the RACs to the rural profiles have included the following activities:

- development of state-specific definitions of "rural education"
- identification of districts within each state that meet the criteria of the definition
- identification of the most pressing needs of each state's rural schools and districts
- review of the RBS data base on rural education with critical assistance in the identification of additional information that should be included and the sources that should be used to obtain the information.

In addition, each RAC will provide a review of the relevant portions of this report. While RBS takes sole responsibility for its contents, the strengths of this report derive in significant measure from the contributions of the RACs.

The Rural Education Data Base

As part of the FY 88 Rural Initiative, each regional educational laboratory undertook to develop a rural education data base. At RBS, the undertaking was conducted in a number of steps. These included:

- definition of "rural" as a descriptor for schools and for education in general
- definition of the unit of analysis for the report
- selection of Quality Educational Data, Inc. (QED) as the initial primary source of statistical and survey-based information

- identification of additional sources of data and of relevant variables
- identification of possible uses for the information within the data base.

Each of these steps is mentioned briefly below followed by a discussion of statistical descriptions used in this report.

Definition of Rural

The definition of rural has proved to be an essential element in the dialog between RBS and the Rural Assistance Councils. This work is given a fuller discussion elsewhere in this report. From the standpoint of defining the data base, the most significant aspect of the effort was the decision to permit each state to structure and work with its own idiosyncratic definition.

Definition of the Unit of Analysis

Throughout this report and the data base, the major unit of analysis is the school district. This focus was chosen for practical reasons. While many important aspects of rural education can be described with greater precision at the school building level, building information is much less commonly available than district information. Further, due to the large number and diversity of districts in the Mid-Atlantic region, there is considerable complexity in the data base even at the district level. Where the information is available and relevant, RBS has used the individual school building as the unit of analysis for supplementary analyses. In general, however, both the present and the projected data base use the school district as the major unit of analysis.

Selection of Quality Educational Data

Selection of Quality Educational Data, Inc. (QED) as the primary source of statistical and survey data was made after careful study of both QED and

alternative data bases. Among the alternatives considered were the census-based information provided by the Northwest Regional Educational Laboratory (NWREL), Census Bureau data, data provided by the SEAs in individual states, data available from the National Center for Educational Statistics, and data available from commercial sources such as Market Data Retrieval, Inc.

QED was selected by RBS for a number of reasons. First, the data available through QED were generally more current than data available from other sources. This was a powerful factor in a region that has seen marked changes occur within the last ten years. Much of the census data from 1980, for example, was found to be inapplicable. Second, the data available from QED was more comprehensive than the data from other sources. For example, no other source provided information on the duties of the key leader within districts, the superintendent.

Third, uniformity of data across the states was a factor. QED presents uniform data in category definition and in the method of data collection from one state to another. This uniformity was seen as facilitating the development of descriptions at the regional level by permitting the cumulation of data across the states in a manner that could not otherwise be achieved. For example, in the area of poverty each of the states has formulated its information in an idiosyncratic way. QED, on the other hand, provides a uniform definition of poverty for all states in the region, and consistency of measures from one state to another.

Finally, QED has an established number of users and uses: some 3,500 agencies, including local school districts, supervisory units, institutions of higher education, the U.S. Departments of Education and Defense, the National School Boards Association, Educational Testing Service, and the American Association of School Administrators use QED data. This widespread

acceptance and use seemed to attest to the reliability and acceptability of the data.

Identification of Additional Sources

While QED was selected as the initial primary source of data for the RBS rural education data base, staff also considered other sources that would be useful in elaborating and enriching the QED data. There were essentially four phases to this work: development of an "other variables" list; refinement of this list; collection of additional basic data; and expansion of the set of available variables.

Development of an "other variables" list. The expansion of the set of variables to be considered for the RBS data base was begun with a semi-formal content analysis of research reports and other publications concerning rural education. There is a large body of such writing accessible, and extensive efforts were made to sample this work and to identify those variables that seemed to have recurring importance or, in the judgment of RBS staff, potential value. The authors of these articles and reports, of course, provided both explicit and implicit information as to what they considered important. This content analysis was supplemented by person-to-person contact with counterparts at the other regional laboratories who were known to be establishing analogous data bases for their regions. These information exchanges were seen as mutually beneficial in generalizing the experience of the individual laboratories to insure that no significant variable would be overlooked, and in delineating the problems and/or advantages of working with a given variable. The result of these steps was the development of an "other variables" list (i.e., non-QED variables).

Refinement of the "other variables" list. The preliminary list of "other variables" was reviewed and assessed by RBS staff from a number of

standpoints. Relevance or importance to an understanding of rural education was the primary dimension. Further consideration was given to the likely uses of the data and to its overlap with other information. The cost of the needed data and the ease or difficulty of obtaining it were also appraised. Related to this was the need for technical procedures to insure or to preserve the value of the information. The extent to which a variable could have possible "political" ramifications within the region was considered. Variables retained within the refined list were: the cost of pupil transportation services (as a percentage of total budget); total expenditures per pupil; the quality and qualification of teaching staff as indicated by the number and type of advanced degrees; student-teacher ratios; statewide testing program outcomes, where available; and the number and percent of significant pupil sub-groups, such as special education students and vocational education students.

Collection of additional data. Information concerning the "other variables" was sought from a variety of sources. Inquiries were directed primarily to the relevant SEAs, to other state agencies, and to professional associations. Not all of the "other variables" have been successfully linked to a satisfactory data source, but the work to date has significantly expanded the RBS data base beyond the QED material.

Expansion of available sources. Implementation of the data base will require continuous review of the variables and the identification of useful sources. This work continues. Useful present examples are RBS' contacts with the Rural Services Institute at Mansfield (PA) University, and with the U.S. Department of Agriculture's Rural Information Center.

Identification of Uses

The development of a data base was essential for the preparation of the profiles of the states and the region described in this report. Beyond this immediate goal, RBS staff have identified a number of additional information products that may be derived from the data base. Systematic efforts will be made to insure that the data base is used in these ways. Examples of such additional uses include its use:

- as a basis for research analyses centering on the operation of rural schools within the Mid-Atlantic region, such as studies of per pupil expenditures in rural districts as contrasted with non-rural districts, or of variations in the ethnographic composition of rural districts across the individual states
- as a continuing source of information for RBS reports about rural education within the Mid-Atlantic region
- as a guide to the planning of services to the region's small schools through more accurate description of what is presently available
- as a guide to planning for the sharing and/or combining of resources within the region
- as a source of information which will enable RBS staff to respond more effectively to the needs and requests of SEA staff
- as a supplement and complement to the data that are gathered and disseminated by the SEAs
- as a validator of conclusions or descriptions of regional rural education activity
- as a source of targeted mailing lists for RBS and other appropriate organizations, such as the Pennsylvania Association of Rural and Small Schools and the New Jersey Rural Administrators Association, to conduct survey activity or disseminate information to selected schools such as elementary schools, those with relatively large numbers of Asian or Black students, or schools that could possibly share resources.

The development of the data base will facilitate all of these purposes and others. The work of defining and implementing services relating to the data base will continue. RBS recognizes the value of the data base and knows that the full realization of the data base potential can only be

achieved through an active program of development, utilization, and dissemination.

In conducting this introductory section, some information should be provided about the statistical descriptions in the remainder of this report. A large body of data has influenced this report. The presentation and discussion of all of the tables within the body of the report would impede the presentation of the text. Accordingly, each description of the individual states and of the region is supplemented by an appendix which presents a number of additional or supplemental tables. The text of the report is based not only upon the tables presented within each section, but upon tables provided in the appendix. At appropriate points, the reader is reminded of this organization by a footnote.

The data reflected in the tables are derived from a number of sources: The QED data base, statistical reports of the SEA, published reports, RBS surveys, etc. Many of these individual sources provide statistical information that is based on different time frames, or that uses categories that are nominal equivalents but defined in different ways. While an effort has been made to provide logical consistency, data from different sources are presented even where these show minor inconsistencies between sources. Thus, the descriptions of "annual enrollment" for a given state or for the region may vary slightly depending on whatever QED data or SEA data is being used. In no case, in the judgment of RBS, is the level of deviation so great as to impair the ability of the reader to form a valid general understanding of the nature of education, or of rural education, within the state or region.

Similarly, in this report, category averages are often the simple, unweighted average of sub-category means, where such a level of precision is

not a gross distortion and where the pursuit of more "precision" in a general description would be basically unhelpful. All of these data have a fluid and dynamic quality, changing over time, and it is the approximate magnitudesthat are of value to the reader. Similarly, no tests of statistical significance are reported. The emphasis is on statistical descriptions in a general way, sufficient to support and inform the generalizations available to the interested reader through the information provided in the text.

DELAWARE

A profile of rural education in Delaware is presented in seven sections: Rural Environment, Definition of Rural, Rural Education Policies, Educational Needs, School District Characteristics, Student Characteristics, and Service Delivery Systems.

Rural Environment

Delaware is very small in size. Like other small states such as Connecticut, Rhode Island, and New Jersey, Delaware crams a lot of people into each square mile of space -- 333 per square mile in 1987 -- which ranks Delaware 7th in the country in population density. However, this density is not evenly distributed. The population is largely in the northern third of the state, which is dominated by the Philadelphia-Wilmington-Trenton metropolitan area. (This metropolitan area contains over 523,000 people -- almost as big as the entire population of Delaware, itself, and is a component of the "BosWash" population corridor.)

When one leaves the Wilmington-Newark corridor and heads south to Kent and Sussex counties, in the lower two-thirds of the state, population densities decline very rapidly (see Figure 1). Indeed, there are no cities of 25,000 or more persons in the entire lower half of the state (below Dover). Of the state's three counties, New Castle in the north contained 417,800 persons in 1986; Kent, in the middle, had 105,200; and Sussex, in the south, had 109,700. Sussex had only 116 people per square mile, about a third of the state's average.

Delaware is the only American state whose system of jurisprudence is based on English Common Law, which almost always favors the corporate interest. However, the Delaware of the DuPonts, of numerous corporate

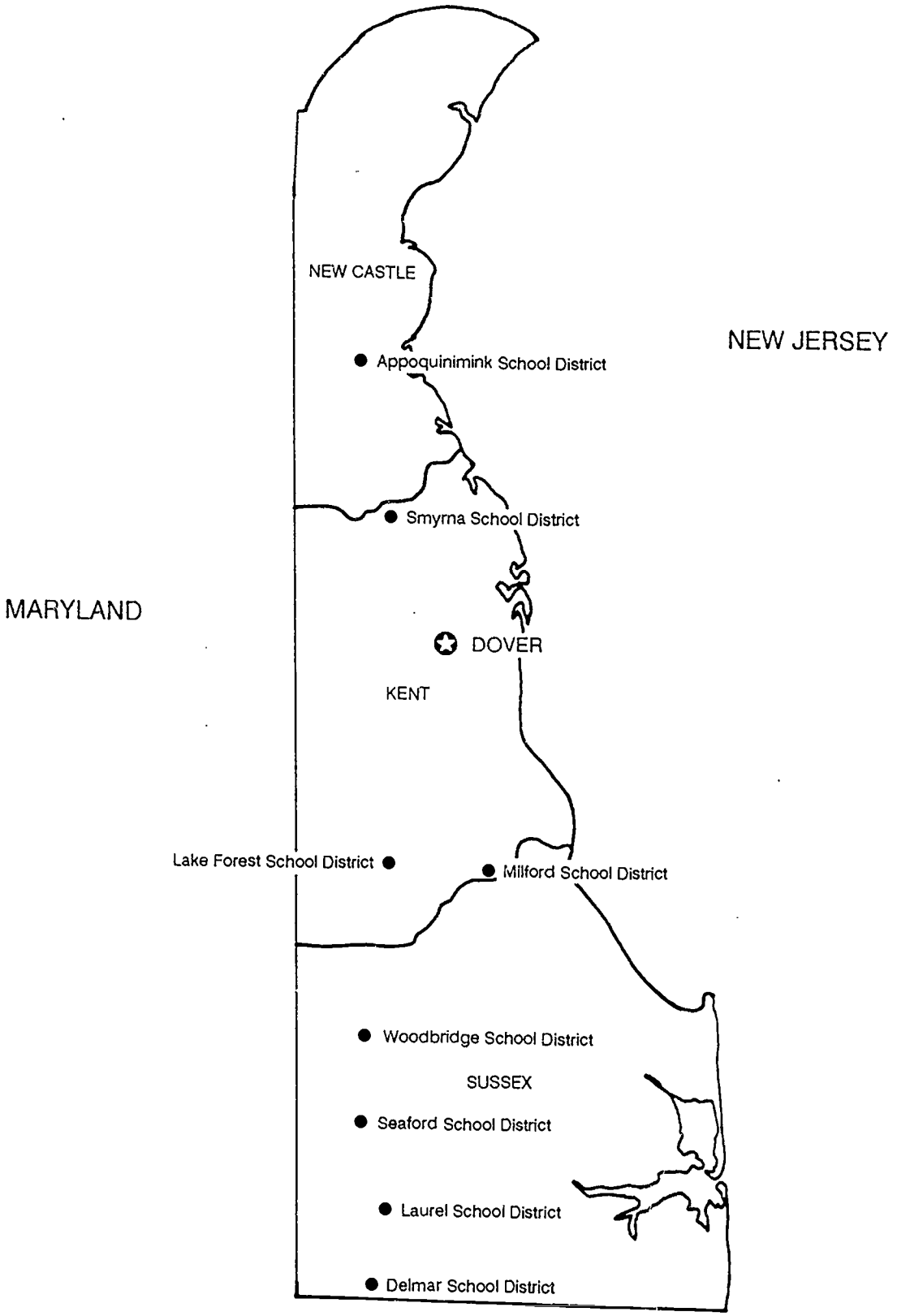

Figure 1

Delaware's Rural Districts by County

headquarters, of the arts, of fine hotels and restaurants, and of sophistication is generally confined to the Wilmington-Newark area. Even Dover seems like an urban oasis in downstate Delaware, which is very rural and very southern. Rehoboth Beach, characterized by rapid growth, is also gaining "oasis" status.

Rural Delaware in many ways projects a classical or stereotypical agricultural image. The huge chicken coops of the area are part of a major broiler industry in rural Delaware. Nearer the shore, there is crabbing, and activities centering on other seafood products of the Chesapeake Bay.

But there is also poverty. Eighty thousand of Delaware's 640,000 citizens (12.5%) were in poverty. A great percentage of these people lived in the lower two-thirds of the state. The state ranked ninth in the nation in terms of births to unmarried women as of 1986, a very high rate, and also ranked ninth in infant mortality. These data were not reported by county, but it seems likely that they reflect a combination of both Wilmington's urban poverty and the rural poverty of Sussex and Kent counties. In both areas, the Black population was likely to have a much higher rate of unmarried births and of infant mortality.

Twenty percent of Delaware's citizens were minority as of 1987, while 25 percent of Delaware's youth were minority, suggesting a gradual increase in the diversity of the state's population. The state's minority population, mostly Black, was distributed evenly through the three counties, 21 percent of Kent, 17 percent of New Castle, and 18 percent of Sussex. School enrollments were 22,000 in Kent, 57,000 in New Castle, and 18,000 in Sussex counties in 1987.

Farming is especially dominant in Sussex County. Farm earnings in 1984 were $13 million in New Castle, $29 million in Kent, and $129 million in

Sussex. In Sussex, 82 percent of farm income was in poultry, far higher than elsewhere. Most manufacturing establishments are in New Castle; of the others, there are twice as many in Sussex as in Kent.

For a small state, Delaware is very complex. Differences in wealth, health care, educational level, and race are as great as in many larger states. The environment for schools is correspondingly complex. There is plenty of money in Delaware, but it is not always available for public services like education, and it is not evenly distributed; a very high percentage of the state's wealth is in one of the three counties (New Castle). It is fortunate, then, that 68 percent of school revenues are from state sources and only 32 percent from local, so that state funds may act as an equalizer to some extent. (On the other hand, state government is likely to be oriented toward the interests of New Castle County, because of its larger population.)

Several things about school environments are interesting in Delaware. The state is second in the nation in the percentage of handicapped children in special classes designed for them (15.3 percent). All three counties participate in this high rat g, meaning that rural handicapped children in Delaware have as good a chance of being in appropriate educational settings as urban children. That is very unusual for rural counties. Second, although high school graduation rates in the state are not overly high (70 percent of ninth graders go on to graduate on time in Delaware, versus 71 percent for the nation in 1988), the chances of going to college, for the 70 percent that do graduate, are very good. These rates hold for Kent and Sussex, as well as for New Castle. If rural youth have access to higher education on completion of secondary school, their options are obviously much greater than those of most rural young people.

Due to their proximity to densely populated areas, it appears that schools in rural Delaware are not as much "at risk" as schools in areas that are hundreds of miles from any kind of urban environment. Indeed, Sussex County has seen a sizable recent increase in building construction permits, suggesting that population densities will build up in rural Delaware in the next decade. This will undoubtedly mean more tax revenues for schools, and more young families with children.

Definition of Rural

In June 1989, after extensive discussion, Delaware's Rural Assistance Council (RAC) arrived at the following definition of rural. Rural includes:

> those districts with fewer than 3,400 students or less than $130,000 full valuation of real estate per pupil in the 1988-89 school year. Included are districts with no or limited beach development, that are sparsely populated, and lack extensive business and industrial facilities.

According to the RAC definition, eight school districts are considered rural (see Table 2). Excluded are districts that were too wealthy to be relevant to the financial fairness issues raised by the RAC. Thus, both size and relative wealth were incorporated in the definition. There was a very strong sentiment among the members of the Delaware RAC that the rural districts selected for attention in the state be poor as well as "rural." This led to the exclusion of two seemingly "rural" districts, Cape Henlopen and Indian River. Therefore, despite their location in relatively rural areas of the state, these districts were excluded from being rural by the RAC definition.

Cape Henlopen and Indian River are, in fact, atypical as non-urban areas with seemingly "rural" characteristics. They are both wealthy resort areas, with annual cycles of population flux and with per capita income well

Table 2

List of Rural School Districts in Delaware

County	District
Kent	Lake Forest
	Milford
	Smyrna
New Castle	Appoquinimink
Sussex	Delmar
	Laurel
	Seaford
	Woodbridge

above any "rural" average. While they have needs that must be recognized and met, the RAC definition would appear to correctly exclude them, for their economic and demographic character sets them apart.

Another consideration came into play in Delaware: the RAC members felt that it was important to include the Appoquinimink District in New Castle County, the most densely populated county and an area of the state not typically considered rural. They based this on a relative lack of wealth. Appoquinimink is thus defined as rural though it is very near the major population centers.

Rural Education Policies

The philosophy of the Delaware SEA seems to be that most of the state is rural -- with the exception of the Wilmington area -- and accordingly virtually all educational initiatives must emphasize rural school improvement. Until the initiation of the Delaware RAC, however, there had not been a concerted effort to identify rural districts and to respond to specific rural needs.

At present, the Delaware RAC is formulating recommendations for improving rural education in that state. The objectives of the RAC are:

- to examine the state's rural schools and districts to identify their most pressing needs
- to bring these needs to the attention of key decisionmakers and leaders throughout the state
- to develop, in cooperation with these leaders, an assistance plan for attending to these needs
- to establish a network of state organizations and associations and to enlist their help in carrying out the assistance plan (D'Amico, 1989).

As the RAC develops policy recommendations regarding the improvement of rural schools in the state, the overall SEA philosophy of treating all school districts in a similar manner may be challenged. The result may be the formulation of specific policies for rural schools in the state.

Educational Needs

In late 1988, the Delaware RAC asked Delaware's rural superintendents to identify and rank their most pressing problems. Eight superintendents responded, and the results indicated that the low tax base of rural areas was their highest priority concern. The survey also revealed that the movement toward allowing parents to choose any school in the state for their children and the reluctance of teachers to settle and teach in rural areas were perceived with equal frequency as the next most pressing concerns facing rural educators in the state. These issues and others identified by the superintendents are presented in order of decreasing priority.

1. The **Low Tax Base of Rural Areas** was considered to be the factor most severely affecting the quality of rural students' education. Many elements were seen as combining to contribute to this concern. The lack of business, resort, or industrial properties in rural areas was seen as an important reason for this low tax base, as was the large number of tax-exempt properties and individuals. School districts cannot control the special tax-exempt status granted to

many properties, individuals, and groups in these areas. The result is that in many rural areas, where the population is small to begin with, the tax paying population is even smaller.

2a. The potential implementation of **Parental Choice**, under which parents would be allowed to send their children to schools outside of the rural districts, shared the second highest priority. There is a concern in rural districts that parents' misconception that rural schools cannot offer the same quality of educational programs as non-rural schools will lead to a drastic reduction in the rural public school student population. If this happens, it will exacerbate a number of already severe problems, such as the existence of antiquated, inefficiently utilized facilities in rural areas; class sizes too small to warrant special courses (especially for exceptionally advanced or exceptionally needy students); and a reduced number of co-curricular opportunities. Compounding the situation is the fact that rural districts are limited to the state units. Also contributing is the tendency for vocational-technical high schools to offer an increasingly wide range of programs, including ones previously found only in comprehensive high schools. The proliferation of non-public schools (which need not meet the regulations governing public schools) is of concern, as well.

2b. The **Reluctance of Teachers to Locate in Rural Areas**. Several problems are embedded in this area of concern. For example, there are fewer cultural activities and not as many satisfactory places to live (especially for minority candidates) in rural areas. In addition, rural areas are hurt disproportionately by the general teacher shortage and by the fact that teacher certification requirements are strict and getting stricter. Lastly, there is the feeling that the teachers' unions and the professional associations may be encouraging their members to go where the salaries are higher and where these groups are influential; that is, to urban and suburban school districts.

4a. The use of **Referenda as a Means of Determining Tax Rates** was cited as a serious obstacle to raising sufficient dollars for education in rural districts. There is no objection to the practice in theory, but to the way its processes are played out in rural areas, where citizens have traditionally expected low taxes and where there are often a great many absentee voters or voters with no children. The result all too often is too few dollars for the schools.

4b. **State Regulations Requiring School Districts to Establish a Reserve in Their Local Budgets** and other constraints on raising and dispersing revenue was another set of concerns. Regulations which set the levels of major and minor capital improvements, of cash-in options, for partial units, and for other employment costs, as well as the availability of usable funds are all part of this concern. The restrictions inherent in the equalization bill were also mentioned.

6. The **"Hodgepodge" of Funding Procedures** that frequently prevent effective planning and service delivery on the part of rural school districts was of concern.

7. The general **Resistance to Change** on the part of local taxpayers, state-level policymakers, local boards of education, and, in some cases, rural district and school staffs were the next level of concern.

8. **Current Salary Structure and Process.** Both the salaries and the benefits that go with them are considerably lower in rural districts than they are in urban or suburban districts. This is partly due to the tax and funding situations that are described in other priority areas, but it was made worse when the governor established a salary structure that gives districts with more local revenue an advantage when it comes to attracting highly qualified, higher-priced teachers.

9. The attitude that **Educational Expenditures are not Deemed Important** when compared to expenditures for highways, health, and other publicly funded services has its roots in a disturbing general public trend to view education as relatively unimportant, but it also reflects provincialism in rural areas where education is not always valued and sometimes even ridiculed.

10a. The **Structure of Property Assessment and Reassessment** that occurs at the county level.

10b. The **Small Number of Administrative Staff** doing a large, perhaps unmanageable, number of administrative tasks in rural districts.

12. **Economies of Scale.** A minimum size is often needed to deliver some services in a cost effective manner, but the aggregation of pupils creates problems of its own. The quest for economies of scale thus creates problems in rural regions.

13a. **Poor Management and Lack of a Collegial Ethos.** The difficulty of attracting teachers extends to administrators, with their greater capacity to produce an impact upon the system, as well. The overall lesser quality of staff precludes their effective interaction.

13b. **Inability to Provide Students with a Sufficient Depth and Breadth in the Curriculum** because of the financial restrictions that exist in rural districts. These same financial restrictions prevent districts with few students from taking advantage of the latest technological innovations.

See Appendix A for a complete list of the nominated rural education issues.

School District Characteristics

Delaware recognizes 16 districts, both rural and non-rural, in its three counties. These districts serve approximately 90,000 students (91,749 in 1988-89 SEA data), with an average district enrollment of about 5,700 students. There is a significant size difference between the non-rural districts, on the average, and the rural: there are about 8,800 students in a non-rural district, about 2,300 students in a rural one. Thus, rural Delaware school districts are considerably smaller than those in Maryland, considerably larger than those in New Jersey, and somewhat larger than those in Pennsylvania.

Half of the state's districts are rural by the definition of the Delaware RAC. This is an indication of the extensive rural character of the state, which is surprising in a fairly industrial northeastern state. It has the greatest percentage of rural districts among the states in the Mid-Atlantic region.

However, the general pattern of lower average enrollment for rural schools means that only about 18,000 students are rural, instead of the roughly 45,000 students that would be projected if district enrollments were equal. This is about 21 percent of all students in the state, and is the largest percentage of rural students among the states in the region. The voice of rural education in Delaware, then, is potentially stronger than it is likely to be in states like New Jersey, where only about five percent of the students are rural. Delaware is clearly like New Jersey in having dominant urban areas, but the ratio of non-rural population to rural population is less pronounced in Delaware.

The northernmost part of the state, New Castle County, contains the state's major population center, Wilmington and its environs. While New

Castle County has one district that has been defined as rural, Kent County, with about 9,000 rural students, and Sussex County, with about 7,300 rural students, contain the bulk of the rural student population.

Kent and Sussex counties differ somewhat in the average size of their rural districts. Kent County districts average about 3,000 students; Sussex County districts run about 1,800. By most descriptors, Sussex County is somewhat more rural than Kent County. This is reflected in data about the character of a school. Sussex County has several small K-3 schools and two 7-12 "high schools." These configurations are most often seen in areas of low population density. Kent County does not have any such schools (see Table 3).

Table 3

Number of Rural Delaware Schools by County and Grade Level
1988-1989

County	K-3	K-6	6-8/7-8	7-12	9-12	Preschool	Total
Kent	0	9	3	0	3	1	16
New Castle	0	2	1	0	1	1	5
Sussex	4	3	2	2	2	0	13
Total	4	14	6	2	6	2	34

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

The state averages about $4,250 per pupil in expenditures for education. This is quite close to the amounts spent by other states in the region. On the other hand, there is quite a bit of variation from one district to another within the state in the amount spent. As Table 4 shows, the Smyrna district spends the least amount per pupil, $3,691, while Cape Henlopen spends the most, $5,342. This is a significant disparity. The

Table 4

Expenditure Per Pupil in Delaware by District*

Rural School Districts	Expenditure
Appoquinimink	$4,364
Delmar	4,535
Lake Forest	3,872
Laurel	4,069
Milford	3,819
Seaford	4,158
Smyrna	3,691
Woodbridge	4,034
Non-Rural School Districts	
Brandywine	4,615
Caesar Rodney	3,716
Cape Henlopen	5,342
Capital	4,183
Christina	4,597
Colonial	4,589
Indian River	3,872
Red Clay	4,536
Statewide Average Per Pupil Expenditure	4,250
Rural Average Per Pupil Expenditure	4,068
Non-Rural Average Per Pupil Expenditure	4,431

*Excluding special schools and vocational schools.

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware Department of Public Instruction.

spending patterns are imperfectly but strongly associated with rural versus non-rural status: the top-spending rural district, Delmar, spends less than six of the eight non-rural districts. While the differences in many cases are relatively small, amounting to only two to three percent of the average expenditure, the average rural district spends about $400 less per pupil, or about nine percent less than the average non-rural district.

There is evidence that these lower per pupil expenditures are reflected in teacher salaries, and that this, in turn, is reflected in the average qualification of the teachers. The average teacher salary in rural Delaware is $26,304. The average teacher salary in non-rural Delaware is $29,952, or $3,640 more. In percentage terms, the non-rural Delaware teacher salary is 14 percent higher. In this small state, where both types of schools compete for the same pool of talent, it seems evident that the non-rural districts will have an advantage. A 14 percent differential within such a small state will have a discernible impact upon the standard of living (see Table 5).

The consistent difference in teacher salaries is indicated by the virtually complete separation in the two distributions of average salaries: in 64 comparisons of each of the eight rural districts with each of the eight non-rural districts, only one (rural Laurel versus non-rural Indian River) favors the rural district.

Some evidence that more highly qualified teachers gravitate to the non-rural areas is provided by the descriptions of rural and non-rural schools in terms of the level of education of their staffs. Almost two-fifths, or 39 percent, of all non-rural teachers have a Master's degree or a higher level of education; but considerably fewer, just under a fourth, or 24.9 percent, of all rural teachers are in this category. The overall teaching staffs are strongly proportionate in size in terms of student enrollment,

Table 5

Average Teacher Salaries in Delaware

Rural School Districts	Salary
Appoquinimink	$25,861
Delmar	26,504
Lake Forest	24,859
Laurel	27,863
Milford	26,851
Seaford	26,343
Smyrna	26,768
Woodbridge	25,380
Non-Rural School Districts	
Brandywine	31,159
Caesar Rodney	28,744
Cape Henlopen	29,893
Capital	29,179
Christina	30,857
Colonial	31,238
Indian River	27,403
Red Clay	31,145
Statewide Average Per Pupil Expenditure	28,128
Rural Average Per Pupil Expenditure	26,304
Non-Rural Average Per Pupil Expenditure	29,952

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware Department of Public Instruction.

but the average level of education of the teachers is higher in the non-rural areas.*

Related to these figures are the average years of teaching experience. Delaware rural teachers, on the average, have been in teaching about 1.6 years less than their non-rural counterparts. There is considerable variation among the districts with respect to this characteristic of their staffs. Appoquinimink, for example, the only rural district in northern New Castle County, has teachers with an average experience of only 11.7 years. In contrast, Laurel has a staff with an average of 17.7 years of experience, while non-rural Brandywine has a staff with 18.2 years. Years of experience is only a very indirect indicator of teacher quality, but there is a definite correlation between this variable and the rural/non-rural dichotomy in Delaware.

While these indications of teacher quality would seem to favor the non-rural schools, the student-to-teacher ratios of the rural and non-rural districts are almost identical. Non-rural schools have an average ratio of 16.5:1. Rural schools have an average ratio of 16.6:1.

Student Characteristics

Minority students constitute about 21 percent of the rural student population (see Table 6). This is a sizable figure, contrasting with virtually no minority students in rural Pennsylvania, and with only ten percent minority students among the rural students in New Jersey. It slightly exceeds the 19 percent minority students observed in Maryland.

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*Additional data describing the characteristics of schools and students in Delaware are provided in Appendix B. As evidenced above, data in the appendices are discussed on occasion in the body of this report. Also, see the discussion of statistical descriptions on pp. 20-21.

Table 6

Ethnicity of Rural Delaware Students
1988-1989

County	White		Black		Hispanic		Asian		Total
	#	%	#	%	#	%	#	%	
Kent	7,171	79.7	1,620	18.0	150	1.7	59	0.7	9,000
New Castle	1,752	83.0	338	16.0	21	1.0	0	0.0	2,111
Sussex	5,630	77.5	1,544	21.3	73	1.0	18	0.2	7.265
Total	14,553	79.2	3,502	19.1	244	1.3	78	0.4	18,376

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

The minority presence is fairly evenly distributed in the student population across the three counties, being 20 percent in Kent County, 17 percent in New Castle County, and 23 percent in Sussex County.

Among the minority students, Black students constitute 92 percent of all students. There were only 78 recorded Asian students in all of rural Delaware in 1988-89, and only 244 Hispanic students. While there is diversity in the Black population, a substantial proportion of the students are from families that have lived in rural Delaware for generations. About 28 percent of Delaware's non-rural students are minority. Thus, the rural incidence, while relatively higher than comparable rural areas in other states, is not unusual within the context of this state.

Dropout data were not available by individual district for this report. However, the data for the three counties indicate that the overall state dropout rate of 7.2 percent is closely paralleled in all sections. New Castle, which has only one rural district, has a dropout rate of 7.2 percent, which is intermediate between the rates for the more rural Kent (7.8 percent) and Sussex (6.4 percent) counties. Minority dropout is a more

significant problem than White dropout. Statewide, for example, Black dropout is at a ten percent rate, Hispanic dropout is at a 13.6 percent rate, and Whites show only six percent dropout. The schools succeed in retaining significantly more White students than minority students.

Rural poverty is marked, but there is extensive non-rural poverty also. Table 7 shows the distribution of districts by poverty ratings.

Table 7

Poverty of Rural and Non-Rural Delaware School Districts
1988-1989

Poverty Ratings	Rural		Non-Rural		Total	
	#	%	#	%	#	%
0-5%	1	12.5	1	12.5	2	12.5
6-10%	0	0.0	1	12.5	1	6.25
11-15%	3	37.5	2	25.0	5	31.25
16-20%	4	50.0	4	50.0	8	50.0
Total	8	100.0	8	100.0	16	100.0

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Thirteen of the 16 districts in the state have more than ten percent of their students living below the poverty level. Of these, seven are rural districts and six are non-rural districts. In contrast to a state like New Jersey, where there are quite a few districts with no more than five percent of their students living below the poverty level, the preponderance of Delaware districts have a sizable component of poverty students.

The Delaware Educational Assessment Program provides data on test results at selected grades (1-8 and 11). When these results are contrasted for the rural and non-rural schools, a slightly superior performance for the non-rural students is seen (see Table 8). The Total Battery score, for example, is on the average lower in the rural areas than it is in the non-

Table 8

Delaware Educational Assessment Program

Total Battery
Average NCE Scores for Delaware Rural School Districts
(Regular and Special Education Combined)
Spring 1988

District	Grades 2	3	4	5	6	7	8	11
Appoquinimink	64.4	64.0	60.0	56.8	60.9	58.3	58.5	56.9
Delmar	-	-	-	-	-	56.0	56.0	51.5
Lake Forest	65.3	64.3	58.5	57.6	62.0	59.0	59.9	66.4
Laurel	63.8	62.1	59.2	59.1	59.2	58.6	56.3	57.5
Milford	59.5	60.2	63.0	59.7	61.5	64.5	68.5	59.1
Seaford	65.5	62.8	62.5	57.3	59.9	57.5	62.3	59.9
Smyrna	61.5	64.9	62.2	54.9	60.3	61.0	57.4	53.9
Woodbridge	67.0	62.5	62.7	58.1	60.8	59.4	58.3	54.5
Statewide Averages	63.9	62.2	62.0	58.1	60.9	59.4	60.0	58.6
Non-Rural Averages	63.9	61.5	62.7	58.4	61.1	59.4	60.3	59.8
Rural Averages	63.9	63.0	61.2	57.6	60.7	59.3	59.7	57.5

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware Department of Public Instruction.

rural ones. In six of the eight grades, beginning in grade 4 and on up, the rural average is lower than the non-rural average. The differences fluctuate from grade to grade, and are reasonably small, but the consistent pattern of results is clearly established. The differences range from 0.1 NCE units (grade 7) to 1.5 units (grade 4).

About 36 percent of Delaware high school graduates go directly on to college. Another 28 percent are working and in some kind of continuing

education six months after graduation. The state retains a substantial majority of its high school graduates as college students, about 63 percent. Of these, half attend the University of Delaware.

Service Delivery Systems

Services in Delaware are generally formulated by the SEA and made available to all school districts in the state. This reflects the small size of the state, both in terms of population and geographical area. The compact size enables the SEA to reach the rural districts almost as readily as the non-rural ones. Further, Delaware is a state in which a very significant percentage of enrolled students (21%) are rural, so the rural character of students and schools is more extensively considered in the provision of basic services.

Delaware's schools and districts have access to a range of service centers, most based outside the state but with a commitment to serving it. Examples of such centers follow.

- East Central Curriculum Coordination Center. This center is an adjunct of the Northeast Network for Curriculum Coordination in Vocational and Technical Education. Its primary focus is on helping schools to reduce any duplication of effort in curriculum development. The center supports a network designed to support training and development, the preparation of curriculum materials, planning assistance, and assistance in implementing and evaluating educational programs.

- Northeast Center for Rural Development. This regionally-oriented center seeks to improve the life and well-being of people in the rural northeast. States that affiliate with the center are helped to implement a community development program. Rural people and communities are the principal focus; economic development, local government finance, and community services are among other foci.

- Research for Better Schools, Inc. serves the Delaware educational community with a variety of R&D programs that are targeted toward improving school functioning. RBS is easily accessible by any district within the state.

- Rural Education and Small Schools Clearinghouse. The clearinghouse is a unit of the Educational Resources Information Center (ERIC), a nationwide information network. Rural education-related reports are collected, organized, catalogued, stored, and made available for dissemination.

- Mid-Atlantic Equity Center, is established to service Delaware and other states with respect to the goals of an egalitarian society. Located in Washington, DC, the center is a non-profit organization. It is an R&D center, providing training and technical assistance services throughout Delaware as a component of its target area.

It is doubtful that a small state such as Delaware will invest extensive resources in the development of service centers targeted for the rural areas, because, paradoxically, Delaware's rural regions are so relatively extensive. More than the other states in the region, rural education is sufficiently salient to be adequately recognized in the ordinary workings of the educational system.

MARYLAND

A profile of rural education in Maryland is presented in seven sections: Rural Environment, Definition of Rural, Rural Education Policies, Educational Needs, School District Characteristics, Student Characteristics, and Service Delivery Systems.

Rural Environment

Maryland has several real "parts" that are distinctively different from each other. The central Maryland corridor, which includes Baltimore and its surrounding counties, links with Washington, DC to the southwest and with Philadelphia-Wilmington-Trenton to the northeast. The 1990 Census will most likely designate Baltimore-Washington as a combined metropolitan area, thus creating the fourth largest metro in the nation, and the one with the highest average income ($33,400 in 1988, according to Market Statistics in New York). With its highly diversified economy, Maryland ranked fifth in per capita income in 1988, averaging $19,314.

At 2.2 million people, the Baltimore metro itself is about half of the state's 4.6 million inhabitants. Overall, Maryland is ranked 18th among the states in size, and grew ten percent from 1980-88, ranking 18th in growth, as well. The "BosWash" corridor does not dominate the state as powerfully as in New Jersey, however. Indeed, Maryland has several large rural pockets.

Rural areas lie along both sides of the corridor. One area of rural population in western Maryland is Appalachian. It includes the mountainous westernmost areas of Garrett and Allegany counties (defined as rural by Maryland's RAC), Washington County, and part of Frederick County (see Figure 2).

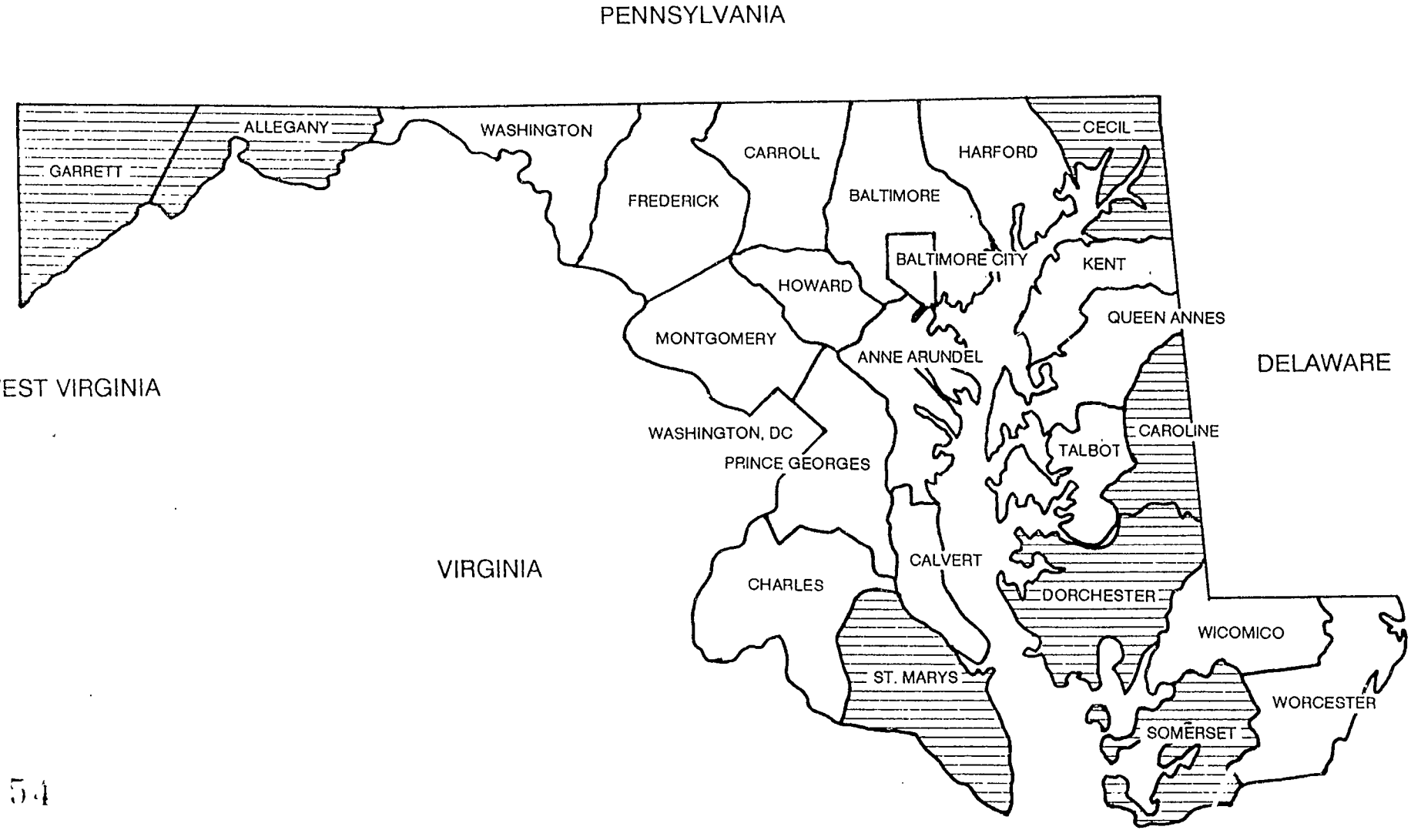

Figure 2

Maryland's Rural Districts by County

On the Maryland side of the Chesapeake Bay there are St. Mary's and Calvert counties. During the 1980s, Charles, St. Mary's, and Calvert counties began to grow rapidly, with St. Mary's becoming almost a suburb of the Baltimore-Washington metro. This has given rural areas new avenues for political influence in Annapolis, but has provided some new clashes of culture. Since 1980, even the Appalachian counties have seen rather rapid growth, with Cumberland and Hagerstown being the centers. This overall pattern of rapid growth for over a decade continues in 1989 despite some economic hard times and consequent loss of population in the western counties.

On the Eastern Shore, the "peninsular" side of the Chesapeake Bay, are Dorchester, Somerset, Wicomico, Worcester, Caroline, Talbot, Queen Anne's and Kent counties. It is here that a distinctive aspect of rural Maryland can best be seen: the area was basically the northernmost extension of the Old South, and at one time plantations were everywhere in the area. At the present time, the population is a little over 20 percent Black. Eastern Shore counties include Caroline at 17 percent Black, Dorchester at 30.2 percent, Somerset at 35 percent, Wicomico at 22.3 percent, and Worcester at 25.5 percent.

In recent years, development of the area as a center for retirement living and tourism have added to the rural residents' income. The concept of education as a pathway to success is a relatively new one for both the rural Eastern Shore and for the mountain environment. The mountain counties are virtually all White, Allegany being only 2.3 percent Black in 1985, Washington 5.9 percent, and Garrett .45 percent.

Although the state is small in area (ranking 42nd), a drive from Ocean City on the eastern coast to Garrett County in the western Appalachians is a

distance of about 350 miles. Much of Maryland, then, is outside the populous corridor, and the image of rural Maryland has endured, portrayed in two images of the mountain man and the water man. In another echo of the Old South, the state's northern boundary is the Mason-Dixon Line, but this area today is inhabited mainly by Yankees.

As we look at Maryland's youth, the population of children under 18 is predicted to increase from about 1,149,000 in 1990 to 1,220,000 in 2010 (only 21 years away), about a six percent increase. However, the percentage of minority youth is expected to increase from 39 percent in 1990 to 43 percent in 2010, with increases in Hispanic and Asian populations as well as Black youth. In the past, urban minorities have tended to stay within the Baltimore City limits, but now Black suburbanization is emerging in the Baltimore-Washington corridor. (Although it is mostly suburban, Prince Georges is now a county with a majority of households containing Black and middle class families.) The federal government is a presence even in rural areas, with installations such as the Army's Aberdeen Proving Ground in Harford County, and the Patuxent Naval Air Station in St. Mary's County.

In recent years, rural counties in Maryland have had unemployment rates almost double the state average. The 1986 average for Maryland was 4.5 percent. In the rural mountain areas, the unemployment rate was 8.9 percent in Allegany, 10.6 percent in Garrett, and 7 percent in Washington. Although somewhat mixed, unemployment in the Eastern Shore region was similarly high: Caroline at 6 percent, Dorchester at 8.3 percent, Queen Anne's at 4.5 percent, Somerset at 10.2 percent, and Worcester at 7.2 percent. Since unemployment rates are high in rural areas, and since Maryland is a state with a heavy concentration of local tax dollars in the school funding base, schools

in many areas of rural Maryland must work against powerful economic currents in their efforts to provide quality education for their youth.

In 1988, Maryland ranked ninth in the nation in providing special settings for its handicapped children. The state ranks about average among states with regard to graduation rate, with 74 percent of its children graduating. Although the data are not clear, it seems that rural areas lag behind in these statistics. There are somewhat fewer handicapped classes as one moves into rural Maryland. Graduation rates, however, seem to hold up fairly well in the Eastern Shore.

Maryland is a very wealthy state, but one that does not have a tradition of assisting its rural citizens. The Eastern Shore, in particular, has been somewhat neglected in previous discussions of educational policy. Maryland is rapidly changing in this regard. Under the leadership of State Superintendents of Schools David Hornbeck and Joseph Shilling, the problems of the Baltimore educational system, which are severe enough to draw attention away from the rural situations, are no longer the overwhelmingly predominant focus of state planning. Sensitive to its problems, the state is now working to provide a productive educational environment in its rural as well as its urban and suburban schools.

Definition of Rural

The Maryland Rural Assistance Council (RAC) developed a definition of rural which encompasses both population density and poverty criteria, with poverty determined by per capita income. The definition, when applied to state districts, singles out the seven poor rural districts which were the focus of the Governor's Rural School Enhancement Project (RSEP). These seven districts are listed in Table 9.

Table 9

List of Rural School Districts in Maryland

County	District
Allegany	Allegany County
Caroline	Caroline County
Cecil	Cecil County
Dorchester	Dorchester County
Garrett	Garrett County
St. Mary's	St. Mary's County
Somerset	Somerset County

The RSEP initiative was initially launched by Governor Schaeffer after he had visited two rural districts in the state and had seen firsthand the inequities that such districts must confront in the delivery of education. As the governor noted, the level of funding from local, state, and federal sources was below the state average, and, in the face of district needs (as evidenced in student population demographics), even more dramatically short of required levels (Lins, 1989).

Rural Education Policies

Maryland law assigns broad and important responsibilities to the State Board of Education. The Board investigates educational needs and sets the state's policies and guidelines for Maryland's elementary and secondary schools. To carry out these responsibilities, the Board passes bylaws that have the force of law, sends an annual budget to the Governor, and recommends legislation to both the Governor and the General Assembly. It also works closely with each local board of education and superintendent (Maryland State Department of Education, 1989).

The State Board of Education has moved Maryland schools beyond an emphasis merely on the basics. The schools stress communication and language skills, mathematics and science, literature and the arts, personal ethics, citizenship, and government. It is their objective to see that all students receive the same opportunity for a quality elementary and secondary education, and, to this end, there is an effort to balance the spending between poor and wealthy school systems.

The state of Maryland is comprised of 23 counties. Each school district, except for Baltimore City, is county-based. Therefore, each district includes all of the schools in its respective county.

While no formal rural education policies exist as such in Maryland, the governor's office initiated a project in 1987 which is aimed directly at addressing the needs of rural schools. The Rural School Enhancement Project (RSEP) is designed to assist the seven rural counties that have the least money to spend on education. All counties seek the implementation of five rigorous standards for the improvement of student outcomes. These standards address the achievement, attendance, dropouts, and the work and education activities of graduates (Lins, 1989). The RSEP project is the only such program targeting rural schools in Maryland, and one of the few aimed at the rural population of any Eastern state. In the U.S., it is said to be the only initiative by a governor's office to improve rural schools.

Two major goals guide the project. The first is to improve results for students through fostering self-help and cooperative activities within the rural school systems, with targeted help from state agencies. The second is to build a long-range advocacy network to secure and maintain support for rural education (Lins, 1989).

The RSEP initiative is a collaboration among state government leaders, the state department of education, the business community, Maryland colleges and universities, and selected local school systems. During the two years it has been in existence, it has collected data previously not available to rural schools: demographic characteristics; resources; program opportunities; indicators of student achievement and participation; and the perceptions of staff, students, and parents about the educational environment. Project staff are working with the superintendents of these seven selected districts to analyze and use this data to plan and carry out improvements.

In June 1989, RSEP held a conference attended by the principal and two teachers from each of the schools in the seven poorest rural counties. The purpose of this conference was to provide school personnel with specific information on a range of strategies, processes, and programs related to the RSEP standards.

During the 1989-90 school year, the seven rural districts will be involved in the development and implementation of action plans for school improvement.

Educational Needs

Maryland staff have collected extensive data on the needs of poor rural schools in the state. The RSEP has identified these needs as falling into the following categories: academic programs for at-risk students, higher order thinking skills, the use of educational technology, the improvement of school attendance, dropout prevention, and the employment of post-secondary youth.

In Maryland, RBS staff have moved beyond the needs assessment process and are working cooperatively with Maryland to address these needs. A major

effort towards accomplishing this goal was the development of the June 1989 Maryland Rural Schools Conference, sponsored by RSEP and RBS, for some 500 rural school teachers and administrators. (Educators from other states in the Mid-Atlantic region were included.) RBS' rural staff was actively involved in planning this effort, and in identifying relevant speakers and programs.

School District Characteristics

Each of Maryland's basic educational administrative units, the school district, is coterminous with a county, with the exception of Baltimore City. There are 23 such county districts and the one municipal district in Baltimore City.

As might be anticipated, each unit is considerably larger in area, and has a greater total student population, than the districts defined in the other states. The total student population in Maryland was about 680,000 in 1988-89 (RBS QED data base). Thus, an average district has about 28,000 students. In Delaware a district has about 3,000 students; New Jersey districts average 2,500; Pennsylvania districts average 3,600.

Seven of the 24 districts are classified as rural by the criteria of the Maryland RAC. They show a total enrollment of about 57,000 students (see Table 10). Thus, about eight percent of the state's students are considered to be rural students. This percentage is approximately that of New Jersey (5%) or Pennsylvania (8%) and somewhat less than Delaware (21%).

A Maryland rural district, then, is a Maryland county. On the average, it has about 8,000 students. This is about 16 times greater than the size of a New Jersey rural district, and indicates the need to keep the

idiosyncratic nature of state definitions of district in mind, as well as state definitions of rural.

Table 10

Number of Students and Teachers in Rural Maryland by County
1988-1989

County	Number of Students	Number of Teachers	Ratio
Allegany	13,383	765	17.5:1
Caroline	4,674	298	15.7:1
Cecil	12,655	730	17.3:1
Dorchester	5,254	315	16.7:1
Garrett	5,099	291	17.5:1
St. Mary's	12,732	769	16.6:1
Somerset	3,588	240	15.0:1
Total	57,385	3,408	16.8:1

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

The average of 8,000 students per district actually masks a differential among Maryland rural districts. Three are quite large, with 12,000 to 14,000 students each; the remaining four are about one-third this size, having 3,000 to 6,000 students. Accordingly, these rural districts differ not only from their non-rural counterparts, but among each other, as well.

The average rural district has about 18 schools, and these schools serve, on the average, about 450 students each. The 15 high schools with grades 9-12 have average enrollments of about 900 students, and graduating classes of about 200; the six high schools with grades 7-12 have average enrollments of about 650 students, and graduating classes of about 100. The most typical rural school is a K-6 school, and has, on the average, about 350 students. Thus, while the numbers of students in a district is large,

the education is actually delivered in units that are quite small (see Table 11).

Table 11

Number of Rural Maryland Schools by County and Grade Level
1988-1989

County	K-3	K-6	K-8	K-12	6-8 7-8	7-12	9-12	Voc./ Tech.	Pre- School	Spec. Ed.	Total
Allegany	0	13	0	3	3	2	3	1	0	0	25
Caroline	0	5	0	0	2	0	2	1	0	0	10
Cecil	0	16	0	0	4	2	3	1	0	0	26
Dorchester	0	6	1	0	2	0	2	1	0	0	12
Garrett	0	10	3	0	2	0	2	0	0	0	17
St. Mary's	1	16	0	0	4	0	3	1	1	1	27
Somerset	2	3	3	0	2	2	0	1	0	1	14
Total	3	69	7	3	19	6	15	6	1	2	131

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

In spite of the large size of the districts, three of seven Maryland rural superintendents report that they must carry additional responsibilities beyond the superintendency itself.* As in Delaware, teacher personnel is the most frequently cited addition. It is paradoxical, in these reports, that only one out of three superintendents in the largest rural districts reports a single role, while three out of four superintendents in the smaller districts report this. Something more complex than district size

*Additional data describing the characteristics of schools and students in Maryland are provided in Appendix C. As evidenced above, data in the appendices are discussed on occasion in the body of this report. Also, see the discussion of statistical descriptions on pp. 20-21.

must determine the extent to which a superintendent is required to perform or is unable to delegate certain responsibilities.

In a state where the 24 districts' average aid is just slightly over $1,000 per pupil, the seven rural districts receive aid that ranges from about $1,300 (Dorchester County) to $1,500 (Somerset County); clearly rural districts receive more than non-rural districts. The need for such an equitable redistribution is indicated in data provided by the SEA which show that while the wealth per student throughout the state averages about $151,000, the seven rural districts range from about $80,000 to $108,000.

All of the rural districts show a per pupil expenditure that is below the state average of $4,323. While this index places Garrett, Somerset, and Caroline counties at the bottom of the list, it shows St. Mary's and Dorchester as surpassing seven of the non-rural districts. There is far from perfect correlation (see Table 12).

The pupil-teacher ratios in the various districts are quite similar. Overall, the state shows an average ratio of about 17 to 1. Both rural and non-rural districts approximate this figure. About 14 percent of all rural students are classified as special education students, a percentage that is slightly higher than the 13 percent observed in non-rural settings. Caroline County, in particular, shows an unusually high percentage of special education students: 21 percent, about one in every five students. The rural districts average about 25 percent vocational education students, also, and this contrasts with the average 20 percent of such students that is seen in the non-rural areas.

In terms of their levels of experience, rural teachers and non-rural teachers in Maryland are very similar. About 66.1 percent of all rural teachers have more than ten years experience; about 69.5 percent of all

Table 12

Expenditure Per Pupil* in Maryland by District, 1987-1988

Rural School Districts	Expenditures
Allegany	$3,912
Caroline	3,761
Cecil	3,932
Dorchester	4,174
Garrett	3,862
St. Mary's	4,185
Somerset	3,830
Non-Rural School Districts	
Anne Arundel	4,467
Baltimore City	3,966
Baltimore	5,162
Calvert	4,155
Carroll	3,893
Charles	4,012
Frederick	3,992
Harford	3,870
Howard	5,073
Kent	4,713
Montgomery	6,112
Prince George's**	4,799
Queen Anne's	4,444
Talbot	4,343
Washington	4,181
Wicomico	3,883
Worcester	5,032
Statewide Average Per Pupil Expenditure	4,323
Rural Average Per Pupil Expenditure***	3,951
Non-Rural Average Per Pupil Expenditure***	4,476

NOTE: Cost per pupil measures the relative cost of providing educational services. The Maryland State Department of Education uses the weighted average number of pupils belonging as the pupil measure.

*Includes the following categories of expenditure: administration; instruction less adult education; student personnel and health services; student transportation; operation and maintenance of plant; fixed charges; special education; and state share of teachers' retirement and social security.

**Preliminary.

***Simple average of expenditure per pupil by county.

SOURCE: The Fact Book, 1988-1989. Maryland State Department of Education.

non-rural teachers surpass this level. There are individual differences: in rural Caroline County, 57 percent of all teachers have more than ten years experience, in non-rural Baltimore County, 75 percent have attained this level. But the patterns are not linked to the rural/non-rural distinction. In non-rural Howard County, only 50 percent of the teachers have more than ten years of experience, while in rural Allegany County, 75 percent exceed the ten years criterion. Some quite complex factors may be determining these differences.

Non-rural teachers are paid about 15 percent more than their rural counterparts. The salary of the average non-rural teacher in Maryland is $29,602; the salary of the average rural teacher is only $25,634. Twelve of the 17 non-rural districts pay more than the top-paying rural district. Clearly, non-urban schools can outbid the rural districts (see Table 13).

About five percent of all school expense in the state is associated with transportation costs. This figure does not appear to vary greatly for the rural and non-rural areas. However, there is some evidence that transportation costs are a more significant budgetary factor in rural Maryland, where about two percent more of the total district expenditure goes for transportation. If the rural districts could reduce transportation costs to the non-rural levels, they could pay teachers about $1,000 more a year.

Student Characteristics

There is a sizable presence of minority students in the schools, but this is found mostly on the Eastern Shore. The western mountain counties, Garrett and Allegany, show almost non-existent numbers of minority students (see Table 14).

Table 13

Average Salary of Teachers in Maryland Public Schools
1987-1988

Rural School Districts	Average Salary
Allegany	$27,217
Caroline	23,519
Cecil	27,472
Dorchester	28,247
Garrett	23,657
St. Mary's	26,114
Somerset	23,212
Non-Rural School Districts	
Anne Arundel	24 172
Baltimore City	586
Baltimore	3. 37
Calvert	30,537
Carroll	28,783
Charles	27,304
Frederick	27,347
Harford	28,651
Howard	31,096
Kent	25,806
Montgomery	37,186
Prince George's	33,260
Queen Anne's	30,661
Talbot	27,734
Washington	28,433
Wicomico	27,394
Worcester	29,289
Rural Average	25,634
Non-Rural Average	29,602
State Average	28,444

SOURCE: The Fact Book, 1988-1989. Maryland State Department of Education.

Table 14

Ethnicity of Rural Maryland Students
1988-1989

County	White		Black		Hispanic		Asian		Total
	#	%	#	%	#	%	#	%	
Allegany	12,982	97.0	268	2.0	134	1.0	0	0.0	13,384
Caroline	3,692	79.0	935	20.0	47	1.0	0	0.0	4,674
Cecil	11,769	93.0	759	6.0	127	1.0	0	0.0	12,655
Dorchester	3,257	62.0	1,944	37.0	53	1.0	0	0.0	5,254
Garrett	5,099	100.0	0	0.0	0	0.0	0	0.0	5,099
St. Mary's	9,931	78.0	2,546	20.0	127	1.0	127	1.0	12,731
Somerset	2,045	57.0	1,507	42.0	36	1.0	0	0.0	3,588
Total	48,775	85.0	7,959	13.9	524	0.9	127	0.2	57,385

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

This contrasts with Somerset County on the Eastern Shore, which, while it has the smallest student population (3,588), has the highest proportion of minority students, 43 percent. Dorchester County, also small (5,254), has about 38 percent minority. St. Mary's and Caroline counties have about 20 percent minority each. The image of an all-White rural district, valid for Pennsylvania or for northwestern Maryland, has no bearing on the Eastern Shore of Maryland.

In Maryland, minority means Black. There are 127 listed Asian students, and 524 Hispanic students, but this is only eight percent of all minority students: 92 percent of all minority students are Black. Black students represent about the same percentage (18%) in rural regions that they do in non-rural regions (21%).

The Maryland RAC's definition specifically targets poverty as a defining characteristic of rural schools. Not surprisingly, then, the

average Maryland rural district shows significantly more poverty than its non-rural counterpart. Forty-three percent of the rural districts have more than 15 percent of their students living below poverty level (see Table 15). Only six percent of non-rural districts have such a rating. Baltimore City, a non-rural district, has the greatest single concentration of poverty students, by far, over 30 percent, but the three rural districts showing the most poverty (see Table 16) -- Dorchester, Garrett, and Somerset -- are all small, with the lowest population densities of any of the districts.

The statewide testing program yields nine major outcomes: three subject areas -- reading comprehensive total, language total, and mathematics total -- for each of three grade levels (3, 5, and 8). Comparisons of rural attainment with non-rural attainment for these nine outcomes show that students in the non-rural districts score higher in each case. Students in three rural counties, Caroline, Cecil, and Garrett, do better than the other rural counties, but in 27 comparisons of these three "least rural counties" with the non-rural average, they equaled or exceeded it only nine times, while failing to match the average 18 times. Thus, even the better rural counties fail to match the non-rural areas.

The rural dropout rate is slightly greater than non-rural, at about 3.8 percent on the average for rural districts and 3.6 percent for non-rural. There is a modest bias in these data, since data for the City of Baltimore, where the dropout rate rises to 12.6 percent, are included. Four of seven rural districts have a dropout rate greater than four percent, as compared to four of 17 non-rural districts.

About 75 percent of all Maryland high school graduates plan to go to college, either full or part-time. For rural students, this figure is more nearly 61 percent.

Table 15

Poverty Ratings of Rural and Non-Rural
Maryland School Districts
1988-1989

Poverty Ratings	Rural		Non-Rural		Total	
	#	%	#	%	#	%
0-5%	0	0.0	3	17.6	3	12.5
6-10%	1	14.3	6	35.3	7	29.2
11-15%	3	42.9	7	41.2	10	41.7
16-20%	3	42.9	0	0.0	3	12.5
21-30%	0	0.0	0	0.0	0	0.0
Over 30%	0	0.0	1	5.9	1	4.2
Total	7	100.0	17	100.0	24	100.0

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Table 16

Poverty Levels of Maryland Rural School Districts,
by County, 1988-1989

County	6-10%	11-15%	16-20%	Total
Allegany	0	1	0	1
Caroline	0	1	0	1
Cecil	1	0	0	1
Dorchester	0	0	1	1
Garrett	0	0	1	1
St. Mary's	0	1	0	1
Somerset	0	0	1	1
Total	1	3	3	7

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Service Delivery Systems

R&D and service improvement organizations in Maryland have a range of capabilities to respond to the needs of school districts within the state. It should be noted, however, that few of these organizations devote most of their attention to rural districts. The work of the majority is directed towards issues of concern to all school districts.

- Rural School Enhancement Project (RSEP), sponsored by the Office of the Governor, assists seven rural counties in the implementation of standards for the improvement of student outcomes. These standards address student achievement, attendance, dropouts, the work and education activities of graduates, and educational technology.

- Maryland Department of State Planning, a state data center, compiles data about small towns and rural areas. Information is compiled from the decennial census of population and housing, the five-year census of agriculture, business, and manufacturers, and from other federal and state sources. Data are available on computer printout, data tape, or microfiche.

- Maryland Tomorrow Incentive Program is a dropout prevention initiative. Housed at the Maryland State Department of Education, it is jointly funded by the state legislature and the Job Training Partnership Act. Twelve service delivery areas exist throughout the state. One such area is the Western Maryland Consortium.

In addition to these Maryland-centered service systems, rural districts within the state have access to a number of regional centers with relevant services that include the state as a target service area. Examples of these include:

- Mid-Atlantic Equity Center, which is established to service Maryland and other states with respect to the goals of an egalitarian society. Located in Washington, DC, the center is a non-profit organization. It is an R&D center, providing training and technical assistance services throughout Maryland as a component of its target area.

- Research for Better Schools, Inc.. As the Mid-Atlantic regional educational laboratory, RBS provides a range of school and classroom improvement services throughout Maryland. Technical assistance, professional development, and knowledge dissemination/utilization are the prime service areas.

- Rural Information Center, located in Beltsville, MD. Sponsored in part by the U.S. Department of Agriculture's Extension Services Division, the Center primarily serves businesses, local governmental units, and citizen organizations. It is conveniently located to serve Maryland communities, and its information products are relevant to a variety of school-centered problems.

The state offers a broad cross-section of research and development centers, both in the context of higher education and the private sector. These, in conjunction with the state professional associations which also contribute assistance, provide a variety of potential resources for rural educators. See Appendix D for a list of these additional service delivery systems and for information as to the types of services available and expertise offered.

NEW JERSEY

A profile of rural education in New Jersey is presented in seven sections: Rural Environment, Definition of Rural, Rural Education Policies, Educational Needs, School District Characteristics, Student Characteristics, and Service Delivery Systems.

Rural Environment

When thinking of New Jersey, one might perhaps think of Japan with its population density of about 1,000 people per square mile. In 1987, New Jersey had about 1,027 people per square mile, making it the most densely populated state. Given this, it would seem that there could be no rural population in New Jersey (and, indeed, the Census Bureau states that 100 percent of the state's 1987 population lived in metro areas), but that is misleading. Beyond the two enormous metros -- Philadelphia-Wilmington-Trenton, and New York-Newark-Jersey City -- that dominate the state's population, many rural school districts are found in Atlantic, Burlington, Cape May, Cumberland, Gloucester, Hunterdon, Monmouth, Morris, Ocean, Salem, Sussex, and Warren counties. The high average density reflects the even greater density of the metropolises; there are areas of lower density and of separation (see Figure 3).

Perhaps the best description of New Jersey has been given by George Sternlieb of Rutgers: "The work force that has left the cities has leaped the second ring of expensive suburbs that are zones against inexpensive housing, to the third ring, the undeveloped rural counties where they can still find housing they can afford." Indeed, 75 percent of the new jobs in New Jersey in the last decade have been in the three counties of Somerset,

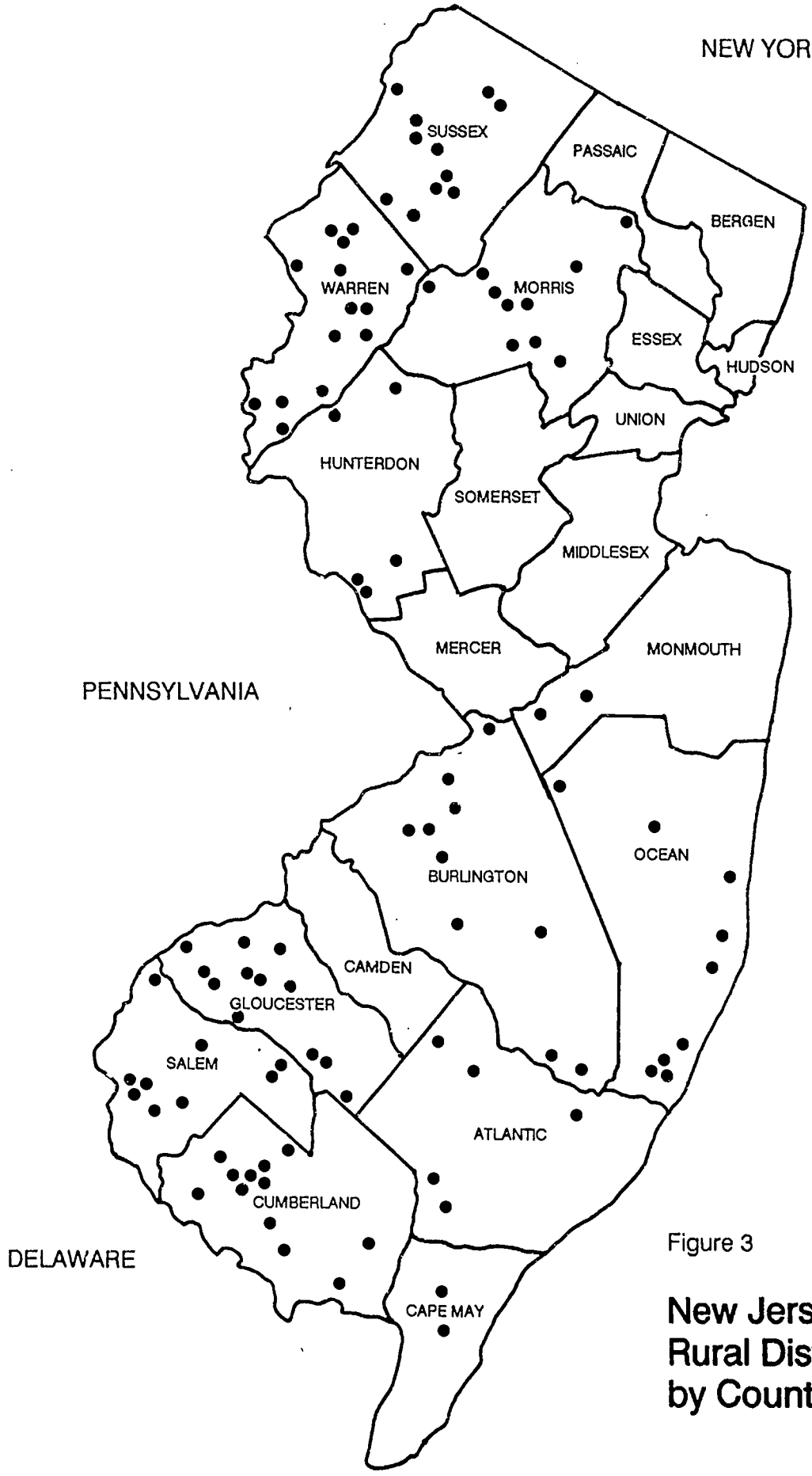

Figure 3

New Jersey's Rural Districts by County

Middlesex, and Morris, the last of which especially has a number of "rural" school districts.

Agriculture is still important in New Jersey. There are large dairy herds in the Appalachian valleys of the northwest. There is truck farming in the rich dirt of central and southwest Jersey. There are orchards in the sandy coastal plain, and cranberries still grow in the marshy bogs of the Pine Barrens. A major problem confronting agriculture in New Jersey in recent years has been the conversion of farmland to private housing and to industrial use. According to Neal Pierce, tax rates have been changed to make such conversions less profitable, somewhat reducing the trend, but the population pressures are intense from both New York City and Philadelphia. (Since colonial times, New Jersey has been referred to as a cask tapped at both ends, with money that could be used to provide better educational programs in New Jersey being shunted instead to New York and Philadelphia as New Jersey citizens cross state lines to work and to pay taxes.)

New Jersey is located at the very center of the "BosWash" corridor which contains 43 million people, about a sixth of the U.S. population. Due to its strategic location, the economic pressures to "fill in New Jersey" with houses, businesses, and factories are virtually all but irresistible. The cost of land in New Jersey continues to rise, but it remains likely that someone in the two dominant cities at the two "ends of the cask" will buy it. Under such conditions, yesterday's rural farm is very likely to be tomorrow's exurb. Compared to almost any other state, rural areas in New Jersey, even those outside of the main corridor in the coastal areas and in the Appalachian foothills in the northwestern part of the state, are more likely to see a form of urbanization in the future.

When compared to the other Mid-Atlantic states of Delaware, Maryland, and Pennsylvania, New Jersey has shown a relatively strong population increase of 4.8 percent from 1980-88. New Jersey is one of the nine states that in 1988 contained half of the nation's people (126.7 million of its 245.8 million). In addition, projections in the May 1988 issue of American Demographics indicate that by 2010, 45.7 percent of New Jersey's youth will be minority. (In comparison, New York's youth will be 52.8 percent, Florida's 53.4 percent, California's and Texas' each 56 percent.) In the past, New Jersey's population has always reflected one of the highest immigration rates in the nation, and it continues to do so today. Recent influxes of people from Asia, South America, and (especially) from the Middle East tended to stay in the cities, at least for the first generation. After that, pressures are created for them to move out, forcing in turn a pressure on everyone else to move out "one more ring."

The Commerce Department reported in April 1989 that New Jersey was the second wealthiest state in the nation in 1988, with a per capita income figure of $21,882 (below Connecticut's $22,761). As a result, poverty areas in the state are somewhat masked. They are either in the core of very large cities, or in small rural pockets, easily ignored and likely to be "invisible" to the stranger passing through on a train or bus. (Poverty statistics are obscured because New Jersey's political system of freeholders makes it more difficult to get a clear description of poverty levels.) In spite of the overall wealth, recent estimates indicate that there are high poverty levels in Atlantic, Cumberland, Essex, and Hudson counties.

As one would expect, teacher salaries are reasonably high in New Jersey as are expenditures per pupil. An education-oriented governor in recent years has instituted many reforms, which have a potential for affecting

every school district in the state. No one in New Jersey seems to be very far away from "where the action is," for better or worse! Thus, rural schools in New Jersey tend to be richer, more sophisticated, more diverse in ethnic and cultural background, and on the whole more complex than rural schools in the other states.

Definition of Rural

The development of a definition of rural by the Rural Assistance Council (RAC) in New Jersey was rendered extraordinarily complex by the nature of the state's demographics. With its high population density, New Jersey is often considered to be an urban state. Most of the state's people do live in urban and metropolitan areas. The needs of its urban school districts are real and considerable, and appropriately, an urban initiative has been developed by the SEA and is ongoing. On the other hand, a significant number of rural and small communities and school districts are found in the state. A 1986 report issued by the New Jersey Department of Education noted that approximately one-half of the operating school districts in New Jersey had fewer than 1,000 pupils enrolled; about one-third had fewer than 500 pupils enrolled, and one in five had enrollments of less than 300. In the six predominately rural counties of Cape May, Cumberland, Hunterdon, Salem, Sussex, and Warren, about three-quarters of the school districts had enrollments of less than 1,000, slightly more than one-half had enrollments of less than 500, and almost one-third had enrollments of less than 300.

While other states have consolidated school districts in recent years, and thereby significantly reduced the total number of school districts, New Jersey has not followed this trend (Leopold, 1986).

As early as 1974, the New Jersey Department of Education categorized districts according to the ten community types which follow.

1 -- Urban Center (UC): dense population with extensive development

2 -- Urban-Suburban (US): near an urban center but not as highly developed, with larger residential areas

4 -- Suburban (S): predominately single-family residential within a short district of an urban area

5 -- Suburban-Rural (SR): rapidly developing area, but large tracts of open land still available for development

6 -- Rural (R): scattered small communities and isolated single-family dwellings

7 -- Rural Center (RC): high-density core area with surrounding rural municipalities

8 -- Rural Center Rural (RCR): small developed core area surrounded by rural areas

9 -- Vocational (V): primary emphasis on vocational training under a separate educational jurisdiction

0 -- Regional District (RD): an educational jurisdiction established to service several surrounding communities.

This system continues in use. The state also assigns districts according to a district factor grouping (DFG), an indicator of the socioeconomic status of citizens in each district. The measure is based on census data and these are updated periodically. The DFG uses a combination of seven variables: (1) educational level, (2) occupational status, (3) density (number of persons per household), (4) urbanization (percent of district considered urban), (5) income (median family income), (6) unemployment (percent of those in the work force who receive unemployment compensation), and (7) poverty (percent of residents below the poverty level).

While the department categorizes districts according to these classifications, it neither provides a working definition of rural nor breaks down its statistics to reflect specifically rural categories. Indeed, use of the

classifications is basically limited to reporting standardized test scores for the statewide testing program and, more specifically, to comparing urban test scores to those of non-urban school districts. Much of the failure to clearly differentiate rural needs can be attributed to the significant and dramatic needs of the state's many urban districts.

The New Jersey RAC definition, like the definitions in other states, seeks to define a rural district in part by its economic characteristics. While there is no explicit reference to poverty level per se, the suggestion that a rural district will have limited industry, limited employment choices, and limited public community resources seems to indicate that, in general, the RAC saw poverty as a significant characteristic.

At their March 1989 meeting, the New Jersey RAC formulated a working definition of rural. They concluded that a rural district is:

> Outside the continuously built-up urbanized or suburbanized area of a major city or borough and generally demonstrating the following six characteristics:
>
> 1. Limited industry
> 2. Usually includes agriculture as an industry
> 3. Limited employment choices in the area
> 4. Low population and/or low housing density
> 5. Limited public transportation
> 6. Limited public/community resources (Kalapos, 1989).

This definition, and a tentative listing of rural districts which met the criteria, were reviewed by each of the state's county superintendents of schools. The vast majority of the superintendents surveyed approved the definition and identified as rural 101 (17%) of New Jersey's operating school districts.

The 101 districts are listed in Table 17, categorized by location. Nine of the 21 counties show no rural districts at all. These constitute a corridor or belt of seven northern counties ranging from the banks of the

Table 17

List of Rural School Districts in New Jersey

County	District
Atlantic	Estell Manor
	Folsom
	Mullica Township
	Port Republic
	Weymouth
Burlington	Bass River
	Chesterfield Township
	Easthampton Township
	Hainesport Township
	Mansfield Township
	Southampton Township
	Springfield Township
	Tabernacle Township
	Washington Township
	Woodland Township
Cape May	Dennis Township
	Woodbine
Cumberland	Commercial Township
	Cumberland Regional
	Deerfield Township
	Downe Township
	Fairfield Township
	Greenwich Township
	Hopewell Township
	Lawrence Township
	Maurice River Township
	Shiloh
	Stow Creek Township
	Upper Deerfield Township
Gloucester	Clearview Regional
	East Greenwich Township
	Elk Township
	Franklin Township
	Harrison Township
	Kingsway Regional
	Logan Township
	Mantua Township
	Newfield Boro
	South Gloucester Co. Reg.
	South Harrison
	Swedesboro-Woolwich
Hunterdon	East Amwell Township
	Hampton Boro
	Lebanon Township
	South Hunterdon Regional
	West Amwell
Monmouth	Millstone Township
	Upper Freehold Regional
Morris	Boonton Township
	Harding
	Mendham Boro
	Mendham Township
	Mine Hill
	Mt. Arlington
	Netcong
	Riverdale
	Rockaway Boro
	Wharton Boro
Ocean	Barnegat Township
	Berkeley Township
	Eagleswood Township
	Lakehurst
	Little Egg Harbor Township
	Ocean Township
	Pinelands Regional
	Plumsted Township
	Tuckerton
Salem	Alloway Township
	Elmer
	Elsinboro Township
	Lower Alloways Creek
	Mannington Township
	Oldmans Township
	Pittsgrove Township
	Quinton
	Woodstown-Pilesgrove

Table 17 (continued)

County	District
Sussex	Frankford Township
	Fredon Township
	Green Township
	Hampton Township
	High Point Regional
	Kittatinny Regional
	Lafayette Township
	Montague Township
	Sandyston-Walpack
	Stillwater
	Sussex-Wantage Regional
Warren	Allamuchy Township
	Blairstown Township
	Franklin Township
	Frelinghuysen Township
	Greenwich Township
	Harmony Township
	Hope Township
	Independence Township
	Knowlton Township
	Liberty Township
	Mansfield Township
	North Warren Regional
	Oxford Township
	Pohatcong Township

Delaware to the banks of the Hudson up the major transportation corridor, together with Camden County, which sits across the Delaware River from Philadelphia. Each of the other 12 counties have some rural districts, although Monmouth County and Cape May County show only two each. It is the mountainous northwest and the coastal southwest that contain most of the rural areas.

Rural Education Policies

New Jersey has not formulated specific policies regarding its rural schools. Throughout the state, revenues from local sources (i.e., real estate taxes) are the major source of funding for public schools. No additional state funds are directed as operating revenue to small or rural schools or school districts. Some benefit to rural areas may derive from New Jersey's equalization formula, which dictates the way funds are disbursed to districts.

However, there have been several statewide initiatives which have demonstrated an interest in addressing the issues and problems of rural schools. Significant among these are the following.

- A New Jersey Rural Special Education Coalition was established in 1983. Recognizing that rural districts have unique characteristics due to their smaller size, the lower incidence of certain handicaps, their greater distance from services, and the greater diversity of administrative work load, the Coalition sought to provide a forum where administrators could discuss their mutual concerns, seek remedies through joint cooperative action, share information, and provide mutual support.

- During the 1985-86 school year, the New Jersey Department of Education sponsored an ad hoc rural initiative committee. Under the direction of Assistant Commissioner Walter J. McCarroll, the committee consisted of county superintendents from six predominately rural counties. Its purpose was to investigate conditions in rural and small schools, to conduct a needs assessment, and to make recommendations to the state department of education. The report issued by this committee was the first comprehensive effort to derive an empirical data base for establishing rural priorities.

- More recently, the New Jersey Association of School Administrators (NJASA) formed a Small Schools Committee. While this group addresses the needs of small schools, it has the implicit effect of serving the needs of rural schools, as well, since most of New Jersey's rural schools are small.

  The mission of the NJASA Small Schools Committee is threefold: (1) explore, through a variety of channels, ways in which the unique problems of small school districts might be resolved, (2) identify resources and disseminate information regarding successful programs and practices which small school districts could use to help one another, and (3) promote a more positive attitude, on the part of the educational community in general, regarding the importance and value of small schools.

  The goals of the committee are: (1) to increase the awareness of small school district needs and issues throughout the state, (2) to become proactive advocates for small school districts in order to influence delivery of services, policy issues, response to mandates, and resources available (people, money); (3) be recognized as representing the interests of small school districts and consulted by: SEA, State Board, Legislative Committees, and Professional Associations, (4) identify effective small school practices at national, state, and regional levels, (5) become a resource to each other by recognizing the positive aspects of small schools and disseminating effective small school practices; and (6) form collaborative partnerships.

  This committee is especially interested in becoming a voice for small schools in New Jersey.

- The New Jersey Rural Assistance Council was established by RBS in 1988 and consists of educators representing the SEA, NJASA Small Schools Committee, and the New Jersey School Boards Association (NJSBA). Its initial purpose has been to provide a state definition of rural and small school districts, to identify promising practices for rural, and to disseminate R&D information to improve rural and small schools (Research for Better Schools, 1989).

Educational Needs

During the 1985-86 school year, the New Jersey Department of Education sponsored an ad hoc committee to study the needs and problems of small and rural schools. As part of the study, the committee completed a questionnaire survey of chief school administrators of school districts with pupil enrollments of 1,000 or less and with other district characteristics that would distinguish them as rural/small. In all, the questionnaire was sent

to the chief school administrators of 241 rural/small districts; voluntary responses were received from 176 districts, or 73 percent of those surveyed.

The questionnaire contained three open-ended questions, asking chief school administrators to: (1) list the most important problems and needs of the rural/small district, (2) provide general recommendations on what could be done to assist such districts, and (3) list some specific ways the state department of education might help. It also contained closed-end questions that sought to identify those areas where the most assistance was needed, under the major headings of administrative services, personnel, curriculum development/improvement, and educational programs.

The most significant factor reported in all sections of the needs assessment survey was that, due to their size, rural/small school districts had limited administrative and supervisory staffs and small teaching staffs. As a result, these districts had considerable difficulty in providing comprehensive educational programs and services and needed substantial assistance in certain areas.

Areas of need and recommendations for assistance reported throughout both the open-ended questions and the forced answer sections of the survey were concerned with (1) developing curriculum, (2) obtaining curriculum services, (3) ensuring adequate staff development, (4) conducting training inservice, (5) sharing services, (6) implementing cooperative programs, (7) helping schools to respond to changing state mandates, (8) reducing the forms and reporting procedures required of busy school staffs, (9) helping districts to work with limited administrative and supervisory personnel, and (10) attracting qualified personnel and teaching staff.

Priority areas fell into four categories: administrative service needs, personnel needs, curriculum development/improvement needs, and educational program needs. Major recommendations are listed below.

- The foremost recommendation for assistance was the implementing of shared services/cooperative programs.
- Among the requests for assistance from the state department of education, respondents placed the highest priority on decentralizing Regional Curriculum Services Unit (RCSU) activities.
- In administrative service needs, respondents placed highest priority on completing applications, grants, forms, and reports.
- In terms of personnel services, chief school administrators were almost unanimous in their emphasis on the need for more staff development/inservice training for teachers.
- The survey found that the highest priority for staff development/ inservice needs was finding time for curriculum development.
- The educational program most often mentioned as a priority need of rural/small school districts was the need to expand curriculum in gifted and talented education.

See Appendix E for a summary of more specific responses in each of the four categories.

School District Characteristics

New Jersey's 21 counties are sub-divided into approximately 560 school districts, not including special education and vocational-technical education schools. The aggregate annual enrollment of these districts is 1,078,959 in 1988-89 according to the SEA estimate. Thus, the average New Jersey school district, rural or non-rural, has about 1,800 students.*

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*Additional data describing the characteristics of schools and students in New Jersey are provided in Appendix F. As evidenced above, data in the appendices are discussed on occasion in the body of this report. Also, see the discussion of statistical descriptions on pp. 20-21.

One hundred one of these districts are rural, according to the RAC definition, about 18 percent of all New Jersey districts (see Table 18).

Table 18

Number of New Jersey Rural School Districts by County
1988-1989

County	Number of Rural School Districts
Atlantic	5
Burlington	10
Cape May	2
Cumberland	12
Gloucester	12
Hunterdon	5
Monmouth	2
Morris	10
Ocean	9
Salem	9
Sussex	11
Warren	14
Total	101

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

However, these districts do not serve a proportionate share of the students (which would be slightly more than 180,000). Instead, only about 52,000 New Jersey students are rural, about five percent of all students in the state. Given the size and density of the state's metropolitan regions, it is easy to see how rural needs can be perceived as less salient. Rural districts serve such a relatively small group, and are spread so thinly over the more remote regions of the state, that they are inherently less visible. To the extent that they confront needs that are qualitatively distinctive, they will inevitably confront difficulties in winning an agenda for meeting them.

The figures above may also be analyzed in terms of students per district. By this approach, the average non-rural New Jersey district has about 2,350 students. The average rural district has only about 500 students. This ratio of sizes, about five to one, quite strongly conveys the differences in perspective that the two kinds of districts will have.

Due to their quite small student enrollments, New Jersey rural districts average only about 1.5 schools per district. As Table 19 indicates, there are 154 schools in rural New Jersey. Of these, only 13 have students who are in grades 10-12. Rural New Jersey in a sense "exports" its secondary-level students to the larger, less rural, districts that have central high schools and more resources. One hundred thirty-five of the 152 rural schools, the overwhelming majority, have students only in grades K-8.

There are 31 different grades-in-school configurations described in the categories in Table 19. While the most typical school is K-6 or K-8, such schools are only about 40 percent of all schools, and the remainder include a very wide array of idiosyncratic combinations of grades -- including one non-combination that is a grade 2 school. There is no sense of any regularity, there are no established types within counties, some with one configuration, some with another. Instead, there is a general idiosyncratic array, almost unpredictable. New Jersey's retention of these many small districts is a reflection of the value that it attaches to local control. These data would seem to indicate that local preferences are strongly determinative of the way in which the schools are run, and that there is a lot of variation among the districts as to how they should be run.

In general, rural education by the New Jersey definition is elementary education. The secondary schools are larger, more affluent, and are the recipients of the students who emerge from the rural schools. The major

Table 19

New Jersey Rural Schools by County and Grade Configuration
1988-89

County	K, K-1, K-2	K-3 P-4, K-4, K-5	P-6, K-6	P-8, K-8	K-12	1-2 1-3, 2	2-8, 3-8	4-5	4-8, 5-8	1-6, 2-6	3-4, 3-5, 3-6	6-8	7-9	7-12	9-12, 10-12	Spec. Ed.	Total
Atlantic	1	1	0	4	0	0	0	0	1	0	0	0	0	0	0	0	7
Burlington	0	2	4	4	0	0	0	0	2	0	1	0	0	0	0	0	13
Cape May	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Cumberland	2	4	0	7	0	0	2	1	3	0	0	1	0	0	1	1	22
Gloucester	6	1	7	0	0	2	0	0	1	3	1	0	1	2	1	0	24
Hunterdon	0	1	1	2	0	0	0	0	1	0	0	0	0	1	0	0	6
Monmouth	1	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0	5
Morris	1	4	1	4	0	0	0	0	3	0	1	2	0	0	0	0	16
Ocean	0	0	8	3	0	1	0	0	0	0	1	0	0	1	0	0	14
Salem	2	2	1	4	0	0	1	0	2	1	0	0	0	1	1	0	15
Sussex	2	0	5	2	0	0	1	0	0	0	1	1	0	1	1	0	14
Warren	0	1	5	6	0	1	0	0	2	0	0	0	0	1	0	0	16
Total	15	15	32	39	0	4	5	1	15	4	5	4	1	7	6	1	154

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

focus, then, of a rural district in New Jersey will be on the younger students.

Further, rural districts are not necessarily found in homogeneously rural counties. Nine of the counties have no rural districts at all. The other counties vary in their proportion. The closest that any single county comes to an all-rural character is Cumberland County, in the southern region of the state, where 80 percent of all school districts are rural under the definition. Salem County, also in the southern area, shows about 69 percent rural districts, and Warren County, a northwestern county, shows about 61 percent rural districts. The other counties range from four percent rural districts (Monmouth, a mid-state county) to 46 percent (Sussex, in the far north). (See Table 20.) Rural districts in places like Monmouth County are clearly atypical within their county. While they may be able to identify with and relate to rural districts in adjacent or nearby counties, it is evident that they face special difficulties as oddities even in their most immediate administrative setting.

New Jersey is a quite small state, and none of its rural districts is hundreds of miles from the urban core of the state. Nonetheless, the typical rural district is relatively remote. Virtually all major transportation systems within the state are oriented toward movement along the northeast population corridor. A line drawn from Trenton in the mid-state south to Newark in the north will roughly define an urban belt that is the axis for virtually all of the major roads and train lines. Many of the avenues that provide access to rural areas are not actually intended for this purpose. Thus, while the Garden State Parkway parallels much of the New Jersey coastline, and thereby gives access to a number of "rural" areas, the road is basically intended to serve the functions of recreation and

Table 20

Number and Percentage of New Jersey Rural Districts by County
1988-1989

County	Total Number of Districts	Number of Rural Districts	Percentage of Rural Districts in County
Atlantic	24	5	20.8
Bergen	73	0	0.0
Burlington	40	10	25.0
Camden	37	0	0.0
Cape May	15	2	13.3
Cumberland	15	12	80.0
Essex	21	0	0.0
Gloucester	27	12	44.4
Hudson	12	0	0.0
Hunterdon	28	5	17.9
Mercer	9	0	0.0
Middlesex	23	0	0.0
Monmouth	50	2	4.0
Morris	38	10	26.3
Ocean	28	9	32.1
Passaic	19	0	0.0
Salem	13	9	69.2
Somerset	17	0	0.0
Sussex	24	11	45.8
Union	21	0	0.0
Warren	23	14	60.9
Total	557	101	

SOURCES: New Jersey Department of Education, Vital Statistics, vol. 2.

Quality Educational Data, Inc., Denver, Colorado.

tourism along the coast. Interstates 78, 80, and 295 all incidentally facilitate access to rural districts, but are primarily routes for through-state travel. It is a further paradox of New Jersey in recent years that the development of such major highways does not so much serve the rural communities as hasten the trend toward their de-ruralization. Both commercial and residential development have proceeded along these corridors, and the resulting increases in population and economic prosperity have removed a significant number of districts from the category defined as rural.

Rural districts in New Jersey vary quite a bit in the average expenditure per pupil. The poorest districts, in counties such as Cumberland, Ocean, and Gloucester (all basically in the south of the state), average about $3,400 per pupil. On the other hand, rural districts in Morris, Monmouth, and Hunterdon counties spend about $4,700 per pupil. Thus, students in the more impoverished rural districts may receive only about 80 percent of the direct educational support that is received by students in the more affluent (but still rural) districts (see Table 21).

Overall, within rural districts there are about 12.5 students per teacher. This is the lowest student teacher ratio in the region. There is some variation from one county to another: Gloucester County has a 15.4 ratio of students per teacher, the highest, while Cumberland County has a 10.2 ratio, the lowest (see Table 22).

Given the small average size of rural districts, it is clear that superintendents will be under pressure to wear more than a single hat, and the data base confirms that a mere 15 of the 101 rural superintendents (15 percent) report that they function only as superintendents. For the remaining 85 percent, other and additional roles are the norm. In fact, 15 percent of New Jersey rural superintendents report that they have three or

Table 21

Average Per Pupil Expenditure by County for Rural Districts in New Jersey, 1986-1987

County	Average Rural Expenditure	Average County Expenditure
Atlantic	$3,594.96	$3,981.87
Burlington	4,133.66	3,793.78
Cape May	3,421.55	4,039.34
Cumberland	3,354.61	3,140.71
Gloucester	3,470.20	3,538.60
Hunterdon	4,494.90	4,297.22
Monmouth	4,639.81	4,192.47
Morris	5,026.80	4,774.70
Ocean	3,454.91	3,763.09
Salem	3,984.11	3,832.19
Sussex	4,198.08	4,166.76
Warren	3,799.89	3,710.01

Average Rural Per Pupil Expenditure: $3,964.46
Average State Per Pupil Expenditure: $4,188.71

SOURCE: Basic Statistical Data of New Jersey School Districts: 1988 Edition. New Jersey Education Association, December 1988.

Table 22

Number of Students and Teachers in Rural New Jersey, by County 1988-1989

County	Number of Students	Number of Teachers	Ratio
Atlantic	1,642	114	14.1:1
Burlington	3,755	275	13.7:1
Cape May	910	66	13.8:1
Cumberland	5,399	528	10.2:1
Gloucester	9,394	611	15.4:1
Hunterdon	1,926	169	11.4:1
Monmouth	1,927	142	13.6:1
Morris	3,620	342	10.6:1
Ocean	7,677	592	13.0:1
Salem	4,772	374	12.8:1
Sussex	6,398	535	12.0:1
Warren	4,836	421	11.5:1
Total	52,256	4,169	12.5:1

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

more additional roles, and about 40 percent of this group have five or more additional roles. The rural superintendent must typically be more of a generalist than his or her urban counterpart.

Student Characteristics

Not surprisingly, while New Jersey has a substantial minority representation in its student enrollment, minority students are most commonly found in non-rural settings. Of about 1,000,000 non-rural students, somewhat over 170,000, or about 17 percent, are minority students. In the rural schools, only about ten percent are minority. From the standpoint of ethnic categories, about five percent of all White students are rural students, about three percent of all Black students, about two percent of Hispanic students, and only about one percent of the state's Asian students (see Tables 23 and 24).

New Jersey is a relatively prosperous state, and the 1980s were in an economic sense a particularly good era for the state. Nonetheless, there is still significant poverty within the state, both in its urban and in its rural regions. Data presented in Table 25 contrast the distribution of the 101 rural districts with the distribution of all non-rural districts. It must be remembered that the non-rural concept in New Jersey combines the affluent suburban districts with the many poor center-city districts. This is not intended to mask urban problems. The effort here is to characterize the rural district within the context of the state overall, not to conceal the realities of urban poverty.

Of the 101 rural districts, over 45 percent have more than ten percent of their students living below the poverty level. For the 460 non-rural districts, this figure is only about 25 percent. Put another way, about

Table 23

Ethnicity of Rural and Non-Rural New Jersey Students
1988-1989

Ethnic Group	Rural		Non-Rural		Total	
	#	%	#	%	#	%
White	47,295	4.3	855,797	79.2	903,092	83.6
Black	3,551	0.3	102,573	9.5	106,124	9.8
Hispanic	1,252	0.1	56,636	5.2	57,888	5.4
Asian	158	0.0	13,609	1.3	13,767	1.3
Total	52,256	4.8	1,028,615	95.2	1,080,871	100.0

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Table 24

Ethnicity of Rural New Jersey Students
1988-1989

County	White		Black		Hispanic		Asian		Total
	#	%	#	%	#	%	#	%	
Atlantic	1,471	89.6	79	4.8	92	5.6	0	0.0	1,642
Burlington	3,518	93.7	116	3.1	113	3.0	8	0.2	3,755
Cape May	615	67.6	168	18.5	127	14.0	0	0.0	910
Cumberland	4,104	76.0	1,112	20.6	167	3.1	16	0.3	5,399
Gloucester	8,286	88.2	864	9.2	225	2.4	19	0.2	9,394
Hunterdon	1,872	97.2	23	1.2	23	1.2	8	0.4	1,926
Monmouth	1,753	91.0	125	6.5	39	2.0	10	0.5	1,927
Morris	3,474	96.0	33	0.9	91	2.5	22	0.6	3,620
Ocean	7,262	94.6	200	2.6	177	2.3	38	0.5	7,677
Salem	3,908	81.9	759	15.9	100	2.1	5	0.1	4,772
Sussex	6,283	98.2	38	0.6	64	1.0	13	0.2	6,398
Warren	4,749	98.2	34	0.7	34	0.7	19	0.4	4,836
Total	47,295	90.5	3,551	6.8	1,252	2.4	158	0.3	52,256

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Table 25

Poverty of Rural and Non-Rural New Jersey School Districts
1988-1989

Poverty Ratings	Rural		Non-Rural		Total	
	#	%	#	%	#	%
0-5%	24	23.8	217	47.2	241	43.0
6-10%	30	29.7	130	28.3	160	28.5
11-15%	33	32.7	57	12.4	90	16.0
16-20%	7	6.9	27	5.9	34	6.1
21-25%	4	4.0	11	2.4	15	2.7
26-30%	2	2.0	5	1.1	7	1.2
Over 30%	1	1.0	13	2.8	14	2.5
Total	101	100.0	460	100.0	561	100.0

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

half of the non-rural districts have no more than five percent of their students living in poverty, while only about a quarter of the rural districts have such a small percentage. Poverty has qualitatively different meanings in the urban and rural settings, and its impact upon schools and students may in selected ways be quite different, but it is always a barrier to opportunity, and it always creates social differentiations that can impede the workings of a district. What the data for New Jersey show is that embedded within this populous and affluent state is a minority of about 100 districts and 50,000 students that confront a rural poverty as real as it is in rural regions elsewhere.

Poverty is inevitably linked to economic factors, and such factors will operate over larger areas. Accordingly, rural New Jersey feels its poverty unevenly. In Morris County, for example, the ten rural districts are about one quarter of all county districts, but only three of them show more than five percent poverty-level students, and only one of them shows more than

ten percent. In contrast, of nine Ocean County rural districts (about one-third of all of the county's districts) only one district has fewer than ten percent poverty students, and no district has fewer than five percent (see Table 26).

Table 26

Poverty Level of New Jersey Rural School Districts by County
1988-1989

County	Poverty Levels 0-5%	6-10%	11-15%	16-20%	21-25%	26-30%	Over 30%	Total
Atlantic	0	1	3	1	0	0	0	5
Burlington	3	3	4	0	0	0	0	10
Cape May	0	2	0	0	0	0	0	2
Cumberland	2	0	5	1	2	1	1	12
Gloucester	1	8	2	1	0	0	0	12
Hunterdon	3	1	1	0	0	0	0	5
Monmouth	0	1	1	0	0	0	0	2
Morris	7	2	1	0	0	0	0	10
Ocean	0	1	7	0	0	1	0	9
Salem	1	1	3	2	2	0	0	9
Sussex	4	4	2	1	0	0	0	11
Warren	3	6	4	1	0	0	0	14
Total	24	30	33	7	4	2	1	101

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

These QED data base descriptions are consistent with the analogous SEA descriptions. New Jersey school districts are categorized by the SEA into ten levels of a system of district factor grouping (DFG). The DFG levels are labeled with the letters A through J, with A being the level of lowest socioeconomic value and J being the level with the highest ranking. Under this system, Ocean County has no rural districts above levels A and B, while Morris County has no rural districts at all within these levels (see Table 27).

Table 27

New Jersey Rural Schools District Factor Groupings by County
1987-1988

County	A-B		C-D		E-F		G-H		I-J		Total	
	#	%*	#	%	#	%	#	%	#	%	#	%
Atlantic	3	60.0	1	20.0	1	20.0	0	0.0	0	0.0	5	100.0
Burlington	3	30.0	3	30.0	2	20.0	2	20.0	0	0.0	10	100.0
Cape May	2	100.0	0	0.0	0	0.0	0	0.0	0	0.0	2	100.0
Cumberland	9	75.0	3	25.0	0	0.0	0	0.0	0	0.0	12	100.0
Gloucester	4	33.3	6	50.0	2	16.7	0	0.0	0	0.0	12	100.0
Hunterdon	0	0.0	2	40.0	2	40.0	1	20.0	0	0.0	5	100.0
Monmouth	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	2	100.0
Morris	0	0.0	1	10.0	3	30.0	3	30.0	3	30.0	10	100.0
Ocean	9	100.0	0	0.0	0	0.0	0	0.0	0	0.0	9	100.0
Salem	6	66.7	3	33.3	0	0.0	0	0.0	0	0.0	9	100.0
Sussex	0	0.0	4	36.4	4	36.4	3	27.3	0	0.0	11	100.0
Warren	4	28.6	6	42.9	3	21.4	1	7.1	0	0.0	14	100.0
Total	40	39.6	29	28.7	19	18.8	10	9.9	3	3.0	101	100.0

*Percentages are rural school districts as a percent of the total number of rural school districts in the county. All districts in the state are divided into ten equally sized groups. This District Factor Grouping (DFG) ranges from A (lowest socio-economic districts) to J (highest socio-economic districts). The table shows where New Jersey's 101 rural districts fit into this scheme.

SOURCE: 1987-1988 High School Proficiency Test State Summary, Grade 9. New Jersey Department of Education

New Jersey high school graduates tend to continue their education beyond high school. About 69 percent of all 1988 graduates were described in SEA data as engaged in some form of continuing education. These SEA data predate the development of the RAC definition and are not organized in terms of "rural district," but the three counties within the state that depart most markedly from the 69 percent overall figure are Cumberland (48

percent), Salem (50 percent), and Warren (50 percent). As noted previously, these are the three counties with more than 60 percent rural districts. They also show marked poverty in their districts, with Cumberland showing 83 percent rural districts with more than ten percent poverty students, Salem showing 78 percent, and Warren showing 38 percent such districts. The implication is clear that many of New Jersey's rural students in these counties do not continue their education beyond high school (see Table 28).

Service Delivery Systems

As in other states, New Jersey service delivery systems are rarely oriented directly towards the needs of rural school districts. Rather, it is necessary for the small district to identify a service deliverer dealing broadly with schools within the state. Nonetheless, a wide variety of services are available of which the following are meaningful examples.

- New Jersey Association of School Administrators (NJASA). Their Small School Committee investigates conditions of rural and small schools, conducts needs assessments, and makes recommendations to the state department of education and committees of the state legislature.

- New Jersey Rural Special Education Coalition provides a forum where administrators can discuss their mutual concerns, seek solutions through collaboration, share information, and be mutually supportive. It sponsors an annual conference and publishes a newsletter.

- Educational Information and Resource Center (ERIC) services the entire state, offering assistance in curriculum development and evaluation, program evaluation, administrative services, information dissemination, and public relations. Its primary focus is on educational technology, gifted and talented students, child abuse, and substance abuse.

- Learning Resource Centers are sponsored by the New Jersey Department of Education, Division of Special Education. They provide a range of information services, materials, training, technical assistance, and consultation services to educators and parents. Rural school districts are serviced by one of the four centers located in the state.

Table 28

Status of New Jersey's 1988 Public High School Graduates
During the Fall of 1988 by County

County*	College or Univ.		Other Education		Employed		Other**		Total
Counties 44% or More Rural									
Cumberland	707	43.2	81	4.9	270	16.5	580	35.4	1,638
Gloucester	1,512	57.0	132	5.0	543	20.5	464	17.5	2,651
Salem	369	45.5	35	4.3	293	36.1	114	14.1	811
Sussex	1,083	59.5	101	5.5	544	29.9	93	5.1	1,821
Warren	476	44.0	62	5.8	262	24.2	283	26.1	1,083
Total	4,147	51.8	411	5.1	1,912	23.9	1,534	19.2	8,004
Counties 5-33% Rural									
Atlantic	968	54.4	65	3.7	519	29.2	227	12.8	1,779
Burlington	2,784	58.6	245	5.2	1,069	22.5	650	13.7	4,748
Cape May	469	55.6	51	6.0	258	30.6	66	7.8	844
Hunterdon	964	67.9	49	3.5	335	23.6	71	5.0	1,419
Morris	4,605	74.3	272	4.4	1,026	16.6	295	4.8	6,198
Ocean	2,475	58.2	298	7.0	1,037	24.4	442	10.4	4,252
Total	12,265	63.7	980	5.1	4,244	22.1	1,751	9.1	19,240
Counties Less than 5% Rural									
Bergen	6,523	73.4	528	5.9	1,469	16.3	399	4.4	9,019
Camden	3,067	58.8	303	5.8	1,172	22.5	674	12.9	5,216
Essex	4,386	59.0	665	8.9	1,458	19.6	925	12.4	7,434
Hudson	1,847	49.7	559	15.0	803	21.6	508	13.7	3,717
Mercer	1,963	66.9	92	3.1	542	18.5	337	11.5	2,934
Middlesex	4,414	65.0	384	5.7	1,549	22.8	447	6.6	6,794
Monmouth	4,422	68.5	323	5.0	1,275	19.7	439	6.8	6,459
Passaic	2,419	56.5	403	9.4	943	22.0	514	12.0	4,279
Somerset	1,992	75.4	132	5.0	419	15.9	97	3.7	2,640
Union	3,131	61.1	380	7.4	1,178	23.0	438	8.5	5,127
Total	34,264	63.9	3,769	7.0	10,808	20.2	4,778	8.9	53,619
State Total	50,676	62.7	5,160	6.4	16,964	21.0	8,063	10.0	80,863

*Three groups of counties are discriminated by the percentage of rural school districts within the total number of school districts in the county.

**Includes graduates seeking employment, underemployed graduates, and graduates in all other residual categories (e.g., homemakers).

SOURCE: Vital Education Statistics: 1988-1989, Vol. 1. New Jersey Department of Education

- Regional Curriculum Services Units function as the intermediate level support agencies of the New Jersey Department of Education. Each unit serves a seven-county region, focusing primarily on major curriculum initiatives. Services provided include training, consultation, networking, and pilot projects. Training activities are primarily offered on a multiple district basis. Consultation services are provided for those who wish to implement training on a building/districtwide basis. Topic areas addressed include computers, planning, evaluation, curriculum development, special education, disruptive youth, drug and alcohol abuse, and nutrition education.

- Ocean County Vocational-Technical Regional Entrepreneurship Program, developed under the auspices of the New Jersey Division of Vocational Education, provides entrepreneurship training to gifted and talented vocational students in Ocean County.

- New Jersey Department of Labor Division of Planning and Research compiles data about small towns and rural areas. Information is compiled from the decennial census of population and housing, the five-year census of agriculture, business, and manufacturers, and from other federal and state sources. Data are available on computer printout, data tape, or microfiche.

The state also offers a broad cross-section of research and development centers, both in the context of higher education and the private sector. These, in conjunction with the state professional associations which also contribute assistance, provide a variety of potential resources for rural educators. See Appendix G for a list of these additional service delivery systems and for information as to the types of services available and the expertise offered.

PENNSYLVANIA

A profile of rural education in Pennsylvania is presented in seven sections: Rural Environment, Definition of Rural, Rural Education Policies, Educational Needs, School District Characteristics, Student Characteristics, and Service Delivery Systems.

Rural Enviroment

Although intensely urban in its major population centers, Pennsylvania has the largest rural population of any state in the nation, about 3.6 million, using the U.S. Department of Agriculture definition of rural. By this definition, 47 of Pennsylvania's 67 counties are rural (see Figure 4).

Unemployment is much higher in rural than urban counties in Pennsylvania, resulting in almost three-fourths of the state's rural population living in "economically distressed areas." Rural adults in Pennsylvania are less likely to have a high school diploma or a college degree. (In part, this reflects attrition; when rural adults do have a college degree, they are more likely to leave the state.)

There are numerous indicators of poverty. Medical care is spotty in rural Pennsylvania. Rural homes are less likely to have complete plumbing facilities, and rural infrastructure (roads, bridges, sewers, water) is likely to be incomplete and poorly maintained, due to the lack of influence of rural areas on the state legislature. Rural banks lack comparable amounts of investment capital, and the larger regional banks are more interested in projects located near cities (Martin, undated).

Some areas of Pennsylvania project a "rural" image but are, in many essential respects, suburban. Thus, Lancaster-Lebanon is an area of

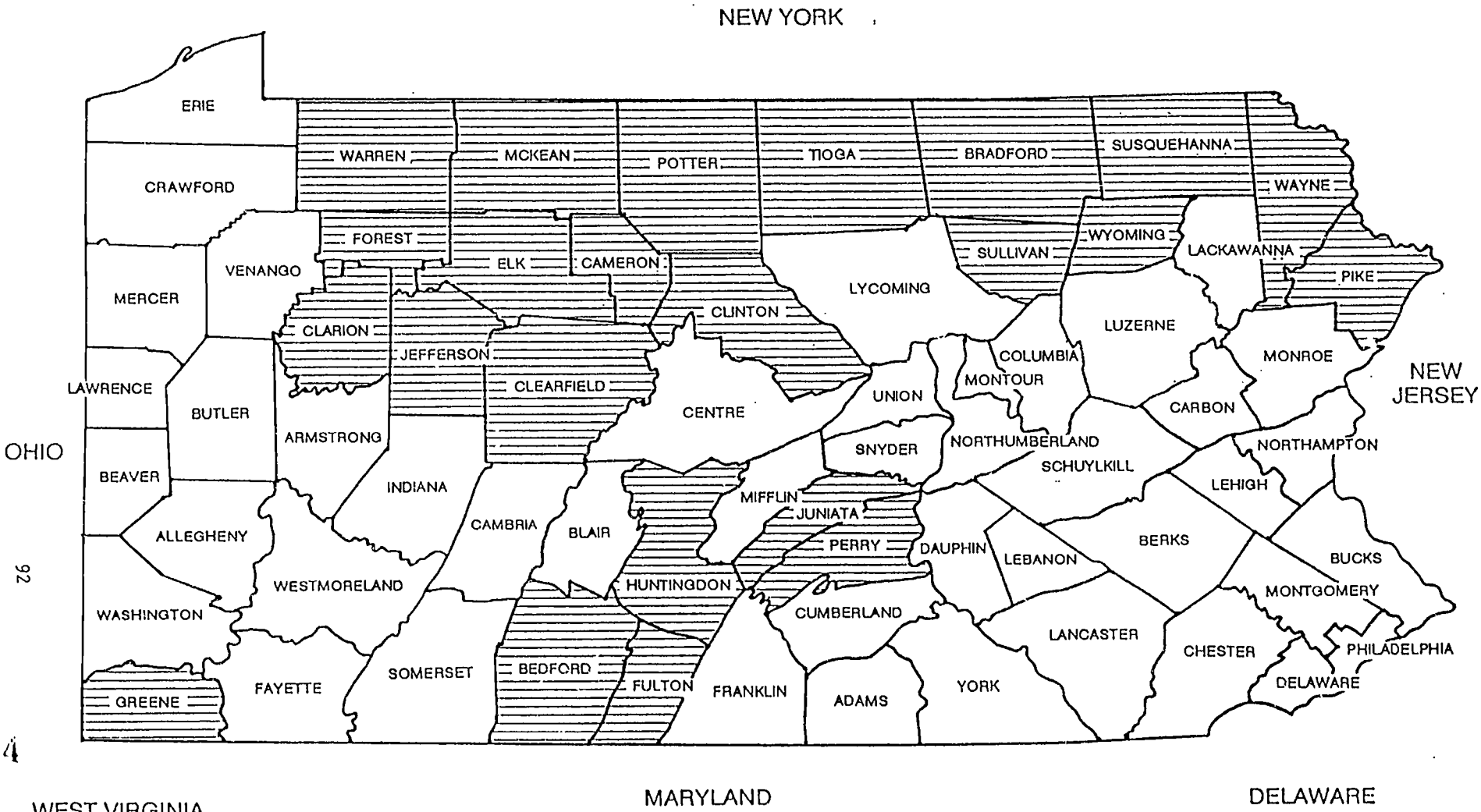

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Figure 4

Pennsylvania's Rural Counties

profitable farms, a large and growing tourism industry, and a number of businesses which provide steady employment for workers in this area. Lancaster, then, is known as a family-oriented place, a good place to raise children, and, in many ways, "the best kept secret in America" -- a buoyant, thriving economy, comfortable population densities, low poverty levels, high educational levels -- all of the advantages of the suburbs without the disadvantages.

Lancaster-Lebanon is also similar to traditionally suburban areas in terms of achievement scores, high quality teachers, and the number of educational dollars spent per child. It further shows high graduation rates, and a high rate of college-going by its graduates. Thus, this area of southeast Pennsylvania can hold its own with many of the explicitly suburban school systems. Interscholastic athletics can easily be arranged with neighboring non-urban schools without the very long bus rides often needed in truly rural areas. Similarly, one of the most important aspects of school environments is the taxpaying environment, particularly the local taxpayer, who provides 50 percent of educational funds in Pennsylvania. In this regard, Lancaster-Lebanon is truly blessed in that local financial support for schools is very strong.

In contrast, rural school districts in the west and northwest area of state show much lower population densities, more rural poverty, and a lower level of economic development and diversification. This area, which is essentially Appalachian in nature, includes Clearfield, Clarion, Jefferson, Butler, Venango, Forest, Elk, and Cameron counties. Here one finds less diversification in the economy, fewer college graduates in the population, much less successful farms, fewer businesses, and much less tourism. Since the citizens here have themselves benefited less from education, they are

less likely to be willing to increase local tax burdens in order to support education. Here one often finds it said that "This school was good enough for my granddad, and it's sure good enough for my kids."

In these areas of low population density and often difficult road conditions, the delivery of health and education services is very expensive on a per-client basis. Further, there is a sense of population loss as a symptom of decline. Some citizens will say that the schools should be good, but not too good, or the kids will leave the small town and close it down. This fear of youth leaving is a characteristic of a large part of rural Pennsylvania, especially northwestern Pennsylvania, where there is often extreme poverty, especially among families with children and among its extraordinarily large number of elderly citizens.

In Pennsylvania, it is possible for rural youth to attend college without leaving the rural environment because of the excellent placement of institutions of higher education throughout rural areas. However, to enter college it is first necessary to graduate from high school, and many rural districts in Pennsylvania's "Appalachian" area show graduation rates that are below the state average.

Rural Pennsylvania is virtually all white. The state's minority population, including its urban centers, is small for a large state, being only 11.2 percent minority in 1987 according to the Population Reference Bureau, and its rural areas reflect this. Rural Pennsylvania is also relatively old -- Pennsylvania as a whole ranks third in the nation in average age, right behind Florida and West Virginia. Fifteen percent of Pennsylvania's population is over 65, and a very high percentage of these elderly live in rural areas. These patterns lead to practical consequences, both for the elderly and the region. Health care and "Meals on Wheels"-type programs are not

easily available in rural areas. Elderly rural citizens are likely to favor programs that benefit themselves, such as improved health care and improved rural housing efforts, and are not likely to support new tax efforts for the improvement of schools.

Definition of Rural

While Pennsylvania's RAC is perhaps the first group in this state to reach a formal working definition of rural, there have been a variety of prior efforts that approached the task, albeit cautiously.

Pennsylvania places its school districts in classes. The smallest, 4th class, includes the 25 districts with enrollments below 5,000 students. Third class districts are those with enrollments of 5,000-30,000; nearly 80 percent of Pennsylvania's school districts (394 districts) are in this class. Eighty districts, with 30,000-450,000 students, are in the 2nd class. Two, Philadelphia and Pittsburgh, are 1st class districts, with student populations in excess of 450,000.

While Pennsylvania's Department of Education has been reluctant to define its rural districts, one early memorandum suggested that all 4th class, and "the vast majority" of 3rd class districts are rural. Even if "vast majority" means only two-thirds, some 262 3rd class and about 25 4th class districts could be considered rural. This would mean that nearly 300, or approximately 60 percent of the state's school districts, would meet the definition. Some of the most rural districts are among the largest in total enrollment, and are also large geographically with a low per square mile population (Kirkpatrick, 1989). A focus on schools yields similar results. It has been estimated that 80 percent of Pennsylvania's districts have at least one rural school.

In recent years, the Pennsylvania state legislature adopted two laws which have aided rural schools, and, in the process, provided somewhat oblique definitions of rural. One law created Small District Assistance Grants which, while not focused on "rural" as such, sought to help such districts. Qualifying districts were those with 1,500 pupils or less and an aid ratio of .50 or higher, which indicates the degree of need. In late 1988, the General Assembly passed a Teacher Loan Forgiveness Act, to encourage teachers to work in specified rural and urban districts. This law defined rural school districts as those with a general population density of less than 300 persons per square mile (Kirkpatrick, 1989).

As late as April 1989, in testimony presented to a public hearing at the Center for Rural Pennsylvania, the Pennsylvania State Education Association defined rural areas as those having a population density of less than 100 persons per square mile (Merenstein, 1989).

Pennsylvania's Definition of Rural

The Pennsylvania Rural Assistance Council (RAC) identified as rural all districts in the most rural counties in the state. These counties have fewer than 75 residents per square mile and less than 100,000 people in the entire county. According to the 1985 census, there are 80 such districts in 23 counties throughout the state. They can be sub-divided into those enrolling fewer than 1,500 students (55 districts) and those enrolling more than 1,500 students (25 districts).

These rural counties account for about seven percent of the state's total population, or 813,245 individuals. Of these, 27 percent are under 18 years of age and 14 percent are over 65, which means that these counties have a dependency ratio of 41 percent. As one might expect, the population

of these rural counties is widely dispersed; overall, they show a density of about 48 persons per square mile (D'Amico, 1989).

The largest number of rural districts form a band across the northern tier of the state. Another cluster of five counties is found in the south central part of the state approximately equidistant from Philadelphia and Pittsburgh. Finally, Greene County, in the extreme southwest corner of the state, adjacent to West Virginia, has five rural districts. Table 29 lists the 80 rural districts in Pennsylvania as defined by the criteria. The typical district resulting from this definition is mountainous and about as remote from the metropolitan centers as is possible in Pennsylvania.

Rural Education Policies

While Pennsylvania has few formal policies aimed specifically at rural education and no publicly announced SEA rural initiative, various groups within the state have implemented "policy-like" initiatives in order to address the issues and problems of rural education. They include the following.

- As early as 1982, 28 statewide associations and organizations with interests in rural issues combined resources and established the Pennsylvania Rural Coalition. The Coalition concentrates members' resources on rural education, economic development, environmental concerns, and rural health. It sponsors an annual conference, publishes a newsletter, and monitors legislation for its members.

- The Pennsylvania Department of Education, under the direction of Margaret A. Smith, Commissioner of Basic Education, created a Small School Districts Task Force in April 1984. This group was organized to identify and discuss the problems of small schools and to recommend solutions. It began with a limited purpose, i.e., to examine the potential effect of the Governor's Agenda for Excellence on small schools, but broadened its goals as the members realized the escalating and interlocking nature of the various issues.

  The issues and problems identified by the Task Force included: attracting teachers to small rural schools, providing adequate

Table 29

List of Rural School Districts in Pennsylvania

County	District
Bedford	Bedford Area
	Chestnut Ridge
	Everett Area
	Northern Bedford County
	Tussey Mountain
Bradford	Athens Area
	Canton Area
	Northeast Bradford
	Sayre Area
	Towanda Area
	Troy Area
	Wyalusing Area
Cameron	Cameron County
Clarion	Allegheny Clarion Valley
	Clarion Area
	Clarion Limestone
	Keystone
	North Clarion County
	Redbank Valley
	Union
Clearfield	Clearfield Area
	Curwensville Area
	Du Bois Area
	Glendale
	Harmony Area
	Moshannon Valley
	Philipsburg Osceola Area
	West Branch Area
Clinton	Keystone Central
Elk	Johnsonburg Area
	Ridgway Area
	Saint Marys Area
Forest	Forest Area
Fulton	Central Fulton
	Forbes Road
	Southern Fulton
Greene	Carmichaels Area
	Central Greene
	Jefferson Morgan
	Southeastern Greene
	West Greene
Huntingdon	Huntingdon Area
	Juniata Valley
	Mount Union Area
	Southern Huntingdon
Jefferson	Brockway Area
	Brookville Area
	Punxsutawney Area
Juniata	Juniata County
McKean	Bradford Area
	Kane Area
	Otto Eldred
	Port Allegany
	Smethport Area
Perry	Greenwood
	Newport
	Susquenita
	West Perry
Pike	Delaware Valley
Potter	Austin Area
	Coudersport Area
	Galeton Area
	Northern Potter
	Oswayo Valley
Sullivan	Sullivan County
Susquehanna	Blue Ridge
	Elk Lake
	Forest City Regional
	Montrose Area
	Mountain View
	Susquehanna Comm

Table 29 (continued)

County	District
Tioga	Northern Tioga
	Southern Tioga
	Wellsboro Area
Warren	Warren County
Wayne	Wallenpaupack Area
	Wayne Highlands
	Western Wayne
Wyoming	Lackawanna Trail
	Tunkhannock Area

funds to those small schools which have a diminishing tax base, meeting the cost of transporting children, and obtaining and properly using computers and other tools of teaching.

- As an offshoot of the Pennsylvania SEA's task force, the Pennsylvania Association of Rural and Small Schools (PARSS) was established in 1984. This group disseminates information to member districts, seeks to influence legislation and governmental decisionmaking, sponsors an annual conference, and publishes a newsletter. PARSS primarily provides information and discussion forums for members. While the organization does not set policy, it does wield considerable influence; for example, PARSS was instrumental in the establishment by the state legislature of Small District Assistance Grants.

- A Rural Services Institute has been established at Mansfield University. It provides useful information for those county officials who need data resources that focus on local comparisons to other areas. Data is compiled on population, vital statistics, housing, education, social indicators, health, employment, and earnings.

- The Pennsylvania state legislature passed a law creating Small District Assistance Grants. Qualifying districts must have 1,500 or less pupils and must demonstrate need as evidenced by an aid ratio of .50 or higher (Kirkpatrick, 1989).

- The General Assembly passed a Teacher Loan Forgiveness Act in 1988, to encourage teachers to work in both rural and urban districts with a particular need. An eligible rural public school district is one "that has a population of less than 300 per square mile and either: more than eight percent of the pupils in average daily membership are low-income pupils...; or the market value/income aid ratio...is defined as greater than seven-tenths."

- The Governor of Pennsylvania created an Office of Rural Affairs in March 1989 to serve as liaison with rural Pennsylvania. The office will work with departments and agencies throughout both state and local governments.

- The Center for Rural Pennsylvania held four public hearings on the subjects of rural education and skill training from April to June 1989. Panelists were asked to respond to three points: identify state policies that would increase the participation of rural youth in adult literacy programs; identify ways in which state government may most effectively encourage rural students to graduate from high school; and how may state government help increase the quality and availability of teachers in rural states.

While these various "policy-like" initiatives emerged from a broad variety of institutions and organizations within the state, they show in

general a state policy of valu. g rural regions and of seeking to assist them. They also show a policy of outreach to rural areas and of efforts to form associations that will bridge the gap between urban centers and rural regions. Further, they facilitate communications concerning the problems and needs of rural regions. By public hearings, conferences, newsletters, and other techniques of dissemination, these policy initiatives attempt to reach and to help rural districts and schools.

Mention may be made, with respect to policy, of the Pennsylvania Rural Assistance Council itself. This RBS-initiated group has already identified a set of issues critical to the quality of rural education in Pennsylvania, and has conducted a rural issues survey with the superintendents of Pennsylvania's rural districts. Further, the Pennsylvania RAC has begun the process of linking the state's rural school districts with other rural agencies in the state. For example, the results of the rural issues survey were presented in report form at the annual conference of the Pennsylvania Rural Coalition in September 1989. The operation of the RAC is in its initial stages. It seems likely, however, that important policy initiatives will arise from this source in the future.

Educational Needs

With the assistance of Research for Better Schools, the Pennsylvania RAC developed a needs assessment survey which, in early 1989, was sent to the superintendents of Pennsylvania's 80 rural school districts. The objective of the survey was to establish what these superintendents believed to be the most pressing educational issues and problems facing them, their schools, and their students. Fifty-nine superintendents (74%) responded by rating a set of issues and problems initially formulated by members of the

RAC using a five-point response scale ranging from "high priority" (5) to "very low priority" (1). Appendix H displays the results of the survey, superimposed on the survey itself.

Generally, the survey showed the following issues to be of prime concern to the rural superintendents who responded. These items received a rating of 4.00 or above.

1. Fiscal Issues (4.78)
2. Community and Family Issues (4.17)
3. Administrative Issues (4.11)
4. Tax Issues (4.00)

Within these issue areas, the following specific problems were identified (by a rating of > 4.00) as having high priority for these superintendents.

1. General Funding (Fiscal Issues) 4.76
2. Economic Development (Community and Family Issues) 4.44
3. Few Administrators Responsible for Performing Many Administrative Functions (Administrative Issues) 4.32
4. Absence of Industry (Tax Issues) 4.22
5. Keeping Up With and Meeting State and Federal Regulations (Administrative Issues) 4.18
6. Things That Put Students "At Risk" (Community and Family Issues) 4.16
7. Special Education (Fiscal Issues) 4.14
8. Transportation (Fiscal Issues) 4.13
9. Poverty (Community and Family Issues) 4..01

As a follow-up to this survey, and as a way of obtaining still more specificity regarding the nature of these issues and problems in rural school districts, three RAC members conducted 14 telephone interviews with a

representative sample of the responding rural superintendents. The superintendents interviewed were geographically spread throughout the state's rural counties in eight different intermediate service areas. The interviewers used the survey results as a point of departure, but were otherwise non-structured in their questions. The most significant findings of these follow-up interviews can be summarized as follows. In the words of one of the interviewers, they "do not reveal any surprises."

- There was consensus that the state should fund the ESBE formula at 100 percent and that a growth clause outside the cap should be developed. Moreover, there should be less emphasis on "market value" and more on personal income.
- Over a third of the districts were beginning their teachers at a salary that fell below what had been "mandated" by the state ($18,500). In addition, there was much concern over the impact that the proposed minimum $24,000 for permanently certified teachers would have on rural district budgets and rural community economics.
- Most felt the proposed $2,330 FEE was a totally inadequate reflection of actual per pupil instructional costs in rural districts.
- Fewer than half of those interviewed had been able to free their resources sufficiently to undertake the time-consuming, costly process of installing a Student Assistance Program.
- Although none objected to the principle that there be mandates and guidelines for operation, all said those developing mandates should be required to insure funding where additional money was necessary for compliance (D'Amico, 1989).

School District Characteristics

Pennsylvania has 67 counties, of which 23 are rural according to the definition of the RAC. Pennsylvania does not have the county-as-district system that Maryland does, but the RAC definition avoids a piecemeal description and characterizes all 80 districts in the 23 counties as rural districts (see Table 30).

Since there are some 500 school districts in the state, 16 percent of the districts are defined as rural, about one in six. These 16 percent of

Table 30

Number of Pennsylvania Rural School Districts by County, 1988-1989

County	Number of Rural School Districts
Bedford	5
Bradford	7
Cameron	1
Clarion	7
Clearfield	8
Clinton	1
Elk	3
Forest	1
Fulton	3
Greene	5
Huntingdon	4
Jefferson	3
Juniata	1
McKean	5
Perry	4
Pike	1
Potter	5
Sullivan	1
Susquehanna	6
Tioga	3
Warren	1
Wayne	3
Wyoming	2
Total	80

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

the districts serve about seven percent of the total enrollment. Pennsylvania is a large and populous state, with a total enrollment of about 1,660,000 students. New Jersey rivals this, but Delaware, at about 90,000 students, and Maryland, at about 680,000, are significantly smaller. Due to its size, Pennsylvania has the greatest absolute number of rural students, about 145,000. Thus, there are more rural students in Pennsylvania than in the other three states combined (see Table 31).

The average non-rural district has just about 1,800 students enrolled. This exceeds New Jersey's average of 500 students per district, but is less than Delaware's 2,300 student average, and, of course, less than Maryland's 8,000+. The average Pennsylvania non-rural district is about twice the size of a rural district at 3,600 students. The ratio of rural district size to non-rural district size is about .50. This is different from the ratio in the other three states, where a rural district has, on the average, about one-fifth of the students in a non-rural district. The reasons for this difference are not well understood. It seems likely that the "non-rural" districts in Pennsylvania have a higher proportion of suburban or similar settings, rather than urban, thus, reducing the overall population density. The average Pennsylvania district is a "full service" district (providing secondary education) in contrast to New Jersey where rural students are predominately in the elementary grades.

While the average rural district has 1,800 students, 55 rural districts (68%) have fewer than 1,500 students. These 55 districts are scattered throughout the state, with some counties, such as Perry, Potter, and Tioga, having no district with more than 1,500 students.

The 80 rural districts operate 348 schools. In contrast to the wide variety of grades-in-school configurations observed in New Jersey,

Table 31

Number of Students and Teachers in Rural Pennsylvania by County
1988-1989

County	Number of Students	Number of Teachers
Bedford	9,082	538
Bradford	12,626	764
Cameron	1,197	72
Clarion	8,466	492
Clearfield	17,810	997
Clinton	5,940	423
Elk	5,242	319
Forest	875	64
Fulton	2,740	156
Greene	7,783	415
Huntingdon	7,384	475
Jefferson	5,463	421
Juniata	3,584	175
McKean	8,015	617
Perry	7,537	426
Pike	2,035	138
Potter	3,201	236
Sullivan	1,010	66
Susquehanna	8,271	508
Tioga	7,314	470
Warren	7,598	500
Wayne	6,463	460
Wyoming	5,248	315
Total	144,884	9,047

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Pennsylvania's rural students (other than special education) fall into eight highly "traditional" patterns: K-3, K-6, etc..

The average school has about 400-450 students. Nearly 60 percent of these schools, 207, are K-6 schools. Another 18 percent are 7-12 schools. The rural regions support 18 9-12 high schools (see Table 32).

Per pupil instructional expense is smaller in the rural districts, averaging just under $2,400 vs. the $2,660 that the average non-rural district spends. Thus, non-rural spending for instruction exceeds rural spending by about ten percent. Rural districts are simply poorer than non-rural ones.*

This relative poverty is reflected in the data for teacher salaries. Rural salaries, at an average of about $26,500, are nearly $6,400 below urban salaries.

The student-teacher ratio is about 16 to 1. This is not exceptional in terms of the other states in the region. There is a considerable range of values within the counties. Juniata has over 20 to 1; Forest has only 14 to 1. Teacher experience is not closely correlated with the salary data, varying from an average of only 12.1 years of experience in Pike County to 17.9 in Elk County. Pike is a higher-paying county than Elk, by about nine percent. Why it would have a teaching staff with such a low number of years of experience is not clearly understood.

About 37 percent of all rural teachers have an education beyond the baccalaureate level; 33 percent have a Masters degree; while about three

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*Additional data describing the characteristics of schools and students in Pennsylvania are provided in Appendix I. As evidenced above, data in the appendices are discussed on occasion in the body of this report. Also, see the discussion of statistical descriptions on pp. 20-21.

Table 32

Number of Rural Pennsylvania Schools by County and Grade Level
1988-1989

County	K-3	K-6	K-8	K-12	6-8/7-8	7-9	7-12	9-12	10-12	Sp. Ed.	Total
Bedford	2	17	0	1	2	0	3	2	0	0	27
Bradford	0	19	0	0	3	0	5	3	0	0	30
Cameron	0	1	0	0	1	0	1	0	0	0	3
Clarion	1	13	0	0	0	0	7	0	0	0	21
Clearfield	1	23	1	2	2	1	4	1	1	0	36
Clinton	1	10	0	1	1	1	2	0	1	0	17
Elk	1	5	0	0	2	0	1	2	0	0	11
Forest	0	1	0	1	0	0	1	0	0	0	3
Fulton	0	4	0	0	0	0	3	0	0	0	7
Greene	1	13	0	1	1	0	3	1	0	0	20
Huntingdon	1	14	0	0	1	0	3	1	0	0	20
Jefferson	2	2	0	0	1	0	2	1	0	0	8
Juniata	0	9	0	0	0	1	1	0	1	0	12
McKean	0	13	0	0	1	2	3	1	1	1	22
Perry	0	6	0	0	1	0	3	1	0	0	11
Pike	0	4	0	0	1	0	0	1	0	0	6
Potter	0	3	0	1	0	0	3	0	0	0	7
Sullivan	0	2	0	0	0	0	1	0	0	0	3
Susquehanna	0	8	0	1	0	0	5	0	0	0	14
Tioga	2	9	0	0	1	0	6	1	0	0	19
Warren	1	16	0	0	0	1	4	0	1	0	23
Wayne	1	7	4	1	2	0	0	2	0	0	17
Wyoming	0	8	0	0	1	0	1	1	0	0	11
Total	14	207	5	9	21	6	62	18	5	1	348

SOURCES: Quality Educational Data, Inc., Denver, Colorado.

Pennsylvania Deparartment of Education, Division of Data Services.

percent have graduate credits beyond the Masters. Only one-tenth of one percent have a doctorate.

Rural transportation costs appear to run about eight percent of the overall budget. This is substantial, but not inordinate in the context of regional experience. Some counties, such as Sullivan, have a much greater relative transportation cost. Sullivan County spends more than 13 percent of its total budget on these expenses. The least that any county spends, in percentage terms, is 4.2 percent by Cameron County.

Student Characteristics

Ethnically, rural Pennsylvania is White. The percentage of minority students is, in aggregate, less than one percent (see Table 33). Nor does this overall result mask any pockets of minority students. The largest rural concentration is in Pike County, where three percent of all students are minority. Paradoxically, in a nation whose dominant minority is Black, the Pike County minority students are largely Hispanic.

Table 33

Ethnicity of Rural and Non-Rural Pennsylvania Students
1988-1989

	Rural		Non-Rural		Total	
Ethnic Group	#	%	#	%	#	%
White	143,942	8.666	1,447,784	87.169	1,591,726	95.836
Black	361	0.022	50,028	3.012	50,389	3.034
Hispanic	573	0.034	13,644	0.821	14,217	0.856
Asian	8	0.001	4,548	0.274	4,556	0.274
Total	144,884	8.723	1,516,004	91.277	1,660,888	100.00

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

The average rural district has about 14 percent of its students living below the poverty level. The average suburban district, on the other hand, has only about nine percent. The urban areas have about 16 percent. While rural Pennsylvania may not match the poverty levels of the big cities, it does confront significant poverty. While 65 percent of the suburban districts have ten percent or fewer poverty students, only 21 percent of the rural districts have low levels of poverty students (see Table 34).

Table 34

Poverty of Rural, Suburban, and Urban Pennsylvania School Districts, 1988-1989

Poverty Ratings	Rural		Suburban		Urban		Total	
	#	%	#	%	#	%	#	%
0-5%	2	2.5	104	26.0	1	5.0	107	21.4
6-10%	15	18.8	157	39.3	1	5.0	173	34.6
11-15%	33	41.3	93	23.3	6	30.0	132	26.4
16-20%	23	28.8	30	7.5	7	35.0	60	12.0
21-25%	6	7.5	7	1.8	3	15.0	16	3.2
26-30%	1	1.3	6	1.5	1	5.0	8	1.6
Over 30%	0	0.0	3	0.8	1	5.0	4	0.8
Total	80	10.0	400	100.0	20	100.0	500	100.0

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Dropout rates are not extraordinarily high, averaging about two percent for rural districts. The non-rural Pennsylvania average is slightly greater, about 2.5 percent. Dropouts in three counties, Perry, Pike, and Juniata, exceeds three percent. Two counties, Fulton and Forest, show less than a one percent dropout rate (see Table 35).

Table 35

Dropout Rate in Rural Counties of Pennsylvania by District
1986-1987

County	Dropout Rate
Bedford	2.41
Bradford	2.85
Cameron	2.37
Clarion	1.39
Clearfield	2.41
Clinton	2.02
Elk	1.74
Forest	0.98
Fulton	0.77
Greene	2.38
Huntingdon	1.20
Jefferson	1.12
Juniata	3.03
McKean	2.14
Perry	3.03
Pike	3.56
Potter	1.54
Sullivan	1.32
Susquehanna	2.99
Tioga	2.37
Warren	1.71
Wayne	2.08
Wyoming	1.47
Statewide Average Dropout Rate	2.31
Rural Average Dropout Rate	2.04
Non-Rural Average Dropout Rate	2.45

SOURCE: Arnold Hillman, Riverview Intermediate Unit, June 1989. Calculation derived from Pennsylvania Department of Education data for 1986-1987.

About 44 percent of all rural high school graduates go on to college. This is significantly below the non-rural average of 52 percent. A few rural counties approach the non-rural average, and two even exceed it, but in five of the 23 rural counties less than 40 percent of the graduates go on. In Forest County, the percentage is only 30.1. This is markedly atypical in the context of the Mid-Atlantic region as a whole.

Service Delivery Systems

For the purposes of this report, delivery systems are considered to be services aimed at schools and their staffs and faculties, rather than pupils. Pennsylvania superintendents, like those in other states, indicated a readiness to draw on services from organizations outside the district in an effort to cope with problems beyond the routine.

A number of service delivery centers within the state of Pennsylvania are primarily rural in their orientation. The following five sources are examples of this.

- Pennsylvania Association of Rural and Small Schools disseminates information to member districts, plans to build or make available existing data bases relative to rural and small schools, and seeks to influence legislation and government decisionmaking on behalf of its membership. It sponsors an annual conference and publishes the PARSS newsletter.

- Pennsylvania Rural Coalition is comprised of 28 statewide associations and organizations interested in rural areas or rural clientele. It monitors legislation, brings together resources, and concentrates on rural education, economic development, environmental concerns, and rural health. It sponsors an annual conference and publishes a newsletter, Pennsylvania Rural Forum.

- Rural Education Teacher Exchange Program of the Pennsylvania Academy for the Profession of Teaching focuses on rural education and provides the opportunity for higher and public education faculty to exchange positions during spring semester.

- The Rural Services Institute at Mansfield University collects and shares information about factors affecting the quality of life in rural areas, helps solve problems facing the community, and provides

students with practical work and study experiences in the community. In addition, an educational outreach project addresses the need to increase rural residents' access to higher education and the changing world of work.

- Institute of State and Regional Affairs, a state data center, compiles data about small towns and rural areas. Information is compiled from the decennial census of population and housing; the five-year census of agriculture, business, and manufacturers; and from other federal and state sources. Data are available on computer printout, data tape, or microfiche.

Frequently, a major source of assistance to rural districts will be more general centers, which offer programs for facilitating education in districts generally. Examples of such service delivery centers within Pennsylvania are the following.

- Research and Information Services for Education (RISE) is an educational information dissemination center. Their primary objective is to disseminate a variety of nationally validated programs in new settings in Pennsylvania. Services are provided through informal and formal networks, as well as to local schools. It is a state-sponsored project.

- Clarion University of Pennsylvania, Information Technology Education for the Commonwealth (ITEC) is a state-legislated program created to improve microcomputer education in local schools. There are two main components: teacher education and software/courseware grants for schools. ITEC offers schools at 14 regional computer resource centers the following assistance: (1) teacher training, (2) assistance in designing computer-oriented curricula, (3) evaluation of proposals for upgrading computer instruction in schools, and (4) software preview libraries.

- Clarion University of Pennsylvania, Pennsylvania Science Teacher Education (PA STEP) is designed to upgrade the skills of practicing teachers and school administrators. A network of 25 colleges, universities, and intermediate units serve as PA STEP sites, offering courses related to classroom implications for microcomputers or "hands-on" investigations in elementary school science. Leadership training and inservice programs are also offered.

- Special Education Regional Resource Centers (SERRC) are funded by the Pennsylvania Department of Education, Bureau of Special Education, for the purpose of providing information, instructional media and materials, training, and technical assistance to teachers, administrators, and others involved in the education of exceptional children. Services include loans of instructional materials, equipment, films and video; dissemination of information; computer laboratory services; and training programs and workshops. There are

three resource centers in the state in the following locations: King of Prussia, Gibsonia, and Harrisburg.

- Intermediate Units are part of the governance structure of public education in the state. They operate at a level between the state education agency and local school districts, and primarily provide services to local school districts that can be operated more effectively and efficiently on a regular basis. One example is the Collective Summer School Program in Beaver County. In 1985, 13 school systems involved in this Intermediate Unit adopted a school board resolution supporting a county-wide summer school.

The state also offers a broad cross-section of research and development centers, both in the context of higher education and the private sector. These, in conjunction with the state professional associations which also contribute assistance, provide a variety of potential resources for rural educators. See Appendix J for a list of these additional service delivery systems and for information as to the types of services available and the expertise offered.

THE MID-ATLANTIC REGION

An overview of rural education in the Mid-Atlantic region as a whole is presented in this section. The content is organized to provide information on rural environments in the region, policies, needs, district characteristics, student characteristics, and service delivery systems.

Rural Environments

The rural environments of the Mid-Atlantic region have been dramatically changing in recent years as a result of forces that are shaping the national rural scene, as well. Recognition of these general environmental trends are essential to any characterization of the region.

- Rural revitalization was important in the 1970s; economic stress is the rural issue of the 1980s, and will likely persist into the 1990s.
- Many of the industries vital to rural economies (agriculture, timber, oil, gas, mining, routine manufacturing) declined in the 1980s. While the nation gained ten percent in jobs from 1975-85, rural areas gained only three percent.
- Workers in the service industries are most likely to live in poverty, yet this is the sector of the rural economy most likely to grow in the years ahead. A large percentage of the people living in poverty in rural areas could be called "the deserving poor" -- married couples and full-time workers in low paying jobs (O'Hare, 1988).
- Economic declines have hurt the entire rural population, but have particularly impacted upon families with children. According to the Population Reference Bureau, a quarter of all rural children were living in poverty in 1986.
- The rural family, long the backbone of rural life, has been beset with increasing problems -- divorce rates are climbing and more women are raising children without a spouse in the home (USDE, 1989).
- Farming no longer dominates the rural economy. In 1987, the 5.1 million people who lived on farms represented only 2.1 percent of the U.S. population and only ten percent of the rural population, 90 percent of which does not live on farms.

- Rural schools are for the most part small or consolidated. The environment around rural schools is very often one of poverty, decline, and human failure. While many rural schools encourage feelings of community, individual achievement, belonging, and participation, many others beset with problems do not.

The Mid-Atlantic region is characterized by rural environments of considerable variation. As the shaded areas of the map in Figure 5 indicate, the region's rural areas form a roughly circular belt which parallels the Atlantic seaboard from the lower tip of Maryland to the northern regions of New Jersey, then moves west to the mountainous regions of northern Pennsylvania and emerges again in southwestern Pennsylvania and western Maryland. This geographic pattern results, in part, from the existence of the northeastern population corridor, stretching from Washington, DC to Boston. A significant portion of this corridor passes through the Mid-Atlantic region, and divides the rural areas. In the western areas, Pittsburgh and other Rust Belt industrial communities separate the northern and southern subareas of the rural region.

The result is a rural life that takes place in close proximity to, and within the context of some of the great population centers of the world. Rural life, in contrast to its neighbors, is somewhat exotic, different, and, through an inability to match the more robust economies of the metropolitan areas, almost inevitably inferior.

Rural communities in the region also differ in their economic basis, and this, when joined with the geographic separation, may impede the development of a common working identity. The Delaware and Maryland communities frequently have economic bases that are maritime, relating to the sea coast, or to the major tidal river basins. The middle and northern Pennsylvania rural regions, on the other hand, are dominated by forestry, mining,

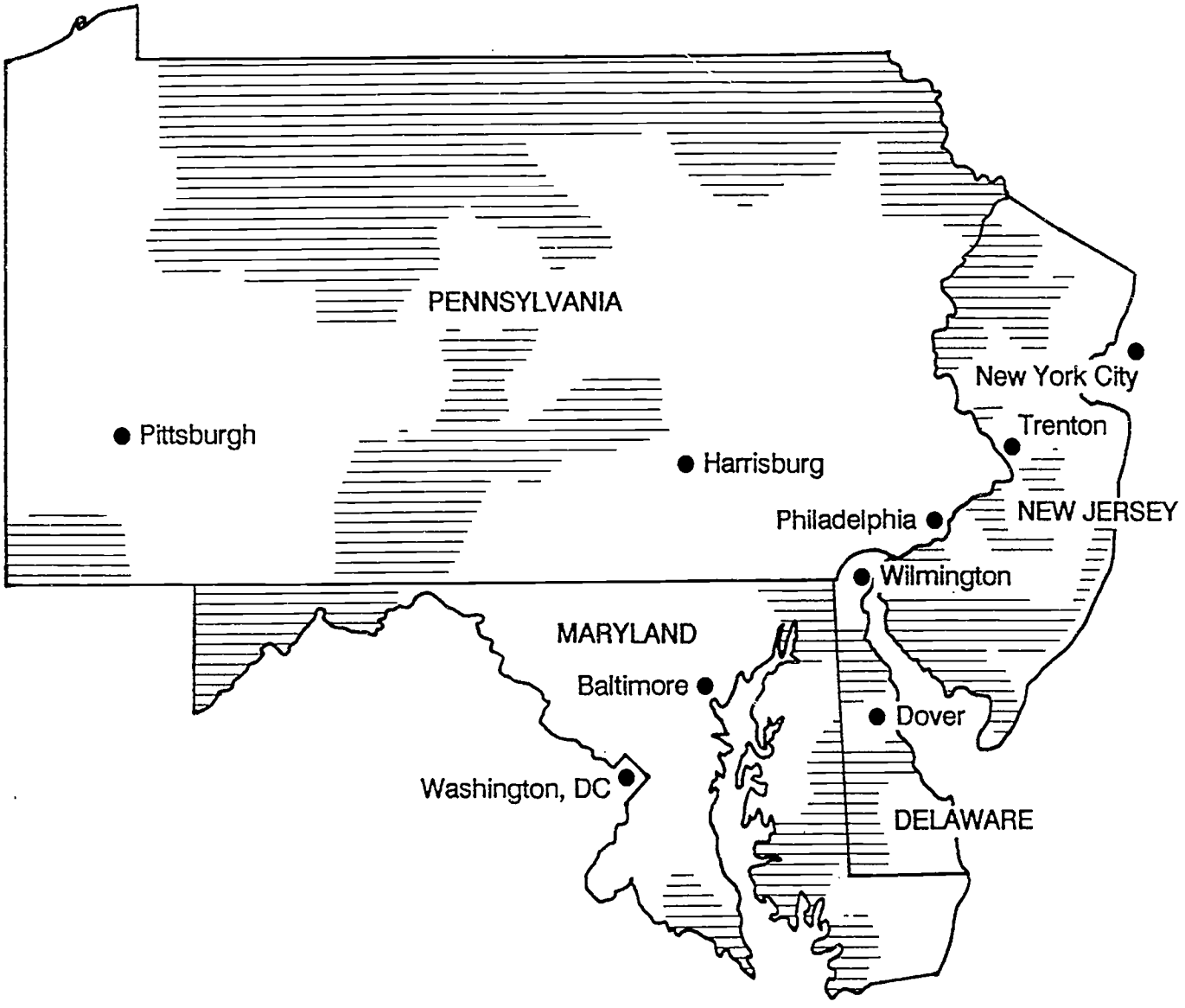

Figure 5

The Mid-Atlantic Region's Rural School Districts

agriculture, and other land-based activities. A further differentiating factor between the coastal and the mountain areas is their use by the metropolitan populations for recreational purposes. While the mountains of northeast Pennsylvania and New Jersey provide considerable recreational use, it is the shore communities in New Jersey, Delaware, and Maryland that are more heavily involved, and, to some extent, this involvement influences rural life in these areas. For the purposes of this report, and in keeping with the definitions of rural that were generated by the RACs, areas that are predominately tourist centers and as a consequence enjoy a solid economic base are not considered rural. Thus, Cape Henlopen (DE) and Ocean City (MD) are areas that may have a sufficiently low permanent resident population to qualify, but the economic base that is generated through tourism removes them from consideration by our working definitions of rural.

It is indicative of life in the Mid-Atlantic region that one of its best known agricultural regions, the Lancaster-Lebanon area of Pennsylvania, is not considered by RAC definition to be a rural area. This area, often photographed because of th picture-perfect farms of the Amish population, is so affluent and so near the major Pennsylvania metropolitan centers that it constitutes its own unique kind of area, which could be called "rural middle class." Such areas may have their own unique problems, but they are more effectively sub-urban than they are rural.

The need to include poverty when defining rural areas within the Mid-Atlantic region is clearly indicated when it is noted that in the absence of this defining characteristic virtually the entire state of New Jersey would be considered to be within a metropolitan district. That is, since a metropolitan district is defined merely by distance from a major population center, virtually every community within the state of New Jersey lies within

the defining distance. It is a thesis of this report that a characterization by distance alone would misrepresent the realities which exist within the region.

The four states that comprise the region have in recent years experienced quite steady populations. New Jersey and Pennsylvania population rates change only about one percent a year, while Delaware and Maryland show ten percent growth rates. The rural regions tend to share in this stability. As metropolitan populations expand, and as the pressure to live outside the center city increases, rural areas surrender land to suburban areas. This kind of change, which has been particularly marked in New Jersey, may produce statistics that indicate population increase in rural areas. Such increases are in a sense phantom, in that the influx of population is altering the very nature of the communities and the school districts in these areas. The influx is increasing the population, but not the areas that remain rural. Indeed, the influx and the nature of its people is removing the area from the definition of rural. Nevertheless, if present trends in the rate of population change continue, there will continue to be major rural areas throughout the Mid-Atlantic region for decades to come.

Rural Education Policies

There is no comprehensive organization or authority within the Mid-Atlantic region concerned with education from a regional standpoint. Accordingly, no description of policy as a recognized, structured, and disseminated body of working principles for the region can be described. Nonetheless, regional trends can be found with respect to conceptualizing rural education and working to insure its quality or to improve it.

Throughout the region, the separateness or difference of the rural school is accepted. That is, education policies throughout the region hold that rural education confronts unique challenges and will require unique attention if these challenges are to be met. These policies are often masked by the names given them by various departments and agencies; both Pennsylvania and New Jersey have programs that focus on schools that are "small" as opposed to "rural," but there is general policy recognition that a small rural school is not like a small urban school.

Cooperation among rural schools is considered essential to the development of an adequate system for the delivery of rural education. There are intrastate associations in each of the region's four states, and these associations provide a forum for exchange among rural educators. Increasingly, through such associations, there are ways of disseminating information as to goals or innovations, of clarifying rural needs, and of triggering the political processes that will meet these needs. There is not as yet any region-wide association of rural educators, but there are undoubtedly much more powerful and fruitful exchanges among the various state associations than could be effected among individual schools. It seems likely, given this policy of association, that a regional group will emerge in the future.

Rural education policies within the Mid-Atlantic region are based upon a dynamic model of social change. That is, rural education is not defined as preparing the individual to remain in a rural environment, but enabling the learner to understand and to relate to the larger, non-rural environment. Put most vividly, rural education in the region is not directed toward producing a generation of farmers and woodsmen to replace their parents. This stereotype is totally unfounded, for, as noted in the

description of the regional rural environments, only ten percent of the rural population is engaged in farming. Rural education is intended to equip the learner with an education that is effectively the equivalent, in content, of the non-rural student.

Intersected with this policy is a policy that seeks to maximize the level of education that is attained by the individual learner. Dropout rates are as important to rural educators as they are to non-rural educators. An emphasis on getting as many young learners as possible to finish high school governs regional policies and programs.

Throughout the region, citizen mobility and the role that education plays in this mobility stimulate educational policy. While education is general, and intended to equip learners for both rural and non-rural environments, there are important differences in the economies of the rural and non-rural sectors, and education plays a significant role in preparing learners for an economic future. Educational policy in this sense will always reflect, implicitly if not explicitly, policies and values with respect to mobility.

The general regional policy must be characterized as one of neutrality in this regard. There is no effort to so conduct the rural schools as to influence the rural learner to seek a non-rural environment, or to view the non-rural environment, with its often more numerous and varied opportunities, as superior to the rural environment. No evaluation of rural education is premised on indicators of the numbers of young persons who leave the rural regions to live in non-rural ones. Throughout the region, rural education is essentially value-neutral with respect to mobility.

One clear indication of this is the effort throughout the region to provide education at centers that are reasonably close to the rural

population. In each of the states, for example, the institutions of higher education are located in widely-dispersed places that puts a collegiate "presence" in each local rural region, and that makes it possible to secure an education without moving out of the rural sector.

These are not policies of retaining persons in rural regions. They are essentially indifferent to the question of the extent to which the population of the rural region increases or diminishes, or exhibits a stability between generations. In general, rural education is conducted independently of issues of mobility.

Regional policies see rural education as probably the single most valuable force for optimizing the contributions of rural regions to the larger units of which they are a part. Regional policies recognize that the rural regions are often at an economic disadvantage in maintaining educational systems that are as effective as those of the non-rural areas. Throughout the Mid-Atlantic region, then, there is a policy of subsidization of rural education, either explicitly or implicitly. Most frequently, this is demonstrated by efforts to equalize state funding assistance and to assist rural areas in recruiting better teaching staff.

Rural education is seen as an instrument for social change through redefining rural life. The changes within the region over the last 50 years have been dramatic. It is evident that these changes will continue. While no one can foresee the specific changes, or the order in which they will occur, it seems likely that the present rural regions will retain for the foreseeable future their most salient defining characteristic, a lower population density. As the "traditional" economic bases within the rural areas decline, in most cases they will be replaced by other bases, a reflection of the larger shift in society from a product-oriented society to a

service-oriented society. Rural education is seen as a primary factor in moderating these changes, in diminishing the negative impacts, and in facilitating the positive ones. These policies for intersecting education with social change are reactive, rather than active. That is, they react and respond to whatever larger trends emerge, rather than define a vision of the ideal rural area and seek to achieve it through education. Policies for rural education in this region are generally conservative.

Nonetheless, in areas such as public health, housing, and nutrition, there are widely accepted values and the rural schools are operated to implement them. Poverty and ignorance are not unique to the urban ghetto. There is social blight in the backwaters of the rural areas in the Mid-Atlantic region and rural education is shaped by its perceived value in helping to remove this blight.

Finally, virtually all policy within the region is shaped by a philosophy of delivery. While the average rural family in the 1980s has mobility and access that was undreamed of a half century ago, there remain formidable practical barriers, both in time requirements and resource requirements, to traveling for education. Throughout the region there is an implicit policy that education will be distributed; that it will be brought to the learner to the maximum extent that is practically possible. As technology expands these practical possibilities, the changes that it introduces are constantly reviewed for their implications for the delivery of education. One of the useful functions of the regional disposition toward forming associations of rural educators is the function of disseminating information about such technological innovations.

Such policy is not explicitly expressed by any regional authority. However, these broad policy considerations shape practice throughout the

region, the suggestions for change, and the dialogue about these changes. There is an essential commonality about rural communities within the region, and though they sprawl across the four states in the odd pattern that history has created, their common exposure to similar historical forces and their similar relationships to their great metropolitan "neighbors" shape them in similar ways.

Rural Education Needs

Since the beginning of RBS' rural education efforts, a number of surveys have been conducted to establish the needs of rural schools and districts throughout the Mid-Atlantic region. Each of these surveys has required a working definition for rural. It is important to understand, however, that in each case these working definitions preceded the development of the RAC-sponsored definitions. Thus, the interpretation of this prior survey work must be qualified by an awareness that the results may not literally apply to the present definitions.

RBS Educational Needs Survey

The first survey was conducted by RBS as part of its larger regional needs assessment. Superintendents of all school districts in Delaware, the District of Columbia, Maryland, New Jersey, and Pennsylvania were sent an educational needs survey in late 1986. The responses of 164 superintendents from rural, small school districts were analyzed separately.

The RBS educational needs survey asked superintendents to rate the importance of 16 issues facing education. The superintendents' ratings are summarized in Table 36. As indicated by their ratings, the five most important issues facing rural, small school districts were: instructional

Table 36

Superintendents' Ratings of Importance of Educational Issues

Issue	Mean Rating[a]
Instructional effectiveness	2.90
Development of higher order skills (e.g., writing, scientific, and thinking skills)	2.88
Staff development	2.79
Adequate financial base to support existing programs	2.76
Educational climates that support the pursuit of excellence by all	2.70
Initiation and continuation of successful school improvement efforts	2.65
Impact of increasing state regulations on local districts	2.55
Rising expectations for student learning	2.54
Student graduation from high school	2.48
Accountability of districts to various publics (e.g., boards, parents)	2.43
Educational technology in the classroom	2.34
Basic skills performance	2.32
Student attendance	2.30
Programs for at-risk students	2.30
Impact of special education on district programs	2.28
School-to-work transition	2.16

[a]Ratings can range from a high of 3.00 to a low of 1.00. N = 164.

effectiveness, development of higher order thinking skills, staff development, an adequate financial base to support existing programs, and educational climates that support the pursuit of excellence by all.

Superintendents were also asked to indicate the areas in which they were most likely to seek external assistance as they dealt with the problems. They reported they would most often seek assistance in the areas of staff development, planning, information gathering, and overall district development. Thus, the superintendents tended to characterize external assistance as being of greatest value when dealing with problems other than day-to-day or routine concerns.

The National Rural and Small Schools Task Force Survey

Additional information concerning the needs of rural schools and districts within the region was derived from a survey conducted by the National Rural and Small Schools Task Force. The task force was established by the nine regional educational laboratories (including RBS) as a first step in responding to the Rural Education Initiative. In early 1987, a national, random sample of 9,300 rural school board presidents, superintendents, principals, and teachers was asked to indicate which of approximately 40 dimensions of school performance required improvement. The respondents from the Mid-Atlantic region indicated that the performance of low income students was the area needing greatest improvement. In view of the considerable proportion of such students found in rural regions, it clearly indicates that an attention to low income students must be a major component of any program to meet rural educational needs.

Another dominant concern within the region surfaced by this survey was concern for the development of students' thinking and reasoning skills.

The next most frequently indicated area of concern was students' self-esteem and aspirations. Thus, the most frequently indicated problems related to students and their development. Several factors focused on the context for education were also indicated, as, for example, the quality of inservice programs for school staff, the systems for rewarding outstanding teachers, and the extent of community and parent involvement. Such needs require insightful and specific techniques if they are to be solved. Communicating with parents, and bringing parents together with the schools in a way that fosters their involvement, poses different demands in the context of rural areas. For more specific information regarding the National Rural and Small Schools Task Force survey see Appendix K.

As mentioned, there is a need to keep in mind the definition of rural that was used in the RBS and task force surveys. The RBS survey used the QED definition of rural, which uses Standard Metropolitan Statistical Areas (SMSAs), and identifies urban areas according to standards formulated by the U.S. Department of Commerce. These standards admittedly are not the same as the Federal Information Processing Standards (FIPS) which have been developed by the U.S. Department of Education. Nonetheless, QED believes that its definition fits into the "popular conception" of the areas of urban, suburban, and rural America.

The task force definition of rural was derived from U.S. Census Bureau data. As defined by the Census Bureau, the rural population consists of all persons not living in urbanized areas (UAs) or in other places which have 2,500 or more inhabitants. To be defined as an urbanized area (UA), a population center must have a population of 50,000 persons or more and a population density of at least 1,000 persons per square mile.

Characteristics of Rural Districts

Throughout the Mid-Atlantic region, the basic unit for the administration of schools is the school district. Each school within the region is part of a district, and its functioning is to be understood within this context. There are common elements of organization and of operation among all districts, but there are differences that must be kept in mind in understanding the region.

Rural districts are organized much as their non-rural counterparts. However, there is some evidence that the rural superintendent plays more roles than does the non-rural counterpart. It is not uncommon for the superintendent in a small and remote district to report an assumption of responsibilities in other areas, such as inservice training, that are delegated to other personnel in the larger school systems. Since this phenomenon is obviously correlated with district size, there is pronounced variation from state to state. In Pennsylvania, for example, 79 percent of all rural superintendents perform a job function within the district in addition to their superintendency. Roughly one rural superintendent in eight in Pennsylvania has six or more additional job functions. Such findings are rare in the larger districts of Delaware and Maryland. See Appendix L for a more detailed breakdown of these statistics.*

Such "band-width" responsibility is not necessarily a negative. More diverse functions may actually involve the small district superintendent more intimately in the workings of the district, and, thus, may lead to a

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*Additional data describing the characteristics of schools and students in each state are provided in Appendices B, C, F, and I. As evidenced above, the appendices are discussed on occasion in the body of this report. Also, see the discussion of statistical descriptions on pp. 20-21.

superintendent who is better informed about these processes. The differences are not strong, but they indicate that the role of the rural superintendent may be defined somewhat differently than that of the non-rural superintendent.

The region's rural schools are concerned about the quality of teachers that they recruit. Within the region, rural teachers are typically (but not always) paid less than non-urban teachers. This results in a loss of competitive positions. Further, rural/non-rural differences in lifestyles remain even in the modern era, and many young teachers prefer the relative social freedom of the non-rural setting. The day when a female teacher who married could no longer continue to teach is long gone, but the individual in a rural setting is significantly more visible than in an urban one, and the rural regions continue to have more conservative values than the non-rural ones.

There is considerable variation among the states because of the variation in proximity to urban centers. Some rural districts in New Jersey are less than an hour by superhighway from either New York or Philadelphia. Some rural districts in the mountainous northwest of Pennsylvania are quite remote from any urban center. It is these more remote districts that find it most difficult to recruit the better candidates.

The student-teacher ratio in the Mid-Atlantic region averages 15.3 (see Table 37). The states of Delaware, Pennsylvania, and Maryland have ratios that are quite close to the average: 15.5 for Delaware, 16.0 for Pennsylvania and 16.8 for Maryland. New Jersey deviates somewhat more with the lowest student-teacher ratio (12.5).

The use of this ratio as an indicator of the quality of education is imperfect but it is widely practiced. The difference between Maryland and

New Jersey would seem to be a reflection of the relative affluence or poverty of the two states. In general, the ratio for the region as a whole seems small enough to be reasonably congruent with a quality education.

Table 37

Number of Students and Teachers in Rural Districts
1988-1989

State	Students	Teachers	Students Per Teacher
Delaware	18,376	1,183	15.5
Maryland	57,385	3,408	16.8
New Jersey	52,256	4,169	12.5
Pennsylvania	144,884	9,047	16.0
Region	272,901	17,807	15.3

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Within the Mid-Atlantic region (not including the District of Columbia), there are about 1,100 school districts (see Table 38). A clear indication of the differences between states is given by a single statistic: 95 percent of all of the districts are found in the states of Pennsylvania and New Jersey. Even when it is considered that these are the two most populous states, this preponderance of districts can only be explained by the ways in which districts are defined. Delaware and Maryland use a definition that produces districts that are inherently larger, both in geographic area and in population, than the other two states.

Table 38 also shows the student enrollment for districts in each of the states and for the region as a whole. The differences among the states are in some respects striking. New Jersey, for example, has 200 districts that have a student enrollment of fewer than 600 students. About half of these

(94 districts) have enrollments of fewer than 300 students! In contrast, neither Delaware nor Maryland has any district with fewer than 600 students. Even Pennsylvania, which has 500 school districts, has only seven districts with student enrollments of fewer than 600.

Table 38

Number and Percentage of School Districts by State and Student Enrollment, 1988-1989

Student Enrollment	Delaware		Maryland		New Jersey		Pennsylvania		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
1-99	0	0.0	0	0.0	7	1.2	0	0.0	7	0.6
100-299	0	0.0	0	0.0	87	15.5	2	0.4	89	8.1
300-599	0	0.0	0	0.0	106	18.9	5	1.0	111	10.1
600-999	1	6.3	0	0.0	75	13.4	32	6.4	108	9.8
1,000-2,499	2	12.5	1	4.2	159	28.3	230	46.0	392	35.6
2,500-4,999	6	37.5	5	20.8	82	14.6	170	34.0	263	23.9
5,000-9,999	5	31.3	3	12.5	31	5.5	54	10.8	93	8.4
10,000-24,999	2	12.5	8	33.3	12	2.1	5	1.0	27	2.5
25,000+	0	0.0	7	29.2	2	0.4	2	0.4	11	1.0
Total	16		24		561		500		1,101	

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Conversely, in relative terms, there are many more districts with 5,000 or more students in Delaware and Maryland than in New Jersey and Pennsylvania. While in absolute terms New Jersey, with 45 districts, and Pennsylvania, with 61 districts, far outnumber the seven districts in Delaware and the 18 districts in Maryland, it is clear that on a percentage basis districts are larger in Delaware and Maryland. Forty-four percent of the Delaware districts and 75 percent of the Maryland districts have 5,000 or more

students. The comparable figures are merely eight percent for New Jersey and 12 percent for Pennsylvania.

The regional distribution of the 1,100 districts is essentially unimodal, with the mode at schools with 1,000 to 2,499 students, and with a balanced dispersion across the range of sizes. It is useful to consider all of these regional districts as a class, but it is necessary to keep in mind the clear correlation between district size and state that is evident in Table 38. Planning for the region can be based upon general, summary statistics, but planning will need to consider each district in terms of the state in which it is located.

These patterns are continued in the distributions by student enrollment by state and region for the rural districts only, where "rural district" is determined by the RAC definition for the state. Table 39 shows these data.

There are 196 such rural districts in the region. Thus, about 18 percent of all districts, about one in every five or six, are defined as rural. This is in itself a somewhat surprising statistic for a region that is so often stereotyped as a densely-populated, highly urban area. The urban centers are clearly predominant, but a significant number of students and schools in each state are in a rural context. The distribution of the region's rural districts by student enrollment in Table 39 also has a basically unimodal configuration, with the modal category again being districts of 1,000 to 2,499 students. For both rural districts and for all districts that is the most frequent size of district. Slightly more than a third, or 35 percent of the districts in both distributions are in this modal category.

Table 39

Number and Percentage* of Rural School Districts
by State and Student Enrollment,
1988-1989

Student Enrollment	Delaware		Maryland		New Jersey		Pennsylvania		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
1-99	0	0.0	0	0.0	2	2.0	0	0.0	2	1.0
100-299	0	0.0	0	0.0	38	37.6	1	1.3	39	19.9
300-599	0	0.0	0	0.0	33	32.7	1	1.3	34	17.3
600-999	1	12.5	0	0.0	11	10.9	9	11.2	21	10.7
1,000-2,499	2	25.0	0	0.0	17	16.8	52	65.0	71	36.2
2,500-4,999	5	62.5	2	28.6	0	0.0	15	18.8	22	11.2
5,000-9,999	0	0.0	2	28.6	0	0.0	2	2.5	4	2.0
10,000-24,999	0	0.0	3	42.8	0	0.0	0	0.0	3	1.5
TOTAL	8		7		101		80		196	

*Percentages are based on the total number of rural districts in each state.

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

The number of rural districts somewhat overstates the prevalence of rural education, because the average rural district has so many fewer students. On the average, throughout the entire region, about eight percent of the students are enrolled in a rural district. Maryland and Pennsylvania have precisely this percentage, while New Jersey is close but slightly less, at five percent. The single most deviate state is Delaware, which has a rural student population that is 21 percent of the entire student population.

Rural district enrollments vary from state to state, but in a manner that is consistent with the way that non-rural enrollments vary. Thus, the average size of a non-rural district in Maryland is approximately four times as great as a non-rural district in Delaware, which, in turn, is about four

times as great as a non-rural district in New Jersey. These ratios obtain for the rural districts, also. This means that the size of a rural district is about equally proportionate to the size of a non-rural district in these three states. In fact, the ratio of rural to non-rural is .26 for Delaware, .22 for Maryland, and .23 for New Jersey (see Table 40).

Table 40

Average Student Enrollment of Rural and Non-Rural Districts for States and Region, 1988-1989

State	Non-Rural Average	Rural Average	Rural to Non-Rural Ratio
Delaware	8,767	2,297	.26
Maryland	36,700	8,198	.22
New Jersey	2,236	517	.23
Pennsylvania	3,610	1,811	.50
Region	3,189	1,392	.43

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Pennsylvania is somewhat different. The average rural district in Pennsylvania is about half the size, rather than one-quarter the size, of a non-rural district. District size is clearly influenced by different factors in Pennsylvania than in the other states.

There is a general tendency for rural districts within a state to be smaller districts. This tendency is most pronounced in New Jersey, where not one of the 127 districts with enrollments greater than 2,500 students is a rural district. Of 231 such larger districts in Pennsylvania, only 17 (7%) are rural. Clearly, rural districts tend to be smaller.

However, some rural districts in some states are quite large. Fifty-four percent of all Delaware districts with more than 2,500 students are rural districts. Thirty percent of such districts in Maryland are rural.

The result is a regional distribution of rural districts, with respect to student enrollment, that is widely dispersed across the range of categories. Table 41 shows the percentage of districts, by enrollment category, that are rural. The decline in this proportion as districts get larger is marked, but there is representation at all size levels.

In terms of the percentage of districts that are rural, Delaware, with 8 of 16 districts (50%) in this category, is the state that is by this indicator the most clearly rural. Maryland, with seven of 24 districts (29%), is markedly rural, while New Jersey and Pennsylvania show 18 percent and 16 percent, respectively. This general pattern is not surprising, in view of the major population centers that are found in both New Jersey and in Pennsylvania, but the extent of Delaware's rural character is worthy of note. It must be remembered, of course, that this is a comparison in relative terms. In an absolute sense, Pennsylvania has more rural students than the three other states combined.

The comparative extent of rural enrollments, by state, is reflected in Table 42. Pennsylvania, with about 145,000 students, easily exceeds the total rural enrollment of the three other states combined. However, Delaware has the largest proportion of rural students in its overall state enrollment, with 21 percent.

Characteristics of Rural Students

Rural students are characterized below in terms of their ethnicity and extent of poverty.

Table 41

Percentage of Rural Districts in the Region
by Size of Student Enrollment,
1988-1989

Student Enrollment	Total Districts	Rural Districts	% Rural Districts
1-99	7	2	29
100-299	89	39	44
300-599	111	34	31
600-999	108	21	19
1,000-2,499	392	71	18
2,500-4,999	263	22	8
5,000-9,999	93	4	4
10,000-24,999	27	3	11
25,000+	11	0	0
Overall	1,101	196	18

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Table 42

Number and Percentage of Rural Students by State
and for the Mid-Atlantic Region,
1988-1989

State	Total Students	Rural Students	% Rural Students
Delaware	88,509	18,376	21
Maryland	681,288	57,385	8
New Jersey	1,080,871	52,256	5
Pennsylvania	1,660,888	144,884	9
Region	3,511,556	272,901	8

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

The non-rural Mid-Atlantic region has slightly more than 12 percent minority students: about nine percent Black, two percent Hispanic, and one percent Asian. Rural districts have fewer minority students, about eight percent minority. However, the rural districts in Delaware and Maryland show percentages above the overall regional average. Rural Delaware has about 21 percent minority students, rural Maryland about 15 percent.

The pattern of major differences among the states varies for these minority data, as well as other demographic characteristics. Table 43 shows that Pennsylvania, which accounts for about 47 percent of all regional students, has only about four percent minority students. Only a very small number of these Pennsylvania students are rural minority.

Pennsylvania's special character distorts the overall regional data. For the other states, the percentage of rural students who are minority are not greatly different from the percentage of non-rural students who are minority. That is, while the vast majority of students are in non-rural districts, the minority presence in these districts is not essentially greater, on the average, than it is in rural areas. Each of the three states has a significant percentage of rural minority poor (see Figure 6).

Not surprisingly, the Asian minorities are rare in the region's rural areas. Of all the students in the region, only .01 of one percent are Asian rural minority.

There is extensive poverty throughout the Mid-Atlantic region. Table 44 shows the percentage of all school districts within each state and for the region as a whole that fall into various levels of poverty. In each state, substantial numbers of districts have high poverty ratings. With the exception of New Jersey, each state has more than 40 percent of its districts in which more than ten percent of the students fall below the poverty

Table 43

Ethnicity of Rural and Non-Rural Students by State
1988-1989

	Rural		Non-Rural	
	N	%	N	%
Delaware				
White	14,553	79.2	50,478	72.0
Black	3,502	19.1	17,954	25.6
Hispanic	244	1.3	1,490	2.1
Asian	77	0.4	211	0.3
Total	18,376	100.0	70,133	100.0
Maryland				
White	48,775	85.0	476,038	76.3
Black	7,959	13.9	132,267	21.2
Hispanic	524	0.9	8,735	1.4
Asian	127	0.2	6,863	1.1
Total	57,385	100.0	623,903	100.0
New Jersey				
White	47,295	90.5	855,797	83.2
Black	3,551	6.8	102,573	10.0
Hispanic	1,252	2.4	56,636	5.5
Asian	158	0.3	13,609	1.3
Total	52,256	100.0	1,028,615	100.0
Pennsylvania				
White	143,942	99.3	1,447,784	95.5
Black	361	0.2	50,028	3.3
Hispanic	573	0.4	13,644	0.9
Asian	8	0.0	4,548	0.3
Total	144,884	100.0	1,516,004	100.0
Region				
White	254,564	93.3	2,830,097	87.4
Black	15,374	5.6	302,822	9.4
Hispanic	2,594	1.0	80,505	2.5
Asian	371	0.1	25,231	0.8
Total	272,903	100.0	3,238,655	100.0

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

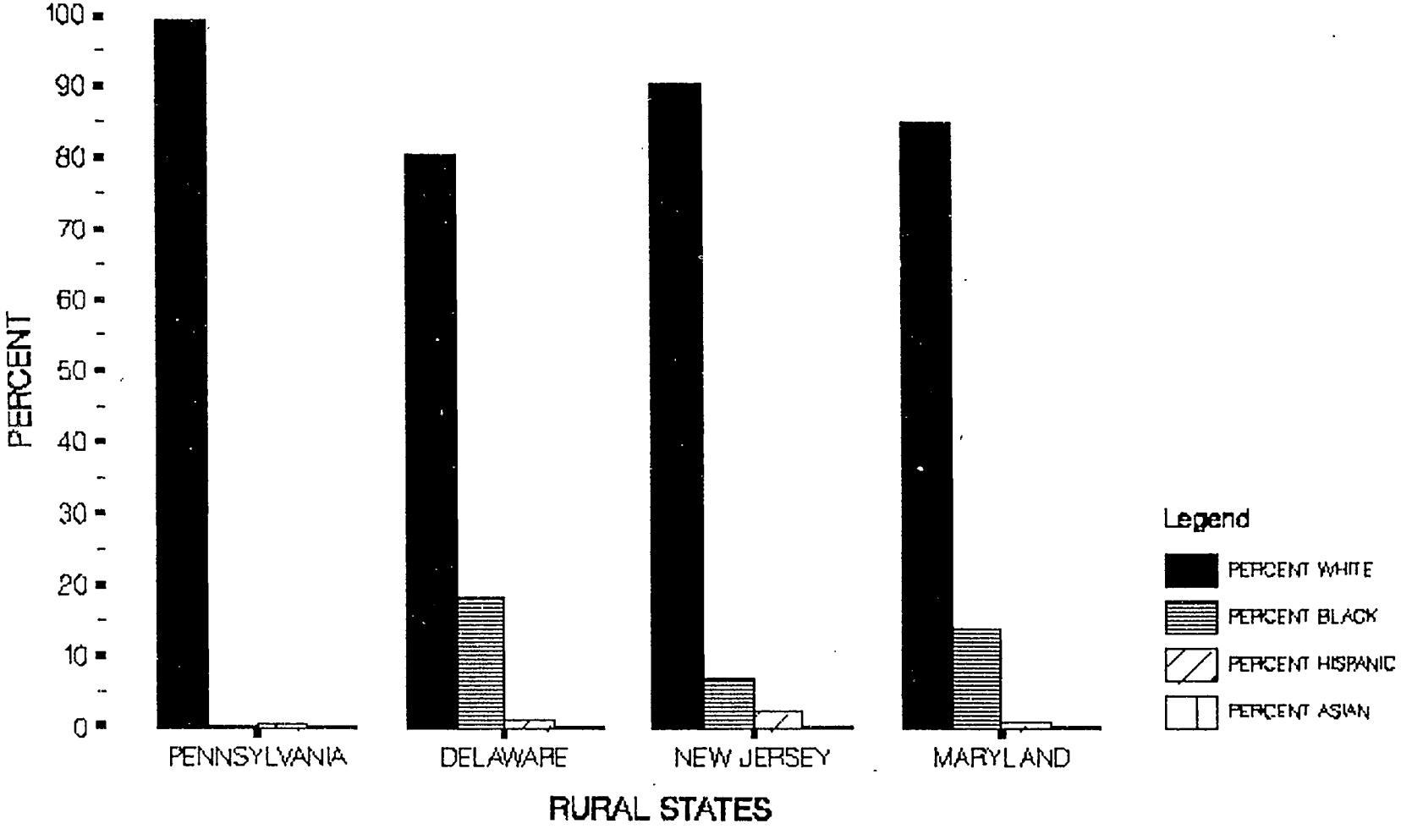

Figure 6
Ethnicity of Rural Students

guideline. Even New Jersey has nearly 30 percent of such districts. Delaware has 81 percent. Student poverty is no stranger to these schools.

Table 44

Distribution of Poverty Ratings for School Districts in Each State in the Region,* 1988-1989

Poverty Rating	Delaware		Maryland		New Jersey		Pennsylvania		Total	
	#	%**	#	%	#	%	#	%	#	%
0-5%	2	12.5	3	12.5	241	43.0	107	21.4	353	32.1
6-10%	1	6.3	7	29.2	160	28.6	173	34.6	341	31.0
11-15%	5	31.3	10	41.7	90	16.0	132	26.4	237	21.5
16-20%	8	50.0	3	12.5	34	6.1	60	12.0	105	9.5
21-25%	0	-	0	-	15	2.7	16	3.2	41	3.7
26-30%	0	-	0	-	7	1.2	8	1.6	15	1.4
Over 30%	0	-	1	4.7	14	2.5	4	0.8	19	1.7
Total	16		24		561		500		1,101	

*Poverty rating indicates the percentage of students below the poverty guideline as a percentage of total school-age children in the district according to the Orshansky percentile.

**Percentages are percent of total students in each individual state.

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

This overall poverty partially reflects the large number of urban poor, but the poverty in the rural districts in the region is substantial. Table 45 shows the distribution of rural districts by poverty ratings for each state and for the region as a whole. Figure 7 contrasts the poverty ratings for rural and non-rural districts in the region.

For the states of Delaware, Maryland, and Pennsylvania, the percentage of rural districts in which more than ten percent of the students fall below the poverty guideline is 88 percent, 86 percent, and 78 percent,

respectively. Even in relatively affluent New Jersey, 46 percent of all rural districts have more than ten percent of their students below the poverty guideline. By this indicator, poverty is widespread.

Table 45

Poverty Ratings of Rural School Districts by State
1988-1989

Poverty Ratings*	Delaware		Maryland		New Jersey		Pennsylvania		Total	
	#	%**	#	%	#	%	#	%	#	%
0-5%	1	12.5	0	0	24	23.8	2	2.5	27	13.8
6-10%	0	0	1	14.3	30	29.7	15	18.8	46	23.5
11-15%	3	37.5	3	42.9	33	32.7	33	41.3	72	36.7
16-20%	4	50.0	3	42.9	7	6.9	23	28.8	37	18.9
21-25%	0	0	0	0	4	4.0	6	7.5	10	5.1
26-30%	0	0	0	0	2	2.0	1	1.3	3	1.5
31-35%	0	0	0	0	1	1.0	0	0	1	0.5
Total	8		7		101		80		196	

*Poverty rating indicates the percentage of students below the poverty guideline as a percentage of total school-age children in the district according to the Orshansky percentile.

**Percentages are percent of total students in each individual state.

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

One indication of the significant relationship between rural districts and poverty is provided in Table 46, which shows the percentage of districts at the various poverty levels that are rural districts. Rural districts are heavily over-represented in the major categories of those districts which have between 11 and 25 percent poverty students. While widespread poverty is often found in urban districts (i.e., when more than 25 percent of the students are below the poverty level), the average rural district in the region has a higher extent of poverty than the average non-rural district.

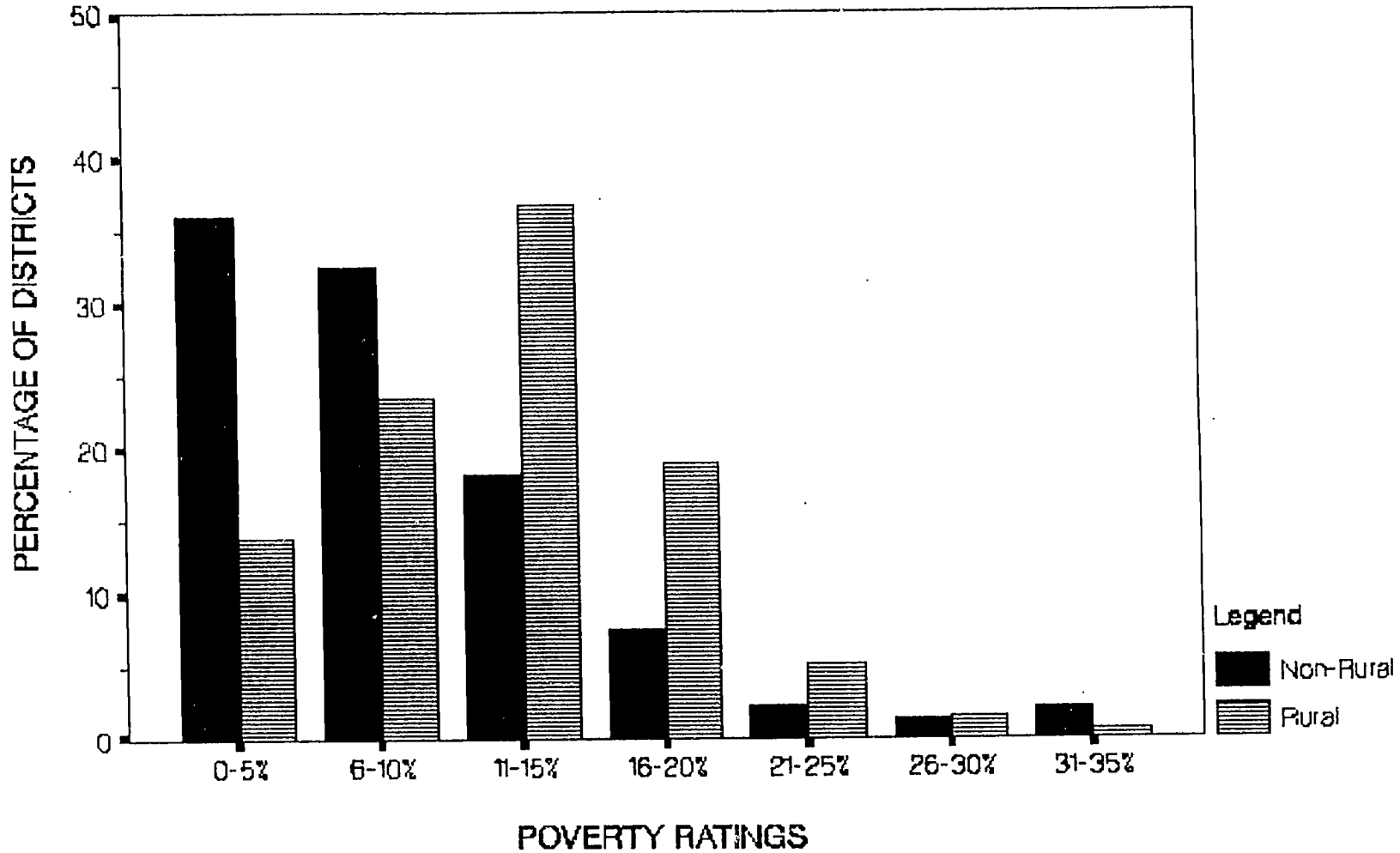

Figure 7
Poverty Ratings of Rural & Non-Rural Schools In the Mid-Atlantic Region

Table 46

Percentage of Rural Districts with Varying Levels of Poverty
1988-1989

Poverty Ratings	Total Districts	Rural Districts	Percentage Rural
0-5%	353	27	8
6-10%	341	46	13
11-15%	237	72	30
16-20%	105	37	35
21-25%	31	10	32
26-30%	25	3	12
Over 30%	19	1	5
Overall	1,101	196	18

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Service Delivery Systems

The concept of service delivery systems that is addressed in this report is not a concept of direct service to rural students. Rather, it is an examination of the extent to which rural administrators and teachers have access to forms of assistance that will best enable them to discharge their responsibilities. It is not a concept, then, of ways in which direct educational experiences, such as museum trips, will be given to children, but a consideration of the extent to which an interested teacher or administrator would be able to locate a resource which would be of assistance in meeting a defined problem in rural education, such as an excessive dropout rate.

For understandable reasons, delivery systems are more difficult to implement and operate in rural areas than they are in urban ones. Schools are farther apart, and the number of staff and teachers in the schools is smaller. Service delivery is made more awkward by these factors. Further,

it is often the case that the poverty of a region will diminish its capacity to pay for services. Finally, the areas of population density may enjoy an implicit over-representation in government, and a consequent over-representation in funding allocations. It is evident from the responses of superintendents to surveys that they will turn to external sources of assistance for an important class of problems. It is thus imperative for the optimum operation of rural districts that access to service delivery systems be facilitated.

There is a constant need to inform the schools of the nature and availability of service delivery centers within the region. RBS has been sensitive to this need, as, for example, in the 1989 Directory of Regional Educational Resource Organizations in the Mid-Atlantic Region, prepared by Peter Donahoe with the support of the Office of Educational Research and Improvement (OERI).

Almost all service-providing organizations are oriented towards some functional dimension of the schools. Since these functional requirements are an element of both rural and non-rural schools, it is most commonly the case that a service-providing organization does not have a specifically rural focus. Nonetheless, the access of these organizations to rural schools is an important element of the success of those schools. Some Department of Education (ED) programs do have specifically rural focuses, but most are nationally comprehensive. ED subdivisions with rural-oriented programs include:

- The Office of Special Education and Rehabilitation Services (OSERS) supports the Rehabilitation Research and Training Center on Rural Rehabilitation Services. OSERS' Handicapped American Indian Vocational Rehabilitation Service Program assists disabled Native Americans living on federal or state reservations. OSERS' Handicapped, Migratory, Agriculture, and Seasonal Farm Workers Rehabilitation

Program provides vocational rehabilitation services to rural workers and their families.

- The Office of Educational Research and Improvement (OERI) holds a series of forums to examine the needs of rural education, identifies exemplary practices for rural children, and publishes a guide of services.

- The Office of Vocational and Adult Education (OVAE) supports the Indian Vocational Education program that provides vocational training to federally recognized Native American Indians. OVAE's grants to the states to support their vocational education programs impact on rural communities where vocational programs are offered. The National Center for Research on Vocational Education, the curriculum coordination centers, and several national discretionary programs contribute to the improvement of vocational education in America's small and rural communities. ED estimates that more than 15 percent of the adults serviced by OVAE's programs reside in rural areas.

ED supports two committees on rural education, the Intradepartmental Rural Education Committee responsible for developing a comprehensive program of rural education, and the Federal Interagency Committee on Education's (FICE) Rural Education Subcommittee that works with 25 federal agencies to identify activities related to rural education. The latter committee is designing a method for sharing information on rural education and is developing a rural education research and development agenda.

Few national programs respond specifically to rural educational needs. Nonetheless, several provide helpful assistance to rural districts. Those most related to work in the Mid-Atlantic region include:

- National Rural Development Institute in the state of Washington houses a variety of programs and services for rural practitioners and teacher educators; includes the National Rural Teacher Education Consortium, the National Rural Education Research Consortium, the American Council for Rural Special Education (ACRES), National Job Services, and an electronic "rural" bulletin board. Established in 1984, it promotes products directed toward rural preservice training and training rural educators.

- Mid-Atlantic Equity Center, a non-profit R&D agency housed in Washington, DC, provides services to schools to help them prepare an increasingly diverse student population for a rapidly changing society. The center provides technical assistance and training

services in race, sex, and national origin desegregation for Delaware, Maryland, and Pennsylvania (as well as Virginia, West Virginia, and the District of Columbia). It publishes a range of materials for teachers and students.

- East Central Curriculum Coordination Center, a federally-funded unit located in Springfield, Illinois, provides a wide range of information resources and technical assistance to career and vocational educators in the east central region of the United States including Delaware, Maryland, and Pennsylvania. The network offers training and staff development, curriculum materials, and assistance in planning, implementing, and evaluating career/vocational education programs.

- The Northeast Network for Curriculum Coordination in Vocational and Technical Education, located in Aberdeen, New Jersey, improves the cost-effectiveness of vocational education in the northeast states and outlying areas through coordination and improved access to information concerning available materials and curriculum development activities. Through its services, the network helps its members reduce duplication of curriculum development efforts. The Northeast Network participates in the national network; serves as a resource center and facilitator to consortium states in the coordination, development, adaptation, dissemination, and use of curriculum materials and services; participates in the implementation of a codification system of library holdings; and prepares an annual impact report of its activities. (The center serving educators in Delaware, Maryland, and Pennsylvania is the East Central Curriculum Coordination Center.)

- Northeast Center for Rural Development, located at Pennsylvania State University, initiates and develops regional research and extension efforts that aim to improve the social and economic well-being of rural people in the northeast region. Each state served by the center has a community development program. In Pennsylvania, it can be accessed through the Cooperative Extension and Agriculture Experiment Station Office located at Pennsylvania State University. Research priorities include rural people and communities, economic development, local government finance, community services, natural resources, environment, rural values, and social change.

- Rural Information Center (RIC) is a joint venture of the National Agricultural Library and the U.S. Department of Agriculture's Extension Services. Located in Beltsville, Maryland, it provides information and referral services to local government officials, businesses, community organizations, and rural citizens working to maintain the vitality of rural areas. It can be utilized by rural school districts interested in data base searches on requested topics, customized information products, and current research on rural issues.

In addition to the above, the Office of Educational Research and Improvement (OERI) funds major programs designed to bring current research and research-based educational improvement information to teachers, school administrators, researchers, and others. These include:

- Educational Resources Information Center (ERIC) is a nationwide information network for acquiring, selecting, abstracting, indexing, storing, retrieving, and disseminating education-related reports. There are 16 clearinghouses across the country. The Rural Education and Small Schools Clearinghouse is based at the Appalachia Education Laboratory in Charleston, West Virginia.

- Regional educational laboratories aid school and classroom improvement based on educational research by providing a range of knowledge development and utilization, technical assistance, and professional development services to clients in their regions. (RBS is the laboratory for the Mid-Atlantic region.)

- National research and development centers conduct long-term, targeted research on topics of national significance. Centers serve a variety of clientele, including researchers, policymakers, and education practitioners. Centers are located throughout the country and typically focus on a particular topical area.

- National Diffusion Network (NDN) is a dissemination system designed to help educational institutions improve by enabling them to learn about and implement locally-developed programs, products, or processes that have proven effective.

There are also national organizations that focus on the needs of rural constituents. A 1986 ERIC/CRESS directory lists the following:

- National Rural Education Association, located at Colorado State University in Fort Collins. It furthers improvement of educational opportunities for all children in rural areas with additional attention to those for whom opportunities have been most severely limited in the past, and works actively at the national level to influence federal policy for the betterment of rural and small schools. Established in 1907, it sponsors an annual national conference in different state and regional locations; disseminates a newsletter, NREA NEWS; and publishes a journal, The Rural Educator.

- Consortium of Higher Education Rural Program Administrators provides a forum for exchanging ideas, practices, policies, and issues attendant to managing rural education programs and centers at institutions of higher education. Established in 1985, it meets annually.

- Rural Sociological Society promotes research and the dissemination of information on rural issues. Established in 1937 (it functioned as early as 1920 as a section of the then American Sociological Society), it sponsors an annual conference; disseminates a news bulletin, The Rural Sociologist; and publishes a journal, Rural Sociology.

- Special Interest Group on Rural Education of the American Educational Research Association encourages educational research relative to schools and people in rural America and provides a forum for the dissemination of the findings of such research. Established in 1960, it sponsors symposia, paper sessions, and other special sessions at AERA's annual meeting. It also has a newsletter, the AERA Rural Education SIG Newsletter.

- Rural American Women, Inc. works to bring recognition and visibility to the problems and achievements of America's 34 million rural women and to provide forums through which they can voice their concerns and bring them to the forefront of the nation's consciousness. Established in 1977, it also facilitates and nurtures grassroots leadership and works to put rural women in touch with each other.

- Small Schools Committee of the American Association of School Administrators provides small district superintendents and other administrators with specially designed convention and inservice programs; monitors federal legislation and regulations to ensure that small districts are treated fairly; maintains a national network comprised of contact administrators in each state; and produces special publications relevant to small school districts. Established in 1979, it sponsors an annual national conference, and has a newsletter, The Small School District Administrator (Rios, 1986).

See Appendix M for a list of other national organizations that are not aimed specifically at rural constituents but provide a variety of potential resources for rural educators.

SUMMARY AND CONCLUSIONS

Rural education is a significant but often overlooked component of education within the Mid-Atlantic region. Eighteen percent of the region's districts, by the definitions of the Rural Assistance Councils, are rural districts. Eight percent of the region's students are rural students. Thus, nearly one district in five is rural, and about one student in 12. The Mid-Atlantic region is predominately non-rural, and is a segment of the heavily populated Northeast Corridor, but it has over a quarter of a million rural students enrolled in rural districts.

Rural districts vary in size from state to state, reflecting idiosyncratic variations in the way in which a district is defined. Maryland has the largest rural districts, averaging 8,000 students; New Jersey has the smallest, averaging 500 students. Within each state pattern, however, rural districts are always smaller than other districts. As a rough rule of thumb, rural districts are about one-fourth the size of non-rural districts in Delaware, Maryland, and New Jersey, and about one-half the size of non-rural districts in Pennsylvania.

Explicit policy for rural education in the region is only now emerging. Important initiatives, particularly in Pennsylvania, are focusing concern on rural problems and on avenues to their solution. Oftimes these initiatives are sponsored by the SEA. No regional policymaking is operating, and, indeed, the necessary prior step of an interactive association among the states for this purpose has not been initiated. The stage is set for an increasing definition of policy within each state, and for the emergence of a cooperative coordinating agency which will facilitate information exchange and other cooperation among the states.

A persistent problem for rural education within the region is poverty. Of the 196 rural districts within the region, 123 (63%) have more than ten percent of their students living below the poverty level, a meaningful indicator of a district's poverty. Poverty within the region is by no means limited to the rural regions, but it is more severe there than in the non-rural areas (which includes both urban and suburban communities). The percentage of districts among the region's non-rural areas that have more than ten percent poverty students is only 31 percent, which is just about half the rural rate.

While the need to cope with the problems of minority students is often thought to be uniquely a problem of urban schools, there is a significant minority presence in the rural areas of the Mid-Atlantic region. About eight percent of all rural students are minority. Of these, clearly the predominate group is Black (about 5.6 percent of all students).

The minority presence is not uniformly distributed, however. Delaware and Maryland, with about 20 percent and 15 percent minority students, show quite high concentrations. New Jersey has about ten percent. But Pennsylvania has virtually no minority students among its rural students. Fewer than one percent of all Pennsylvania rural students are minority students.

Further, while Maryland has a relatively high concentration of minority students, these are mostly found along the Eastern Shore area near the Chesapeake Bay. The mountainous western areas of Maryland are like the Pennsylvania regions, with virtually no minority students.

Within the region, a number of meaningful indicators reflect the relatively greater poverty of the rural schools. Per pupil expenditures, average teacher salaries, money spent for instruction and for instructional supplies, all show greater average expenditure by non-rural districts than

by rural ones. Indicators of staff quality, as in the average educational attainment of teachers, ordinarily favors the non-rural areas. Where state redistribution formulas are applied, they provide money to the rural districts. Even with such a corrective redistribution, however, the rural areas must confront significant problems with respect to resources.

Statewide testing scores do not show a consistent superiority in the performance of non-rural students, but there are indications of this in some states such as Delaware. Student-teacher ratios likewise vary extensively but are not consistently smaller in the non-rural areas.

Dropout rates tend to be high in the rural Mid-Atlantic regions and the proportion of graduates who proceed to college is typically lower than for non-urban districts. Support for schools by the community is complicated by economic problems and by conservative and traditional views on the value of education. The region is undergoing great economic changes and farming is by now the primary occupation of only about ten percent of the regional rural population. Nonetheless, the tradition that an occupation may not require much formal education remains, and this impacts upon the ability of the schools to win approval of adequate budgets. The primary needs identified by key personnel, such as district superintendents, are strongly centered on the areas of fiscal problems and scarcity of resources.

Rural education would appear to be at a significant point in its history within the region. For about 70 years the region has been the scene of great demographic changes, such as the decline of manufacturing and agriculture, and the development of substantial urban minority populations. Many of these changes have properly focused attention on the urban areas. Rural problems have been seen, in this context, as lesser problems. The rural

areas themselves have been seen as diminishing, as agricultural areas have given way to housing.

But rural education remains significant and will continue to be important for the foreseeable future. Across the region, in any given year, there are a quarter of a million rural students whose prospects for an effective and adequate education depend upon the development of systems and services that can provide the skills needed in the complex social context of the present day. There are forces in the states of the region that are moving to meet the problems. These forces need to be identified and assisted. There is a need to foster a regional viewpoint and understanding. The work to date, as in the development of the Rural Assistance Councils, is only a first step. Much additional work remains to be defined and accomplished.

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APPENDICES

Appendix A

Nominated Issues in Delaware Rural Education

Nominated Issues in Delaware Rural Education

These 63 issues were nominated as part of the priority-establishing survey considered by the Delaware RAC in 1988.

1. Fixed incomes
2. Referendums as means to determine tax rate
3. Lack community support since less an one-half citizens have school-aged children
4. Property taxes have traditionally been expected to be low
5. Hodgepodge of funding procedures
6. Economies of scale
7. Poor structure of assessment and re-assessment; it's left to the counties
8. Low tax base
9. Lack of business/industrial properties
10. Educational expenditures not considered as important as health, highways, etc.
11. Current salaries in rural areas are considerably lower than in urban areas
12. Vision/perception that education really isn't important
13. Provincialism
14. Tuition payment structure between districts
15. Schools have no control over county government granting tax exempt status to groups or individuals
16. State/federal properties tax exempt
17. Farmland assessment
18. Governor's establishing teacher's salary and telling locals they have to fund it
19. Too many rental properties
20. Resistance to change
21. Requirement that SD's establish a reserve in their local budget

22. Large number of senior citizens

23. Lack of resort area

24. Small population

25. Low education in area tends to equal fewer advanced degrees held by teachers

26. Over 65 exemption

27. Equalization Bill

28. Referenda law

29. Level of major capital improvement
30. Level of minor capital improvement

} 60/40

31. Choice

32. Cash-in options

33. Absentee voting in school-related elections

34. Disability exemption

35. One person/one vote

36. Rural areas are limited to the state units

37. Other employment costs

38. Vo-Tech Centers becoming comprehensive HS's

39. Disproportionate amount of funds generated in New Castle County

40. Teachers don't want to locate in rural areas

41. Districts with small number of students can't provide the depth and breadth of curriculum

42. Teachers cannot specialize

43. Availability of a range of satisfactory housing

44. Lack of cultural attractions

45. Teacher salary scales

46. Teacher benefit schedules

47. Lack of higher education opportunities in rural areas

48. Availability of sufficient usable funds

49. Poor management/lack of collegial ethos

50. Unions

51. Certification requirements are strict and getting stricter

52. Antiquated facilities

53. Union wants to divide and conquer (multiple bargaining units)

54. Small schools impact on scheduling

55. Finding staff to provide co-curricular activities

56. Tiny administrative staff

57. Small classes do not warrant a course

58. Partial units

59. Inadequate funding to take advantage of technology

60. Anyone can start a non-public school

61. Inadequate funding to cover legislative or state board requirements

62. Transportation

63. Lack of availability of jobs for grads or spouses in rural areas

Appendix B

Selected Data on Rural Schools and Rural Students in Delaware

Selected Data on Rural Schools
and Rural Students in Delaware

The following tables include additional information about the characteristics of rural school districts and rural students. These tables are supplementary to those already printed in the text of this document.

The tables appear in approximately the same order that they are alluded to in the text (pp.37-41). Other tables do not include information referred to in the text, but provide helpful background information. These tables are placed last in this appendix.

All these tables consist of information drawn from a wide variety of sources. The types of tables vary somewhat across states because of differences in the availability and presentation of information as well as differences in the relative importance of the data. (The most relevant data tend to be highlighted in the text rather than in the appendices.)

Taken together, all these tables should supply the reader with helpful information, and a broader understanding of rural students and districts.

Index of Tables

Table 1

Number of Delaware Rural School Districts by County
1988-1989

County	Number of Rural School Districts
Kent	3
New Castle	1
Sussex	4

SOURCE: Quality Education Data, Inc., Denver, Colorado.

Table 2

Number of Students and Teachers in Rural Delaware by County
1988-1989

County	Students	Teachers
Kent	9,000	567
New Castle	2,111	124
Sussex	7,265	492
Total	18,376	1,183

SOURCE: Quality Education Data, Inc., Denver, Colorado.

Table 3

Educational Level of Delaware Teachers
1987-1988

School Districts	Full Time #	LTB #	LTB %	BACH #	BACH %	B+15 B+30 #	B+15 B+30 %	MAST #	MAST %	M+15 M+30 M+45 #	M+15 M+30 M+45 %	DOCTOR #	DOCTOR %
Rural Districts													
Appoquinimink	136	0	0.0	74	54.4	37	27.2	10	7.4	15	11.0	0	0.0
Delmar	36	0	0.0	16	44.4	7	19.4	7	19.4	6	16.7	0	0.0
Lake Forest	183	2	1.1	62	33.9	61	33.3	22	12.0	36	19.7	0	0.0
Laurel	107	0	0.0	38	35.5	50	46.7	2	1.9	16	15.0	1	0.9
Milford	196	0	0.0	43	21.9	91	46.4	13	6.6	48	24.5	1	1.0
Seaford	188	0	0.0	55	29.3	101	53.7	5	2.7	27	14.4	0	0.0
Smyrna	165	0	0.0	58	35.2	62	37.6	16	9.7	29	17.6	0	0.0
Woodbridge	102	0	0.0	41	40.2	39	38.2	8	7.8	14	13.7	0	0.0
Non-Rural Districts													
Brandywine	668	0	0.0	186	27.8	176	26.3	76	11.4	219	32.8	11	1.6
Caesar Rodney	353	0	0.0	94	26.6	140	39.7	25	7.1	94	26.6	0	0.0
Cape Henlopen	221	0	0.0	56	25.3	85	38.5	22	10.0	56	25.3	2	0.9
Capital	342	0	0.0	105	30.7	103	30.1	38	11.1	95	27.8	1	0.3
Christina	1,034	5	0.5	291	28.1	304	29.4	117	11.3	309	29.9	8	0.8
Colonial	577	0	0.0	170	29.5	196	34.0	54	9.4	154	26.7	3	0.5
Indian River	380	1	0.3	116	30.5	161	42.4	30	7.9	72	18.9	0	0.0
Red Clay	889	0	0.0	275	30.9	257	28.9	96	10.8	253	28.5	8	0.9
Total Rural	1,113	2	0.2	387	34.8	448	40.3	83	7.5	191	17.2	2	0.2
Total Non-Rural	4,464	6	0.1	1,293	29.0	1,422	31.9	458	10.3	1,252	28.0	33	0.7
Total Statewide	5,577	8	0.1	1,680	30.1	1,870	33.5	541	9.7	1,443	25.9	35	0.6

SOURCE: Educational Personnel in Delaware Public Schools, 1987-88. Department of Public Instruction. Delaware State Department of Education.

Table 4

Average Number of Years Teaching Experience of Delaware Teachers
1987-1988

School Districts	Number of Years
Rural Districts	
Appoquinimink	11.7
Delmar	14.4
Lake Forest	13.4
Laurel	17.7
Milford	12.9
Seaford	13.8
Smyrna	13.3
Woodbridge	12.5
Non-Rural Districts	
Brandywine	18.2
Caesar Rodney	14.2
Cape Henlopen	13.6
Capital	16.4
Christina	14.7
Colonial	15.8
Indian River	13.1
Red Clay	16.6
Average Rural	13.7
Average Non-Rural	15.3
Average Statewide	14.5

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware State Department of Education, Department of Public Instruction.

Table 5

Students per Teacher in Delaware by District
1987-1988

Rural School Districts	Number of Students
Appoquinimink	16.0
Delmar	15.3
Lake Forest	17.1
Laurel	17.3
Milford	16.7
Seaford	17.0
Smyrna	17.4
Woodbridge	16.3
Non-Rural School Districts	
Brandywine	16.8
Caesar Rodney	17.6
Cape Henlopen	15.6
Capital	17.3
Christina	15.8
Colonial	16.2
Indian River	16.4
Red Clay	15.9
Average Statewide Ratio	16.5
Average Rural Ratio	16.6
Average Non-Rural Ratio	16.5

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware State Department of Education, Department of Public Instruction.

Table 6

Ethnicity of Rural and Non-Rural Delaware Students
1988-1989

Ethnic Group	Rural #	Rural %	Non-Rural #	Non-Rural %	Total #	Total %
White	14,553	16.4	50,478	57.0	65,031	73.5
Black	3,502	4.0	17,954	20.3	21,456	24.2
Hispanic	244	0.3	1,490	1.7	1,734	2.0
Asian	77	0.1	211	0.2	365	0.4
Total	18,376	20.8	70,133	79.2	88,509	100.00

SOURCE: Quality Education Data, Inc., Denver, Colorado.

Table 7

Dropouts, Grades 9-12, by County and Race
1987-1988

County	Black	Hispanic	White/Other*	Total
New Castle				
No. of Pupils	4,525	477	12,437	17,439
No. of Dropouts	448	67	744	1,259
Percent Dropouts	9.9%	14.0%	6.0%	7.2%
Kent				
No. of Pupils	1,450	106	4,697	6,253
No. of Dropouts	173	12	300	485
Percent Dropouts	11.9%	11.3%	6.4%	7.8%
Sussex				
No. of Pupils	1,295	26	3,932	5,253
No. of Dropouts	104	4	230	338
Percent Dropouts	8.0%	15.4%	5.8%	6.4%
Statewide				
No. of Pupils	7,270	609	21,066	28,945
No. of Dropouts	725	83	1,261	2,082
Percent Dropouts	10.0%	13.6%	6.0%	7.2%

*Includes American Indian and Asian.

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware State Department of Education, Department of Public Instruction.

Table 8A

Follow-Up of the 1987 Graduates
1987-1988

Status 6 Months after Graduation	Percentage
Working (only)	27.9
Working and Continuing Education	27.7
Continuing Education (only)	36.4
Military	4.3
Unemployed	2.5
Unknown	1.2

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware State Department of Education, Department of Public Instruction.

Table 8B

College Attendance

Institution	Percentage
University of Delaware	32.1
Other Delaware Colleges	31.2
Out of State Colleges	36.7

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware State Department of Education, Department of Public Instruction.

Table 9

Poverty Level of Delaware Rural School Districts by County
1988-1989

	Poverty Levels				
County	0-5%	6-10%	11-15%	16-20%	Total
Kent	0	0	1	2	3
New Castle	0	0	1	0	1
Sussex	1	0	1	2	4
Total	1	0	3	4	8

SOURCE: Quality Education Data, Inc., Denver, Colorado.

Table 10

Number of Job Functions Held by Superintendents
in Rural Delaware Districts
1988-1989

County	1	2	3 or More
Kent	1	1	1
New Castle	0	1	0
Sussex	4	0	0
Total	5	2	1

SOURCE: Quality Education Data, Inc., Denver, Colorado.

Table 11

Student Transportation as a Percentage of Total School Expenditure in Delaware by District
1987-1988

School Districts	Total Expenditures from All Funds	Student Transportation	%
Rural School Districts			
Appoquinimink	8,919,898	662,815	7.4
Delmar	2,478,423	237,948	9.6
Lake Forest	11,466,906	847,990	7.4
Laurel	7,014,391	418,443	6.0
Milford	12,060,301	876,917	7.3
Seaford	12,824,660	898,499	7.0
Smyrna	9,915,421	609,970	6.2
Woodbridge	6,539,172	615,994	9.4
Non-Rural School Districts			
Brandywine	48,894,888	1,687,089	3.5
Caesar Rodney	17,909,020	1,155,377	6.5
Cape Henlopen	16,435,831	1,131,071	6.9
Capital	24,300,007	1,147,814	4.7
Christina	68,156,863	3,086,878	4.5
Colonial	39,943,636	2,681,736	6.7
Indian River	23,127,742	1,901,827	8.2
Red Clay	62,384,579	3,486,500	5.6
Entire State	372,371,738	21,446,868	5.8
Rural	71,219,172	5,168,576	7.3
Non-Rural	301,152,566	16,278,292	5.4

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware State Department of Education, Department of Public Instruction.

Table 12

Percent Special Education Enrollment in Delaware by District
1987-1988

Rural School Districts	Percent
Appoquinimink	11.4
Delmar	8.8
Lake Forest	13.1
Laurel	10.3
Milford	14.1
Seaford	11.3
Smyrna	10.6
Woodbridge	13.4
Non-Rural School Districts	
Brandywine	10.1
Caesar Rodney	9.9
Cape Henlopen	13.9
Capital	10.0
Christina	12.3
Colonial	11.8
Indian River	12.0
Red Clay	10.5
Statewide Average	11.5
Rural Average	11.6
Non-Rural Average	11.3

SOURCE: State of Delaware Report of Educational Statistics, 1987-1988. Delaware State Board of Education and Delaware State Department of Education, Department of Public Instruction.

Appendix C

Selected Data on Rural Schools and Rural Students in Maryland

Selected Data on Rural Schools
and Rural Students in Maryland

The following tables include additional information about the characteristics of rural school districts and rural students. These tables are supplementary to those already printed in the text of this document.

The tables appear in approximately the same order that they are alluded to in the text (pp. 53-60). Other tables do not include information referred to in the text, but provide helpful background information. These tables are placed last in this appendix.

All these tables consist of information drawn from a wide variety of sources. The types of tables vary somewhat across states because of differences in the availability and presentation of information as well as differences in the relative importance of the data. (The most relevant data tend to be highlighted in the text rather than in the appendices.)

Taken together, all these tables should supply the reader with helpful information, and a broader understanding of rural students and districts.

Index of Tables

Table 1

Number of Maryland Rural School Districts by County
1988-1989

County	Number of Rural School Districts
Allegany	1
Caroline	1
Cecil	1
Dorchester	1
Garrett	1
St. Mary's	1
Somerset	1

SOURCE: Quality Education Data, Inc., Denver, Colorado.

Table 2

Number of Job Functions Held by Superintendents
in Rural Maryland Counties, 1988-1989

County	1	2	3-4
Allegany	0	1	0
Caroline	1	0	0
Cecil	1	0	0
Dorchester	0	0	1
Garrett	1	0	0
St. Mary's	1	0	0
Somerset	0	0	1
Total	4	1	2

SOURCE: Quality Education Data, Inc., Denver, Colorado.

Table 3

State Aid Per Pupil Versus Local Wealth Per Pupil
1988-1989

School Districts	State Aid Per Pupil (Dollars)	Wealth Per Pupil (Thousands of Dollars)
Rural Districts		
Allegany	1,353	101,092
Caroline	1,480	81,254
Cecil	1,405	92,931
Dorchester	1,310	107,732
Garrett	1,414	91,935
St. Mary's	1,345	102,242
Somerset	1,482	80,862
Non-Rural Districts		
Anne Arundel	1,051	148,250
Baltimore City	1,406	92,727
Baltimore	706	202,283
Calvert	954	163,428
Carroll	1,280	112,469
Charles	1,289	111,038
Frederick	1,291	110,740
Harford	1,300	109,379
Howard	898	172,209
Kent	1,052	148,225
Montgomery	379	253,442
Prince George's	1,103	140,147
Queen Anne's	1,103	140,136
Talbot	502	234,246
Washington	1,271	113,856
Wicomico	1,318	106,503
Worcester	60	319,353
State Average	1,031	151,492

SOURCE: The Fact Book, 1988-89. Maryland State Department of Education.

Table 4

Students Receiving Special Education Services in Maryland
1987-1988

School Districts	Total Special Education	Total Students	Percentage Special Education
Rural School Districts			
Allegany	1,404	11,239	12.5%
Caroline	949	4,478	21.2
Cecil	1,490	12,490	11.9
Dorchester	663	4,984	13.3
Garrett	833	5,166	16.1
St. Mary's	1,698	12,217	13.9
Somerset	619	3,369	18.4
Non-Rural School Districts			
Anne Arundel	8,654	64,328	13.5
Baltimore City	18,514	107,486	17.2
Baltimore	10,047	82,086	12.2
Calvert	1,033	9,373	11.0
Carroll	2,580	20,978	12.3
Charles	2,448	18,033	13.6
Frederick	4,096	25,734	15.9
Harford	3,984	29,497	13.5
Howard	3,486	27,564	12.6
Kent	261	2,379	11.0
Montgomery	10,763	98,533	10.9
Prince George's	10,610	105,312	10.1
Queen Anne's	560	5,190	10.8
Talbot	376	3,801	9.9
Washington	3,176	17,180	18.5
Wicomico	1,101	12,186	9.0
Worcester	566	5,344	10.6
Total State	89,911	688,947	13.1
Total Rural	7,656	53,943	14.2
Total Non-Rural	82,255	635,004	13.0

SOURCE: The Fact Book, 1988-1989. Maryland State Department of Education.

Table 5

Vocational-Technical Students in Maryland Public Schools
1987-1988

School Districts	Total Voc-Tech*	Total Students	Percentage Voc-Tech
Rural School Districts			
Allegany	3,559	11,239	31.7%
Caroline	1,349	4,478	30.1
Cecil	2,826	12,490	22.6
Dorchester	1,162	4,984	23.3
Garrett	1,330	5,166	25.7
St. Mary's	2,348	12,217	19.2
Somerset	757	3,369	22.5
Non-Rural School Districts			
Anne Arundel	22,767	64,328	35.4
Baltimore City	13,420	107,486	12.5
Baltimore	20,243	82,086	24.7
Calvert	1,912	9,373	20.4
Carroll	4,296	20,978	20.5
Charles	3,666	18,033	20.3
Frederick	5,109	25,734	19.9
Harford	5,789	29,497	19.6
Howard	4,001	27,564	14.5
Kent	547	2,379	23.0
Montgomery	14,851	98,533	15.1
Prince George's	18,216	105,312	17.3
Queen Anne's	1,575	5,190	30.3
Talbot	864	3,801	22.7
Washington	5,613	17,180	32.7
Wicomico	2,865	12,186	23.5
Worcester	1,214	5,344	22.7
Total Rural	13,331	53,943	25.0
Total Non-Rural	126,948	635,004	20.2
Total State	140,279	688,947	20.4

*Total excludes Vocational Support Services, Industrial Arts/Technology Education, Pre-Voc Industrial Arts and Capstone/Integrated Coop.

SOURCE: The Fact Book, 1988-1989. Maryland State Department of Education.

Table 6

Total Certified Professional Staff at School Level by Years of Experience
Maryland Public Schools
October 1987

School Districts	Total	1-5 yrs.		6-10 yrs.		11-20 yrs.		21-30 yrs.		30+ yrs.	
		#	%	#	%	#	%	#	%	#	%
Rural School Districts											
Allegany	709	77	10.9	97	13.7	307	43.3	196	27.6	32	4.5
Caroline	297	60	20.2	69	23.2	108	36.4	48	16.2	12	4.0
Cecil	818	115	14.1	159	19.4	404	49.4	126	15.4	14	1.7
Dorchester	338	48	14.2	55	16.3	158	46.7	67	19.8	10	3.0
Garrett	296	38	12.8	56	18.9	146	49.3	51	17.2	5	1.7
St. Mary's	772	174	22.5	140	18.1	337	43.7	112	14.5	9	1.2
Somerset	232	45	19.4	41	17.7	93	40.1	40	17.2	13	5.6
Non-Rural School Districts											
Anne Arundel	4,214	546	13.0	726	17.2	1,992	47.3	848	20.1	102	2.4
Baltimore City	6,686	848	12.7	846	12.7	2,996	44.8	1,564	23.4	432	6.5
Baltimore	6,014	761	12.7	770	12.8	2,772	46.1	1,518	25.2	193	3.2
Calvert	506	75	14.8	102	20.2	222	43.9	96	19.0	11	2.2
Carroll	1,295	225	17.4	246	19.0	597	46.1	199	15.4	28	2.2
Charles	1,119	270	24.1	250	22.3	455	40.7	127	11.3	17	1.5
Frederick	1,651	427	25.9	293	17.7	681	41.2	226	13.7	24	1.5
Harford	1,857	266	14.3	288	15.5	910	49.0	348	18.7	45	2.4
Howard	1,816	560	30.8	356	19.6	696	38.3	186	10.2	18	1.0
Kent	175	36	20.6	27	15.4	78	44.6	29	16.6	5	2.9
Montgomery	6,932	883	12.7	1,171	16.9	3,021	43.6	1,557	22.5	300	4.3
Prince George's	6,617	1,033	15.6	853	12.9	2,926	44.2	1,667	25.2	138	2.1
Queen Anne's	315	63	20.0	58	18.4	136	43.2	54	17.1	4	1.3
Talbot	275	49	17.8	56	20.4	127	46.2	36	13.1	7	2.5
Washington	1,166	130	11.1	172	14.8	540	46.3	270	23.2	54	4.6
Wicomico	773	110	14.2	127	16.4	339	43.9	167	21.6	30	3.9
Worcester	405	61	15.1	63	15.6	210	51.9	67	16.5	4	1.0
Rural Average	3,462	557	16.1	617	17.8	1,553	44.9	640	18.5	95	2.7
Non-Rural Average	41,816	6,343	15.2	6,404	15.3	18,698	44.7	8,959	21.4	1,412	3.4
State Average	45,278	6,900	15.2	7,021	15.5	20,251	44.7	9,599	21.2	1,507	3.3

SOURCE: Characteristics of Professional Staff Employed in Maryland Public Schools. October, 1987. Maryland State Department of Education, Office of Management Information Systems.

Table 7

Student Transportation as a Percentage of Total School Expenditure in Maryland by District 1987-1988

School Districts	Total Expenditures from All Funds	Student Transportation	%
Rural Districts			
Allegany	46,611,353	2,768,668	5.9
Caroline	18,598,704	1,388,781	7.5
Cecil	49,122,921	2,657,311	5.4
Dorchester	21,626,678	1,375,969	6.4
Garrett	21,373,123	1,675,431	7.8
St. Mary's	51,578,562	3,234,675	6.3
Somerset	13,549,371	1,093,977	8.1
Non-Rural Districts			
Anne Arundel	314,068,527	15,082,627	4.8
Baltimore City	458,529,101	18,701,594	4.1
Baltimore	437,690,580	13,983,260	3.2
Calvert	43,776,735	2,527,046	5.8
Carroll	86,421,050	5,303,639	6.1
Charles	79,400,162	5,373,882	6.8
Frederick	112,540,772	5,303,351	4.7
Harford	117,073,812	6,263,337	5.3
Howard	156,347,159	7,238,910	4.6
Kent	11,388,074	916,486	8.0
Montgomery	706,790,915	26,149,704	3.7
Prince George's	531,024,660	26,943,196	5.1
Queen Anne's	22,874,030	1,678,997	7.3
Talbot	16,827,131	921,044	5.5
Washington	79,258,524	3,350,701	4.2
Wicomico	48,369,630	2,569,259	5.3
Worcester	26,532,242	1,613,349	6.1
Entire State	3,471,373,816	158,115,194	4.6
Rural	222,460,712	14,194,812	6.4
Non-Rural	3,248,913,104	143,920,382	4.4

NOTE: Expenditures for current expense equipment are included in the category for which the equipment was purchased.

SOURCE: Selected Financial Data, Maryland Public Schools. Maryland State Department of Education, 1987-88. Part 2 - Expenditures.

Table 8

Ethnicity of Rural and Non-Rural Maryland Students
1988-1989

Ethnic Group	Rural		Non-Rural		Total	
	#	%	#	%	#	%
White	46,425	6.8	476,038	69.9	522,463	76.7
Black	10,386	1.5	132,267	19.4	142,653	20.9
Hispanic	494	0.1	8,735	1.3	9,229	1.4
Asian	80	0.0	6,863	1.0	6,943	1.0
Total	57,385	8.4	623,903	91.6	681,288	100.0

SOURCE: Quality Education Data, Inc., Denver, Colorado.

Table 9

Maryland Statewide Testing Program: Rural Districts' Scores
1986-1987

District/Grade	Reading Comprehension	Language Total	Mathematics Total
Allegany			
Grade 3	3.5	3.7	3.3
Grade 5	5.7	6.4	5.3
Grade 8	8.8	8.8	8.7
Caroline			
Grade 3	3.7	4.4	3.6
Grade 5	6.1	7.7	6.2
Grade 8	9.3	9.6	9.0
Cecil			
Grade 3	3.7	3.6	3.4
Grade 5	6.2	7.1	5.9
Grade 8	10.0	9.1	9.0
Dorchester			
Grade 3	3.3	3.6	3.4
Grade 5	5.4	6.8	5.4
Grade 8	8.0	8.5	8.4
Garrett			
Grade 3	3.5	3.5	3.3
Grade 5	5.7	6.7	5.5
Grade 8	9.3	9.5	8.9
St. Mary's			
Grade 3	3.4	3.4	3.3
Grade 5	5.8	6.6	5.4
Grade 8	9.3	9.3	9.0
Somerset			
Grade 3	3.0	3.2	3.0
Grade 5	5.3	6.1	5.0
Grade 8	8.4	8.8	8.2
Rural Average			
Grade 3	3.4	3.6	3.3
Grade 5	5.7	6.8	5.5
Grade 8	9.0	9.1	8.7
Statewide Average			
Grade 3	3.7	3.8	3.5
Grade 5	6.1	7.3	6.0
Grade 8	10.0	10.2	9.8
National Norm			
Grade 3	3.3	3.4	3.1
Grade 5	5.5	5.6	5.3
Grade 8	8.4	8.3	8.5

SOURCE: Maryland Accountability Testing Program, Annual Report, 1986-87 School Year. Maryland State Department of Education.

Table 10

Maryland Students Withdrawing from School (Dropouts)
1987-1988

School Districts	Withdrawal Rate
Rural School Districts	
Allegany	1.2%
Caroline	4.3
Cecil	4.5
Dorchester	3.7
Garrett	3.0
St. Mary's	4.2
Somerset	5.7
Non-Rural School Districts	
Anne Arundel	4.6
Baltimore City	12.6
Baltimore	4.2
Calvert	2.2
Carroll	2.6
Charles	2.7
Frederick	2.7
Harford	2.8
Howard	2.3
Kent	2.2
Montgomery	2.2
Prince George's	3.5
Queen Anne's	4.0
Talbot	3.3
Washington	3.2
Wicomico	3.2
Worcester	2.2
Average Rural	3.8
Average Non-Rural	3.6
Statewide Average	3.6

SOURCE: Summary of Attendance, Maryland Public Schools, September-June, 1987-88. Office of Management Information Systems, 1987-88.

Table 11

Number of Graduates and Post Graduation Plans of Maryland Public School Graduates
1988

Unit	Total Graduates #	Total College %	Full-Time %	Part-Time* %	Trade/ Business School %	Work %	Military %	Other+ %
Rural Districts								
Allegany	1,010	68.2	49.7	18.5	5.0	26.8	6.4	12.1
Caroline	271	57.6	32.4	25.2	7.5	38.5	11.2	10.4
Cecil	839	66.2	39.2	27.0	7.5	38.5	6.3	8.5
Dorchester	375	57.8	31.2	26.6	13.9	33.8	15.2	5.9
Garrett	348	58.9	37.5	21.4	9.1	36.3	5.7	11.4
St. Mary's	788	60.3	31.2	29.1	7.9	40.7	7.0	13.2
Somerset	197	64.9	25.6	39.3	14.7	40.8	10.0	8.9
Non-Rural Districts								
Anne Arundel	4,546	71.0	37.6	33.4	6.5	38.9	4.3	12.7
Baltimore City	4,829	71.2	40.1	31.1	7.9	31.1	9.5	11.4
Baltimore	6,067	77.7	54.4	23.3	4.8	27.1	4.5	9.2
Calvert	622	70.4	44.8	25.6	6.6	30.9	6.0	11.7
Carroll	1,619	67.8	47.6	20.2	4.9	33.2	5.8	8.5
Charles	1,367	73.2	43.8	29.4	6.2	34.6	6.1	9.3
Frederick	1,739	73.1	52.7	20.4	3.9	31.4	5.0	7.0
Harford	2,025	79.8	54.9	24.9	4.7	22.9	5.7	11.8
Howard	2,091	85.4	72.9	12.5	2.2	13.7	3.4	7.8
Kent	162	58.7	40.7	18.0	9.9	32.0	8.7	8.7
Montgomery	7,590	89.4	75.4	14.0	2.1	10.1	2.4	10.0
Prince George's	7,631	73.3	46.1	27.2	5.7	24.8	7.0	16.4
Queen Anne's	342	60.7	41.1	19.6	6.1	36.8	7.1	8.9
Talbot	288	71.7	46.3	25.4	10.3	29.7	6.7	7.0
Washington	1,269	57.1	35.6	21.5	4.8	43.6	5.5	10.5
Wicomico	776	71.3	44.3	27.0	9.5	29.2	10.0	7.0
Worcester	384	67.7	41.1	26.6	7.5	31.5	12.3	7.6
Total State	47,175	75.3	51.7	23.6	5.3	26.3	5.8	10.9

*Duplicated with other columns

+Includes nonrespondents

NOTE: Percentages based on pregraduation plans data submitted by the class of 1988.

SOURCE: The Fact Book, 1988-89. Maryland State Department of Education.

Table 12

Total Certified Professional Staff at School Level by Preparation
Maryland Public Schools, October 1987

Local Unit	Highest Degree Held: None* #	None* %	Bachelors #	Bachelors %	Bachelors + 30 hrs. #	Bachelors + 30 hrs. %	Masters #	Masters %	Masters + 30 hrs. #	Masters + 30 hrs. %	Doctors #	Doctors %	Total #
Rural School Districts													
Allegany	3	0.4	86	12.1	227	32.0	342	48.2	48	6.8	3	0.4	709
Caroline	5	1.7	95	32.0	114	38.4	73	24.6	9	3.0	1	0.3	297
Cecil	7	0.9	276	33.7	248	30.3	218	26.7	67	8.2	2	0.2	818
Dorchester	3	0.9	59	17.5	113	33.4	101	29.9	55	16.3	7	2.1	338
Garrett	1	0.3	77	26.0	72	24.3	123	41.6	23	7.8	0	0.0	296
St. Mary's	5	0.6	502	65.0	0	0.0	232	30.1	25	3.2	8	1.0	772
Somerset	1	0.4	82	35.3	88	37.9	55	23.7	5	2.2	1	0.4	232
Non-Rural School Districts													
Anne Arundel	22	0.5	640	15.2	1,539	36.5	1,584	37.6	397	9.4	32	0.8	4,214
Baltimore City	107	1.6	1,049	15.7	2,757	41.2	1,252	18.7	1,481	22.2	40	0.6	6,686
Baltimore	1	0.0	596	9.9	2,071	34.4	1,248	20.8	2,037	33.9	61	1.0	6,014
Calvert	3	0.6	143	28.3	179	35.4	164	32.4	12	2.4	5	1.0	506
Carroll	14	1.1	290	22.4	515	39.8	317	24.5	151	11.7	8	0.6	1,295
Charles	5	0.4	332	29.7	288	25.7	481	43.0	9	0.8	4	0.4	1,119
Frederick	10	0.6	500	30.3	506	30.6	437	26.5	185	11.2	13	0.8	1,651
Harford	13	0.7	346	18.6	437	23.5	692	37.3	358	19.3	11	0.6	1,857
Howard	8	0.4	476	26.2	444	24.4	664	36.6	201	11.1	23	1.3	1,816
Kent	1	0.6	112	64.0	0	0.0	50	28.6	11	6.3	1	0.6	175
Montgomery	15	0.2	925	13.3	2,493	36.0	1,270	18.3	2,061	29.7	168	2.4	6,932
Prince George's	29	0.4	1,082	16.4	2,399	36.3	2,183	33.0	815	12.3	109	1.6	6,617
Queen Anne's	0	0.0	90	28.6	102	32.4	114	36.2	8	2.5	1	0.3	315
Talbot	2	0.7	194	70.5	39	14.2	37	13.5	3	1.1	0	0.0	275
Washington	12	1.0	166	14.2	439	37.7	451	38.7	91	7.8	7	0.6	1,166
Wicomico	17	2.2	146	18.9	295	38.2	253	32.7	59	7.6	3	0.4	773
Worcester	7	1.7	118	29.1	99	24.4	160	39.5	20	4.9	1	0.2	405
Total State	291	0.6	8,382	18.5	15,464	34.2	12,501	27.6	8,131	18.0	509	1.1	45,278
Total Rural	25	0.7	1,177	34.0	862	24.9	1,144	33.0	232	6.7	22	0.6	3,462
Total Non-Rural	266	0.6	7,205	17.2	14,602	34.9	11,357	27.2	7,899	18.9	487	1.2	41,816

*Three years college or less.

SOURCE: Characteristics of Professional Staff Employed in Maryland Public Schools, October, 1987. Maryland State Department of Education, Office of Management Information Systems.

Appendix D

Maryland's Service Delivery System

Maryland's Service Delivery System

The following is a list of private R&D, higher education, and professional association organizations represented in Tables 1, 2, and 3.

Council on Economic Education in Maryland

Johns Hopkins University, Center for Social Organization of Schools

Johns Hopkins University, Center for Talented Youth

Maryland Association of Boards of Education

Maryland Leadership in Education Administration Development Center

Mid-Atlantic Equity Center

Research for Better Schools, Inc.

Salisbury State University, School of Education

University of Maryland Baltimore County Campus, Center for Educational Research and Development

University of Maryland, Center for Instructional Development and Evaluation

University of Maryland College Park Campus, Center for Educational Research and Development

University of Maryland College Park Campus, Institute for Child Study

SOURCE: Donahoe, P. Directory of Regional Educational Resource Organizations in the Mid-Atlantic Region, 1989. Research for Better Schools under the auspices of the Office of Educational Research and Improvement (OERI), Department of Education, under contract number 400-86-0003.

Maryland Higher Education, Private Research and Development Organizations and Professional Associations

These organizations primarily focus on the following activities: program evaluation; staff development; publications; and conferences and workshops. Provision of services is generally short-term in duration and falls short of meeting the expressed needs of rural school districts. Information is provided in terms of organization type, services, and areas of expertise. It should be noted that federally funded programs based within post-secondary institutions are included in this section.

Number of Organizations, Type and Percentage

Type	#	%
Non-Profit R&D	4	34
Post Secondary R&D	5	42
State Professional Association	1	8
LEAD Center	1	8
Post Secondary, Other	1	8

Primary Services Offered

Services	#	%
Development	5	10
Program Assessment/Evaluation	8	15
Presentations/Conferences/Workshops	8	15
Publications/Dissemination	8	15
Research	4	8
Technical Assistance	5	10
Staff Development	8	15
Planning	1	2
Needs Assessment	3	6
Management	1	2
Instructional Development	1	2

More than two-thirds of the organizations offer: Program Assessment/Evaluation, Presentations/Conferences, Publications/Dissemination, and Staff Development services. Less than half provide Research, Planning, Management, and Instructional Development services.

Primary Areas of Expertise within Organizations

Expertise	# Org. Providing Service
At Risk Students	4
Higher Order Thinking	2
Instructional Effectiveness	2
School Effectiveness/Improvement	4
Student Testing/Academic Performance	1
School Administration/Management	1
Reading/Language Arts	2
School-Community Relations	1
Educational Technology	3
Economic Education K-12	1
Basic Skills Performance	1
School Climate/Discipline	1
Mathematics	1
Science	1
Gifted Education	1
School Board Operations	1
Staff Development	3
Adult Education	3
Post-Secondary Education	1
Early Childhood	2
Teaching Techniques/Classroom Management	3
Minority Relations	1
Evaluation/Assessment	3
Instructional Design	1

The primary areas of expertise are: At Risk Students and School Effectiveness/Improvement.

SOURCE: Donahoe, P. Directory of Regional Educational Resource Organizations in the Mid-Atlantic Region, 1989. Research for Better Schools under the auspices of the Office of Educational Research and Improvement (OERI), Department of Education, under contract number 400-86-0003.

Appendix E

Results of New Jersey's Rural Needs Assessment Survey

Summary of Responses by Chief School Administrators
Concerning Educational Needs of Rural/Small School Districts

I. Administrative Service Needs in Priority Order

1. Completing Applications, Grants, etc.
2. Completing Forms and Reports
3. Forming Cooperatives
4. Facilities Planning (long range)
5. Computer Use

II. Personnel Needs in Priority Order

1. Staff Development/In-service
2. Obtaining Substitute Teachers
3. Attracting Qualified Teachers

III. Curriculum Development/Improvement Needs in Priority Order

1. Time for Curriculum Development
2. Training for Teachers
3. Curriculum Alignment

IV. Educational Program Needs in Priority Order

1. Gifted/Talented
2. Writing
3. Special Education
4. Science
5. Career/Vocational

SOURCE: Leopold, S. (1986). 1986 Needs Inventory of Rural/Small School Districts in the State of New Jersey. Trenton, New Jersey.

Appendix F

Selected Data on Rural Schools and Rural Students in New Jersey

Selected Data on Rural Schools
and Rural Students in New Jersey

The following tables include additional information about the characteristics of rural school districts and rural students. These tables are supplementary to those already printed in the text of this document.

The tables appear in approximately the same order that they are alluded to in the text (pp. 75-88). Other tables do not include information referred to in the text, but provide helpful background information. These tables are placed last in this appendix.

All these tables consist of information drawn from a wide variety of sources. The types of tables vary somewhat across states because of differences in the availability and presentation of information as well as differences in the relative importance of the data. (The most relevant data tend to be highlighted in the text rather than in the appendices.)

Taken together, all these tables should supply the reader with helpful information, and a broader understanding of rural students and districts.

Index of Tables

Table 1

Student Enrollments in New Jersey Public School Districts
by Grade and County
September, 1988

COUNTY	PRE-K	K	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6	GRADE 7	GRADE 8	GRADE 9	GRADE 10	GRADE 11	GRADE 12	POST-GRAD.	SPECIAL ED.	UN-GRADED	TOTAL	% of Students Enrolled in each County
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	112)	113)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
Atlantic	175	2,693	2,658	2,388	2,439	2,299	2,320	2,362	2,374	2,353	2,364	2,105	2,019	1,930	0	1,509	13	32,001	3.0
Bergen	714	6,481	7,106	6,862	7,004	6,918	6,966	6,933	6,961	7,082	7,331	7,331	7,606	8,292	0	4,078	47	97,712	9.0
Burlington	416	4,731	5,015	4,546	4,188	4,118	4,048	3,909	3,848	4,074	4,432	4,312	4,233	4,632	26	4,503	58	61,089	5.7
Camden	981	6,184	7,086	6,394	5,961	5,792	5,292	5,341	5,185	5,086	5,610	4,954	4,724	5,005	36	5,879	155	79,665	7.4
Cape May	43	1,083	1,161	1,000	1,006	909	1,057	924	858	808	893	859	747	855	0	766	0	12,969	1.2
Cumberland	413	1,772	2,184	1,810	1,733	1,702	1,590	1,607	1,543	1,615	1,745	1,665	1,781	1,705	145	1,686	0	24,696	2.3
Essex	554	7,951	9,830	9,278	9,474	9,025	8,773	8,585	8,083	7,815	8,684	7,886	7,582	7,343	19	5,445	246	116,573	10.8
Gloucester	31	2,840	3,038	2,778	2,664	2,782	2,608	2,678	2,550	2,432	2,509	2,380	2,538	2,579	155	2,485	386	37,433	3.5
Hudson	316	4,960	5,511	5,031	4,982	4,914	4,806	4,567	4,564	4,330	5,221	4,387	3,901	3,630	0	4,083	293	65,496	6.1
Hunterdon	0	1,240	1,336	1,234	1,247	1,204	1,147	1,141	1,137	1,199	1,048	1,176	1,235	1,348	13	624	0	16,329	1.5
Mercer	0	3,532	3,614	3,393	3,360	3,116	3,002	3,037	3,014	2,763	3,088	2,983	2,798	3,037	0	2,776	15	43,528	4.0
Middlesex	489	6,067	6,584	6,014	5,805	5,741	5,746	5,665	5,659	5,514	6,133	6,199	6,308	6,285	1,381	4,492	291	84,373	7.8
Monmouth	352	6,184	6,516	5,920	5,871	5,866	5,723	5,887	5,607	5,788	6,041	5,819	5,884	6,261	0	3,704	65	81,488	7.5
Morris	162	4,107	4,344	4,202	4,155	4,325	4,207	4,311	4,260	4,364	4,577	4,760	5,272	5,815	48	2,350	11	61,270	5.7
Ocean	29	4,732	4,780	4,587	4,467	4,530	4,265	4,378	4,160	4,168	4,616	4,422	4,273	4,267	1	2,751	97	60,523	5.6
Passaic	246	4,503	5,047	4,838	4,708	4,741	4,625	4,673	4,542	4,538	4,564	4,357	4,308	4,141	0	2,570	10	62,411	5.8
Salem	144	930	952	867	894	847	788	855	823	818	789	801	848	814	0	843	0	12,013	1.1
Somerset	130	2171	2,398	2,211	2,075	2,152	2,184	2,002	2,164	2,075	2,364	2,269	2,256	2,522	8	1,192	0	30,173	2.8
Sussex	12	1,794	1,891	1828	1,724	1,658	1,626	1,652	1,521	1,540	1,627	1,607	1,645	1,749	28	1,232	8	23,142	2.1
Union	988	4,487	5,108	4,606	4,655	4,582	4,348	4,306	4,419	4,349	4,660	4,590	4,382	4,724	4	3,050	18	63,276	5.9
Warren	0	1,220	1,267	1,117	1,109	1,041	981	1,023	986	973	972	989	1,050	1,099	48	822	14	14,711	1.4
TOTAL	6,195	79,662	87,426	80,904	79,521	78,262	76,102	75,836	74,258	73,684	79,268	75,851	75,390	78,033	1,912	56,840	1,727	1,080,871	100.0
Percent of Students Enrolled by Grade	0 6	7 4	8.1	7.5	7.4	7.2	7.0	7.0	6.9	6.8	7.3	7.0	7.0	7.2	0 2	5.3	0.2	100	

SOURCE: Vital Education Statistics, 1988-89. Vol. I. New Jersey State Department of Education.

Table 2

Number of Job Functions Held by Superintendents
in Rural New Jersey Districts
1987-1988

County	1	2-3	4-5	6 or More
Atlantic	2	3	0	0
Burlington	1	9	0	0
Cape May	1	1	0	0
Cumberland	2	7	2	1
Gloucester	1	9	1	1
Hunterdon	2	2	0	1
Monmouth	0	2	0	0
Morris	2	8	0	0
Ocean	1	6	2	0
Salem	1	5	1	2
Sussex	2	7	1	1
Warren	0	12	2	0
Total	15	71	9	6

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Table 3

Highest Degree Held by Classroom Teachers
Employed in the Public Schools of New Jersey by County
1988-1989

	Highest Degree Held										
County*	None		Bachelors		Masters		Doctors		Other		Total
Counties 44% or More Rural											
Cumberland	24	1.4	1,340	77.4	359	20.7	5	0.3	4	0.2	1,732
Gloucester	22	0.9	1,965	77.2	547	21.5	8	0.3	4	0.2	2,546
Salem	15	1.7	707	79.8	163	18.4	0	0	1	0.1	886
Sussex	9	0.5	1,052	62.5	615	36.6	4	0.2	2	0.1	1,682
Warren	11	1.0	723	67.3	337	31.3	3	0.3	1	0.1	1,075
Total	81	1.0	5,787	73.1	2,021	25.5	20	0.3	12	0.2	7,921
Counties 5-33% Rural											
Atlantic	17	0.7	1,865	80.5	428	18.5	7	0.3	0	0	2,317
Burlington	36	0.9	2,896	69.5	1,215	29.2	14	0.3	3	0.1	4,164
Cape May	23	2.3	754	74.3	232	22.9	2	0.2	4	0.4	1,015
Hunterdon	5	0.4	722	60.5	458	38.4	8	0.7	0	0	1,193
Morris	23	0.5	2,705	57.1	1,987	42.0	17	0.4	3	0.1	4,735
Ocean	44	1.1	2,885	69.2	1,226	29.4	10	0.2	7	0.2	4,172
Total	148	0.8	11,827	67.2	5,546	31.5	58	0.3	17	0.1	17,596
Counties Less than 5% Rural											
Bergen	46	0.6	3,424	44.6	4,126	53.8	70	0.9	7	0.1	7,673
Camden	81	1.5	3,949	71.5	1,449	26.2	35	0.6	10	0.2	5,524
Essex	43	0.5	5,124	60.6	3,184	37.7	90	1.1	9	0.1	8,450
Hudson	41	0.9	3,005	62.4	1,747	36.3	14	0.3	9	0.2	4,816
Mercer	26	0.8	2,054	63.6	1,124	34.8	21	0.7	4	0.1	3,229
Middlesex	71	1.1	3,619	57.0	2,604	41.0	46	0.7	6	0.1	6,346
Monmouth	39	0.6	3,746	61.7	2,249	37.1	28	0.4	5	0.1	6,067
Passaic	37	0.8	3,011	63.3	1,673	35.2	26	0.5	8	0.2	4,755
Somerset	16	0.7	1,383	58.5	954	40.3	12	0.5	0	0	2,365
Union	51	1.0	2,699	54.5	2,171	43.8	31	0.6	4	0.1	4,956
Total	451	0.8	32,014	59.1	21,281	39.3	373	0.7	62	0.1	54,181
State Total	680	0.9	49,628	62.3	28,848	36.2	451	0.6	91	0.1	79,698

*Three groups of counties are discriminated by the percentage of rural school districts within the total number of school districts in the county.

SOURCE: Vital Education Statistics, 1988-1989. Volume II. New Jersey State Department of Education.

Table 4

Average Years Experience in Teaching for Public School Classroom Teachers in Rural School Districts in New Jersey, by County
June 1988

County	Teaching Experience
Atlantic	13.4
Burlington	13.7
Cape May	11.5
Cumberland	14.4
Gloucester	13.8
Hunterdon	15.4
Monmouth	14.5
Morris	14.9
Ocean	11.4
Salem	12.7
Sussex	14.3
Warren	13.9
Statewide Average	15.0
Rural Average	13.7

SOURCE: New Jersey Teacher Salaries (Including Number of Special Services Personnel). 1988-89 Edition. New Jersey Education Association.

Table 5

Educational Experience of Classroom Teachers in New Jersey Public School Districts by County
1988-1989

County*	Under 1 Year #	Under 1 Year %	1-4 Years #	1-4 Years %	5-9 Years #	5-9 Years %	10-19 Years #	10-19 Years %	20-29 Years #	20-29 Years %	30-39 Years #	30-39 Years %	Over 40 Years #	Over 40 Years %	Total
Counties 44% or More Rural															
Cumberland	52	3.0	256	14.8	240	13.9	775	44.7	351	20.3	55	3.2	3	0.2	1,732
Gloucester	97	3.8	386	15.2	441	17.3	1,036	40.7	494	19.4	89	3.5	3	0.1	2,546
Salem	32	3.6	150	16.9	136	15.3	369	41.6	171	19.3	27	3.0	1	0.1	886
Sussex	33	0.2	199	11.8	315	18.7	752	44.7	347	20.6	35	2.1	1	0.1	1,682
Warren	17	1.6	136	12.7	173	16.1	494	46.0	220	20.5	35	3.3	0	0	1,075
Total	231	2.9	1,127	14.2	1,305	16.5	3,426	43.3	1,583	20.0	241	3.0	8	0.1	7,921
Counties 5-33% Rural															
Atlantic	84	3.6	379	16.4	359	15.5	940	40.6	457	19.7	94	4.1	4	0.2	2,317
Burlington	110	2.6	529	12.7	657	15.8	1708	41.0	1005	24.1	147	3.5	8	0.2	4,164
Cape May	41	4.0	200	19.7	190	18.7	416	41.0	140	13.8	28	2.8	0	0	1,015
Hunterdon	23	1.9	142	11.9	214	17.9	510	42.7	270	22.6	33	2.8	1	0.1	1,193
Morris	91	1.9	485	10.2	688	14.5	2,004	42.3	1,261	26.6	197	4.2	9	0.2	4,735
Ocean	116	2.8	645	15.5	741	17.8	1,801	43.2	775	18.6	90	2.2	4	0.1	4,172
Total	465	2.6	2,380	13.5	2,849	16.2	7,379	41.9	3,908	22.2	589	3.3	26	0.1	17,596
Counties Less than 5% Rural															
Bergen	151	2.0	769	10.0	931	12.1	2,996	39.0	2,297	29.9	503	6.6	26	0.3	7,673
Camden	179	3.2	801	14.5	965	17.5	2,267	41.0	1,120	20.3	188	3.4	4	0.1	5,524
Essex	198	2.3	1,020	12.0	1,192	14.1	3,544	41.9	2,012	23.8	450	5.3	34	0.4	8,450
Hudson	95	2.0	511	10.6	733	15.2	2,401	49.9	929	19.3	138	2.9	9	0.2	4,816
Mercer	93	2.9	472	14.6	570	17.7	1,266	39.2	661	20.5	161	5.0	6	0.2	3,229
Middlesex	137	2.2	663	10.4	846	13.3	2,645	41.7	1,780	28.0	269	4.2	6	0.1	6,346
Monmouth	134	2.2	729	12.0	939	15.5	2,540	41.9	1,481	24.4	231	3.8	13	0.2	6,067
Passaic	101	2.1	664	14.0	771	16.2	1,994	41.9	1,046	22.0	170	3.6	9	0.2	4,755
Somerset	60	2.5	285	12.1	300	12.7	922	39.0	668	28.2	127	5.4	3	0.1	2,365
Union	162	3.3	671	13.5	776	15.7	1,802	36.4	1,238	25.0	296	6.0	11	0.2	4,956
Total	1,310	2.4	6,585	12.2	8,023	14.8	22,377	41.3	13,232	24.6	2,533	4.7	121	0.2	54,181
State Totals	2,006	2.5	10,092	12.7	12,177	15.3	33,182	41.6	18,723	23.5	3,363	4.2	155	0.2	79,698

*Three groups of counties are discriminated by the percentage of rural school districts within the total number of school districts in the county.

SOURCE: Vital Education Statistics, 1988-1989. Volume II. New Jersey State Department of Education.

Table 6

Average Salary of Public School Classroom Teachers
in Rural School Districts in New Jersey, by County, 1988-1989.

County	Salary	County Average*
Atlantic	$26,596**	$30,823
Burlington	29,664	31,252
Cape May	26,592	29,467
Cumberland	26,148	28,789
Gloucester	27,465	28,736
Hunterdon	32,240	32,787
Monmouth	29,683	32,636
Morris	32,858	34,909
Ocean	27,812	30,614
Salem	27,874	30,070
Sussex	31,826	32,794
Warren	28,978	30,533

Statewide Average	33,372
Rural Schools Average	28,978
Non-Rural Average	34,178

*Includes both rural and non-rural schools.

**One district (Estelle Manor) was omitted because the salary data were not available.

SOURCE: New Jersey Teacher Salaries (Including Number of Special Services Personnel). 1988-89 Edition. New Jersey Education Association.

Table 7

New Jersey Dropouts as a Percentage of Total Enrollment, by County
1988-1989

County*	Percentage of Dropouts
Counties 44% or More Rural	
Cumberland	2.8
Gloucester	1.5
Salem	1.6
Sussex	0.9
Warren	1.3
Counties 5-33% Rural	
Atlantic	2.9
Burlington	1.2
Cape May	2.0
Hunterdon	0.7
Morris	0.7
Ocean	2.1
Counties Less than 5% Rural	
Bergen	0.6
Camden	1.6
Essex	2.2
Hudson	3.0
Mercer	2.5
Middlesex	1.4
Monmouth	1.6
Passaic	2.6
Somerset	0.8
Union	1.6
State Average	1.7
Average for Counties 44% or More Rural	1.6
Average for Counties 5-33% Rural	1.6
Average for Counties Less than 5% Rural	1.8

*Three groups of counties are discriminated by the percentage of rural school districts within the total number of school districts in the county.

SOURCE: Vital Education Statistics, 1988-89. Volume I. New Jersey State Department of Education.

Table 8

New Jersey Special Education Students in Rural Counties
1988

County	Number of Special Education Students	Total Number of Students	Percentage*
Atlantic	1,509	32,001	4.7%
Burlington	4,503	61,089	7.4
Cape May	766	12,969	5.9
Cumberland	1,686	24,696	6.8
Gloucester	2,485	37,433	6.6
Hunterdon	624	16,329	3.8
Monmouth	3,704	81,488	4.5
Morris	2,350	61,270	3.8
Ocean	2,751	60,523	4.5
Salem	843	12,013	7.0
Sussex	1,232	23,142	5.3
Warren	822	14,711	5.6
Total	56,840	1,080,871	5.3

*Percentage is percentage of special education students as a percentage of the total number of students in each rural county.

SOURCE: Vital Education Statistics, 1988-89. Volume I. New Jersey State Department of Education. (Data as of September 1988).

Appendix G

New Jersey's Service Delivery System

New Jersey's Service Delivery System

The following is a list of private R&D, higher education, and professional association organizations represented in Tables 1, 2, and 3.

Educational Testing Service

Educational Testing Service, Test Collection

Fairleigh Dickinson University, Bilingual Education Skills and Training Center

Georgetown University, Bilingual Education Service Center

Kean College of New Jersey

Montclair State College, Institute for the Advancement of Philosophy for Children

New Jersey Association for Supervision and Curriculum Development

New Jersey Leadership in Educational Administration Development Center

New Jersey School Boards Association

Research for Better Schools, Inc.

Rutgers University, Center for Policy Research in Education

Seton Hall University, Office of Continuing Professional Education

SOURCE: Donahoe, P. Directory of Regional Educational Resource Organizations in the Mid-Atlantic Region, 1989. Research for Better Schools under the auspices of the Office of Educational Research and Improvement (OERI), Department of Education, under contract number 400-86-0003.

New Jersey Higher Education, Private Research and Development Organizations and Professional Associations

These organizations primarily focus on activities such as: conferences/workshops and publications/information dissemination. Provision of services is generally short-term in duration and falls short of meeting the expressed needs of rural school districts. Information is provided in terms of organization type, services, and areas of expertise. It should be noted that federally funded programs based within post-secondary institutions are included in this section.

Number of Organizations, Type and Percentage

Type	#	%
Non-Profit R&D	3	25
Post Secondary R&D	5	42
State Professional Association	2	17
LEAD Center	1	8
Post Secondary, Other	1	8

R&D organizations are the most predominant type, representing independent agencies and post secondary institutions.

Primary Services Offered

Services	#	%
Development	6	13
Program Assessm t/Evaluation	4	9
Presentations/Conferences/Workshops	8	17
Publications/Dissemination	8	17
Research	4	9
Technical Assistance	6	13
Staff Development	6	13
Planning	2	5
Needs Assessment	1	2
Off Campus Courses	1	2

Almost seventy-five percent of the organizations offer: Development, Presentations/Conferences, Publications/Dissemination, Staff Development, and Technical Assistance, Staff Development.

Primary Areas of Expertise within Organizations

Expertise	# Org. Providing Service
At Risk Students	4
Higher Order Thinking	3
Instructional Effectiveness	4
School Effectiveness/Improvement	4
Bilingual Education	3
Student Testing/Academic Performance	4
Policy Development	2
Teacher Supv./Evaluation	1
School Administration/Management	4
Reading/Language Arts	1
School-Community Relations	1
Educational Technology	1
School Finance	3
Basic Skills Performance	1
Post-Secondary Education	1
Early Childhood	1
Management Development	1
School Library Media	1
Evaluation/Assessment	6
Staff Development	4

One-third or more of the organizations focus on: At Risk Students, Instructional Effectiveness, School Effectiveness/Improvement, Student Testing/Academic Performance, School Administration/Management, and Evaluation/Assessment.

SOURCE: Donahoe, P. Directory of Regional Educational Resource Organizations in the Mid-Atlantic Region, 1989. Research for Better Schools under the auspices of the Office of Educational Research and Improvement (OERI), Department of Education, under contract number 400-86-0003.

Appendix H

Results of Pennsylvania's Rural Needs Assessment Survey

Results of Pennsylvania's Rural Needs Assessment Survey

ISSUES IN RURAL EDUCATION SURVEY

RESULTS

Listed below are a number of general and specific problems and issues facing rural education today. In order to develop a state plan to address these problems and issues, we need your input as to the priority which should be given to each based upon your experience as a rural educator.

Please rate both the general (numbered items) and specific issues (lettered items) according to the priority you think they deserve by circling the appropriate choice on the five-point priority scale accompanying each.

Issues	$\bar{x}$	% Priority					
		Very High Priority				Very Low Priority	
1. Fiscal Issues	4.78	5 82	4 14	3 4	2	1	[1]
a. General funding	4.76	5 80	4 17	3 3	2	1	[2]
b. Transportation	4.13	5 46	4 27	3 24	2 2	1	[3]
c. Special education	4.14	5 45	4 30	3 21	2 2	1	[4]
d. Building needs (including maintenance and construction)	3.92	5 34	4 34	3 25	2 5	1 2	[5]
e. Other (specify) (11)	5.00	5 100	4	3	2	1	[6]
f. Other (specify) (5)	5.00	5 100	4	3	2	1	[7]
2. Instructional Staff Issues	3.79	5 25	4 34	3 36	2 5	1	[8]
a. Recruitment in general and in particular areas of certification (e.g., foreign language, advanced math)	3.79	5 27	4 36	3 29	2 7	1 2	[9]
b. Retention	3.00	5 3	4 31	3 40	2 14	1 12	[10]
c. Professional development	3.88	5 34	4 29	3 31	2 5	1 2	[11]
d. Professional isolation	3.31	5 14	4 29	3 34	2 19	1 3	[12]
e. Part-time instructional needs	3.23	5 14	4 25	3 39	2 15	1 7	[13]
f. Age and experience of teachers	3.00	5 5	4 24	3 44	2 20	1 7	[14]

Issues	$\bar{x}$	% Priority					
		Very High Priority				Very Low Priority	
g. Lack of guidance counselors (especially for elementary students) 3.47		5 25	4 22	3 32	2 15	1 5	[15]
h. Other (specify) (7) Counselors - secondary - especially female 5.00		5 100	4	3	2	1	[16]
i. Other (specify) (1) 5.00		5 100	4	3	2	1	[17]
3. Instructional Program Issues 3.84		5 28	4 35	3 33	2 2	1 2	[18]
a. Lack of advanced placement or other "special" programs 3.67		5 26	4 33	3 26	2 14	1 2	[19]
b. Home teaching and schooling 3.03		5 15	4 17	3 32	2 27	1 8	[20]
c. Low post-secondary participation rates 3.29		5 12	4 33	3 33	2 17	1 5	[21]
d. Lack of career education programs 3.24		5 5	4 33	3 45	2 16	1 2	[22]
e. Poor articulation between instructional and guidance programs 3.05		5 5	4 20	3 51	2 22	1 2	[23]
f. High drop-out rates 2.81		5 7	4 17	3 39	2 25	1 12	[24]
g. Lack of vocational education programs 2.91		5 9	4 17	3 41	2 22	1 10	[25]
h. Not enough resources for special education needs 3.33		5 17	4 29	3 31	2 19	1 5	[26]
i. Difficulty implementing technology 3.29		5 12	4 33	3 33	2 14	1 7	[27]
j. Other (specify) (3) 5.00		5 100	4	3	2	1	[28]
k. Other (specify) (1) 5.00		5 100	4	3	2	1	[29]
4. Community and Family Issues 4.17		5 44	4 33	3 19	2 4	1	[30]
a. Economic development 4.44		5 64	4 17	3 17	2 2	1	[31]
b. Poverty (low per capita income) 4.01		5 36	4 38	3 21	2 2	1 3	[32]

Issues	$\bar{x}$	% Priority					
		Very High Priority				Very Low Priority	
c. Unemployment	3.89	5 37	4 29	3 24	2 7	1 3	[33]
d. Things that put students "at-risk" (e.g., alcoholism, drug abuse)	4.16	5 42	4 39	3 14	2 3	1 2	[34]
e. Teenage suicide	3.37	5 20	4 24	3 32	2 20	1 3	[35]
f. Teenage pregnancy	3.76	5 25	4 36	3 31	2 7	1 2	[36]
g. High family mobility rates	3.22	5 9	4 26	3 47	2 17	1 2	[37]
h. Out-migration of talented youth	3.91	5 41	4 22	3 27	2 8	1 2	[38]
i. Divorce	3.94	5 27	4 43	3 29	2 2	1	[39]
j. Other (specify) (3)	5.00	5 100	4	3	2	1	[40]
k. Other (specify) (1)	5.00	5 100	4	3	2	1	[41]
5. Administrative Issues	4.11	5 36	4 45	3 11	2 7	1	[42]
a. Few administrators responsible for performing many administrative functions	4.32	5 55	4 26	3 16	2 3	1	[43]
b. Need for information and technical assistance in order to take advantage of opportunities	3.84	5 24	4 46	3 20	2 8	1 2	[44]
c. Poor economies of scale	3.58	5 16	4 38	3 36	2 11	1	[45]
d. Inability to obtain or develop specific expertise in order to take advantage of opportunities	3.56	5 16	4 41	3 31	2 9	1 3	[46]
e. Keeping up with and meeting state and federal regulations	4.18	5 44	4 34	3 19	2 3	1	[47]
f. Other (specify) (3)	4.66	5 67	4 33	3	2	1	[48]

Issues	x	% Priority					
		Very High Priority				Very Low Priority	
g. Other (specify) (0)		5	4	3	2	1	[49]
6. Revenue Issues 3.78		5 34	4 21	3 34	2 11	1	[50]
a. Student matriculation in non-district schools (e.g., private, parochial) 2.75		5 3	4 21	3 40	2 21	1 16	[51]
b. Tax assessments do not reflect actual usage 3.77		5 30	4 30	3 28	2 12	1	[52]
c. Other (specify) (3)	5.00	5 100	4	3	2	1	[53]
d. Other (specify) (1)	5.00	5 100	4	3	2	1	[54]
7. Tax Issues 4.00		5 40	4 28	3 23	2 9	1	[55]
a. Absentee owners 3.17		5 16	4 23	3 30	2 23	1 7	[56]
b. Absence of industry 4.22		5 56	4 21	3 16	2 4	1 4	[57]
c. State owned land 3.44		5 28	4 19	3 26	2 26	1 2	[58]
d. Income tax reciprocity with neighboring states 2.94		5 24	4 13	3 20	2 22	1 22	[59]
e. Other (specify) (3)	4.66	5 67	4 33	3	2	1	[60]
f. Other (specify) (1)	5.00	5 100	4	3	2	1	[61]
8. Other Issue (specify) (2)	5.00	5 100	4	3	2	1	[62]

Appendix I

Selected Data on Rural Schools and Rural Students in Pennsylvania

Selected Data on Rural Schools
and Rural Students in Pennsylvania

The following tables include additional information about the characteristics of rural school districts and rural students. These tables are supplementary to those already printed in the text of this document.

The tables appear in approximately the same order that they are alluded to in the text (pp. 107-112). Other tables do not include information referred to in the text, but provide helpful background information. These tables are placed last in this appendix.

All these tables consist of information drawn from a wide variety of sources. The types of tables vary somewhat across states because of differences in the availability and presentation of information as well as differences in the relative importance of the data. (The most relevant data tend to be highlighted in the text rather than in the appendices.)

Taken together, all these tables should supply the reader with helpful information, and a broader understanding of rural students and districts.

Index of Tables

Table 1

Instructional Expense Per Pupil in Rural Counties
of Pennsylvania by District
1986-87

Counties	Expenditure
Bedford	$2,149
Bradford	2,470
Cameron	2,340
Clarion	2,376
Clearfield	2,255
Clinton	2,516
Elk	2,333
Forest	3,064
Fulton	2,040
Greene	2,518
Huntingdon	2,251
Jefferson	2,448
Juniata	1,781
McKean	2,375
Perry	2,054
Pike	2,893
Potter	2,516
Sullivan	2,563
Susquehanna	2,218
Tioga	2,337
Warren	2,338
Wayne	2,728
Wyoming	2,566
Statewide Average	2,572
Rural Average	2,396
Non-Rural Average	2,664

SOURCE: Arnold Hillman, Riverview Intermediate Unit, 6/89. Calculation derived from Pennsylvania Department of Education data, 1986-1987.

Table 2

Average Rank Salary of Public School Classroom Teachers
in Rural School Districts in Pennsylvania, by County
1988-1989

County	Salary
Bedford	$25,717
Bradford	28,113
Cameron	23,735
Clarion	27,376
Clearfield	25,797
Clinton	27,973
Elk	25,096
Forest	25,252
Fulton	23,491
Greene	27,678
Huntingdon	24,462
Jefferson	27,776
Juniata	25,135
McKean	25,583
Perry	24,542
Pike	27,435
Potter	24,261
Sullivan	28,105
Susquehanna	25,397
Tioga	27,182
Warren	27,723
Wayne	27,586
Wyoming	28,708
Average for Rural Counties	26,266

SOURCE: Classroom Teacher Averages and Rankings by Local Education Agency, 1988-89. Pennsylvania Department of Education.

Arnold Hillman (Riverview Intermediate Unit. 6/89, based on Pennsylvania Department of Education statistics) reports the following averages for 1987-88:

Urban Counties	$32,898
Urban Influenced Counties	27,665
Rural Counties	26,535

Table 3

Average Years of Teaching Experience for Public School Classroom Teachers in Rural School Districts in Pennsylvania, by County 1988-1989

County	Teaching Experience
Bedford	16
Bradford	16.7
Cameron	17.5
Clarion	17
Clearfield	13.4
Clinton	17
Elk	17.9
Forest	14.4
Fulton	16.1
Greene	14.6
Huntingdon	16.2
Jefferson	16.8
Juniata	15.5
McKean	16.5
Perry	13.9
Pike	12.1
Potter	15
Sullivan	15.6
Susquehanna	15.4
Tioga	17.2
Warren	16.9
Wayne	14.6
Wyoming	16.3
Average for Rural Counties	15.8

SOURCE: Classroom Teacher Averages and Rankings by Local Education Agency, 1988-89. Pennsylvania Department of Education.

Table 4

Number of Teachers and Levels of Education in Pennsylvania by Rural County
1987-1988

County	0-3 Years College		Bachelor's Degree		Master's Degree		Master's + 30 Grad. Credits		Master's + 60 Grad. Credits		Doctorate		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Bedford	3	0.6	309	65.6	151	32.1	6	1.3	1	0.2	1	0.2	471	100
Bradford	10	1.4	417	56.7	272	37.0	33	4.5	2	0.3	1	0.1	735	100
Cameron	0	0	44	68.8	20	31.3	0	0	0	0	0	0	64	100
Clarion	9	2.0	249	54.8	185	40.7	11	2.4	0	0	0	0	454	100
Clearfield	8	0.9	622	69.0	252	27.9	18	2.0	1	0.1	1	0.1	902	100
Clinton	3	0.8	275	70.3	93	23.8	18	4.6	1	0.3	1	0.3	391	100
Elk	0	0	179	69.6	71	27.6	6	2.3	0	0	1	0.39	257	100
Forest	3	5.3	32	56.1	21	36.8	1	1.8	0	0	0	0	57	100
Fulton	0	0	88	59.5	59	39.9	1	0.7	0	0	0	0	148	100
Greene	7	1.6	308	69.2	125	28.1	5	1.1	0	0	0	0	445	100
Huntingdon	9	2.1	284	65.7	128	29.6	6	1.4	2	0.5	3	0.7	432	100
Jefferson	14	3.1	247	54.0	195	42.7	1	0.2	0	0	0	0	457	100
Juniata	1	0.6	95	60.1	62	39.2	0	0	0	0	0	0	158	100
McKean	6	1.1	323	61.8	179	34.2	15	2.9	0	0	0	0	523	100
Perry	0	0	243	59.4	166	40.6	0	0	0	0	0	0	409	100
Pike	3	2.3	85	66.4	35	27.3	4	3.1	1	0.8	0	0	128	100
Potter	0	0	144	72.4	51	25.6	4	2.0	0	0	0	0	199	100
Sullivan	0	0	0	0	48	76.2	15	23.8	0	0	0	0	63	100
Susquehanna	0	0	324	70.7	116	25.3	13	2.8	5	1.1	0	0	458	100
Tioga	0	0	252	64.6	106	27.2	28	7.2	4	1.0	0	0	390	100
Warren	2	0.5	232	54.1	190	44.3	3	0.7	1	0.2	1	0.2	429	100
Wayne	0	0	271	66.1	124	30.2	12	2.9	2	0.5	1	0.2	410	100
Wyoming	0	0	161	57.7	106	38.0	10	3.6	2	0.7	0	0	279	100
Total Rural	78	0.9	5,184	62.8	2,755	33.4	210	2.5	22	0.3	10	0.1	8,259	100

SOURCE: Pennsylvania Department of Education, Teacher Certification Department.

Table 5

Cost of Student Transportation in Pennsylvania by County (Rural) and Transportation as a Percent of all Expenditures 1985-1986

County	Total Expenditures	Cost of Transportation	Percent
Bedford	27,647,016	2,505,769	9.1%
Bradford	41,921,412	3,561,375	8.5%
Cameron	3,355,247	140,148	4.2%
Clarion	28,299,632	2,338,873	8.3%
Clearfield	54,499,639	4,384,975	8.0%
Clinton	19,404,938	1,050,321	5.4%
Elk	15,964,517	1,290,677	8.1%
Forest	3,456,129	214,426	6.2%
Fulton	7,818,056	666,902	8.5%
Greene	28,319,464	2,741,298	9.7%
Huntingdon	22,116,396	1,747,884	7.9%
Jefferson	25,741,152	1,935,104	7.5%
Juniata	7,780,357	725,429	9.3%
McKean	32,391,449	1,800,305	5.6%
Perry	20,936,873	2,214,580	10.6%
Pike	7,931,803	635,338	8.0%
Potter	11,112,620	962,455	8.7%
Sullivan	3,639,193	477,681	13.1%
Susquehanna	26,646,626	2,752,301	10.3%
Tioga	22,981,935	1,933,789	8.4%
Warren	24,244,985	1,775,069	7.3%
Wayne	26,105,602	2,775,643	10.6%
Wyoming	17,669,562	1,352,149	7.7%

SOURCE: Selected Expenditure Data for Pennsylvania Public Schools, 1985-86. Pennsylvania Department of Education, 1988.

Table 6

Ethnicity of Rural Pennsylvania Students
1988-1989

County	White		Black		Hispanic		Asian		Total
	#	%	#	%	#	%	#	%	#
Bedford	9,028	99.4	18	0.2	36	0.4	0	0.0	9,082
Bradford	12,550	99.4	0	0.0	76	0.6	0	0.0	12,626
Cameron	1,185	99.0	0	0.0	12	1.0	0	0.0	1,197
Clarion	8,425	99.5	8	0.1	25	0.3	8	0.1	8,466
Clearfield	17,792	99.9	18	0.1	0	0.0	0	0.0	17,810
Clinton	5,940	100.0	0	0.0	0	0.0	0	0.0	5,940
Elk	5,242	100.0	0	0.0	0	0.0	0	0.0	5,242
Forest	875	100.0	0	0.0	0	0.0	0	0.0	875
Fulton	2,694	98.3	27	1.0	19	0.7	0	0.0	2,740
Greene	7,659	98.4	62	0.8	62	0.8	0	0.0	7,783
Huntingdon	7,251	98.2	111	1.5	22	0.3	0	0.0	7,384
Jefferson	5,447	99.7	0	0.0	16	0.3	0	0.0	5,463
Juniata	3,584	100.0	0	0.0	0	0.0	0	0.0	3,584
McKean	7,999	99.8	0	0.0	16	0.2	0	0.0	8,015
Perry	7,476	99.2	23	0.3	38	0.5	0	0.0	7,537
Pike	1,974	97.0	0	0.0	61	3.0	0	0.0	2,035
Potter	3,195	99.8	0	0.0	6	0.2	0	0.0	3,201
Sullivan	990	98.0	10	1.0	10	1.0	0	0.0	1,010
Susquehanna	8,196	99.1	17	0.2	58	0.7	0	0.0	8,271
Tioga	7,241	99.0	22	0.3	51	0.7	0	0.0	7,314
Warren	7,598	100.0	0	0.0	0	0.0	0	0.0	7,598
Wayne	6,379	98.7	19	0.3	65	1.0	0	0.0	6,463
Wyoming	5,222	99.5	26	0.5	0	0.0	0	0.0	5,248
Total	143,942	99.3	361	0.2	573	0.4	8	0.0	144,884

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Table 7

Poverty Level of Pennsylvania Rural School Districts by County
1988-1989

	Poverty Levels						
County	0-5%	6-10%	11-15%	16-20%	21-25%	26-30%	Total
Bedford	0	0	1	2	2	0	5
Bradford	0	1	1	5	0	0	7
Cameron	0	0	0	1	0	0	1
Clarion	0	3	3	1	0	0	7
Clearfield	0	1	6	1	0	0	8
Clinton	0	0	1	0	0	0	1
Elk	1	2	0	0	0	0	3
Forest	0	0	1	0	0	0	1
Fulton	0	0	2	1	0	0	3
Greene	0	0	1	3	0	1	5
Huntingdon	0	1	1	1	1	0	4
Jefferson	0	2	1	0	0	0	3
Juniata	0	0	0	1	0	0	1
McKean	0	3	1	1	0	0	5
Perry	1	0	3	0	0	0	4
Pike	0	1	0	0	0	0	1
Potter	0	0	2	1	2	0	5
Sullivan	0	0	1	0	0	0	1
Susquehanna	0	0	3	2	1	0	6
Tioga	0	0	1	2	0	0	3
Warren	0	1	0	0	0	0	1
Wayne	0	0	2	1	0	0	3
Wyoming	0	0	2	0	0	0	2
Total	2	15	33	23	6	1	80

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Table 8

Percentage to College in Rural Counties of Pennsylvania by District
1986-1987

County	Number of Rural School Districts
Bedford	41.6
Bradford	46.7
Cameron	37.6
Clarion	42.9
Clearfield	47.2
Clinton	53.0
Elk	45.8
Forest	30.1
Fulton	42.8
Greene	41.8
Huntingdon	38.2
Jefferson	43.8
Juniata	39.5
McKean	44.3
Perry	44.4
Pike	52.4
Potter	36.5
Sullivan	47.2
Susquehanna	49.8
Tioga	46.0
Warren	40.8
Wayne	42.9
Wyoming	50.0
Statewide Average Percentage to College	49.2
Rural Average Percentage to College	43.7
Non-Rural Average Percentage to College	52.0

SOURCE: Arnold Hillman, Riverview Intermediate Unit, 6/89. Calculation derived from Pennsylvania Department of Education data, 1986-1987.

Table 9

Per Capita Income in Pennsylvania by Rural County
1986-1987

County	Per Capita Income
Bedford	$8,020
Bradford	9,380
Cameron	10,222
Clarion	9,613
Clearfield	10,031
Clinton	9,037
Elk	11,505
Forest	8,709
Fulton	7,971
Greene	8,834
Huntingdon	8,453
Jefferson	10,178
Juniata	10,113
McKean	10,811
Perry	10,504
Pike	11,000
Potter	8,496
Sullivan	8,810
Susquehanna	9,499
Tioga	8,547
Warren	10,685
Wayne	10,362
Wyoming	9,504

SOURCE: Arnold Hillman, Riverview Intermediate Unit, 6/89. Calculation derived from Pennsylvania Department of Education data, 1986-1987.

Table 10

Number of Job Functions Held by Superintendents
in Rural Pennsylvania Districts
1988-1989

County	1	2-3	4-5	6 or More
Bedford	0	3	2	0
Bradford	1	2	3	1
Cameron	0	1	0	0
Clarion	2	5	0	0
Clearfield	3	1	4	0
Clinton	0	0	0	1
Elk	1	0	1	1
Forest	0	1	0	0
Fulton	0	3	0	0
Greene	1	1	1	2
Huntingdon	0	3	1	0
Jefferson	1	1	1	0
Juniata	1	0	0	0
McKean	1	2	1	1
Perry	1	2	1	0
Pike	0	1	0	0
Potter	0	2	3	0
Sullivan	0	1	0	0
Susquehanna	1	1	2	2
Tioga	1	0	0	2
Warren	1	0	0	0
Wayne	1	0	1	1
Wyoming	1	1	0	0
Total	17	31	21	11

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Table 11

Number of Voc. Ed. Students in Pennsylvania by County (Rural)
1988-1989

County	Voc-Ed Students	Total Students	% of Voc-Ed
Bedford	911	9,082	10.0%
Bradford	1,436	12,626	11.4%
Cameron	134	1,197	11.2%
Clarion	1,038	8,466	12.3%
Clearfield	1,593	17,810	8.9%
Clinton	462	5,940	7.8%
Elk	336	5,242	6.4%
Forest	77	875	8.8%
Fulton	487	2,740	17.8%
Greene	848	7,783	10.9%
Huntingdon	1,099	7,384	14.9%
Jefferson	1,280	5,463	23.4%
Juniata	416	3,584	11.6%
McKean	1,209	8,015	15.1%
Perry	827	7,537	11.0%
Pike	202	2,035	10.0%
Potter	429	3,201	13.4%
Sullivan	76	1,010	7.5%
Susquehanna	1,009	8,271	12.2%
Tioga	868	7,314	11.9%
Warren	689	7,598	9.1%
Wayne	514	6,463	8.0%
Wyoming	326	5,248	6.2%

SOURCE: Quality Education Data, Inc., Denver, Colorado.

Appendix J

Pennsylvania's Service Delivery System

Pennsylvania's Service Delivery System

The following is a list of private R&D, higher education, and professional association organizations represented in Tables 1, 2, and 3.

Bloomsburg University, College of Professional Studies

Carnegie-Mellon University, College of Humanities and Social Studies

Clarion University of Pennsylvania, College of Education and Human Services

East Stroudsburg University, Center for School Services

Edinboro University of Pennsvylania, Institute for Research and Community Services

Gannon University, Center for Economic Education

Georgetown University, Bilingual Education Service Center

Indiana University of Pennsylvania, College of Education

Kutztown University, College of Education

Lincoln University, Education Department

Mansfield University, Division of Community Services and Graduate Studies

Mid-Atlantic Equity Center

Pennsylvania Association of School Administrators

Pennsylvania Leadership in Educational Administration Development Center

Pennsylvania Science Teachers Association

Pennsylvania State Education Association

Pennsylvania State University, The Pennsylvania School Study Council

Research for Better Schools, Inc.

Temple University, The Center for Research in Human Development and Education

Temple University, Measurement and Research Center

Temple University, National Center for the Study of Corporal Punishment and Alternatives in the Schools

University of Pennsylvania, Center for School Study Councils

University of Pennsylvania, Literacy Research Center

University of Pittsburgh, Institute for Practice and Research in Education

University of Pittsburgh, Tri-State Area School Study Council

Vocational Research Institute

Widener University, Office of Evaluation Research

Wilkes Barre, Regional Computer Resource Center

SOURCE: Donahoe, P. Directory of Regional Educational Resource Organizations in the Mid-Atlantic Region, 1989. Research for Better Schools under the auspices of the Office of Educational Research and Improvement (OERI), Department of Education, under contract number 400-86-0003.

Pennsylvania Higher Education, Private Research and Development Organizations and Professional Associations*

These organizations primarily focus on the following activities: conferences and workshops, development, research, and staff development. Provision of services is generally short-term in duration and falls short of meeting the expressed needs of rural school districts. Information is provided in terms of organization type, services, and areas of expertise.

Type	#	%
Non-Profit R&D	4	14
Post Secondary R&D	14	50
State Professional Association	3	11
LEAD Center	1	4
Post Secondary, Other	6	21

R&D organizations are the most predominant type, representing independent agencies and post secondary institutions. Twenty one percent are some other type of post secondary organization.

Primary Services Offered

Services	#	%
Development	14	12
Program Assessment/Evaluation	11	9
Presentations/Conferences/Workshops	19	16
Publications/Dissemination	8	7
Research	14	12
Technical Assistance	10	8
Staff Development	14	12
Planning	9	7
Needs Assessment	10	8
Management	2	2
Program Implementation	7	6
Consultation	1	1

Two-thirds of the organizations offer: Program Assessment/Evaluation, Development, Presentations/Conferences, Research, Technical Assistance, Staff Development, and Needs Assessment Services.

Primary Areas of Expertise within Organizations

Expertise	# Org. Providing Service
At Risk Students	6
Higher Order Thinking	4
Instructional Effectiveness	8
School Effectiveness/Improvement	10
Student Testing/Academic Performance	2
School Administration/Management	8
Reading/Language Arts	7
School-Community Relations	5
Educational Technology	6
Basic Skills Performance	3
School Climate/Discipline	2
Mathematics	3
Science	2
Staff Development	9
Adult Education	7
Post-Secondary Education	3
Early Childhood	5
Teaching Techniques/Classroom Management	1
Minority Relations	1
Evaluation/Assessment	10
Social Studies	2
Special Populations	1
Student Motivation and Interest	1
School-Business Relations	3
Bilingual Education	1
Teacher Supervision/Evaluation	2
Middle School Curriculum/Instruction	1
School Finance	3
Career/Vocational Education	3
School Law	1
Special Education	2

Twenty five percent or more of the organizations focus on: School Effectiveness/Improvement, Evaluation Assessment, Staff Development, :School Administration/Management, Instructional Effectiveness, Reading/Language Arts, and Adult Education.

SOURCE: Donahoe, P. Directory of Regional Educational Resource Organizations in the Mid-Atlantic Region, 1989. Research for Better Schools under the auspices of the Office of Educational Research and Improvement (OERI), Department of Education, under contract number 400-86-0003.

Appendix K

Regional Needs Assessment Data

Regional Needs Assessment Data

Percents of Respondents* in the Mid-Atlantic Region
Expressing Great or Fairly Strong Need for Improvement in Survey Items

Survey Items	Percent
Performance of low income students	69
Student's thinking/reasoning skills	65
Development of students' self-esteem/aspirations	52
System to reward outstanding teachers	48
Quality of in-service programs for school staff	46
Extent of community and parent involvement	43
Expectation for student academic development	40
Performance in mathematics	37
Availability of student support	35
Community support for quality education	34

*Respondents include: school board presidents, district superintendents, building principals, and classroom teachers. (N=156)

SOURCE: Jane H. Arends, compiler. Building on Excellence. Regional Priorities for the Improvement of Rural, Small Schools, April, 1987. Washington, DC.

Percents of Respondents* in the Mid-Atlantic Region Expressing No or Little Need for Improvement in Survey Items

Survey Item	Percent
Size/turnover of teaching/administrative staff	60
Availability of quality instructional materials	55
Students' behavior in school	49
Students' attendance patterns	49
Availability of variety in courses offered	48
School classroom atmosphere	48
Availability of teaching/learning facilities	46
Alignment of instructional materials and assessment	42
System to reward outstanding students	40
Performance in health and physical education	38
Availability of teachers for selected subjects	38
Use of time for instruction/student learning	38
Widespread understanding of instructional goals	38
Support and resources for effective teaching	37

*Respondents include: school board presidents, district superintendents, building principals, and classroom teachers. (N=156)

SOURCE: Jane H. Arends, compiler. Building on Excellence. Regional Priorities for the Improvement of Rural, Small Schools, April, 1987. Washington, DC.

Appendix L

Job Functions of Superintendents in the Mid-Atlantic Region

Job Functions Held by Superintendents in Rural Schools
1988-1989

Job Function	Delaware		Maryland		New Jersey		Pennsylvania		Total	
	No.	%*	No.	%*	No.	%*	No.	%*	No.	%*
Superintendents	8	4.1	7	3.6	101	51.5	80	40.8	196	100.0
Business/Purchasing	0	0.0	0	0.0	0	0.0	3	1.5	3	1.5
Teacher Personnel	2	1.0	2	1.0	5	2.6	22	11.2	31	15.8
Federal Programs	0	0.0	1	0.5	80	40.8	38	19.4	119	60.7
Chapter 1 (Title 1)	0	0.0	1	0.5	7	3.6	12	6.1	20	10.2
Chapter 2 (Block Grant)	0	0.0	1	0.5	7	3.6	14	7.1	22	11.2
Curriculum Instruction	1	0.5	0	0.0	3	1.5	27	13.8	31	15.8
Gifted Talented	0	0.0	0	0.0	1	0.5	8	4.1	9	4.6
Micro-Supv Dist	1	0.5	0	0.0	41	20.9	28	14.3	70	35.7
Special Education	0	0.0	0	0.0	2	1.0	7	3.6	9	4.6
Health/Drugs Aids Education	0	0.0	0	0.0	3	1.5	10	5.1	13	6.6
Affirmative Action	0	0.0	0	0.0	0	0.0	1	0.5	1	0.5
Inservice Training	1	0.5	0	0.0	0	0.0	3	1.5	4	2.0
Transportation	0	0.0	0	0.0	0	0.0	2	1.0	2	1.0
Building/Grounds	0	0.0	0	0.0	1	0.5	1	0.5	2	1.0
Adult/GEd Cont. Ed.	0	0.0	0	0.0	0	0.0	2	1.0	2	1.0
Bus/Dist Education	0	0.0	0	0.0	0	0.0	1	0.5	1	0.5
Home Ec./Cons. Ed.	0	0.0	0	0.0	1	0.5	1	0.5	2	1.0
Indus. Arts/Trade & Ind.	0	0.0	0	0.0	1	0.5	1	0.5	2	1.0
Vocational Education	0	0.0	0	0.0	0	0.0	2	1.0	2	1.0
Food Service	0	0.0	1	0.5	1	0.5	1	0.5	3	1.5
Reading K-12	0	0.0	0	0.0	2	1.0	1	0.5	3	1.5
Guidance Counselor	0	0.0	0	0.0	2	1.0	1	0.5	3	1.5
Testing-Academic	1	0.5	0	0.0	0	0.0	0	0.0	1	0.5
Library Services	0	0.0	0	0.0	3	1.5	0	0.0	3	1.5
Nurse/Health Services	0	0.0	0	0.0	2	1.0	0	0.0	2	1.0
Audio/Visual Services	0	0.0	0	0.0	3	1.5	0	0.0	3	1.5

*All percentages are percentages of the total number of superintendents in the region (196).

SOURCE: Quality Educational Data, Inc., Denver, Colorado.

Appendix M

National Organizations Providing Services to Educators

National Organizations Providing Services to Educators

The following is a list of national organizations that provide a variety of services to educators and educational institutions.

American Association for Adult and Continuing Education
American Association of Physics Teachers
American Association of School Administrators
American Association of Teachers of German
American Chemical Society, Education Division
American Council for Drug Education
American Educational Research Association
American Institutes for Research
American Political Science Association
Aspira Association, Inc.
Association for Supervision and Curriculum Development
Center for Research into Practice
Children's Defense Fund
Council for Basic Education
Council for Elementary Science International
Council of Chief State School Officers
Gallaudet University, Center for Assessment and Demographic Studies
Howard University, School of Education
The Institute for Educational Leadership
National Alliance of Black School Educators, Inc.
National Association of State Directors of Special Education
National Center on Child Abuse and Neglect
National Clearinghouse for Alcohol and Drug Information
National Committee for Citizens in Education
National Council for the Social Studies
National Institute for Work and Learning/Academy for Educational Development
Smithsonian Institution, Office of Elementary and Secondary Education

SOURCE: Donahoe, P. Directory of Regional Educational Resource Organizations in the Mid-Atlantic Region, 1989. Research for Better Schools under the auspices of the Office of Educational Research and Improvement (OERI), Department of Education, under contract number 400-86-0003.

Department of Education Initiatives

Most DOE programs are nationally comprehensive in their geographic or demographic coverage; however, some programs at DOE are directed specifically toward Rural America:

1. The Office of Special Education and Rehabilitation Services (OSERS) supports the Rehabilitation Research and Training Center on Rural Rehabilitation Services. OSERS's Handicapped American Indian Vocational Rehabilitation Service Program assists disabled Native Americans living on Federal or State reservations. OSERS's Handicapped Migratory Agricultural and Seasonal Farm Works Rehabilitation Program provides vocational rehabilitation services to rural workers and their families.

2. The Office of Education Research and Improvement (OERI) holds a series of forums to examine the needs of rural education, identify exemplary practices for rural children and publishes a guide of services.

3. The Office of Vocational and Adult Education (OVAE) supports the Indian Vocational Education Program that provides vocational training to federally recognized Native American Indians. OVAE's grants to the States to support their vocational education programs impact on rural communities where vocational programs are offered. The National Center for Research on Vocational Education, the Curriculum Coordination Centers, and several National Discretionary Programs contribute to the improvement of vocational education in America's small and rural communities. DOE estimates that more than 15 percent of the adults serviced by OVAE's programs reside in rural areas.

4. DOE supports two committees on rural education; the Intradepartmental Rural Education Committee responsible for developing a comprehensive program of rural education and the Federal Interagency Committee on Education's (FIC) Rural Education Subcommittee that works with 25 Federal agencies to identify activities related to rural education. The latter committee is designing a method for sharing information on rural education and is developing a rural education research and development agenda.

In addition to the above, the Office of Educational Research (OERI) funds major programs designed to bring current research and research-based educational improvement information to teachers, school administrators, researchers and others. These include:

1. Educational Resources Information Center System (ERIC).

2. Regional Educational Laboratories aid school and classroom improvement based on educational research by providing a range of knowledge dissemination and utilization, technical assistance, and professional development services to clients in their regions.

3. National Research Development Centers conduct long-term, targeted research on topics of national significance. Centers serve a variety of clientele, including researching, policymakers, and education practitioners. Centers are located throughout the country and typically focus on a particular topical area.

4. National Diffusion Network is a dissemination system designed to help educational institutions improve by enabling them to learn about and implement locally-developed programs, products, or processes that have proven effective.

SOURCE: Donahoe, P. Directory of Regional Educational Resource Organizations in the Mid-Atlantic Region, 1989. Research for Better Schools under the auspices of the Office of Educational Research and Improvement (OERI), Department of Education, under contract number 400-86-0003.