

SOUTH DAKOTA YOUTH AT-RISK

Prepared for

South Dakota Youth and Family Alliance
Department of Education and Cultural Affairs
700 Governor's Drive
Pierre, SD 57501

by

Community Research Associates
115 North Neil Street, Suite 302
Champaign, IL 61820
217/398-3120

May 1991

1-12-93
mfl
138738

U.S. Department of Justice
National Institute of Justice

This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated in this document are those of the authors and do not necessarily represent the official position or policies of the National Institute of Justice.

Permission to reproduce this copyrighted material has been granted by

South Dakota Youth and Family
Alliance

to the National Criminal Justice Reference Service (NCJRS).

Further reproduction outside of the NCJRS system requires permission of the copyright owner.

PREFACE

This report is intended to describe the status of youth at-risk in South Dakota, and strategies for providing services to those youths. It represents the latest task in a very active state and local initiative to identify and aid at-risk youth.

Under strong executive leadership, effective actions have been taken to increase public awareness of South Dakota's youth at-risk. Coalitions have been formed at the state and local level to promote collaborative planning, coordination, and service delivery. A major focus of state leadership has been to enhance local leadership and encourage local ownership of youth problems and solutions. Listed below is a chronology of activities which comprise the recent youth at-risk effort in South Dakota.

- 12/87** Governor sends staff (including one cabinet member) to the National Forum on Youth At-Risk in Washington, D.C.
- 1/88** Governor establishes the Youth At-Risk Interagency Work Group. The mission of this work group is: *To increase community awareness in South Dakota of its youth at-risk, and to facilitate development of local strategies which guarantee youth the opportunity to achieve personal, social, and economic self-sufficiency.*
- 9/88** Governor hosts the first Youth At-Risk Conference to increase public awareness of youth at-risk and encourage local coordination and collaboration in developing and implementing solutions to youth problems.
- 2/89** Governor names members to newly formed Interagency Coordinating Council.
- 1989** In Fall of 1989, Governor holds eight Family in Education forums across the state "to gather input from South Dakota citizens about our children and their future."
- 1989** At Centennial Summit held in the Fall of 1989, youth at-risk are identified as South Dakota's top education priority.
- 1990** South Dakota Legislature establishes within the state treasury the Youth At-Risk Education Trust Fund (\$7,854,446).
- 1990** Legislature approves a special appropriation to fund the centennial school improvement project; six pilot drop-out prevention projects; and, in partnership with the Private Industry Council, eleven alternative learning centers.

- 4/90 Governor's Conference on Youth At-Risk showcases model programs and innovative community planning strategies for youth at-risk. The conference focuses on three areas: youth employment, substance abuse, and drop outs.
- 7/90 On July 9-10, 1990, participants at the Education '90 Conference in Sioux Falls discuss the six national goals for education adopted by President Bush and the National Governor's Association and make recommendations on strategies for achieving these goals in South Dakota.
- 7/90 Interagency Agreement is established among the South Dakota Departments of Education and Cultural Affairs, Health, Human Services, and Social Services, as well as the Unified Judicial System, to create the Interagency Coordination Network. The Interagency Coordination Network provides a statewide system of coordinated, multi-disciplinary, interagency services for children with special needs or for children at-risk. An additional goal of this agreement is "to provide systems of services which fully coordinate the efforts and resources of all federal, state, and local, and private entities toward full capability of the state to provide quality early intervention services."
- 12/90 Youth at-Risk Interagency Work Group and Interagency Coordinating Network Council (ICNC) merge to form Youth and Family Alliance.
- 1991 Legislature establishes that the annual interest from the Youth At-Risk Trust Education Trust Fund (approximately \$510,000) would be transferred to the Department of Education and Cultural Affairs (DECA), and gave DECA spending authority.
- 1991 Legislature approves special appropriation to continue funding of eleven alternative learning programs for one more year (matching funds provided by the Private Industry Council under the Job Training Partnership Act).
- 3/91 With technical assistance from six regional interagency facilitators, local Interagency Coordination Networks are established in 29 South Dakota communities. The local networks provide a mechanism for planning and delivery of a comprehensive system of services including: (1) identification of children with special needs; (2) referral and transition services; (3) collaborative case management; (4) personnel development; (5) family support services; and (6) community programs and activities that promote the healthy development of children and youth.
- 4/91 Statewide needs assessment completed.
- 7/91 Grants awarded from the Youth At-Risk Trust fund to community-based projects that have demonstrated a commitment to collaboration in addressing the needs of at-risk youth.

SOUTH DAKOTA YOUTH AND FAMILY ALLIANCE**Vision Statement**

South Dakota youth and their families will have access to community-based opportunities to achieve personal, social, educational and economic potential.

Mission Statement

The mission of the Alliance is to provide leadership and management to empower state agencies, local agencies, communities, families and individuals to meet their unique needs.

Purposes

- ▶ Technical Assistance
- ▶ Planning and Coordination
- ▶ Information and Resource Sharing
- ▶ Advocacy

Members and Participating Agencies

| | |
|---------------------|---|
| Mary DeVany | Commerce and Regulation |
| Sandra Durick | Department of Health |
| Craig Eichstadt | Attorney General's Office |
| Di Knox | Division of Alcohol and Drug Abuse |
| Kevin McLain | Department of Corrections |
| Dean Myers | Special Education |
| Jay Newberger | Court Services, Unified Judicial System |
| Janet Ricketts | Homeless Education |
| Mike Ryan | Vocational Education |
| Lloyd Schipper | Department of Labor |
| Norma Schmidt | Department of Health |
| Sharon Sonnenschein | Department of Social Services |
| Gib Sudbeck | Division of Alcohol and Drug Abuse |
| Kelly Wheeler | Division of Mental Health |
| Steve Withorne | Indian Affairs |
| Christie Johnson | Coordinator, Department of Education |
| Bernice Hackett | Secretary, Department of Education |

YOUTH AT-RISK TRUST FUND**Legislative Intent**

To insure that all of South Dakota's young people are trained and ready to achieve economic self-sufficiency.

Legislative Strategy

To provide an ongoing measure of assistance and alternative methods for projects which will benefit present and future generations of youths most apt to fail in completing the essentials of learning.

Eligible Projects:

Allocations from the youth-at-risk education trust are to be made available as grants for local projects benefitting at-risk youth in the following areas:

- Early identification
- Early childhood projects
- Parental involvement projects
- Prevention awareness initiatives
- Substance abuse prevention
- Drop-out prevention (classroom environment emerged as most important determinant of competence)
- Career exploration and vocational education projects
- The centennial school improvement program*
- Alternative high school programs
- School-to-work transition projects
- Health and medical services programs (screening to detect hearing problems - N.A. children more prone to ear infections; correlates with instrumental competence)
- Mental health services
- Family-based services
- Institutional care
- Juvenile aftercare

**The centennial school improvement program was funded during Fiscal Year 1989-90 with a special appropriation, and is now completed.*

ACKNOWLEDGEMENTS

Because of the size and comprehensive nature of this study, the final report could not have been completed without the generous assistance of many people. The authors of this report would like to extend a note of sincere appreciation to all who were involved in the research and preparation of this report.

Specifically, we would like to thank the members of the Youth and Family Alliance. Their recommendations, help in locating data, review of draft reports, and more were keys to completing the effort.

There were also many persons within state agencies who immediately and enthusiastically responded to our requests for information. Although they are too numerous to name in this space, we would like to extend our sincere thanks for their willingness to immediately turn their attention to our inquiries.

A specific thanks to Donna Fjelsted for her guidance to the consultant team in the early stages of the study; to Bernice Hackett for her help with organization and coordination; and to Mary Fortune and Shannon Hayes for their long hours spent in production.

Finally, we would like to express a special note of thanks to the Youth At-Risk Coordinator, Christie Johnson, for her help and inspiration during the entire course of the project.

CONTENTS

| | |
|--|------|
| PREFACE | i |
| South Dakota Youth and Family Alliance | iii |
| Youth At-Risk Trust Fund | iv |
| ACKNOWLEDGEMENTS | v |
| CONTENTS | vi |
| List of Tables | viii |
| EXECUTIVE SUMMARY | ix |
| INTRODUCTION AND REPORT OVERVIEW | 1 |
| Defining "Youth At-Risk" | 1 |
| Factors That Contribute to Risk | 2 |
| STUDY METHODOLOGY | 5 |
| Approaches to Needs Assessment | 5 |
| Strategy Selected and Rational | 5 |
| Social Indicators | 6 |
| Other Sources of Information on Youth At-Risk | 7 |
| Collection and Analysis of Social Indicators | 8 |
| Limitations of Current Needs Study | 9 |
| FINDINGS: YOUTH AT-RISK IN SOUTH DAKOTA | 10 |
| (1) Economically Disadvantaged Children and Youth | 11 |
| (2) Family Stress | 16 |
| (3) Hardships Associated with Minority Status | 18 |
| (4) Educationally Disadvantaged Children and Youth | 20 |
| (5) Alcohol and Drug Abuse | 24 |
| (6) Health Care Deficiencies | 27 |
| (7) Juvenile Delinquency | 30 |
| (8) Mental Health | 32 |
| (9) Teen Pregnancy | 35 |

| | |
|---|----|
| RISK INDICATORS | 37 |
| Introduction | 37 |
| Correlations Between Social Indicators | 38 |
| Presentation of Risk Indicators | 40 |
| (1) Economically Disadvantaged Children and Youth | 40 |
| (2) Family Stress | 44 |
| (3) Hardships Associated with Minority Status | 46 |
| (4) Educationally Disadvantaged Children and Youth | 47 |
| (5) Alcohol and Drug Abuse | 48 |
| (6) Health Care Deficiencies | 50 |
| (7) Juvenile Delinquency | 51 |
| (8) Mental Health | 53 |
| Composite Index | 55 |
| Summary | 56 |
| RECOMMENDATIONS | 58 |
| I. State Priorities | 58 |
| II. Benchmarks | 62 |
| III. Planning and Coordination | 63 |
| IV. Information on Children and Families | 65 |
| V. Program Evaluation | 66 |
| VI. Key Predictors and Risk Factor Strategies | 68 |
| VII. Minority Status Strategies | 69 |
| VIII. Prevention and Early Intervention | 70 |
| IX. Funding Strategies | 71 |
| X. Other Promising Practices | 74 |
| BIBLIOGRAPHY | 77 |
| APPENDICES | |
| (A) Risk Indicator Correlation Matrix | |
| (B) Presentation of Risk Indicators | |
| (C) Maps Displaying Distribution of Risk Data | |
| (D) Composite Risk Index Examples | |
| (E) South Dakota Population Distribution | |
| (F) Drug Use Among High School Students | |
| (G) Nationally Comparable Measures of Adolescent and Child Well-Being | |
| (H) School Completion Data | |
| (I) Risk Factors for Delinquency and Drug Abuse | |
| (J) Special Education Student Profile (Handicapping Condition) | |

LIST OF TABLES

| | | |
|-------------|------------|---|
| APPENDIX A: | Table A1: | Risk Indicator Correlation Matrix |
| APPENDIX B: | Table B1: | Food Stamp Usage By Children Per 1000, 1990 |
| | Table B2: | Per Capita Personal Income, 1989 |
| | Table B3: | Average Unemployment Rate, 1989 |
| | Table B4: | Aid to Dependent Children Distributions, FY 1989 |
| | Table B5: | Child Abuse and Neglect Statistics, FY 88 & 89 |
| | Table B6: | Foster Care and Group/Residential Care, Average Monthly Caseloads by District, FY 1989 |
| | Table B7: | Divorces, 1989 |
| | Table B8: | Distribution of Native American Population, 1990 |
| | Table B9: | Educationally Disadvantaged Youth, Chapter 1 Data, 1990 |
| | Table B10: | Drug Related Arrests Leading to Prosecution, FY 1989 |
| | Table B11: | Alcohol and Drug Treatment Clients Per 1,000 Residents, 1989 |
| | Table B12: | Low Birth Weight Babies, 1989 |
| | Table B13: | Infant Deaths Per 1,000 Births, 1989 |
| | Table B14: | Commitments to Department of Corrections, FY 1989 |
| | Table B15: | Delinquency Petitions Filed Per 1,000 Youth At-Risk, FY 1989 |
| | Table B16: | Children Receiving Mental Health Services, FY 1989 |
| APPENDIX D: | Table D1: | Composite Health Care Index Example |
| | Table D2: | Composite At-Risk Index Rating |
| APPENDIX E: | Table E1: | Distribution of Juvenile Population, 1990 |
| | Table E2: | Comparative Population Profile: U.S. and South Dakota |
| APPENDIX F: | Table F1: | Percentage of South Dakota High School Seniors, At-Risk of Drug and Alcohol Use, 1989-90, By Level of Risk and Region |
| | Chart F1: | Percent of South Dakota High School Seniors At-Risk from Substance Abuse By Region |
| | Chart F2: | Percentage of South Dakota High School Seniors At-Risk from Substance Abuse |
| APPENDIX G: | Table G1: | Nationally Comparable Measures of Adolescent and Child Well-Being |
| APPENDIX H: | Table H1: | School Completion Data |
| | Table H2: | Enrollment in Education Program by Ethnicity: 1989 |
| APPENDIX J: | Table J1: | 1989-90 Total Enrollment and 1989-90 Special Education Enrollment |

SOUTH DAKOTA YOUTH AT-RISK EXECUTIVE SUMMARY

In the fall of 1990, the State of South Dakota initiated a research project to identify the numbers and types of state youths who are at-risk of failing to become economically and socially self sufficient citizens.

During the course of the study, the South Dakota Youth and Family Alliance formed to provide leadership and management to empower state agencies, local agencies, communities, families, and individuals to meet their unique needs. The Alliance is now prepared to fund locally developed programs targeted at reducing the likelihood of economic and social failure can be funded by July 1. This report will be used as a resource to assist in funding and program development.

To determine the prevalence of risk producing factors in South Dakota, a consultant team was contracted to collect social indicator data and review reports and studies with the ultimate goal of identifying those conditions in greatest need of attention in the months and years ahead.

The investigation revealed that three inter-related factors combine to present the most serious obstacles to the self-sufficiency and well-being of current and future generations of South Dakota youth. Those factors are summarized here.

- *Economically Disadvantaged Youth and Children.* South Dakota children living in poverty, especially very young children who live in poverty households, are at the greatest risk of failure.
- *Family Stress.* Changes in family systems and economic stresses appear to have reduced the ability of many families to provide the foundation and support children need to achieve their personal, social, and economic potential. Sharp increases in child abuse, divorce, births to teen and/or unmarried mothers, and foster care placements indicate that increasing numbers of South Dakota children are at-risk.
- *Hardships Associated with Minority Status.* Jurisdictions with the highest percent of Native Americans are disproportionately represented on virtually every indicator of risk. One of the most critical needs in South Dakota is to increase the academic achievement and graduation rates of Native American youth. This need cannot be met without addressing other risk factors, including the effects of economic disadvantage and dependency, alcoholism, as well as the negative impact of dysfunctional families and communities.

The data and research also indicate that up to six other factors can combine to limit a youths potential for success. The more the factors are present, the greater the likelihood that the youth will face serious economic or social perils in the future. Those factors include:

- Educational disadvantages, handicaps, and/or failure;
- Alcohol and drug abuse;
- Health care deficiencies and associated problems;
- Juvenile delinquency;
- Mental health problems; and
- Teen pregnancy.

To reduce the likelihood that today's youths will become tomorrow's failures, efforts must be made to eradicate the problems presented above.

Some of the more significant recommendations are summarized here by type.

STATE PRIORITIES

- Because of the diverse range of needs, it is recommended that planners and policy makers prioritize resource allocation among the groups most in need. Those groups include:
 - Communities and schools with a high "index of need;"
 - Low income children and their families;
 - Educationally disadvantaged children;
 - Children with special needs and their families;
 - At-risk Native American youth;
 - Non-college bound youth, especially drop-outs, and potential drop-outs; and
 - Teen parents, and children of teen parents.
- To attain goals, an approach which relies on the state for resource development, financial aid, and technical assistance and communities for planning, problem prioritization, and implementation is advocated. That approach would include: addressing the needs of the whole child through interagency coordination and planning; strengthening the capacity of the local community by reaching out to families, schools, and children; integrating social and economic perspectives on youth development and using a variety of age appropriate interventions to support critical needs.
- The following service areas should be considered for prioritization:
 - Prevention and early intervention;
 - Culturally sensitive and responsive services, curriculum, and teaching strategies;
 - Alcohol and substance abuse prevention and treatment;
 - Intensive home based services;
 - Transitional services which support and maintain gains achieved during treatment and which reconnect youth with their families; and
 - Community based alternatives to detention and incarceration.

BENCHMARKS

- Use baseline data as benchmarks to measure adequate state progress in changing the conditions that hinder the development of children.

PLANNING AND COORDINATION

- The state should promote interagency cooperation and collaboration to assist local networking initiatives.
- Continue support of the interagency case management model developed by Child and Adolescent Service System Program, a system which now encompasses all children whose service needs cross agency boundaries.
- Reward broad-based local planning and coordination efforts through funding criteria that places a high priority on collaboration and community/parent involvement.

INFORMATION ON CHILDREN AND FAMILIES

- Improve the availability, accuracy, and use of state and local information on children and families.
- Encourage local school districts and communities to maintain accurate information on indicators for youths.
- Provide technical assistance to schools and communities in developing and interpreting data on youth at-risk.

PROGRAM EVALUATION

- Develop an evaluation system for monitoring and evaluating projects funded by the youth at-risk trust fund that involves local planners, decision-makers, and service providing as partners in all evaluation efforts undertaken.

KEY PREDICTOR AND RISK FACTORS STRATEGIES

- Utilize social indicators for prioritizing services and selecting projects for funding.
- Measure progress toward state goals by evaluating changes in social indicators associated with risk.

MINORITY STATUS STRATEGIES

- Increase the availability of culturally sensitive and appropriate services that help communities and youth develop respect for cultural diversity.
- Eliminate the gap in high school graduation rates between South Dakota students from Native American backgrounds and their non-minority counterparts.

PREVENTION AND EARLY INTERVENTION

- To the extent possible, focus program dollars on prevention and early intervention programs.

FUNDING STRATEGIES

- Adopt a funding strategy which focuses on overall need--i.e., utilizes a need index--to prioritize communities with greatest need.
- Select priority areas which have direct impact on goals identified in the plan.
- Examine ways to increase the leverage of youth at-risk Trust Funds by using strategies aimed at statewide or systemwide improvements.

OTHER PROMISING PRACTICES

- South Dakota should aggressively pursue federal community service funds.
- Strong consideration should be given to funding peer resource programs.

INTRODUCTION AND REPORT OVERVIEW

DEFINING "YOUTH AT-RISK"

What does being "at-risk" mean? It depends on who is defining the term and what he or she feels a youth is at-risk of becoming. Ask researchers, parents, teachers, or others and they would all describe "at-risk" differently. It becomes apparent, therefore, that some type of common definition of the term is necessary, at least as it applies to South Dakota's Youth At-Risk Initiative.

To begin, "at-risk" is an indefinite term that has been used by various disciplines to describe: all children under 21; potential high school drop-outs; economically disadvantaged children; and young people in danger of becoming associated with a number of different youth problems; including substance abuse, teen pregnancy, delinquency, child abuse, and dependency on the welfare system.

The legislation establishing the South Dakota Youth At-Risk Education Trust Fund suggests that "at-risk" could include children in all of these groups, with the exception of the first all-inclusive category. The legislative intent is to ensure that all of South Dakota's *young people are trained and ready to achieve economic and social self-sufficiency*. It further states that the purpose of the youth-at-risk trust fund is to benefit *present and future generations of youths most apt to fail* (emphasis added) *in completing the essentials of learning* (SL 1990, ch 190, Section 13-14-7).

For the purposes of this study, therefore, the term "youth at-risk" is used to characterize those children and youth who, for whatever reason or combination of reasons, are unlikely to become economically and socially self-sufficient citizens. This definition includes not only children and youth who are unlikely to graduate from high school, but also young people who are likely to leave school without adequate life skills to achieve economic and social self-sufficiency.

In order to identify the needs of youth at-risk in South Dakota, this study examined those problems and conditions which research has shown to be most likely to support or hinder the development and potential of children from birth to age 21.

FACTORS THAT CONTRIBUTE TO RISK

Before a South Dakota specific review of risk behavior and factors can occur, it is important to understand general risk theory. The following is presented to provide the reader with a very brief overview of the factors which have been identified as contributing to risk.

Youth problems are the result of complex cultural, individual, social, economic, and environmental factors. Researchers and practitioners in the fields of juvenile delinquency, substance abuse, mental health, and education have identified a multitude of indicators or predictors of problem behaviors. Although there is some variation in the indicators for each of these areas, the similarities are more notable than the differences. These factors are frequently interwoven, and the exact cause and effect relationship is often unclear. However, Davis and McCaul of the Institute for the Study of At-Risk Students (1989, p. 34) believe there is general consensus among researchers and policy-makers that three broad societal forces place youth at-risk. These are:

- ▶ Poverty
- ▶ The changing make-up of the American family, such as the increase of single parent and dual working parent families
- ▶ Hardships related to minority status

Concern regarding these social forces have been in the forefront of recent reports on the status of children in the United States. Minority youth, in far too many cases, are negatively affected by all three of these forces. For example, non-white children are more apt to be living in a single parent household, with an unmarried teenage mother who is on welfare.

In addition to the societal forces, Davis and McCaul divide the numerous risk factors that are associated with youth problems into two additional categories: school environment factors and

individual characteristics. Conditions related to all three of these areas can be operating simultaneously and inter-actively.

Risk factors which researchers (e.g., Hawkins and Weiss, Jenson, Catalana, Lishner, 1988) have found to be significantly associated with delinquency and drug abuse are listed in Appendix I. The factors below are common to all areas of youth problems and therefore are most likely to increase the probability that a child will face an uncertain future as a family member, citizen, and productive employee:

- Living in a poverty household
- Minority/racial group identity
- Living in a single parent family (especially an unmarried teen mother)
- Poor family management practices/lack of parenting skills
- Educational deficiencies
- Handicapping condition
- Family alcohol or drug use and/or family history of criminality
- Early antisocial behavior
- Early experimentation with drugs
- High mobility (frequent changes in residence and school)
- Community disorganization and/or high level of transiency

Children who are at-risk based on several of these factors are at the greatest risk of not making a successful transition to adulthood. These young people are least likely to acquire the necessary social and employment skills to become productive citizens. They are likely to require continued social and/or correctional services during their entire lifetime. Their children, in turn, will be the future generation of youth at-risk.

Davis and McCaul (1990) have done extensive research on at-risk youth and suggest that a convenient framework for viewing the multitude of factors that contribute to a young person being at-risk of school failure can be lumped into three broad categories.

First of all there are societal factors. Examples found by the authors to correlate with being at-risk include the following.

- Minority racial/ethnic group identity
- Non-English or limited-English language background
- Poverty
- Negative family/home conditions (child abuse/neglect; alcoholism, educational level of parents, single parent family, dysfunctional family, homeless)

There are also school environmental factors, examples of which are included here.

- Inappropriate or ineffective curriculum, teaching strategies, and/or educational standards
- Lack of basic support services (e.g., counseling, health services, referral, special instruction)
- Low teacher expectations for student performance
- School climate not conducive to positive development
- Lack of sensitivity to diversity

And finally, there are individual youth characteristics. These correlates may be directly or indirectly related to family, school, and community. Examples include the following.

- Low self-esteem, motivation, aspirations, self-discipline, self-control, aggressiveness, depression
- Chemical abuse
- Dangerous sexual practices
- Peer pressure/rejection
- Handicapped (cognitive, learning, emotional, physical, sensory deficits)
- Incompatible value system
- Excessive work

To determine which youths or type of youths are most at-risk of certain failed behaviors (e.g., school failure), researchers identify characteristics or indicators which serve to measure the extent to which risk factors are present in a community. The indicators are databased proxy representations of the risk factors.

For example, it is known that poverty places youth at increased risk of school failure. Although it is not possible to "measure" poverty, it is possible to define it using an indicator such as "percent of children living below the poverty level" or "percent eligible for the free lunch program." These indicators can then be used to determine the extent to which poverty exists within a community and to compare between communities.

Despite the plethora of work on risk factors and indicators which have been conducted nationally, it is still not known to what extent these factors exist within South Dakota, especially at the community level. For that reason, this report is being issued. It examines the scope and extent of risk factors in South Dakota and other issues involving youth at-risk. The implications of risk factors for the development of a broad youth at-risk strategy is discussed and actions for implementing that strategy are recommended.

STUDY METHODOLOGY

APPROACHES TO NEEDS ASSESSMENT

There are several methods that can be used to identify needs, but most approaches fall into two broad categories: (1) those which involve the use of primary data collection, such as opinion surveys, surveys of key informants, organized public meetings, surveys of service recipients, and brainstorming; and (2) those which use secondary data, including social indicators, service statistics, resource inventories, and needs data identified by other planning systems. Each method has its strengths and weaknesses, and most needs assessments use a combination of approaches. The approach or combination of approaches that is selected must be based on the particular situation, and take into consideration the nature of the total effort.

STRATEGY SELECTED AND RATIONALE

The approach selected for this study includes the use of "social indicators," combined with information from other secondary data sources. Several factors influenced the strategy selected.

First, the array of youth needs, and the factors that place youth at-risk are numerous, and had not been clearly defined. South Dakota, like most other states, does not have a clear picture of who are its "youth at-risk." A first step, then, was to identify the range of conditions and problems that hinder the positive development of children and youth, and to get a general overview of their occurrence in South Dakota before examining a single needs area in more detail.

Second, numerous studies and surveys related to youth at-risk in South Dakota have been completed or are in progress. An objective of the current project was to inventory and utilize, rather than duplicate, these studies.

Third, a strategy for identifying needs that provides information on youth needs geographically, and which can be updated relatively easily and at low cost were important considerations. A major intent was to provide an initial data base which could be expanded and built upon, both at the state and local level, depending upon the specific needs of a particular planning or service delivery effort, without duplicating other data collection efforts.

SOCIAL INDICATORS

Social indicators are aggregate statistics on social conditions, (e.g., the number of low birth weight babies, children living in poverty, school drop-outs; victims of child abuse, etc.) that "indicate" the magnitude of a problem or of conditions associated with a particular problem or need.

Chief advantages of using social indicators are the relatively easy access to and availability of data, the relatively low cost of obtaining the data, and its built-in design flexibility. For example, social indicator data can be used to examine the needs of an individual community, to compare a community's needs with those of other communities in the state, or to compare the needs of South Dakota with those of other states in the same region or nationally. Social indicator data can also be used to establish benchmarks, or baselines, so that changes can be assessed over time. Benchmarks can also be used to establish goals for future time periods. Finally, data from several different sources can be used to develop an "index of need." An index of need has been identified as the preferred method of allocating funds for at-risk youth (see Arizona State University, "Project Fair," 1990).

The use of social indicators in needs assessment can range from the use of a few indicators to more complex designs that employ "constructs" created by combining a number of indicators of the same need, and designs that use complex statistical techniques such as factor and multiple regression analysis. The social indicators developed for this study will need to be refined over time.

OTHER SOURCES OF INFORMATION ON YOUTH AT-RISK

A major disadvantage of the social indicator approach is that it does not provide detailed information regarding specific needs. A second disadvantage is that data sets for many important indicators of youth needs are aggregated by different types of geographical units, and therefore cannot be combined in a single index. A third problem is that data for important indicators may not be current, readily available, reliable, or in the public domain. These problems were partially addressed by utilizing data and information from other needs studies, and in some cases by examining a particular youth need from a statewide perspective only.

Several major surveys, evaluations, and other studies have been undertaken during the past year that provide information on youth at-risk in South Dakota. These studies provide in-depth information regarding one or more youth problems, related risk factors, resources, and/or unmet needs. For example, results of the "1989-90 Youth Risk Behavior Survey," provide excellent information on youth behaviors that are critical to the present and future health and safety of young people in South Dakota. This survey, which was developed by the Center for Disease Control, is being conducted annually in South Dakota and other states, and will be used to measure progress in achieving nationally established health goals.

A survey of drug and alcohol use among South Dakota high school seniors (RMBSI, Inc., 1990) sponsored by the Division of Alcohol and Drug Abuse and the Department of Education and Cultural Affairs provides detailed information on South Dakota youth at-risk from substance abuse. Examples of other studies which provide needs data include: a survey of child care needs (Branum, South Dakota State University, 1990); a study of the prevalence of emotional disturbance among young school children (Beiser, 1990); a survey of citizen and law enforcement attitudes toward drug use and crime (Attorney General's Task Force on Drugs and Crime, 1990); a juvenile justice system study conducted for the Department of Corrections (Community Research Associates, 1990); as well as others. Additional studies are in progress, including several resource inventories.

Also, hundreds of reports on youth at-risk have been published by other state and national organizations. Finally, annual state statistical reports provide a wealth of information regarding the characteristics of children receiving state services, and the services provided. Some also contain information regarding the cost of providing those services, as well as federal, state, and local levels of funding.

Studies and other data sets identified during the course of the project are listed in the "Topical Bibliography of Youth At-Risk" located in the appendix to this report. Reports and other publications are listed in the topical bibliography under the primary problem area addressed. Local planners are encouraged to consult these reports for more detailed information related to specific youth needs.

Data from these secondary sources are incorporated in the findings.

COLLECTION AND ANALYSIS OF SOCIAL INDICATORS

The collection and analysis of social indicators involved the following steps:

- (1) Identification of problem and needs areas to be included in the study.
- (2) Identification of potential social indicators and their sources.
- (3) Assessment of the extent to which reliable, broadly representative social indicator data currently exists for potential indicators, and whether data is available for local geographical units (or on a statewide basis only), as well as the likelihood that reliable data will be available on a regular basis in the future. This involved:
 - (a) Interviews with State Human Service agency representatives regarding the availability and reliability of data.
 - (b) Collection and examination of available aggregate data.
- (4) Identification of a relatively small set of variables which are either direct measures of aggregate levels of youth at-risk, or which reflect social conditions that are linked to youth problems.
- (5) Construction of example individual and composite indexes of need for selected geographical areas (county, or school district, depending on availability).

After reviewing a large number of potential measures, variables were selected which were determined to be the most relevant to studying youth needs, and for which data were readily available.

The outcome of this process was a set of variables that provide a diverse, yet comprehensive set of indicators which, when combined with population data, yield an aggregate indication of the relative need for a particular geographic area.

For complete information on the social indicators used in this study, including definitions, sources, county rankings, and analysis, see the section, "Risk Indicators."

LIMITATIONS OF CURRENT NEEDS STUDY

A statewide needs assessment, even one that includes comparative data for local communities, is only the first step in the process of identifying and addressing youth needs. All data is subject to interpretation. Those most familiar with a particular problem (often people in the community) are in the best position to interpret what the data really mean. For example, a high incarceration rate may be a true indicator of a high crime rate, or it may simply reflect a lack of local resources, judicial policy, or some other phenomena. There are also many conditions and factors that contribute to a particular problem or need, and these vary from one community to another. These conditions, as well as a comprehensive assessment of the availability, adequacy, and quality of local resources, must be determined and prioritized at the local level.

FINDINGS: YOUTH AT-RISK IN SOUTH DAKOTA

"If the health and the educational and social development of America's children are not nurtured, they will not be able to assume a productive role in the future work force. Ultimately, it will affect the nation's ability to be economically competitive in the global marketplace. Society cannot continue to ignore the ravages brought upon children, especially minority children, by infant mortality and morbidity, inadequate child care and preschool education, teenage pregnancy, school failure, substance abuse, youth unemployment, welfare dependency, and poverty" –National Governor's Association, America in Transition, 1990, p. 18.

This section highlights key findings from the South Dakota Youth Needs Study. Critical statewide and regional factors contributing to youth at-risk, as well as some of the more pressing problems and unmet needs are reported. An understanding of these conditions and problems is considered particularly relevant to developing state strategies with real potential for brightening the future of South Dakota's at-risk children and their families.

An examination of social indicators, data from other sources, and existing research combine to indicate that the most significant indicators of youth at-risk in South Dakota are:

- Economic disadvantages,
- Problems related to family instability and stress, and
- Hardships associated with minority status.

These factors, which are frequently inter-related, also appear to present the most serious obstacles to the self-sufficiency and well-being of current and future generations of South Dakota's youth. Youth who experience more than one of these conditions are at greatest risk, and are especially likely to encounter a number of related conditions and problems that reduce their opportunities for success. These include:

- Educational disadvantages, handicaps, and/or failure;
- Alcohol and drug abuse;
- Health care deficiencies and associated problems;
- Juvenile delinquency;
- Mental health problems; and
- Teen pregnancy.

These findings are consistent with national trends, but the specific form they take in South Dakota is unique to the state's population, geography, and socio-economic climate.

Standardized "needs indicators" for each of the problems listed above were calculated for each South Dakota county, with the exception of (2) hardships associated with minority status and (9) teen pregnancy. The identification of "hardships associated with minority status" as a critical risk factor was derived from the association between the percent of a county's population that is Native American and other risk variables. Data on the number of teen pregnancies which occur in each county is not released; therefore a county level needs indicator could not be calculated.

Sample composite indicators using selected variables also were computed. County rankings on each social indicator, as well as a more detailed discussion of findings, limitations, and gaps in social indicator data for each problem area can be found in the section, "Risk Indicators."

The following is a summary and discussion of findings related to each of the problem areas listed above based on the analysis of social indicators and other data sources.

(1) ECONOMICALLY DISADVANTAGED CHILDREN AND YOUTH

- ▶ **South Dakota children living in poverty, especially very young children who live in poverty households, are at the greatest risk.**

"Poverty" is the inability to meet basic necessities in terms of food, shelter, and clothing (U.S. Department of Health, Education, and Welfare). Some children growing up in poverty excel academically and personally and later become socially and economically self-sufficient adults. Nevertheless, there is overwhelming evidence that children living in poverty households are more likely to drop out of school, to be abused, to have preventable health, physical, and emotional problems, to become dependent on alcohol and other drugs, and to engage in delinquent behavior.¹

¹For further information on children and poverty, see Schorr (1988), Davis and McCaul (1989 and 1990), and National Governor's Association (1989) in the topical bibliography.

The effects of a deficient diet in the early years on physical growth and brain development, lack of adequate supervision to insure physical safety, increased likelihood of physical abuse, inadequate health care, lack of adequate intellectual stimulation, and exposure to the family turmoil that often accompanies or causes poverty, all place children, especially very young children, living in poverty households at greater risk of conditions that can impede or permanently impair their development (Davis and McCaul, 1991:36; Zill, et. al, 1989:7).

Social Indicators

Counties were ranked on four indicators of economic disadvantage and the correlations of these indicators with other indicators of need were examined. County-level economic variables included in this study are: (1) per capita income; (2) number of children living in families receiving food stamps; (3) number of families receiving Aid to Dependent Children (ADC); and (4) unemployment rates.

South Dakota counties which rank highest on indicators of poverty also have the highest rates of infant mortality, low birth weight babies, adjudicated delinquents, and adult alcohol and drug related arrests (See Table A1--Appendix A, "Correlation of Selected Variables"). There are also significant associations between poverty indicators and ethnicity and population size.² The percent of the population that is Native American is negatively associated with per capita income, and positively correlated with the percentages of children living in families receiving foodstamps, the number of ADC families; and unemployment rates. Per capita income is negatively correlated with population. In other words, less populated counties tend to have lower average per capita incomes than more densely populated counties. This correlation, while statistically significant, was weaker than many others ($r = 0.29$). In addition, at the school district level, the number of children living in low income households as a percentage of total

²A more in-depth presentation of correlations can be found in the section entitled "Risk Indicators" and in Appendix A.

enrollment was also examined. School districts which reported higher percentages of low income children, also tended to report higher percentages of educationally disadvantaged students (see Table B9, "South Dakota Chapter I Selected Data: FY 1991").

Census data is an extremely important source for indicators known to be associated with children in poverty, including number of children living in a single parent household; number of children living in overcrowded housing; level of educational attainment, and so on. At the time of this study, 1990 Census results for these factors were not yet available, and the 1980 Census data by county was considered too unreliable for inclusion.

Other Data

Many significant indicators of poverty and associated risk factors are not currently aggregated at the county level. However, statewide data, as well as other studies and research reports provide information that help define how many children in South Dakota are at-risk due to conditions associated with poverty.

- 1985-89 Census estimates indicate that approximately 40,000 South Dakota children, or 20 percent, are poor. An estimated thirty percent (19,200) of South Dakota children under the age of 5 are poor (numbers and percentage based on 1985-89 Census data).
- Thirty-two percent of South Dakota's school children live in families which meet the low income criteria to receive Federal funds (known as Chapter 1) to support education for educationally disadvantaged children.³
- One in every five South Dakota adolescents lives in a family whose income is below the U.S. poverty threshold. Nationally 16 percent of all teenagers are poor. In "Adolescent Life Chances" (South Dakota State University Census Data Center, June 1990), VanDenBerg and Arwood note that poverty is a critical factor in determining whether adolescents will have fulfilling and successful futures: "The lack of money rules out a college 'life chance.' It also lowers both parental and teen-age attitudes and aspirations toward education and work." According to this article, which used 1980 Census data, 48.3 percent of Native American teens live in poverty, compared to 13.5 percent of white youth; children in families headed by a female (regardless of ethnicity), are more likely to be living in poverty (36.4 percent)

³Data on Chapter 1 funding is from statistics provided by the Department of Education and Cultural Affairs.

than children from two-parent families; and three times more rural adolescents live in poverty (23.8 percent) than do urban youths (6.9 percent).

- The 1990 estimated median income for a four person family in South Dakota was \$29,142--the fourth lowest median income in the nation. Per capita income data by county, however, indicates that there are extreme variations in income among counties, from a high of \$15,285 in Minnehaha County to a low of \$4,625 in Shannon County (see Table B2, "Per Capita Personal Income).
- Zill, Krysan, Stief, and Peterson in Young Children in Poverty in the United States (1989) found that certain demographic groups of children are over-represented among the nation's young children in poverty. For example, they found that nearly half are children of high school drop-outs, compared to 20 percent of all children under six; almost half are children of teenaged mothers (only 25 percent of all children were born to teen mothers); and the majority are children of ethnic minorities. They also documented that poor school-age children are nearly twice as likely to have chronic health limitations than are non-poor children.

Unmet Needs

- **The lack of adequate economic, health, education and human service support for children living in poverty households is a major barrier to breaking the cycle of poverty and its long-term effects on present and future generations of South Dakota children.**

Economic and educational disadvantage are highly inter-related. More young adults and their children are growing up in poverty or near poverty level conditions. Unless fundamental socio-economic conditions are addressed, there will continue to be increasing numbers of children who enter kindergarten and first grade developmentally unprepared to learn the basic skills that are the building blocks for later academic success.

Federal aid to the state in virtually every area that affects the welfare of children has been significantly reduced since 1982. Millions of federal dollars for the educationally deprived, health

services, Medicaid, social services, mental health, AFDC and child support, Food Stamps, job training, and housing have been cut.⁴

State and local resources are also limited. For example, only 20.6 percent of those who were unemployed received unemployment insurance in 1988, the 11th lowest percentage in the nation. Children living in families headed by a person who has been unemployed for months, and perhaps years, are likely to experience a combination of deprivation and despair that allows little hope for a brighter future.

The socio-economic and cultural forces which contribute to the increasing numbers of children living in poverty are complex and influenced by factors at the national, state, and local level. Economic development and federal and state policies that reduce the number of families living below the poverty level are probably the most important strategies. However, both state and local resources are limited, and despite broad public recognition and bipartisan support for increased financial aid for early childhood health and education programs, the national budget deficit and the cost of the Persian Gulf War make it unlikely that there will be significant increases in Federal spending for social programs.

The recommendations section of this report, therefore, focuses as much on the most effective use of existing resources (including both people and financial resources), as on increases in spending. Research suggests, for example, that viable strategies that focus on strengthening the capacity of communities, families, and children to break the cycle of disadvantage are effective, and provide the best hope for the future.

South Dakota has already taken a number of significant steps in this direction, both in terms of improving the efficiency of the service delivery system, and in terms of maximizing the use of federal/state funds. Community-based coordination and case management are examples

⁴See "The South Dakota Priority," published by the Children's Defense Fund, Fall 1990. This document reports data on significant indicators of child well-being as well as cumulative changes in Federal funding between 1982 and 1988.

of recent changes in the service delivery system which promise to improve the quality and cost-effectiveness of services. Joint funding of projects is another strategy that can help fill gaps in services, such as the Federal and state funding of alternative schools.

Two new federal programs will provide services to children and/or their families which promote economic independence and skill development. The recently passed Child Care Bill will provide support for improving the quality and availability of child care. The Community Services Act will award grants to states, and in some cases, to private agencies, on a competitive basis. The Act will fund community service, work experience, and youth corps projects.

(2) **FAMILY STRESS**

- ▶ **Changes in family systems and economic stresses appear to have reduced the ability of many families to provide the foundation and support children need to achieve their personal, social, and economic potential. Sharp increases in child abuse, divorce, births to teen and/or unmarried mothers, and foster care placements indicate that increasing numbers of South Dakota children are at-risk.**

The family has primary responsibility for the nurturance, health, and well-being of children. Changing economic and social forces, however, are making it difficult for increasing numbers of families to meet this responsibility. The changing configuration of the American family, the increased number of families where both parents are working, and growing numbers of the working poor and homeless are some of the key trends that are of most concern to national, state, and local policy-makers. These changes directly impact the ability of families to provide the care, support, and direction essential for healthy child development.

The result can be seen in higher divorce, child abuse, teen pregnancy, juvenile incarceration, substance abuse, school drop-out, and youth unemployment rates. But perhaps the most disturbing indicator is the dramatic increase in all forms of correctional supervision, including prison, probation, and parole (Austin, 1990).

Social Indicators

Data on three social indicators of family problems were examined: (1) Substantiated cases of child abuse and neglect (2) average number of children in an out-of-home placement each month; and (3) divorce rates. Currently only data on marital terminations are aggregated by county. Child abuse/neglect data are available by social service area, and out-of-home placements are available by social service area, circuit and tribal area. It is anticipated, however, that Fiscal Year 1990 data will be available by county for all three indicators. At that time a composite indicator of family instability using these three measures could be constructed. In the meantime, this data is still useful for local planning efforts.

South Dakota communities with high divorce rates also showed lower average per capita incomes, higher rates of drug related arrests, more delinquency petitions filed, more families on welfare, and larger Native American populations.

Other Data

The Child Protective Services annual statistical reports provide data on child abuse and out-of-home care by ethnicity, age, type of abuse, and type of out-of-home placement. It is anticipated that all of these data can be aggregated by county in the future.

- The rate of substantiated cases of child abuse and neglect in South Dakota has increased from 2,609 in 1980 to 4,317 in 1989, an increase of 65.5 percent. The number of substantiated reports, however, actually reached its peak in 1986, and has declined slightly during each of the past three years.
- An examination of child abuse and neglect data by type of abuse and by ethnic group reveals that more than half of the substantiated cases of abuse and neglect are Native American children, and that there are nearly two neglected Native American children for every one neglected white child. More white children, on the other hand, are victims of physical and sexual abuse. Substance abuse and the prevalence of unemployed, single-parent families have been noted as major contributing factors to neglect among Native American children.
- Native American children are also vastly over-represented in the foster care caseload. Approximately 65 percent of an average month's foster care caseload is Native American. Persons interviewed during the course of the juvenile justice

system study indicated that there is lack of foster care beds for Native American Children and few viable alternatives.

Although 1990 census data related to family risk variables will probably not be available until 1991 at the earliest, changes in family structure are reflected in divorce and birth statistics. For example, the divorce rate doubled between 1960 and 1972, and reached its peak in 1980. In 1988, 21.1 percent of all births were to unwed mothers; 13.4 percent of births to white mothers were out of wedlock, and 64.4 percent of births to Native American women were to unmarried mothers. By comparison, in 1960 only 1.6 percent of all white and 22.9 percent of all Native American births were non-marital. There was a small increase (1 to 2 percent) in the percentage of non-marital births for both races between 1987 and 1988 (South Dakota Vital Statistics and Health Status, 1988).

The impact of single-parent status on family resources needed to support healthy growth and development is discussed under problem areas (1) Poverty and (9) Teen Pregnancy.

(3) HARDSHIPS ASSOCIATED WITH MINORITY STATUS

- ▶ **Jurisdictions with the highest percent of Native Americans are disproportionately represented on virtually every indicator of risk. One of the most critical needs in South Dakota is to increase the academic achievement and graduation rates of Native American youth. This need cannot be met without addressing other risk factors, including the effects of economic disadvantage and dependency, alcoholism, as well as the negative impact of dysfunctional families and communities.**

Incomes in South Dakota counties with large Native American populations are among the lowest in the nation. The Aberdeen Area Tribal report on the health status of Native Americans in a four state region reports that high unemployment is a major cause for dysfunctional communities. "Unemployment and poverty contribute to the high rate of substance abuse." Substance abuse, in turn, contributes to high rates of accidents, violence, fetal alcohol syndrome, child neglect, and low aspirations (Aberdeen Tribal Area Health Plan, 1990).

Native American children and youth are more likely than non-minority young people to:

- be living in poverty
- drop out of school
- be educationally deprived
- have an educational handicap
- have a low self-concept
- be a teen parent or the child of a teen parent
- live in a single parent household
- be neglected
- be adjudicated delinquent
- be in a state correctional facility or foster care
- have alcohol and drug related problems (dependency, family alcohol use, fetal alcohol syndrome, etc.)
- have preventable health problems
- be an accident victim
- live in substandard housing
- change residence and schools frequently

Social Indicators

The association between minority status and other risk variables was examined using 1990 total population and Native American population figures for each county. Table 1, "Correlation of Selected Variables" shows that there are fairly strong relationship between the percent of population that is Native American and the indicators of economic disadvantage. This means that counties with higher percentages of Native American's are also likely to have higher unemployment rates, a greater proportion of the population receiving Aid to Families with Dependent Children, and lower per capita incomes. They also are likely to have higher infant mortality rates, and alcohol and drug treatment rates. Juvenile and criminal justice variables are not significantly related. This is possibly because many of the counties with large Native American populations handle law violations in tribal courts, and tribal court actions are not included in the current measures of juvenile and adult crime. Statewide data demonstrate that Native American children are significantly over-represented on a number of other critical, but unavailable risk factors. These include school drop-out, child abuse and neglect, and teen pregnancy rates.

Other Data

- Only 55 percent of Native American mothers began prenatal care in the first trimester, compared to 80 percent of White mothers. Five percent of Native American mothers received no prenatal care at all. Inadequate prenatal care is associated with infant mortality, which is higher in counties with larger proportions of Native Americans.
- The graduation rate for Native American youth is estimated to be 40 percent, compared to 79.6 percent for all South Dakota youth. The annual school drop out rate for Native Americans is 20.1 percent for students enrolled in grades 7-12 (for white students the drop rate is 3.97 for students enrolled in grades 7-12). Some of these students obviously have transferred to another school, but it has not be tracked. BIA schools are not required to report data on transfers or dropouts to the Department of Education, and some do not. Some of these students do earn G.E.D. certificates. However, they still have missed out on the skill building experiences available in a high school setting. Youth who drop out of school, of course, are at higher risk not only of unemployment, but also of being in the juvenile justice and adult correctional systems.
- Data from the 1990 juvenile justice system study indicate that serious financial needs, lack of employment skills, lack of involvement in meaningful activities, school-related problems, poor parenting, alcohol and drug abuse, and domestic violence are among the risk factors that contribute disproportionately to the law-violating behavior of Native American youth. Not surprisingly, adjudicated Native American youth are less likely than white youth to come from a two-parent home (24.2 percent of Native American youth, compared to 50.7 percent of white youth were living with both parents at the time of disposition.)
- Two 1990 surveys of alcohol and drug abuse among South Dakota high school students indicate that Native American youth are at greater risk from substance abuse, but the difference is not as great as might be anticipated, especially for younger youth. The need for culturally appropriate alcohol and drug prevention and treatment programs was identified as a critical need by key informants interviewed as part of the juvenile justice study, as well as by the Aberdeen Area Tribal Health Plan.

(4) EDUCATIONALLY DISADVANTAGED

- **Education is a key to the success of children. Yet many children in South Dakota are deprived of opportunities to succeed in school.**

South Dakota's school completion and school achievement rates compare favorably with other states. For example, South Dakota students' composite scores on the 1989 ACT test for college-bound seniors were the 5th highest among the 28 states that administered the test. The

state ranks 12th out of 51 states in terms of the percentage of students who complete high school. Not all children in the state, however, appear to have the same chances of achieving success in school. These children are generally referred to as educationally or academically "disadvantaged."

The term "disadvantage" generally refers to individuals (other than individuals with handicaps) who have economic or academic disadvantages and who require special services and assistance in order to enable them to succeed in an educational or vocational program.

Social Indicators

The needs indicators used to measure educational disadvantage were: (1) percent of eligible school enrollment classified as low income and (2) percent of school enrollment identified as educationally deprived. These variables are available for each school district. School districts collect and report this data to the Department of Education and Cultural Affairs in order to establish eligibility for federal funds provided to states to meet the special education needs of educationally deprived students.

"Low income" generally means those students who are eligible to receive free or reduced lunches or have other indicators of economic status which identify them as in need of economic assistance. School districts identify students as "educationally deprived" on the basis of standard achievement test scores. Those who are more than two grade levels behind in reading, writing, or math skills; who score below the 25th percentile on a standardized achievement or aptitude test; or who have limited English proficiency are generally considered "educationally deprived."

The percentage of low income, and percentage of educationally deprived were combined to create a composite indicator of educational disadvantage because neither measure by itself was considered to be a reliable indicator. Rankings are listed in Appendix B.

Most other needs indicators used in the study were based on aggregate statistics from counties, rather than from school districts. For this reason the relationship between educational disadvantage and other needs indicators could not be examined. Local school districts and other groups, however, can still use the data in Table B9 (Chapter 1 Selected Data) for local planning.

Vocational Education, Special Education

Indicators for a number of additional areas of educational need could be developed, including: (1) vocational education, (2) special education, and (3) student retention (i.e., drop-out prevention).

The first two can be developed with existing data. For example, the formula used to allocate vocational education funds to school districts under the Perkins Act could be used to rank school district's relative need for vocational education funds. In fact, this is already done through the allocation process. The same is true regarding the allocation of special education funds to school districts.

It should be noted that handicapped students or special needs students, including both the talented and gifted, and those with cognitive, learning, emotional, physical, or sensory deficit handicaps traditionally have not been included in the term at-risk. These students have traditionally been regarded as a completely separate population under state "Special Education" programs. This orientation has been changing in recent years for a couple of reasons. First, special education professionals are promoting the mainstreaming of "special education" students. Second, many handicapped or special needs students share risk factors with other youth at-risk. Consequently, they need the same kinds of support services as other children and youth with multiple problems.

School Drop-Out Statistics

A third, and extremely important education needs indicator, of course, is the high school graduation rate. The graduation rate has replaced its opposite, the school drop-out rate, as the standard measure of school completion because the graduation rate is being used for national education goals. School districts report annual drop-out statistics to the Department of Education and Cultural Affairs, but this information is kept confidential. Like many other states, data on the actual number of students who drop out of school is unreliable. South Dakota recently has taken steps to improve the reliability and uniformity of school drop-out statistics by developing a standard definition of "drop-out" and by implementing an new reporting system.

Local communities must have accurate data regarding the numbers of students who drop out of school, as well as the reasons they drop out. Without such information, neither needs in this area, nor the results of efforts to improve the graduation rate for all students can be measured. The state policy of keeping this information confidential is highly unusual and does not appear to serve the needs of children.

Other Data

- The importance of early identification of youth at-risk is frequently noted. However, only 40 percent of children **identified** as educationally disadvantaged are receiving Chapter 1 services. Chapter 1 is a federally funded program intended to meet the special needs of educationally deprived children. Current levels of funding clearly do not meet the identified need in many South Dakota school districts.
- Approximately 79.6 percent of South Dakota's ninth graders graduate from high school. The National goal is to increase the high school graduation rate to at least 90 percent by the Year 2000.
- An estimated 40 percent of Native American students graduate from high school on schedule; as few as 25 percent of the students on some Indian reservations graduate. The annual drop-out rate for Native American youth in grades 7-12 is 20.4 percent (without adjustments for transfers).
- The 1989 ACT composite scores for South Dakota college-bound seniors ranked 5th highest out of 28 participating states and South Dakota's white students consistently achieve above the national average on the Standard Achievement Tests administered to 4th, 8th, and 11th graders.

- Native American student's scores on both the 1989 SAT and the 1989 ACT, however, were significantly lower than those of white students. They were also lower than the scores of Native American youth in other states. A recent study found that family income and course selection affect test scores more than any other factors, including ethnicity and race (ACT Activity, 1989). Research also suggests that course selection is influenced by the level of parental and teacher support for school achievement.

(5) **ALCOHOL AND DRUG ABUSE**

- ▶ Available data indicate that significant numbers of South Dakota youth are at high risk from alcohol and substance abuse. The data lend additional support to the prevailing belief that alcohol and substance abuse problems must be addressed within the broader context of the family and community, and that prevention through education is a critical first step. The Attorney General's Task Force Report and the 1990 Juvenile Justice Study both identified the need to expand the range and availability of alcohol and drug abuse prevention and treatment services.

Social Indicators

Two social indicators of alcohol and drug abuse are included in this study: (1) drug-related arrests leading to prosecution and (2) persons obtaining alcohol and drug treatment. Both of these indicators include data on juveniles and adults, and both are significantly correlated with marital termination. The association between substance abuse and family instability has been established in other studies.

County rates of drug-related arrests leading to prosecution varied widely from zero such arrests in 19 counties, to more than 10 per 1,000 persons in Aurora, Lyman, and Union counties. This indicator correlates with few other county-level indicators. The only statistically valid correlation is with marital termination. The weak correlation with indicators included in this study suggests that other factors help explain the distribution of drug-related arrests.

There are more statistically valid correlations with the number of alcohol and drug treatment clients per 1,000 persons in the general population than with any other indicator, but none of the correlations is very strong. The strongest correlation is with the divorce rate ($r = 0.45$). The reader should note that this is an indicator of service utilization rather than a precise measure of people needing service. However, it is the best proxy measure available at this time.

Other Data

Several other studies and reports provide information on the range, scope, and magnitude of alcohol and substance abuse problems and services statewide. The Youth Risk Behavior Survey (1990) and the survey of "Drug and Alcohol Use Among South Dakota High School Seniors (RMBSI, Inc., 1990) both contain self-reported measures of drug and alcohol use. South Dakota's Fiscal Year 1991 Application for Drug Control and System Improvement Formula Grant Funds contains comprehensive crime statistics as well as the perceptions of citizens and law enforcement regarding drug problems in South Dakota. Each year the Division of Alcohol and Drug Abuse publishes a summary of clients and services. The Department of Correction Chemical Dependency Program has assessed the dependency and substance abuse status and needs of youth committed to its care. Finally, the Juvenile Justice System Study (1990) explored the extent to which youth in the juvenile justice system are engaged in the use of alcohol and drugs and the adequacy of resources to treat young offenders who have a dependency problem.

These reports provide considerable information on the magnitude and range of chemical dependency problems and needs. The following are some critical findings from these reports:

- Of the 10,299 clients receiving services at accredited treatment facilities during FY 1990, 2,882 admissions, or 29.2 percent, were under age 20. Nineteen percent of clients with DUI convictions were under the age of 21. Prevention activities and programs were provided to approximately 14,500 youth (elementary through high school). Nine percent of all clients reported that they first used a drug by age 11. 81 percent reported their first use occurred by age 21 (Division of Alcohol and Drug Abuse).

- In 1990, 78 percent of the State Training School population; 63 percent of the Youth Forestry Camp population; and 88 percent of the young women committed to the Work Therapy Program were diagnosed as having a alcohol and/or drug abuse problem. Only about one-third of those diagnosed as drug dependent at the State Training School reported that they had ever received treatment for their addiction (1990, Department of Corrections).
- Respondents to a survey conducted by the Attorney General's Task Force on Drugs reported the most serious impact of illicit drug usage were the impact on crime, problems in school, other family problems, and marital problems. The Attorney General's Task Force on Drugs also held 29 public meetings in 21 communities across the state starting in the Summer of 1988 and continuing through December, 1990. Local concerns relevant to youth included: (1) lack of public awareness that there is problem; (2) the need to educate youth, parents, and teachers to recognize and avoid the dangers of drug use; (3) the need for adults to set good examples; (4) the need for harsher and more consistent sentencing; (5) the importance of involving the whole family in the treatment process; and (6) the need to establish additional half-way houses to treat juveniles.
- The South Dakota Juvenile Justice System Study (1990) found that drug use was one of the strongest predictors of prior and current juvenile justice system involvement. Non-white adjudicated youth in the study sample were more likely than their white counterparts to be described as having serious or severe problems with alcohol abuse (49.2 percent v. 21.6 percent for whites). They also were more likely to be identified as having problems with other drugs (29.5 percent v. 11.9 percent for whites).
- Respondents to the Juvenile Justice System Decision-Maker Survey ranked drug and alcohol abuse in the top three youth problems more often than any other except family/ home problems (Community Research Associates, 1990). In exploratory interviews with juvenile justice professionals, the need for alcohol treatment and prevention services was mentioned more frequently than any other type of service. Specific service needs mentioned included: an accessible range of community-based prevention, residential treatment, transitional placements, and support services.
- Sixty-one percent of ninth through twelfth grade students participating in the "1989-1990 Youth Risk Behavior Survey" indicated that they drank alcohol on one or more occasions during the past 30 days. Forty-one percent reported that they had five or more drinks on one occasion in the past 30 days, and 22 percent had 5 or more drinks on at least three occasions in a 30 day period. Twenty-seven percent admitted driving a motor vehicle while or after drinking alcohol and drugs.
- A statewide survey of drug and alcohol abuse among South Dakota high school seniors found that 23.2 percent of South Dakota High School seniors are at moderate to high-risk from alcohol and drug abuse. The percentage of at-risk high school seniors on Indian Reservations was significantly greater than for other groups surveyed (see Tables F1). Self-reported use of alcohol is above the national average, while reported use of other substances is below the national average.

(6) HEALTH CARE DEFICIENCIES

- ▶ **The health and safety of many South Dakota children and youth are at-risk.**

Preventive health education and services for children and adolescents should be promoted to reduce this risk.

Although South Dakota compares favorably with other states on many indicators of health, risks associated with lack of early pre-natal care, especially among young, and non-white mothers; inadequate early health care for children living in low income families; dangerous and/or excessive alcohol use, and adolescent risk behavior place significant numbers of children unnecessarily at-risk.

As noted earlier, deficiencies in diet and health care in the pre-natal and post-natal periods of a child's life can be especially damaging to a child's future development. The Governor's Task Force Report (1989) points out that there are several strategic points in the life of a child when prevention is especially critical. The first is the provision of comprehensive and timely prenatal care. The second is well-child care, including screening and immunizations. Later, during adolescence, appropriate primary health care and preventive education help youth maintain healthy bodies, as well as positive health and safety practices.

Social Indicators

Two widely used indicators of health conditions were used: (1) the infant mortality rate; and (2) the number of low birth weight babies. Other important health indicators that could be used if county data is made available include the percentage of women obtaining late or no prenatal care and the percent of medicaid eligible mothers.

Table B13 (Infant Deaths Per 1000 Births) shows that the infant death rate per 1,000 live births from 1980 through 1989 was 10 times higher in the county with the largest rate than in the county with the smallest (2.6 versus 28.0). As might be anticipated, infant death rates were negatively correlated with income, meaning that as income decreases, infant death rates

increase. The infant death rate was even more strongly associated with utilization of food stamps; the rate of families receiving Aid to Families with Dependent Children; and the size of the Native American population.

The percent of low birth weight babies was only mildly associated with the infant death rate, and was not significantly associated with any of the other needs indicators. The lack of an the usual association with other needs indicators may be related to the fact that South Dakota has the lowest rate of low birth weight babies in the nation.

Other Data

South Dakota's Center for Health Policy and Statistics publishes comprehensive vital and health statistics annually. These reports include both data for the current year, as well data trends on births, deaths, infant deaths, marriages and divorces as far back as the 1930's, and in some cases, since the beginning of the century. None of the adolescent health and vital statistics, however, are reported by county in regularly published reports.

Another new and valuable source of data on teen health and safety issues is the "Youth Risk Behavior Survey." This survey of ninth through twelfth grade students was first developed by the Center for Disease Control (CDC) to determine the AIDS education needs. It was expanded in 1989-90 to include a comprehensive range of youth health and safety issues including: drinking and driving; use of seat belts; tobacco, alcohol and other drug use; suicide; nutrition and eating disorders; exercise; sexuality issues, including sexual experience, use of birth control, and knowledge and use of measures for preventing sexually transmitted diseases. This survey will be repeated annually, and the results will be used to measure progress in achieving national health goals. The results have been disseminated to school districts, community health nurses, and other state and local youth service planners and providers. The results of the Youth Risk Behavior survey provide direct, self-reported measures of risk behaviors, and therefore represent the most accurate data available statewide on a broad range

of critical risk factors. Since the survey is based on a stratified random sample, data for individual counties is not available. This information, however, is an important supplement to the county needs indicators.

The following are a sampling of results from the 1989-90 Youth Risk Behavior Survey (this data is also available by age, grade, sex, and ethnicity). Table G1 shows how South Dakota compares with other states on a number of health and safety indicators published in the 1991 Kids Count Data Book (The Center for the Study of Social Policy, 1991).

- South Dakota's low birth weight rate is the lowest in the nation.
- The infant mortality rate has decreased only slightly over the past 10 years; South Dakota ranks 30th out of 51 states on this indicator.
- The child death rate has decreased by 35 percent over the past 10 years, and South Dakota's national rank is 20.
- The teen violent death rate has increased by 15 percent during the past 10 years, and in 1988; South Dakota national ranking is 46, meaning that only five states have high teen violent death rates.
- Slightly more than twenty (20.3) percent of children in South Dakota are not covered by health insurance.

Low birth weight does not appear to be a problem in South Dakota. However, Health Division statistics presented by age and ethnicity show that significant percentages of expectant teen mothers and expectant Native American mothers are not obtaining prenatal care in the critical first trimester of pregnancy (South Dakota Department of Health, 1988 and 1989). These mothers appear to have the same access to pre-natal care as older mothers, but they are not as likely to utilize available services for reasons most likely associated with age, education, and possibly social or cultural factors.

Of the students surveyed during 1989-90:

- Fifty percent reported that during the past 30 days they had been in a car or truck or on a motorcycle driven by someone who was or had been drinking alcohol or using drugs.
- Only 13 percent said they use a seat belt all or most of the time; 22 percent do sometimes; and 64 percent rarely or never use a seat belt;

- Thirty-two percent reported they had thought about suicide in the past 12 months; 17 percent said they had made a specific plan; 10 percent said they actually attempted suicide.
- Seventy-two percent had not participated in a physical education class in the past 14 days;
- Fifty percent reported they have had sexual intercourse; 16 percent said they have had four or more sexual partners; nearly half had not used an effective form of birth control during their most recent sexual encounter.
- Nine percent reported vomiting on purpose on one or more occasions during the past seven days to lose weight or to keep from gaining weight; 15 percent had taken a diet pill; 34 percent had not eaten any green or yellow vegetables and 27 percent had not eaten any fruit in the previous day.
- Eighty-six percent said they had been taught about AIDS/HIV infection in school, compared to 52 percent of those surveyed in 1988-89.
- Compared to other students in their class, 20 percent said they were one of the best; only 8 percent said they were below the middle.

(7) JUVENILE DELINQUENCY

- ▶ **Delinquency and later criminal involvement are highly correlated with dropping out of school, substance abuse, and other youth problems.**

Social Indicators

Social indicators of juvenile delinquency included (1) the number of juvenile delinquency petitions filed, and (2) the number of commitments to the Department of Corrections. Delinquency petitions rates varied considerably across counties. Counties with larger populations and higher rates of divorce tended to have higher petition rates than smaller counties. There was also a slight association between the delinquency petition rate and alcohol and drug arrest leading to conviction. This later indicator included both juveniles and adults, and included only drug (i.e., no alcohol-related) arrests. Since data from the juvenile justice study and two statewide surveys indicate that alcohol is the substance mostly frequently abused

by juveniles, an indicator of juvenile alcohol use, aggregated by county, may have resulted in a stronger correlation.

Juvenile arrest data is frequently used as an indicator of juvenile delinquency, but reliable statewide statistics on juvenile arrests are not available in South Dakota. Other important indicators that should be added include the total number of juveniles detained, the number of status offenders detained, and the number of status offender petitions filed.

Other Data

The Unified Judicial System collects information on juvenile and adults referred to court services. Data on admissions to juvenile detention and adult jails and lockups are currently collected by the South Dakota Youth Advocacy Project (SDYAP) as a condition of receiving federal Juvenile Justice funds. The Department of Corrections maintains a data base on youth committed to its care and custody. In addition, a broadly representative juvenile justice study committee initiated a review and evaluation of the juvenile justice system, which was conducted during summer, 1990 (see Report of the Juvenile Justice Study Committee, 1991).

- In Fiscal Year 1989, 2,504 juvenile delinquency petitions were filed, or 16.2 petitions per 1,000 juveniles age 10-17. Two hundred and forty-four juveniles were committed to the Department Corrections.
- According to the most recent national statistics (based on 1987 data), South Dakota has a juvenile incarceration rate of 166 per 100,000 juveniles age zero to 17. This represents an increase of 96 percent over the 1979 rate. South Dakota ranks 40th in its rate of juvenile incarceration. In other words, only 11 states incarcerate juveniles at a higher rate.
- In Federal Fiscal Year (FY) 1990, South Dakota admitted 2,409 youth to its two detention facilities, for a rate of 115 per 100,000 youth ages 10 to 17. Admissions to adult jails and lockups in 1990 numbered 288 or 14 per 100,000 youth ages 10-17. In FY 1989, there were 628 admissions to adult jails. Recent changes in the state legislative code are expected to further reduce the number of juvenile jailings. South Dakota is the only state which does not participate in the Juvenile Justice and Delinquency Prevention (JJDP) Act. The Act prohibits participating states from detaining juveniles in adult jails and lockups, and from holding status and nonoffenders (youth who have not committed a violation that would be a crime if they were an adult) in any secure facility. In FY 1990, 710 status offenders were held in juvenile detention facilities, and 44 more were held in adult jails. Under the

JJDP Act, only six could be held for more than 24 hours before the state would be in violation of the Act's mandates.

There is evidence from the 1990 juvenile justice study that lack of resources contribute significantly to both pre- and post-adjudicatory detention rates in South Dakota. This study also provides considerable data on adjudicated juveniles, including those on probation, and those sentenced to a Department of Corrections facility. Needs data on a sample of adjudicated youth, for example, suggest that young people who commit law violations have serious family and personal problems and needs which contribute to their offense behavior. Negative peer influence, poor parental supervision and parenting skills, and lack of pro-social or other constructive activities were the conditions most frequently identified as contributing to offense behavior. The study found significant correlations between juvenile justice involvement and the following risk factors: lack of parental control, drug abuse, age of first offense, and race; and with the following needs factors: poor school attendance, the need or desire for employment, poor parental supervision, poor self-esteem/image, physical abuse, sexual abuse, medical and financial problems, and poor social communication skills.

Juvenile justice system resource needs identified through interviews and surveys included: pre- and post-adjudicatory alternative placements and treatment resources, including substance abuse treatment and treatment for sexual offenders; a statewide diagnostic and evaluation capability, intensive home-based services; transitional and aftercare services, and updating of data systems for planning, case management, and evaluation.

(8) MENTAL HEALTH PROBLEMS

- ▶ Recent research suggests that emotional disorders among children are increasing, that disorders such as depression and conduct disorder continue into adulthood, and that children with unmet mental health problems are at high risk of becoming disturbed adults. Drinking during pregnancy, inadequate health care, social turmoil, and unwelcoming classroom environments are some of the critical factors affecting children's mental health.

Children with emotional disorders are at especially high risk. Not only is their emotional health impaired, but their mental health problems also result in lower academic performance and behavior problems.

Social Indicators

A reliable indicator of mental health needs could not be identified. As a proxy measure, the number of children age 0-17 receiving mental health services through the Division of Mental Health during Fiscal Year 1989, standardized per 1,000 juveniles, was used. It is emphasized that this measure does not include all children and youth who need or receive mental health services. For example, it does not include children served in mental health institutions, seriously emotionally disturbed children receiving case management and intensive in-home services through the Mental Health Division's Child and Adolescent Service System Program; or children served by private practitioners.

Based on this indicator, mental health treatment rates varied widely among counties. Mental health treatment rates do not correlate significantly with other indicators that one might expect to be associated with mental health problems, such as alcohol and drug use and divorce rates. This may be due to the unreliability of the data as an indicator of mental health problems and needs. The relationship between this indicator and child abuse and neglect could not be examined because the data are aggregated by different geographical units; these data will be comparable beginning next year.

Other Data

The South Dakota Division of Mental Health collects and reports information on the characteristics of children receiving community mental health services and the types, cost, and funding sources of the services provided. Also, data bases for case management and intensive home services are being developed. This information will be available for FY 1991. In addition, three studies dealing with children's mental health and its treatment have been sponsored by the Mental Health Division in the past year, including an evaluation of mental health continuums for abused and neglected children; an evaluation of the implementation of an in-home therapy program; and a study of "Persistent and Pervasive Mental Disorder Among Young School

Children in Rural Areas." This last study examined rates and the importance of selected risk factors among Sioux children living on the Pine Ridge Reservation and among native and non-native children in the towns of Kadoka and Martin.⁵ The Youth Risk Behavior Survey also elicits information regarding suicidal thoughts and behavior among South Dakota teens.

- Between July 1, 1989 and June 30, 1990, 5046 children ages zero through 21 were served in community mental health programs (Division of Mental Health, 1990). Seventy-five percent were white, 23.4 percent were Native American, and approximately one and one-half percent were from other ethnic groups. Slightly more boys (52.3 percent) than girls (47.6 percent) received services. Only 1,897 of the total 5,046, or 37.6 percent lived with both parents. Many lived with a single parent (29.4 percent), or in foster care or other out-of-home settings. Of those served, nine percent were between ages birth to five; 38.5 percent were between the ages of six and 12; 37.2 percent were ages 13 through 17; and 15.2 percent were 18 to 21.
- Thirty-two percent of the ninth to twelfth grade students participating in the 1989-90 Youth Risk Behavior Survey said they had thought about suicide in the past 12 months; 17 percent reported they had a specific plan for how they would attempt suicide; 10 percent said they had actually attempted suicide; and two percent reported receiving medical attention from a doctor or nurse as the result of a suicide attempt.
- According to the study entitled, "Persistent and Pervasive Mental Disorders Among Young School Children in a Rural Area of South Dakota," (Beiser, M., 1990), rates of mental disorder range from a low of 6.6 percent to a high of 37 percent, with a estimated rate somewhere in the range of 16 to 18 percent being most common. Approximately half of these are estimated to have pervasive problems (i.e., problems that affect other areas of a child's life. The findings of this study of Native and non-Native youth in rural South Dakota communities did not vary significantly from rates reported in other studies.
- The study of pervasive mental disorder found that children with persistent and pervasive mental disorders were far more likely to be truant from school, to fight with other children, and to experience academic failure. A history of maternal drinking during pregnancy, illness, and social turmoil are all recognized risk factors related to mental health. This study also found, however, that classroom environment was the most important determinant of self-perceptions' and teachers' perceptions of competence. In other words, "children who perceive their classroom environment as friendly and supportive have fewer emotional problems and experience higher self-esteem than children whose environments are not welcoming" (Beiser, 1990:47). The importance of school environment on mental health has been demonstrated in other studies. In addition to the importance of pre-pregnancy counseling, pre-natal care, and early health care, the report

⁵Beiser, M.D., "Persistent and Pervasive Mental Disorders Among Young School Children in a Rural Area of South Dakota." University of British Columbia, 1990.

recommends that the significant role of the school not be overlooked. With respect to the observed effect of classroom environment on competence, the report concludes:

"This observation is cause for optimism. In comparison with home, the school probably offers easier entree for intervention which can help prevent disorder as well as promote a positive self-concept. The observation also suggests an obligation. If the school is such a powerful determinant of the emotional life of children, it is imperative to begin to unravel the structural and functional characteristics of this environment which contribute to health, well-being and productivity."

(9) TEEN PREGNANCY

Having a teen mother, especially a single teen mother, places a child at high risk. Teen mothers are more likely to have low birth weight babies. Low birth weight, in turn, is associated with learning disabilities, educational failure, alcohol and drug problems, and a future which presents few opportunities for success.

Children born to a teen mother or who live in a one-parent, female headed household are far more likely to experience the deprivations inflicted by poverty. Teen mothers are less likely to complete their education, thereby decreasing their opportunities and those of their children. 1980 U.S. census data showed that regardless of race or ethnicity, children living in a female headed household have only 30 to 40 percent of the income available to children living with two parent families. This ratio may have improved during the past decade, but it is unlikely that the gap has been closed. It is estimated that welfare assistance is needed by 73 percent of teen mothers within four years.

Social Indicators

No social indicators for teen pregnancy were included in the current study. The numbers of births to teen mothers are not currently published for individual counties. Because teen and single-parent status are so strongly associated with other child and youth risk factors, it is critical that local communities have access to information about the numbers of teen and single parents

in their communities as they develop plans to support and strengthen families. Dangers in violating confidentiality due to low numbers of teen mothers in some communities can be addressed through training, by developing trend data, and/or by combining data from several counties involved in regional planning and service delivery of course a minimum number of teen births might be established for a level under which a county's figures would not be reported. A logical regional grouping of counties would be counties participating in the same inter-agency network. Regional boundaries for inter-agency networks had not been finalized at the time of this report; therefore, regional data was not requested.

Other Data

- While South Dakota's teen pregnancy rate is slightly below the national average, births to unmarried teens have increased in South Dakota by 26 percent since 1980. Only nine other states (most of them in the West) had greater increases during this time period.
- In 1988, over 20 percent of all pregnancies were to mothers 19 years of age and younger in four counties (Buffalo, Mellette, Shannon, and Todd).
- Although 76 percent of all mothers in South Dakota received prenatal care in the first trimester (approximately the national average) in 1988, only 52.1 percent of teenage mothers received early prenatal care. South Dakota's Center for Health Policy and Statistics found that both education and age appear to be a factor in commencing prenatal care" (1988, p. 10). This may indicate the need to increase efforts to educate young women about the importance of prenatal care, as well as how to recognize early pregnancy symptoms, and access to confidential health care. School health clinics, for example, have demonstrated significant reductions in teen pregnancy rates.
- Nationally it is estimated that only 56 percent of all teen mothers graduate from high school. Nonetheless, important gains have been made in the percentage of young mothers who had their first child at age 17 or younger who later graduate from high school: from 19 percent in 1958 to 29 percent in 1975, and to 56 percent in 1986. A number of programs designed to encourage pregnant and parenting teens to remain in school are currently receiving funds under the Carl Perkins Act. Native American communities are especially in need of educational services and support in this area.

RISK INDICATORS

INTRODUCTION

In order to assess the level of risk and need in local communities, several social indicators were collected from existing state agency data bases. This section presents those indicators, describes some of the problems and strengths, and identifies other potential indicators which would also be useful for identifying need. This section also concludes with a recommendation on how to create and use a composite needs index, once all data are available.

The indicators reviewed here are organized according to the social problems/needs identified in the previous section of this report. Those problems, the indicators found for analysis in this report which best describe the extent of the problems, and the level of aggregation (in parentheses) include:

Problem 1: Economically Disadvantaged Children

- Food stamp recipients (county)
- Per capita personal income (county)
- Average unemployment rate (county)
- Distribution of ADC (county)

Problem 2: Family Stress

- Foster care and group/residential care (CPS field office)
- Divorces
- Abuse/neglect rates (CPS field office)

Problem 3: Hardships Associated with Minority Status

- Percent Native American residents (county)

Problem 4: Educationally Disadvantaged

- Educationally deprived (school district)

Problem 5: Alcohol and Drug Abuse

- Drug arrests leading to prosecution (county)
- Person obtaining alcohol and drug treatment (county)

Problem 6: Health Care Deficiencies

- Low birth weight babies (county)
- Infant death rate (county)

Problem 7: Juvenile Delinquency

- Commitment to DOC (county)
- Delinquency petitions (county)

Problem 8: Mental Health

- Mental health service clients (county)

Problem 9: Teen Pregnancy

- Local data unavailable

The indicators are described in greater detail in the following pages.

Before turning to the data however, the reader should be aware that the data do have some inherent problems. First, many need indicators represent only one year of data. Data collected over such a short duration are subject to biases characteristic of fluctuating patterns over time. As programs change or are added to a community, as population characteristics change, and as the economy fluctuates, community profiles change. When local planning begins, planners are urged to seek and use data which are collected over time to insure that built in anomalies are accounted for and a more accurate picture of need is developed.

CORRELATIONS BETWEEN SOCIAL INDICATORS⁶

The analysis presented in this section is largely dependent upon correlations computed between the social indicators. Correlations are used to test for relationships between the indicators. In other words, as one social indicator changes, what happens to another social indicator? Does the second

⁶Correlations are found in Appendix A.

change in the same manner (increasing or decreasing), in the opposite direction (as one increases, the other decreases), or not at all? Answers to such questions provide valuable insights into how risk factors are related to each other.

Pearson's correlations--or "simple-r"--have been calculated and the significant relationships are presented in the commentary on social indicators. For two variables to be directly related--that is, a change in one yields a corresponding change in another--they would have a Pearson's value of 1.0. If they are positively related, the value is +1.0; if negatively related, the value is -1.0. A negative relationship means that as one value increases, another decreases.

As an example, the social indicators Food Stamp Distribution Rates and Per Capita Personal Income can be compared using Pearson's. The calculations yield a correlation of -0.7742. This means that income is negatively associated with the food stamp use rate in a community (because of the minus sign in front of the number). Further, it is a fairly strong relationship (i.e., quite a bit closer to -1.0 than 0.0). In plain English, this value means that, in general, we can expect jurisdictions with higher per capita incomes to have lower rates of food stamp usage. Had the Pearson's *r* been positive rather than negative, the assumption would have been that jurisdictions with higher per capita incomes also have higher rates of food stamp usage.

Note that correlations imply no cause--only association. In other words, if there is a strong positive relationship between two variables, i.e., infant death rates and ADC maintenance, one cannot assume that the elimination or reduction of ADC distributions in a jurisdiction will reduce the infant death rates. Nevertheless, they are useful when comparing variables and many interesting correlations are found among the South Dakota social indicators.

The entire list of correlations is found in Appendix A. In the Appendix each indicator was compared to all the others. Across the top and down the left hand column are abbreviated names of the indicators and a few additional variables. The abbreviations can be translated as:

| | |
|----------|---|
| POPUL | Population |
| NATAMER | Number of Native Americans |
| UNEMPLOY | Unemployment rate |
| FOODSTMP | Food stamp use rate |
| PETITION | Delinquency petition rates |
| INCOME | Per capita personal income |
| ADC | ADC rate |
| ALDDRUG | Alcohol and drug treatment rate |
| INFDEATH | Infant death rate |
| LOWBIRTH | Low birth weight rate |
| DIVORCES | Marital termination rate |
| MH | Mental health services client rate |
| DRUGARST | Drug related arrests leading to prosecution |
| DOC | DOC commitment rates |

PRESENTATION OF RISK INDICATORS

The presentation of risk indicators is organized according to the problem areas presented above. Each indicator is presented with a definition (i.e., indicator description), the level at which data are presented, a source, and a brief discussion of the data.

In addition, supporting materials are presented in the Appendix. A correlation table which looks for associations between variables can be found in Appendix A. The presentation of the actual data is located in Appendix B. Finally, maps which show the distribution of risk phenomenon are presented in Appendix C.

It is these data which are used to draw the conclusions found in the section entitled "Findings: Youth At-Risk in South Dakota." The correlations between risk factors, and their additive impact on problem areas, all help describe the extent to which problems occur statewide. The county breakdowns presented in Appendix B will be helpful to local jurisdictions which conduct their own planning for at-risk youths.

(1) ECONOMICALLY DISADVANTAGED CHILDREN

For this study, four indicators were found which can be used to measure and locate the distribution of economically disadvantaged children. They include food stamp recipient rates,

per capita personal income, average unemployment rate, and distribution of Aid to Dependent Children rates. All four indicators are described here.

Average Annual Unemployment Rate, 1989

DESCRIPTION

Percent of labor force unemployed, on average, during 1989. The state average during 1989 was 4.2 percent.

GEOGRAPHIC AREA

These data are aggregated at the county level.

SOURCE

South Dakota Department of Labor
Labor Market Information Center, 2/7/91

DISCUSSION

Average unemployment in South Dakota varied significantly from the mean of 4.2 percent. No county was exempt, however six had rates below two percent. Conversely, three counties had average unemployment greater than 10 percent during FY 1989 (see indicators in Appendix B).

Not surprisingly, unemployment was negatively associated with other average annual per capita income ($r = -0.58$)--see correlation in Appendix A. Generally, that is, the higher the unemployment rate, the lower the county's per capita income. Other economic-type indicators with which this variable is associated include food stamp distribution rate ($r = 0.73$) and aid to dependent children ($r = 0.74$). Neither the direction of these relationships nor the strength are surprising.

What is of greater interest, however, is the relationship between unemployment and two other variables--the indicator "infant death rate" ($r = 0.70$) and the size of the Native American population ($r = 0.54$). Both are positively and moderately to strongly associated with unemployment--that is, as unemployment increases, so does the proportion of county residents who are Native American and the rate of infant deaths. Of course the infant death correlation could be further linked to availability of prenatal health care.

A map demonstrating the distribution of unemployment rates by counties is found in Appendix C. Most of the lowest unemployment rated counties run on a line from north to south through the east central section of the state. It is somewhat similar to the distribution found for the distribution of the Native American population.

Per Capita Personal Income, 1988

DESCRIPTION

The average per capita income, expressed in dollars. The state average during 1988 was \$12,754.

GEOGRAPHIC AREA

These data are aggregated at the county level.

SOURCE

Bureau of Economic Analysis
US Department of Commerce

DISCUSSION

Income data can be used, in the absence of other data, to help identify areas of economically disadvantaged children or families.

The wealthier counties, at least according to these data, ran roughly on an east west line through the center of the state (see map in Appendix C) although there is significant deviation from this generalization. The poorer counties are clustered in the south western part of the state. The data also reveal that there is tremendous deviation from the norm, and between the wealthiest and poorest counties.

The Minnehaha county per capita income level of \$15,285 is 230 percent higher than that found in Shannon county--\$4,625.

As the discussions above have revealed, income is related to number of additional economic factors such as ADC levels ($r = -0.75$) and food stamp distribution ($r = -0.77$), but also social and health indicators. Infant death rates ($r = -0.69$) and divorce rates ($r = 0.56$) are both moderately to strongly related, although death rates have a negative association while divorce rates are positively related.

It is no surprise to see that in general, South Dakota is similar to all other states--poorer counties tend to have greater economic and social problems.

Rate of Aid to Dependent Children, 1989

DESCRIPTION

The average number of children per 1,000 in the general population receiving ADC during fiscal year 1989. The statewide rate during that period was 63.2 per 1,000.

SOURCE

South Dakota Department of Social Service Annual Statistical Report: Fiscal Year 1989
Table 34

GEOGRAPHIC AREA

These data are presented by county, but are also aggregated by MSA and district.

DISCUSSION

The ADC rate varies considerably from county to county. Shannon county, for example, has a rate 150 times higher than that found for McPherson. Fourteen different jurisdictions have rates per 1,000 in excess of 100 (see Appendix B).

Not surprisingly, this indicator correlates strongly with other economic-type indicators. There is a near perfect correlation with food stamp activity ($r = 0.99$), and a moderate association is also seen with unemployment ($r = 0.58$). The Native American population variable is also associated with this indicator at $r = 0.74$ --that is, the greater the percentage of Native Americans, the higher the ADC distribution rate.

Infant death rates also correlate with ADC rates ($r = 0.75$). That is, counties with higher ADC rates also tend to be those with higher infant death rates. That is not to imply that one causes another, but they may both derive from the same phenomenon (i.e., poverty).

Even the prevalence of alcohol and drug usage (measured here as treatment) is correlated with ADC, albeit at a slight level ($r = 0.27$)--see Appendix A.

A map of ADC distribution is also included in Appendix C.

Food Stamp Distribution Rates, 1990

DESCRIPTION

The average number of children living in families which received food stamps during 1990, standardized per 1,000 children in the jurisdiction. The average statewide was 140 per 1,000.

GEOGRAPHIC AREA

The data are aggregated at the county level.

SOURCE

South Dakota Department of Social Services
Ad hoc report, February 1991

DISCUSSION

These data presented above have already demonstrated that economically disadvantaged jurisdictions correlate with many of the risk indicators. The food stamp indicator is further evidence of this phenomenon.

Food stamp distributions, as pointed out earlier, correlate almost directly with ADC maintenance ($r = 0.99$). Food stamps are yet another correlate with infant deaths ($r = 0.75$). This indicator and/or ADC would be sound variables to use in assessing the state

of a community's economic health, especially when one of the goals of that assessment is to compare it with other communities.

(2) FAMILY STRESS

Recall from the presentation of the findings that the family cannot fulfill its responsibilities, nurture and care for its children when certain descriptive economic and social forces interfere. Therefore, in an attempt to assess family stress, three social indicators were found: foster care and group/residential care, divorce rates, and child abuse and neglect rates. The indicators are summarized here.

Divorce Rate, 1989

DESCRIPTION

Divorces per 1,000 population. State rate in 1989 was 3.7.

GEOGRAPHIC AREA

These data are aggregated at the county level.

SOURCE

South Dakota Vital Statistics, 1989
Center for Health Policy and Statistics
South Dakota Department of Health

DISCUSSION

Divorce rates varied across that state and significantly from the mean. The two largest counties, Minnehaha and Pennington, not only have the largest populations and numbers of divorces, but also two of the four highest divorce rates (see Appendix B).

Divorce, or marital termination, rates are used as a means of assessing community problems with aggregate family stress. As such, it would not be surprising to see divorce rates correlated significantly with other risk indicators. And in fact, a check of the Pearson-r figures demonstrates a number of associations.

To begin, there is a moderately strong association between divorce rates and per capita income ($r = 0.56$)—the higher the income, the higher the tendency for divorces in a community. There is also a strong positive association with rates of alcohol and drug treatment ($r = 0.45$)—see Appendix A.

Research suggests that there should be a moderate to strong positive relationship between divorce rates (as a proxy measure for family stability) and drug activity. While the relationship exists for South Dakota during the survey period, the relationship is slight ($r = 0.24$). There is a stronger relationship between divorces and delinquency rates

(petitions $r = 0.44$). The reader is cautioned that these indices are based on single year data collection efforts, and are subject to short term anomalies. Use of the indices for calculating high risk communities is more safely accomplished when using several years worth of data.

It would not be surprising to see all of these correlations increasing with the addition of a few more years worth of information.

Child Abuse and Neglect Data, FY 1988 and 1989

DESCRIPTION

The number of substantiated child abuse and neglect cases during 1988 and 1989, standardized as a percentage of the state totals.

GEOGRAPHIC AREA

These data are aggregated by Child Protective Services field offices. They are currently unavailable by county.

SOURCE

Department of Social Services, Child Protective Services to Families and Children, FY 1989 Statistical Report.

DISCUSSION

The child abuse/neglect data presented here would be a valuable contributor to a risk index, but they are not comparable to other indicators because of the geographic aggregation (i.e., field office rather than county).

While the information is useful as it is for local planning efforts, it does not lend itself to risk index construction in its current format. Therefore, local evaluators and planners will want to determine how best to use the data in their local initiatives, and a system for presenting the information on a county level will be helpful in the future.

Yet some curious findings are still seen. The data are presented by Child Protective Services field office. Both the number of substantiated cases, and the percent substantiated vary widely. The number of cases seems to correlate roughly with population size--Rapid City and Sioux Falls have the largest number of cases, Lake Andes and Sisseton the smallest.

However, the percent of substantiated cases seems to correlate with no immediate visible factors. The two largest offices have low rates of substantiated abuse (both less than 43 percent), but so too does the smallest office (21 percent for Sisseton). The percent fluctuates widely.

CPS reports that a new variable is being added to the survey forms used to collect these data, and it is anticipated that the variable will allow for aggregation on a county-to-county basis by FY 1991. Planners are urged to look for these data when initiating local studies.

Foster Care and Group/Residential Care Caseloads, FY 1989**DESCRIPTION**

The number of out of home placements made during 1989, standardized as a percentage of the state totals.

GEOGRAPHIC AREA

These data are aggregated by Child Protective Services office and district. They are currently unavailable by county, although the data are also available by judicial circuit and by tribal court.

SOURCE

Department of Social Services, Annual Statistical Report, 1989.

DISCUSSION

Out of home placement rates are valuable tools for assessing the level of family stress across jurisdictions. Unfortunately, these data are aggregated in such a way in South Dakota that makes them impossible to compare to the indicators noted above (i.e., field office rather than county level).

While the information is useful as it is for local planning efforts, it does not lend itself to risk index construction in its current format. Therefore, local evaluators and planners will want to determine how best to use the data in their local initiatives, and a system for presenting the information on a county level will be helpful in the future.

The data are presented in Appendix B for informational purposes.

ADDITIONAL SOCIAL INDICATORS

Additional indicators of family stress include the number of children removed from their home or placed in foster care, the number of abuse/neglect cases, the number of runaways, and the number of CHINS petitions.⁷ Most of these data are available in South Dakota, with the exception of foster care, which is not conveniently aggregated at the county level.

(3) HARDSHIP ASSOCIATED WITH MINORITY STATUS

Research has shown correlations between poverty and many traditional risk factors.

Research has also shown similar relationships between minority status and poverty. It follows, therefore, that correlations may exist between minority status and social indicators.

⁷The South Dakota Unified Judicial System has recently released an unpublished report on CHINS petitions by county and judicial circuit. The report is available through the Department of Education and Cultural Affairs for local planners.

The most prevalent minority group in South Dakota being Native Americans, population data was gathered by county which shows the distribution of those residents. The discussion of the data follows.

Native American Population, 1990 Estimates

DESCRIPTION

Estimated number of Native Americans. This variable is compiled from Population projections and U.S. Bureau of the Census data.

DISCUSSION

Native American population distributions is not a traditional risk indicator, but in South Dakota is found to correlate strongly with many of the examined factors. Areas of higher percentages of Native Americans are characterized by generally greater levels of need according to the social, mental health, economic, and other factors examined in this study.

Correlations are seen, for example, between Native American population size and unemployment ($r = 0.54$), food stamp distribution ($r = 0.72$), ADC distribution ($r = 0.74$), and infant death rates ($r = 0.70$). Additionally, this indication is negatively related to per capita income ($r = 0.73$). Because of the number and strengths of the associations between this variable and several social indicators, any statewide strategy should look closely at focusing on areas characterized by large numbers of Native Americans.

(4) EDUCATIONALLY DISADVANTAGED CHILDREN AND YOUTH

To construct a risk indicator to measure the amount and distribution of educationally disadvantaged youths, DECA officials recommend constructing an index which combines percent of residents identified as low income youth and percent educationally deprived. DECA interprets the resulting index rate as percent educationally disadvantaged.

Such an index is presented in the Chapter 1 data summarized in Appendix B and in the text below.

Percent educationally deprived, FY 1991

DESCRIPTION

The percent of children who are educationally deprived.

GEOGRAPHIC AREA

These data are aggregated by school districts. They are currently unavailable by county.

SOURCE

Department of Education
Chapter 1 data

DISCUSSION

Education indicators are very important for assessing community and state needs regarding risk factors. School readiness, completion, achievement, and support are measured to give a picture of education needs via a number of very specific indicators.

The Chapter 1 data presented here would be a valuable contributor to a risk index, but it is not comparable to other indicators because of the geographic aggregation (i.e., school district rather than county). As such, it is currently only comparable to variables within its data file.

What is learned when examining the data is that the relationship between the percentage of low income students and the number educationally deprived is low ($r = 0.32$, $p = 0.001$). Further, the relation between the percent considered educationally deprived and the percent receiving services is not only small ($r = -0.23$, $p = 0.05$), but it is also negative. The data indicate that as the percent of educationally deprived students increase, the percent receiving services actually decreases. There is, however, a slight positive correlation between percent low income and percent receiving services ($r = 0.30$, $p = 0.01$).

While the information is useful as it is for local planning efforts, it does not lend itself to risk index construction in its current format because it is not directly comparable to other county-level indicators. Therefore, local evaluators and planners will want to determine how best to use the data in their local initiatives, and a system for presenting the information on a county level will be helpful in the future.

Additional examples of education indicators include the following: percent of Headstart eligible children in programs; high school drop out rates; graduation rates; test scores (percentage below median); educational expenditures; suspensions; and more.

(5) ALCOHOL AND DRUG ABUSE

The association between substance abuse and other risk factors, such as family instability or stress is well documented in the literature.

For this study, two indicators have been utilized to assess rates of alcohol and drug abuse: drug arrests related to prosecution and persons obtaining alcohol and drug treatment.

Alcohol and Drug Treatment Cases, 1989

DESCRIPTION

The number of alcohol and drug treatment clients, standardized per 1,000 persons in the general population. This is not a juvenile/child specific indicator.

GEOGRAPHIC AREA

Tabulated at the county level.

SOURCE

State of South Dakota Fiscal Year 1990 Client Service Summary
Department of Human Services
Division of Alcohol and Drug Abuse, September 1990

DISCUSSION

The data provided for this indicator are not specific to the child population--it contains data on all clients. Just as with mental health treatment/cases, this indicator is subject to just those individuals who obtain the service. It is not necessarily a precise estimate of the numbers of people who actually require the service. However, it is the best proxy measure available, and is therefore worthy of investigation.

Many of the indicators correlate with the alcohol/drug treatment variable, but most of the associations are slight. The correlation matrix reveals that there are more statistically valid correlations for this indicator than any other, although none of the relationships are particularly strong. The highest r is found for the divorce rate ($r = .45$). The remainder have correlated at less substantial, although statistically valid, levels. This might be a reflection of the nature of the data base, since it focuses on all clients, rather than just youths. If a jurisdiction were to use this index to assess the extent of its alcohol and drug problem, then it is advised to locate juvenile-specific data before proceeding.

The map in Appendix C seems to show the alcohol/drug treatment activity concentrated generally in the western half of the state. All but three of the 26 counties with treatment rates of less than 10 per 1,000 are located east of the river. This is probably as much an indication of access to services as it is actual need.

Drug Related Arrests Leading to Prosecution, 1989

DESCRIPTION

The number of drug related arrests which lead to prosecution, standardized per 1,000 persons in the resident population.

GEOGRAPHIC AREA

Aggregated at the county level, data available statewide.

DISCUSSION

The tables describe the distribution of arrests for drug related offenses which led to eventual prosecution. Just as with other indicators, this also varies widely. Several counties had no such arrests during 1989, while three (Aurora, Lyman, and Union) all had more than 10 per 1,000. It is interesting to note that these three counties are not highly populated. Recall the moderate correlation between population and delinquency petitions; such a correlation does not exist between this indicator and population size.

The drug related arrest data correlates with few other county-level indicators, and only slightly when it does. The only statistically valid correlation is with marital termination ($r = 0.24$). Although Hawkins and others have noted the correlation with drug use/abuse and family instability, there are apparently other factors which help to explain the distribution of drug arrests in South Dakota ($r^2 = .06$).

Please note that these data are not juvenile-exclusive. Instead they represent all arrests, regardless of the person's age.

Other indicators useful for measuring alcohol and drug abuse which could not be obtained for this investigation, but may be available in the future include the following: number of petitions filed for alcohol and/or drug offenses; dispositions for alcohol and drug offenses; and volume of liquor sales.

(6) HEALTH CARE DEFICIENCIES

Deficient health care among pregnant mothers is known to lead to a multitude of problems, including low birth weights and even infant deaths. Both indicators are reviewed here.

Low Birth Weight Babies, 1989

DESCRIPTION

The number of babies born during 1989 who were of low birth weight, normalized per 1,000 live births.

GEOGRAPHIC AREA

These data are aggregated at the county level.

SOURCE

South Dakota Vital Statistics, 1989
Center for Health Policy and Statistics
South Dakota Department of Health

DISCUSSION

Many counties had no low birth weight babies born during the reporting period. However, Minnehaha had as many as 93 and several had more than five per 1,000 live births.

Perhaps the most surprising finding regarding this indicator is not what it correlates with, but rather what it is not associated with. It would be hypothesized that low birth weight rates would correlate moderately or strongly with infant death rates, under the assumption that both sets of mothers had similar types of prenatal care (limited or none). However, the two indicators are only slightly correlated ($r = 0.25$). Further, low birth weight is not significantly associated with per capita personal income. In fact, this indicator is correlated only slightly or not at all with the remaining indicator. Perhaps these findings reflect an anomaly with the reporting year or a problem with the data. Whatever the

cause, the reader is urged caution when beginning to evaluate at-risk levels based on this tradition indicator.

OTHER SOCIAL INDICATORS

A number of additional factors can be used to describe or identify health care deficiencies, including the percentage of births to women who obtain late or no prenatal care, percentage of low birth weight babies, medicaid eligible mothers, and more. The low birth weight indicator is described elsewhere in this report.

Infant Death Rate, 1980-1989

DESCRIPTION

The number of infant deaths per 1,000 live births, from 1980 through 1989. Over the 10 year period, the statewide rate was 10.6 per 1,000.

GEOGRAPHIC AREA

These data are aggregated at the county level.

SOURCE

South Dakota Vital Statistics, 1989
Center for Health Policy and Statistics
South Dakota Department of Health

DISCUSSION

The infant death rate per 1,000 live births was greater than 10 times higher in the county with the largest rate than that with the smallest (2.6 versus 28.0). There was a fairly even distribution between these two rates--see Appendix B.

One might hypothesize that the rate would correlate with economic factors in such a manner that poorer counties would have higher infant death rates. In fact, the correlation matrix lends credence to this hypothesis.

Infant death rates are negatively correlated with income--in other words, as income decreases, infant death rates increase ($r = -.69$). The association is even higher for both ADC rates ($r = .75$) and utilization of food stamps ($r = .75$). Notable within the correlation matrix is the strong, positive relationship between Native American population size and infant death rates ($r = .70$)--see Appendix A.

(7) JUVENILE DELINQUENCY

For this study, two indicators are used to trace delinquency patterns: Commitments to DOC and Delinquency Petitions.

Delinquency Petitions Filed, FY 1989⁸**DESCRIPTION**

The number of juvenile delinquency petitions filed, standardized per 1,000 juveniles in the resident population.

GEOGRAPHIC AREA

Aggregated at the county level, data available statewide.

SOURCE

South Dakota Unified Judicial System (database; not published in routine report format).

DISCUSSION

The attached table provides the number of delinquency petition filed per county across the state in FY 1989. The rates varied widely, with as few as zero filed for juveniles in five counties and as many as 47.9 on youths in Pennington. The reader should be warned when interpreting these data that the petitions actually measure numbers filed, not numbers of juveniles for whom the petitions were filed. Therefore, the data used for the indicator are subject to replication--that is, if more than one petition is filed on a juvenile, each petition appears in the data base.

Within the county level indicators, it is found that petitions per 1,000 juveniles were correlated significantly and meaningfully with only two others. First, there is an apparent relationship between population size and standardized petitions filed ($r = 0.51$). In other words the greater the population, the higher percentage of the population had a petition filed during FY 1989.

Secondly, there is a moderate relationship between a county's marital termination rate and petitions filed ($r = 0.48$). This finding is substantiated in other delinquency research and has some implications for delinquency prevention projects in South Dakota. Other family stability indicators which might be found in South Dakota may also yield similar positive correlations with delinquency.

Keep in mind that this data is a one year sample, and is subject to changes over time or may differ from previous years. Local jurisdictions which use this indicator to measure juvenile delinquency behavior are advised to expand the data base to examine trends over time.

The distribution of petitions is presented in the accompanying map. The filing rate pattern duplicates what is found in the correlations, that is, there is generally a higher rate of activity in the areas of greater population. The center of the state, in general, has fewer

⁸The South Dakota Unified Judicial System has recently prepared an ad hoc report on 1990 delinquency petitions by county and judicial circuit. The data will be available for local planning through the Department of Education and Cultural Affairs.

juveniles than the eastern and western sections. The standardized petition filings fall roughly within the same area.

Commitments to the Department of Corrections, FY 1989

DESCRIPTION

The number of commitments to DOC during FY 1989 standardized by the number of juvenile aged 10-19.

GEOGRAPHIC AREA

Aggregated by county.

SOURCE

Unified Judicial System petition/commitment data base.
Ad hoc report.

DISCUSSION

Commitment rates can be useful only when carefully examined and interpreted. In fact, problems of misinterpretation can result if the analyst does not take the data at face value. Local philosophies regarding corrections candidates yield different criteria from jurisdiction to jurisdiction. Also, single year samples can be flawed by anomalies in the population. Commitment rates should usually be examined only when other indicators are assessed as well.

For South Dakota, the commitment rates vary as widely as any other of the indicators examined. Twenty-nine counties produced no committed juveniles during 1989. Six others had more than 10 or more commitments during the same time period. In fact, Tripp county had 12.6 commitments to the State for every 1,000 at-risk youths.

Interestingly, the correlation matrix reveals no significant associations with any indicator but delinquency petition rate ($r = 0.59$). This may indicate that commitment rates are more an indicator of local philosophies, resource availability, or other phenomenon, rather than actual need.

OTHER SOCIAL INDICATORS

Other more reliable indicators of juvenile delinquency activity include referrals to court, number of petitions, non-adjudicatory actions taken, juvenile pre-dispositional detentions, and percentage of youths with identified needs. Such data should be available to local planners with only limited research required.

(8) MENTAL HEALTH

Recall from the findings section that recent research suggest that emotional disorders among children are increasing, disorders such as depression and conduct disorder continue into

adulthood, and that children with unmet mental health problems are at high risk of becoming disturbed adults. As such, it is important to analyze social indicators which reveal areas of risk.

For this study, the rate of children served by the State Division of Mental Health is used.

Rate of Children Served by the Division of Mental Health, FY 1989

DESCRIPTION

Children aged 0-17 who received mental health services via the South Dakota DMH during fiscal year 1989, standardized per 1,000 juveniles in the general population. The state rate for the survey period was 20.4 per 1,000 juveniles.

GEOGRAPHIC AREA

These data are aggregated at the county level.

SOURCE

South Dakota Division of Mental Health
Computer report, August, 1990

DISCUSSION

Mental health treatment rates is one of the most widely varying county level indicators examined in this study. One county had but a single child resident receive treatment during the fiscal year (for a rate of 0.9/1,000) while several others had hundreds. The reader should be cautioned while examining this indicator, however, because the variation could be caused not only by the mere numbers of persons receive treatment, but its availability. Many communities may have low numbers in the accompanying table merely because the service could not be delivered, even if there was a viable candidate. A better indicator would be "persons requiring mental health services" rather than "persons receiving mental health service." However, such an indicator is impossible to accurately compile. Hence, this is used as a reasonable proxy.

Perhaps because of that problem with the data, mental health treatment rates does not correlate with any variables which might be hypothesized. It relates slightly to food stamp use rates ($r = .23$, $P = .034$) and with infant death rates ($r = .23$, $P = .03$). There is no relationship with other indices such as alcohol and drug use or divorce rates, both indices which might be hypothesized as relating to mental health services.

Other variables used to diagnose mental health problems include the number of open cases of seriously emotionally disturbed children, the child and adolescent suicide rate, and the number of children with developmental and learning disabilities.

The map further demonstrates the random nature of the distribution of this variable. An examination reveals no additional clues as to other factors which may correlate with the mental health indicator.

COMPOSITE INDEX

When sufficient, comparable data exist from appropriate risk indicators, it is possible to construct a composite index to assist the planning and/or funding process.

Perhaps the simplest method for compiling an index is to (1) identify the indicators which are of greatest interest to planners and policy-makers and (2) rank order them. The indicators chosen for inclusion in the scale would be based on policy priorities, recognition of need, types of funds available, etc.

The ranking would then be converted to a score. For example, suppose the risk variable "infant death rate" was included in the composite score as a means of assessing community health care deficiencies. The jurisdiction with the lowest infant death rate would be ranked (and scored) "1", second lowest "2", and so on until all jurisdictions are scored. This would be repeated across all appropriate indicators until each jurisdiction is scored.

An average score is then calculated for all indicators for each jurisdiction. This average score becomes the index rating. Simply put, the lower the rating, the lower the community need. Separate index ratings can be compiled for each of a state's/community's problem areas (i.e., juvenile justice, mental health, health, education, family stress, etc.) or combined into a larger composite matrix.

Further, certain problem areas can be weighted through the inclusion of more than one indicator (e.g., using both infant death rates and infant mortality rates together to assess health care quality) or by assigning a weighted value to an indicator.

The composite scores can then be divided, for example, into quartiles or thirds to identify counties or jurisdictions of low to high need.

As an example, a composite index rating was developed based on two indicators, the low birth weight and the infant death rates. They represent a hypothetical situation based on a scenario where South Dakota officials might be interested in attacking health care problems by using these two indicators to identify counties of greatest need. The results of the raking system are presented in Appendix D.

Here it is seen that Jerauld County has the lowest "health care index" (1), and that Todd has the highest (62). Officials might simply divide the data into thirds (22 counties each level) and declare them jurisdictions of low, medium, and high need. The resources available to address the problems as defined by the planners and policy makers could then be concentrated into the highest need counties.

Eleven county-level indicators are presented in the next table of Appendix D to show how they might all be combined under a hypothetical scenario to assist in planning.

An alternative method for assessing overall need would be to determine the mean for the composite score and establish quartile deviations above and below the mean. Those jurisdictions which fall in the first quartile would receive 3 points (highest need index), those in the second would receive 2 points, those in the third would receive 1 point, and the those in the fourth quartile would be considered lowest need and receive no points.

These data could then be used as project evaluation criteria. By evaluating proposals based on need according to the quartile rankings, the impact of the system being scrutinized (e.g., juvenile justice, education, etc.), the budget request justification, and the project narrative (which would probably be given the most points in the evaluation and include a requirement for regional collaboration) then an equitable points assignment system could be available to evaluate project proposals. Such systems are already operational in other states.

SUMMARY

Depending on the extent of the data, its accuracy, and its ability to accurately represent a problem or need, there are essentially four possible uses for index scores.

- (1) They can be used to establish goals and benchmarks for planning purposes. No planning initiative occurs without first identifying long and short term goals. The data provide benchmarks so that there are reference points for pursuing the goals.
- (2) They are valuable for evaluating progress toward stated goals. As data are collected on an annual or other routine basis, the information is useful for establishing the progress which the initiative is making. It helps identify problem areas and allows officials to make adjustments in procedures.

- (3) At the point where sufficient dollars are available, it can be used as a formula for fund allocation. Simply put, the greater the need, as identified by the index, the greater share of funds a jurisdiction would be eligible for.
- (4) Finally, as in the example presented above, it can be used as part of the rating criteria for awarding projects, in conjunction with other criteria.

In essence, the process of developing need indices is just beginning in South Dakota. It will probably be two years before all the indicators are identified to match the problem areas and the data are collected in a manner which makes index creation complete. Until then, the data can still be used to provide insights into need and can also be used by local officials to establish plans, draft proposals, and create interim risk indices.

RECOMMENDATIONS

Just as the issues surrounding at-risk youth are complex and diverse, so too are the recommendations for the initiative. Because of their number and diversity, the recommendations are classified into separate categories. Those categories include:

- (1) State Priorities;
- (2) Benchmarks;
- (3) Planning and Coordination;
- (4) Information on Children and Families;
- (5) Key Predictions and Risk Factor Strategies
- (6) Minority Status Strategies
- (7) Prevention and Early Intervention
- (8) Other Promising Practices; and
- (9) Funding

They are presented in detail on the following pages.

Recommended state priorities for youth at-risk are guided by the State's goal "to insure that all of South Dakota's young people are trained and ready to achieve economic self-sufficiency."

The overall strategy calls for policies that directly impact individual, family, school, and community conditions contributing to youth at-risk. It is based on research which suggests that strategies which focus on strengthening the capacity of communities, families, schools, and children provide the best hope for the future. It further suggests a framework which views communities, parents, and youth as resources and partners.

I. STATE PRIORITIES

The predominant characteristics of those South Dakota youth most apt to leave school without critical life skills suggest a number of state priorities. These priorities are listed under three major categories below: target population, approach, and service priorities. It is recommended that the Youth

and Family Alliance concentrates on the priorities as a means of focusing initiatives. Further, prioritization within each category is a matter for the alliance to resolve, based on available dollars, status of current indicators, etc.

Recommended Target Population Priorities

The data and literature indicate a need to focus on special population types. This review suggests the following are the most critical groups to focus on:

- (1) Communities and schools with a high "index of need;"
- (2) Low income children and their families;
- (3) Educationally disadvantaged children;
- (4) Children with special needs and their families;
- (5) At-risk Native American youth;
- (6) Non-college bound youth, especially drop-outs, and potential drop-outs; and
- (7) Teen parents, and children of teen parents.

Of course, the priorities which an individual jurisdiction should focus on is dependent upon the extent to which these population groups exist within a community.

Recommended Approach

The approach to service delivery should be based on the knowledge that a youth at-risk is faced with a multitude of potential problems and external influences. As such, altering at-risk behavior, or eliminating risk factors, requires a sophisticated approach. One such approach is presented here as a series of recommendations.

(1) ADDRESS THE NEEDS OF THE WHOLE CHILD THROUGH:

- Interagency and multi-agency collaboration and coordination;
- Comprehensive community-based planning and coordination of educational, health, and social services;
- A balanced continuum of prevention, intervention, and treatment services; and
- Policies, curriculum, and services which recognize and are responsive to the unique qualities and needs of ethnic and cultural minority youth.

(2) STRENGTHEN THE CAPACITY OF COMMUNITIES, FAMILIES, SCHOOLS, AND CHILDREN

- State-local and public-private partnerships involving schools, businesses, public and private organizations, parents and youth;
- Creating opportunities for youth to develop skills and contribute to their community; and
- Supporting the development, effectiveness, and maintenance of community-based coalitions

(3) INTEGRATE SOCIAL AND ECONOMIC PERSPECTIVES ON YOUTH DEVELOPMENT

This approach/recommendation should emphasize intervention strategies that:

- Create positive opportunities for youth in their major life arenas (i.e., family, school, peer group, community, work, and culture) ;
- Promote maximum participation in decision-making, and opportunities for youth to gain personal fulfillment (a sense of belonging, usefulness, competence) from their involvement; and
- Enhance educational attainment, and therefore positively affect future career and life opportunities.

(4) USE A VARIETY OF AGE APPROPRIATE INTERVENTIONS TO SUPPORT CRITICAL NEEDS AT EACH STAGE OF DEVELOPMENT**Service Priorities**

All of the service categories eligible for funding under the legislation establishing the Youth At-Risk Trust fund are priorities. The list below suggests specific priorities within those categories. Many do not require a major investment of financial resources. They demand instead increased utilization of citizens, local businesses, traditional youth service organizations, churches, parents, and youth as resources. Some, however, will require an significantly greater additional investment of state, local, and federal dollars than is currently committed through the Youth At-Risk Trust Fund.

The range and scope of needed services is evidence that no one single focus will be effective in preventing and responding to the problems of youth at-risk. All projects address key predictors and factors associated with at-risk behavior. These include poor parenting skills and family management practices, parental attitudes and behavior that model crime and substance abuse; association with

delinquent or substance using peers, early school adjustment difficulties, poor academic performance and school failures, and a low degree of attachment to family, school, pro-social peers, and community.

IT IS THEREFORE RECOMMENDED THAT THE FOLLOWING SERVICE AREAS BE CONSIDERED FOR PRIORITIZATION:

- (1) *Prevention and early intervention, including*
 - maternal and child health,
 - quality childcare,
 - pre-schools/Headstart,
 - elementary basic skills,
 - parent training and support,
 - early identification,
 - middle school improvement projects,
 - peer resource programs (all ages),
 - adolescent in-school health clinics,
 - school and community based community service,
 - work experience/career exploration,
 - alternative educational opportunities, and
 - vocational education;
- (2) *Culturally sensitive and responsive services, curriculum, and teaching strategies;*
- (3) *Alcohol and substance abuse prevention and treatment. Programs are especially needed which*
 - serve rural areas of the state,
 - are developed by Native American communities to be culturally sensitive,
 - serve youth who are in transition from residential programs to their home communities, and
 - utilize peer resource approaches as the primary prevention strategy;
- (4) *Intensive home-based services for children with handicapping conditions (emotional, physical, cognitive), as well as for seriously dysfunctional families, and youth with chronic or acute problems;*
- (5) *Transitional services which support and maintain gains achieved during treatment and which reconnect youth with their families and communities; and*
- (6) *Community-based alternatives to detention and incarceration.*

II. BENCHMARKS

- (1) *USE BASELINE DATA AS BENCHMARKS TO MEASURE ADEQUATE STATE PROGRESS IN IMPROVING THE PERSONAL, SOCIAL, EDUCATIONAL, AND ECONOMIC CONDITIONS OF CHILDREN.*

Benchmarks are a means of creating a shared agenda and providing a tangible measure of adequate state progress. They show where you are now, and where you want to be 10 years from now. National goals have been established in a number of areas, including child and maternal health, school readiness, academic achievement, and school completion. These goals do not address all of the indicators of youth needs and problems, but *"the existing goals give us something to aim for, as well as guideposts for assessing current performance and progress. At the best, they represent a common vision and commitment to improve children's lives."* (The Center for the Study of Social Policy, 1991, p. 64).

National education performance goals for the year 2,000 were approved in 1990 by President Bush and the nation's governors. Health goals were established by the U.S. Department of Health and Human Services. Broad citizen participation in setting benchmarks, as well as executive and legislative endorsement, is key to an adequate level of commitment.

Planners should be careful when establishing benchmarks to ensure that all (and the most) appropriate measures are being used to gauge progress. For example, using the "1989 teen pregnancy rate" as a benchmark to monitor progress toward reducing teen pregnancy is helpful, but when taken out of context will not provide the whole picture. Examining per capita dollars spent on primary prevention or education programs is also an important aspect when gauging progress.

In the context, then, it should be made clear that the data presented in this report are primarily used to identify problem areas for planning purposes. They may or may not be useful benchmarks for measuring progress towards goals, and care should be taken when interpreting what the data really mean.

- (2) *CONTINUE TO IMPLEMENT THE RECOMMENDATIONS AND STRATEGIES DEVELOPED AT THE "EDUCATION 90: FRAMEWORK FOR THE FUTURE" CONFERENCE.*

Changes in family structure and the number of single and two-parent families in the workforce have increased the role that schools play in the development of personal, social, and educational skills. Educators, who are faced with this new responsibility on a daily basis, have been in the forefront of identifying interventions critical to supporting children and families in a changing world. The National Education Goals reflect the wide consensus of researchers and policymakers in the field of health, education, human services and corrections that the problems of at-risk youth can be addressed only by comprehensive strategies that recognize the need to promote the health and well-being of the whole child and that of his or her family.

The result of the *Education 90: Framework for the Future* Conference was a comprehensive plan to address the National Education Goals. Implementation of this plan calls for: (1) coordination and collaboration within and across education, health, and social service agencies; (2) comprehensive services for at-risk youth, especially pre-schoolers; and (3) effective partnerships involving parents, businesses and the community; (4) creating opportunities for young people to be in service to their communities; and (5) the adoption of cultural education goals and objectives.

The plan details specific state and local strategies to improve children's chances of succeeding in school.

III. PLANNING AND COORDINATION

The Governor, the Legislature, the Unified Judicial System and State Executives have provided leadership in the development of state policies for youth at-risk. They have already demonstrated a high level of commitment to identifying the needs of youth at-risk and laying the foundations for future success.

State and local health, education, social service, and correctional agencies, as well as local leaders, educators, parents, businesses, and community groups, are implementing strategies to achieve a shared goal: families, schools and communities that support the personal, educational, and social needs of children.

The majority of the recommendations in this section support and build on what the state of South Dakota is already aggressively pursuing.

The Role of the State

- (1) *CONTINUE TO PROMOTE INTERAGENCY COLLABORATION THROUGH THE CREATION OF INTERAGENCY TASK FORCES, COMMISSIONS, AND INITIATIVES RELATED TO CHILDREN AND FAMILIES.*
- (2) *CONTINUE TO ENCOURAGE AND ASSIST COMMUNITIES IN CREATING AND MAINTAINING EFFECTIVE COORDINATION NETWORKS.*
- (3) *PROMOTE COOPERATIVE PLANNING AND USE OF RESOURCES THROUGH JOINT FUNDING.*
- (4) *CONTINUE SUPPORT OF THE INTERAGENCY CASE MANAGEMENT MODEL THAT WAS DEVELOPED BY THE CASSP PROGRAM AND WHICH HAS BEEN EXPANDED TO INCLUDE ALL CHILDREN WHOSE SERVICE NEEDS CROSS AGENCY BOUNDARIES.*

South Dakota is in the forefront in its support and implementation of a statewide case management approach to service delivery. The following quote emphasizes the efficacy of this approach:

"At the heart of the best prevention program is a well-trained case manager who not only can help families assess their strengths and deficits, but also can broker services to help families anticipate their needs before a crisis occurs." (National Governor's Association, Report of the Task Force on Children, 1989, p. 20.)

- (5) *MAKE COORDINATION AMONG RELEVANT STATE AND/OR LOCAL AGENCIES, COORDINATION WITH SCHOOLS, A REQUIREMENT FOR ANY NEW PROGRAMS FUNDED.*
- (6) *REWARD BROAD-BASED LOCAL PLANNING AND COORDINATION EFFORTS THROUGH FUNDING CRITERIA THAT PLACES A HIGH PRIORITY ON COLLABORATIVE EFFORTS.*
- (7) *GIVE PRIORITY TO PROJECTS THAT STIMULATE COLLABORATION AND WHICH ENCOURAGE A HIGH DEGREE OF COMMUNITY, PARENT, AND/OR YOUTH INVOLVEMENT (NOT JUST INVOLVEMENT OF PROFESSIONALS).*

The Role of the Community

- (1) *LOCAL AND REGIONAL PLANNING AND COORDINATION EFFORTS SHOULD ENCOURAGE CITIZEN, PARENT, AND YOUTH PARTICIPATION IN IDENTIFYING, EVALUATING, AND SOLVING YOUTH AND FAMILY PROBLEMS IN THEIR COMMUNITIES.*

Comprehensive community actions plans for youth at-risk should:

- (a) Involve a broad representative cross-section of community leaders, public and private service providers, educators, parents, and youth in their development and implementation;
- (b) Be based on an assessment of local conditions that support and hinder the children and youth in achieving personal, social, educational, and economic potential;
- (c) Evaluate the availability, adequacy, and accessibility of services to meet the unique needs of at-risk children and their families;
- (d) Include a balanced and coordinated continuum of prevention, early intervention, and remediation/treatment services;
- (e) Promote coordination, collaboration, and inter-agency case-management among relevant youth-serving agencies;
- (f) Utilize age-appropriate strategies;
- (g) Target those populations of children most at-risk;
- (h) Acknowledge and develop the potential of young people to contribute to their community. Provide opportunities for youth to develop skills and contribute to the welfare of others (e.g., through active participation in planning, operating, and evaluating community services; peer resource programs, and other community service initiatives).

IV. INFORMATION ON CHILDREN AND FAMILIES

- (1) *IMPROVE THE AVAILABILITY, ACCURACY, AND UTILIZATION OF STATE AND LOCAL INFORMATION ON CHILDREN AND FAMILIES.*

The development of a data base for planning and evaluating youth at-risk needs and services should be viewed as a developmental process, and should involve communities. Toward this goal, the following additional recommendations are made.

- (2) *ENCOURAGE LOCAL SCHOOL DISTRICTS AND COMMUNITIES TO ACCURATELY COLLECT AND COMPILE INFORMATION ON INDICATORS OF CHILD AND ADOLESCENT HEALTH, EDUCATION, SOCIAL AND ECONOMIC WELL-BEING, AND TO USE THIS INFORMATION TO INCREASE PUBLIC AWARENESS, STIMULATE AND GUIDE LOCAL RESPONSES, AND EVALUATE THE IMPACT OF YOUTH AT-RISK POLICIES AND PROGRAMS. (FY 1991)*

- (3) *PROVIDE TECHNICAL ASSISTANCE TO SCHOOLS AND COMMUNITIES IN DEVELOPING AND INTERPRETING DATA ON YOUTH AT-RISK. (FY 1991)*

Information is a powerful tool, often more because of the questions it raises, than those it helps answer. All data requires interpretation, and local communities are in the best position to interpret the implications of data trends, survey information, research findings, and other information related to youth at-risk in their community. Collecting information that is valid, reliable, and useful is critical to informed decision-making.

- (4) *DEVELOP AND ENCOURAGE THE USE OF STANDARD DEFINITIONS, CATEGORIES, AND PROCESSES FOR IDENTIFYING LOCAL NEEDS AND RESOURCES. (FY 1991)*

As a starting point, the planning guide being developed as a part of this study will include guidelines and tools for examining local youth issues, needs, and resources. (FY 1991)

- (5) *DEVELOP CONSENSUS AT THE STATE AND LOCAL LEVEL REGARDING THE MINIMUM INFORMATION NEEDED FOR ACCOUNTABLE PLANNING, IMPLEMENTATION, MONITORING AND EVALUATION OF STATE AND LOCAL YOUTH-AT-RISK INITIATIVES, AND THEN MAKE THE COLLECTION AND REPORTING OF THIS INFORMATION A REQUIREMENT OF FUNDING. (FY 1992)*

During the first, and probably the second year, data collection and reporting methods and requirements will need to be refined and improved, utilizing the suggestions and comments from state and local policy-makers, service providers, and educators. They will also be influenced by improvements and/or changes in other state information systems. The potential adoption of a "central directory" system for all children and youth services, for example, would replace the need for local planning and coordinating councils to conduct annual resource inventories. However, they will still need to evaluate the adequacy and appropriateness of these resources. (FY 1991)

- (6) *A PROCESS FOR COLLECTING AND DISSEMINATING DATA USED FOR PLANNING (AS BENCHMARKS AND/OR SOCIAL INDICATORS) SHOULD BE ESTABLISHED.*

The baseline data used for this report came from dozens of sources and agencies. Those data also change from year to year. Therefore, a mechanism will have to be established to collect, collate, and disseminate the information to local planners and policymakers.

It is recommended that a Youth At-Risk Information Clearinghouse be established by the Alliance to maintain not only data, but also annual reports, agency plans, research findings, and risk theory materials. The Alliance would be responsible for contacting agencies to request relevant materials on an annual basis and following up to insure the materials are available for community-based planning. Automating the material so that it can be searched by key word or social indicator will increase the efficiency of a clearinghouse.

V. PROGRAM EVALUATION

(1) *ENHANCE STATE AND LOCAL CAPACITY TO CONDUCT MEANINGFUL AND APPROPRIATE EVALUATIONS OF YOUTH AT-RISK PROGRAMS.*

"What works?" "What types of services are most cost effective?" "Does Program X make a difference?" "Is the service worth continuing or expanding?" "Are families and children getting what they need?" These are some of the questions that people ask when they are trying to get the most out of limited resources. Those responsible for the expenditure of public funds should also ask: "Is the program providing the services to the population it said it would?" "Is it carrying out the activities and meeting the objectives committed to in the contract?"

Program evaluation seeks to answer these questions by collecting and analyzing information about the type, quantity and quality of services offered and the effectiveness of those services in achieving desired changes or outcomes with specific client populations.

Effective evaluations can serve a variety of purposes including:

- Establishing policy and planning directions,
- Determining types of programs/services to be offered,
- Identifying areas for improvement in a program,
- Determining whether a program is meeting service goals and objectives, and
- Determining types of services which are most effective in achieving desired outcomes with specific client populations.

Meaningful and appropriate evaluations require planning--the projects to be evaluated must be designed up front to make the process feasible. Enhancing state and local capacity to conduct meaningful and appropriate evaluations of youth at-risk programs involves:

- Developing and prioritizing evaluation questions;
- Identifying approaches to provide the information needed to answer those questions;
- Evaluating the feasibility and cost-effectiveness of each approach; and
- Developing an agreed-upon evaluation plan, and data collection systems and procedures to support that plan.

Failure to develop a planned, agreed-upon approach to evaluation will lead to wasted money and effort (i.e., data collected which are of no use to anyone); frustration (everyone involved in the evaluation will feel they have wasted their time); and discord (the program, the sponsor, and the public will feel they did not get what they asked for or expected).

A number of factors can determine the nature and quality of the evaluation process, including:

- The quality of goals and objectives;
- The rationale linking program services and activities to program goals;
- The quality and availability of relevant data;

- The quality and availability of resources available for evaluation; and
- The congruence of expectations among those interested in evaluation results.

It is therefore recommended that the Youth and Family Alliance:

- (2) *DEVELOP AN EVALUATION SYSTEM FOR MONITORING AND EVALUATING PROJECTS FUNDED BY THE YOUTH AT-RISK TRUST FUND THAT INVOLVES LOCAL PLANNERS, DECISION MAKERS AND SERVICE PROVIDERS AS PARTNERS IN ALL EVALUATION EFFORTS UNDERTAKEN.*

It is also recommended that as part of its technical assistance role, the state:

- (3) *PROVIDE TRAINING TO ALL INTERESTED PARTIES IN EVALUATION METHODS AND THE FACTORS THAT INFLUENCE THE QUALITY AND USEFULNESS OF EVALUATION INFORMATION.*

The following are some suggested guidelines for developing a meaningful and appropriate approach to evaluation:

1. Involve local planners, decision-makers, and service providers in all evaluation efforts to insure that the evaluation system is based upon a data collection system which yields consistently reliable data, as well as providing information which is useful at an agency/programmatic level and at system-wide and statewide levels.
2. Determine the purpose of the evaluation by answering the following questions:
 - a. Who will be involved in the evaluation, and who will be interested in the results?
 - b. What information is needed or desired by this audience? What do they want to learn?
 - c. How will information from the evaluation will be used?
3. Prioritize the purposes of the evaluation system (what information is most important?).

For example, is the purpose:

- To provide documentation and administrative accountability for the projects that are funded (program monitoring)?
- To assess the implementation and ongoing operation of a program in order to identify ways in which the program can be modified or improved (process or formative evaluation)?
- To determine whether projects are meeting short-term performance objectives (process or formative evaluation)?
- To assess the nature and extent of change on program clients and the extent to which these changes result from the interventions provided through a service or program (outcome or impact evaluation)?
- To compare the cost-effectiveness of different approaches to the same problem (cost-benefit analysis)?

4. Identify evaluation approaches which address priority needs; evaluate the feasibility and cost-effective of each approach; and identify the limitations of each approach.
5. Design the evaluation plan, guided by decisions made during steps 1-4.
 - a. Develop evaluation questions for program goals.
 - b. Develop evaluation methods taking into consideration what data can realistically be collected and the appropriate methods and procedures for collecting the data. Include:
 - Measures of program activities and outcomes,
 - Data collection methods or instruments,
 - Data collection procedures, and
 - Methods to be used in analyzing and interpreting data.
 - c. Develop an evaluation implementation plan that specifies what data will be collected, when it will be collected, how it will be collected and by whom.
 - d. Decide what methods of analysis will be used to interpret data that is collected.
 - e. Develop a plan for disseminating evaluation results.

VI. KEY PREDICTORS AND RISK FACTOR STRATEGIES

Effective prevention and intervention strategies must directly address the key factors contributing to delinquency, emotional disorder, substance abuse, school failure, teenage pregnancy, and other problems that cast a dark shadow on the lives of many young people. Major risk factors common to all of these problem areas, predictors and risk factors associated with each specific problem area, social indicators included in the "index of need" are all found elsewhere in this report.

- (1) *UTILIZE SOCIAL INDICATORS PRESENTED IN THIS REPORT FOR PRIORITIZING SERVICES AND SELECTING PROJECTS FOR FUNDING.*
- (2) *MEASURE PROGRESS IN ACHIEVING STATE GOALS BY EVALUATING CHANGE IN SOCIAL INDICATORS OF CHILD, YOUTH, AND FAMILY ISSUES ASSOCIATED WITH RISK.*
- (3) *KEEPING LOCAL CONDITIONS AND FACTORS IN MIND, LOCAL SCHOOLS AND SOCIAL SERVICE AGENCIES SHOULD IDENTIFY THOSE YOUNG PEOPLE WHO HAVE ALREADY DEMONSTRATED BEHAVIORS OR CHARACTERISTICS WHICH HAVE BEEN SHOWN TO HAVE A HIGH CORRELATION WITH AT-RISK BEHAVIORS SUCH AS DROPPING OUT OF SCHOOL, ALCOHOL ABUSE, TEEN PREGNANCY, OR TROUBLE WITH THE LAW; MONITOR THEIR PROGRESS, AND PROVIDE APPROPRIATE PREVENTION, CRISIS INTERVENTION, AND REMEDIATION INTERVENTIONS.*

VII. MINORITY STATUS STRATEGIES

Knowing that Native American children are more likely to be poor, to be living in single parent families, to be living in a home where the parent is poorly educated and has a drinking problem, strategies should focus on this population.

- (1) *INCREASE AVAILABILITY OF CULTURALLY SENSITIVE AND APPROPRIATE SERVICES AND PROJECTS THAT HELP COMMUNITIES AND YOUTH DEVELOP RESPECT FOR CULTURAL DIVERSITY.*
- (2) *ELIMINATE THE GAP IN HIGH SCHOOL GRADUATION RATES BETWEEN SOUTH DAKOTA STUDENTS FROM NATIVE AMERICAN BACKGROUNDS AND THEIR NON-MINORITY COUNTERPARTS.*

This recommendation is based on Goal 2, Objective 2, of the National Educational Goals adopted in 1990: "The gap in high school graduation rates between American students from minority background and their non-minority counterparts will be eliminated."

South Dakota educators have recommended that the state legislature mandate Native American education by requiring that Native American curricula be integrated into all schools. This is an excellent start. It is clear, however, that an extraordinarily high percentage of Native American students are at-risk on the basis of multiple risk factors. Only a strategy which addresses the multiple factors that work against the educational success of Native American students, and which address the needs of the whole child, will succeed. One such strategy might involve:

- Integration of culturally sensitive and effective curriculum and teaching strategies.
- Curricula, activities, and training that promote sensitivity to and appreciation of cultural diversity, not only in schools, but in health, social, and correctional agencies.
- Financial incentives to communities who join together in coalitions to reduce their dropout rate.
- Encouragement and support of tribal-based identification of needs and solutions to youth problems on Indian Reservations.

A solution proposed in the Aberdeen Tribal Area Health Plan would involve the following:

- Address the needs of the whole person.
- Funding and resources are needed for creative/innovative methods to rebuild and empower families.
- Families need assistance in learning how to be less dependent on the system and more self-reliant.
- Tribal people need to relearn cooperation behavior to solve family and community problems.

- Funding to teach children/youth survival skills in dysfunctional families.
- Funding to create culturally sensitive alcohol programs.
- Development of a community/family strengthening curriculum which will make families functional.

VIII. PREVENTION AND EARLY INTERVENTION

Constrained by limited resources, South Dakota's service system, like that in other states, spends most of its resources treating the symptoms instead of the causes of youth problems. Although state and local comprehensive plans should attempt to achieve a balance of prevention, early intervention and treatment resources and strategies, the Youth At-Risk Trust fund should make prevention and early intervention services a high priority.

Key decision-makers interviewed in the course of the South Dakota Juvenile Justice System Study agreed that there is a critical need for early identification and intervention before youth problems become chronic or acute. Data collected on youth in South Dakota's juvenile justice system confirmed that family, personal, and school problems had significantly contributed to these youths' offense behavior. If these problems had been addressed before they reached crisis proportions, the use of state resources for expensive treatment and correctional services may have been avoided.

Discretionary dollars, such as those in the Youth At-Risk Trust fund, are one of the few sources of funding for prevention activities. As stated in the 1989 National Governor's Association's task force report on children, "... the growing need to spend limited resources on high-cost treatment and remedial efforts increases the burden on our economy and reduces our ability to compete effectively with countries that invest early in more cost-effective programs of prevention and early intervention" (1989, p. 2).

- (1) *THEREFORE, IT IS RECOMMENDED THAT, TO THE EXTENT POSSIBLE, TRUST FUND DOLLARS BE FOCUSED ON PREVENTION AND EARLY INTERVENTION PROGRAMS.*

Research in the health, education, and social science fields have provided substantial evidence that prevention services are cost-effective and result in significant long-term savings (e.g., Austin and Meister, 1990, pp. 7-28; National Governor's Association, 1989, p. 4; Schorr, 1988, p. xii;

Schweinhart and Weikart, 1980).⁹ *America in Transition* (1989) suggests several points in every child's life at which primary prevention strategies are especially critical:

| | |
|--------------------------------|--|
| PRENATAL: | Comprehensive and timely prenatal care. |
| BIRTH TO FIVE: | Well-child care, including screening and immunization. Accessible and affordable child care coupled with quality preschool education. Early identification of handicapping conditions. |
| PRIMARY SCHOOL ¹⁰ : | Early identification and intervention for educationally disadvantaged. Focus on reading skills. Headstart follow-up. |
| MIDDLE SCHOOL: | A vital and engaging middle school education, structured to help students make the transition between childhood and adolescence. |
| ADOLESCENCE: | Health care and preventive health education. Constructive engagement in volunteer and community service, organized recreation, and community theater and music programs. |

IX. FUNDING STRATEGIES

A major task which the Alliance must address is how to allocate and award Youth At-Risk Trust funds. It is recommended that funding be viewed as one of several strategies for addressing the problems and needs of youth and families. Dollars, rather than goals, tend to drive the planning process when grant programs are not included as part of a broader comprehensive plan that includes non-grant solutions such as coordination, technical assistance, and advocacy.

⁹Schorr, Lisbeth with Daniel Schorr, *Within Our Reach: Breaking the Cycle of Disadvantage*, New York: Anchor Press, Doubleday, 1988; L.J. Schweinhart and D.P. Weikart, *Young Children Grow Up: The Effects of the Perry Preschool Program on Youths Through Age 15*. Ypsilanti, Michigan: High Scope Press, 1990.

¹⁰Primary prevention strategies for the primary school years were not included in *America in Transition*; however, numerous other studies, including those summarized by Austin and Meister in *Responding to Children At Risk*, as well as research conducted by Hawkins and Weiss, Patterson, and others, suggest key strategies for children in the early grades that should not be overlooked.

Funding Allocation Strategy and Awards Process

- (1) *ADOPT A FUNDING STRATEGY WHICH FOCUSES ON OVERALL NEED--I.E., UTILIZES A NEED INDEX--TO PRIORITIZE COMMUNITIES WITH THE GREATEST NEED.*

Project Fair has identified the pros of various funding allocation strategies for state programs targeted at youth at-risk of dropping out of school. This study concluded:

"If the public policy goal is to target resources on those districts with the greatest need and to encourage local creativity in addressing the problem, **the index of need appears to be the preferred funding alternative** based on the findings of the simulation study" (emphasis added).

The extent to which data that closely mirrors the distribution and magnitude of the at-risk population is easily available by desired geographic units must also be considered.

- (2) *LINK MONEY TO GOALS AND MANDATES.*
- (3) *SELECT PRIORITY AREAS FOR FUNDING THAT HAVE DIRECT IMPACT ON GOALS IDENTIFIED IN PLAN. SOME OTHER FACTORS TO CONSIDER IN SELECTING PRIORITIES AND DETERMINING HOW MUCH TO ALLOCATE TO EACH PRIORITY AREA INCLUDE:*
- (a) [If community planning and ownership is a goal] a broad enough range of areas so that communities have room to determine their own priorities and strategies;
 - (b) Information on nature, scope, severity, magnitude, and location of the problem, including any recent significant changes;
 - (c) Other resources available to address the problem;
 - (d) Recent or current policies, legislation, coordination/planning efforts or other factors that have been "effective" or promising in relation to the priority area; and
 - (e) Obstacles or barriers.
- (4) *USE A FUNDING ALLOCATION PROCESS THAT IS CONSISTENT WITH ALLIANCE'S MISSION AND GOALS.*
- (5) *USE AN AWARDS PROCESS THAT DIRECTLY SUPPORTS THE PRIORITIES AND ALLOCATIONS MADE IN THE PLAN (INCLUDES SENSITIVITY TO COMMUNITY NEEDS IN DEVELOPING APPLICATION, REVIEW, AND SELECTION PROCESS).*
- (6) *DEVELOP SPECIFIC MEASURABLE GOALS AND OBJECTIVES FOR EACH PRIORITY AREA AND ALWAYS ANNOUNCE THE GOALS AND RATIONALE FOR THE PROGRAM WHEN ANNOUNCING THE AVAILABILITY OF FUNDS.*
- (7) *DETERMINE WHAT ENTITIES ARE ELIGIBLE TO APPLY FOR FUNDS.*

- (8) *INCREASE THE LEVERAGE OF YOUTH AT-RISK TRUST FUNDS BY LEVERAGING OTHER FUNDS AND RESOURCES.*

For example, the Alliance could provide start-up funds for a project that will be funded by local or other sources within a pre-determined time period. This time period could vary for different categories of projects (e.g., a research or training project might be funded for one year only, whereas a direct service program that requires considerable investment of time and resources during the development and implementation phases might be funded fully or partially for several years). Regardless of the period, it should be announced in advance and strictly adhered to.

- (9) *EXAMINE WAYS TO INCREASE THE LEVERAGE OF YOUTH AT-RISK TRUST FUNDS BY UTILIZING STRATEGIES AIMED AT STATEWIDE OR SYSTEMWIDE IMPROVEMENT.*

Ask:

- What is potential for statewide replication?
- What is potential statewide, regional, or systemwide impact on quality and/or delivery of services?
- What is potential statewide, regional, or systemwide impact on conditions causing youth problems?
- Is this the most cost-effective use of limited resources?

- (10) *USE A GRANTS PROCESS WHICH CLEARLY FOCUSES ON GOALS AND PRIORITIES, YET IS FLEXIBLE ENOUGH TO RESPOND TO BOTH STATE AND LOCAL CONCERNS.*

Funding programs is one strategy that may be used to address identified problems or to enhance community-based opportunities for children and their families to achieve personal, social, educational, and economic potential. The following are the basic steps involved in developing and implementing a grants process:

- (1) Establish goals and priorities;
- (2) Select allocation strategy;
- (3) Develop funding protocol;
- (4) Announce grant program and submission requirements;
- (5) Review applications;
- (6) Make funding recommendations and decisions; and
- (7) Award funds.

The specific tasks for the grants process are:

- (1) Determine goals and priorities to address through the use of grant funds.
- (2) Review and assess potential allocation strategies.
- (3) Select strategy(s) for allocating funds.
- (4) Develop Request for Proposals (funding protocol) which includes:
 - (a) Goals and objectives of grant program;
 - (b) Target population(s);

- (c) Specific approaches, activities and/or services eligible for funding;
- (d) Application/submission requirements:

- 1. Who can apply,
- 2. Amount of funds available and cash or in-kind match, if any,
- 3. Funding period and plans for continuation funding, if any,
- 4. Standard application format (or application kit), and
- 5. Grants process timelines;

- (e) Any special conditions of funding. For example:

- 1. Planning and coordination,
- 2. Funding restrictions,
- 3. Reporting requirements,
- 4. Evaluation requirements,
- 5. Performance requirements, and
- 6. Inter-agency agreements;

- (5) The application process-common components:

- (a) Public notification of availability of funds,
- (b) Preapplications or "Letters of Intent to Apply for Funds,"
- (c) Grant application training workshops,
- (d) Contents of application, and
- (e) Date application is due.

- (6) The review and selection process.

- (a) Who will review and making funding recommendations/decisions?
- (b) Criteria for selection.
- (c) Dates of review and oral presentation if any.
- (d) Date of funding decision.

- (7) Notice of grant award mailed to successful applicants (also, notify those who did not receive award; an appeals process is sometimes required/desirable).

- (8) Acceptance of grant award and signed contractual document(s) returned to funding agency.

- (9) Grant funding cycle begins.

X. OTHER PROMISING PRACTICES

- (1) **SOUTH DAKOTA SHOULD AGGRESSIVELY PURSUE APPLICATION FOR FEDERAL COMMUNITY SERVICE FUNDS.**

- (2) *STRONG CONSIDERATION SHOULD BE GIVEN TO FUNDING PEER RESOURCE PROGRAMS, INCLUDING PEER HELPERS, PEER-TUTORING, COOPERATIVE LEARNING, AND CROSS-AGE PEER TUTORING.*

Research (as reported by Bernard, 1990) consistently shows that peer resource programs:

- (a) Provide children and youth of all ages the opportunity to develop collaboration/conflict resolution skills
- (b) Promote acceptance and respect for diversity (between physically and/or mentally handicapped or socially withdrawn peers and non-handicapped peers and between white and non-white peers;
- (c) Promote academic achievement;
- (d) Reduce alcohol and drug use among youth;
- (e) Provide the positive social support that all youth need; and,
- (f) Give youth the opportunity to help, to experience being needed, valued, and respected by another person; and
- (g) Help satisfy the basic need to belong, to make decisions and solve problems, and to have some control over one's life--all of which are essential to the development of identity.

Child development research has identified social support as critical to social, physical, and cognitive development, and as protective of health and mental health during the stressful life events that many at-risk children experience (divorce, illness, unemployment, family alcoholism, depression, school transition, etc.). (Bernard, 1990; Wasserman, 1988, Dubow and Tisak, 1989; Fenzel and Blyth, 1986, Sandler, et. al, 1985 and others.)

- (3) *THE ALLIANCE SHOULD ESTABLISH INTERMEDIATE OBJECTIVES FOR ITS GOALS AS A MEANS OF ESTABLISHING A STRATEGY AND PROVIDING AN ACCURATE PICTURE OF ACCOMPLISHMENTS.*

The ability to reach many of the initiative goals will be complicated by extenuating factors. For example, problem areas overlap, making it difficult to attain one goal without addressing multiple needs. Therefore, it is important to establish intermediate objectives as a means of better gauging progress toward overall goals.

As an example, suppose a priority goal is established to "reduce delinquent behavior among South Dakota's youths." To only measure the differences in delinquency petition rates between an existing and a baseline year would not provide a full picture of how much has been accomplished to reach the goal. Objectives such as, "develop prevention programs in 20 rural communities," "initiate a statewide sixth grade Law-Related Education program," and "introduce a police diversion/early intervention program for first offenders in two pilot sites" may all be part of the overall strategy for the goal. Examining progress toward each goal provides a more thorough understanding of the impact that is being made to resolve a problem.

(4) *USE REGIONAL WORKSHOPS TO ENHANCE AWARENESS AND COMPETENCY ON STATE YOUTH AT-RISK ISSUES.*

Regional workshops should be useful for: explaining mandates of Federal programs to local officials and planners; identifying and sharing components of good planning networks; and providing technical assistance on issues such as grantsmanship, model programs, and evaluations.

The overall goal of the workshops would be to enhance the capacity of the local community to plan and coordinate. Federally funded programs continue to demand greater levels of local participation--as such, these workshops could be used to benefit both the Alliance and individual state agencies by enhancing local planning skills.

TOPICAL AT-RISK YOUTH BIBLIOGRAPHY

This bibliography lists references on youth at-risk, beginning with a list of "general" studies and publications, each of which contains information on a broad range of concerns regarding children and youth at-risk. The general reference section is followed by additional studies and publications that address more specific youth at-risk issues. These additional references are organized alphabetically by topical areas. References within each section are listed alphabetically by author.

YOUTH AT-RISK: GENERAL

Austin, Susan and Gail Meister (1990). *Responding to Children At Risk: A Guide to Recent Reports*. Philadelphia, Pennsylvania: Research for Better Schools.

Center for the Study of Social Policy, (1990). *Kids Count Data Book--State Profiles of Child Well-Being*. Washington, D.C.

Center for the Study of Social Policy (1991). *Kids Count Data Book--State Profiles of Child Well-Being*. Washington, D.C.

Children's Defense Fund (1990). *Children 1990: A Report Card, Briefing Book, and Action Primer*. Washington, D.C.

Children's Defense Fund (1990). *S.O.S. America: A Children's Defense Budget*. Washington, D.C.

Davis, William E. and Edward J. McCaul (1991). *The Emerging Crisis: Current and Projected Status of Children in the United States*. Orono, Maine: Institute for the Study of At-Risk Students, University of Maine.

Morenoff, R. and S. Wilkie (Fall, 1990). "The South Dakota Priority," Child Welfare League of America and the National Priorities Project. New York.

National Governor's Association (1989). *America in Transition, The International Frontier: Report of the Task Force on Children*, Washington, D.C.

Schorr, Lisbeth and B. Daniel (1988). *Within Our Reach: Breaking the Cycle of Disadvantage*. New York: Anchor Press, Doubleday.

"South Dakota 1989-90 Youth Risk Behavior Survey" (1990). Sponsored by the Department of Education and Cultural Affairs, Office of Education Services, for AIDS prevention education.

VanDenBerg, Jean, and Don Arwood (June 1990). "Adolescent Life Chances," in SDSU Census Data Center Newsletter, Vol. 5, No. 3. Department of Rural Sociology, Agricultural Experiment Station.

Webster, Carol (September 1987). "Preliminary Discussion Paper: Youth At-Risk" (unpublished report). Olympia, Washington: Department of Social and Health Services.

Zill, N., M. Krysan, T. Stief, and J.J. Peterson (1989). *Young Children in Poverty in the United States: A Statistical Profile*. Report Prepared for the National Center for Children in Poverty. Washington, D.C.: Child Trends, Inc.

ALCOHOL AND DRUG

Alcohol Health and Research World, Vol. 13, No. 4 (1989). "Perspectives on Current Research." Washington, D.C.: U.S. Department of Health and Human Services, National Institute on Alcohol Abuse and Alcoholism {DHHS Publication No. (ADM) 89-151.}

The American Drug and Alcohol Survey, Drug and Alcohol Use Among South Dakota High School Seniors, 1989-90. Fort Collins, Colorado: RMBSI, Inc. Study sponsored by Department of Human Services, Division of Alcohol and Drug Abuse; and Department of Education and Cultural Affairs; Pierre, South Dakota.

Attorney General's Task Force on Drugs (January 4, 1991). *Application for Drug Control and System Improvement Fiscal Year 1991 Formula Grant Program Funds through the Drug Control and System Improvement Formula Grant Program under the State and Local Law Enforcement Assistance Program of the Anti-Drug Abuse Act of 1988*. State of South Dakota Office of the Attorney General, Pierre, South Dakota.

Bernard, Bonnie (1990). "The Case for Peers," Western Regional Center, Drug-Free Schools and Communities, Northwest Regional Educational Laboratory, Portland, Oregon.

"State of South Dakota Fiscal Year 1990 Client Service Summary" (September 1990). Department of Human Services, Division of Alcohol and Drug Abuse, Pierre, South Dakota.

U.S. Department of Health and Human Services, Public Health Services, National Institute on Alcohol Abuse and Alcoholism (January 1990). *Seventh Special Report to the U.S. Congress on Alcohol and Health from the Secretary of Health and Human Services*.

CHILD ABUSE/NEGLECT/DEPENDENCY

American Association for Protecting Children (1989). "Highlights of Official Aggregate Child Neglect and Abuse Reporting, 1987." Denver, Colorado: The American Human Association.

South Dakota Child Protective Services (1989). "Child Protective Services to Families and Children: FY 89 Statistical Report," Department of Social Services, Child Protection Services, Pierre, South Dakota.

CHILD CARE

Branum, Judy (March 1990). "Needs Assessment Survey Results for the Governor's Planning and Advisory Council on After School Day Care." Child Development and Family Relations Department, South Dakota State University.

EDUCATION

Davis, William E. and Edward J. McCaul (1990). *At-Risk Children and Youth: A Crisis in Our Schools and Society*, Institute for the Study of At-Risk Students, University of Maine, 1990.

Education Daily (May 3, 1990), "State Education Statistics, 1988-89: Student Performance and Resources," pp. 3 and 4.

Schweinhardt, L.J. and D.P. Weikart (1980). *Young Children Grow Up: The Effects of the Perry Preschool Program on Youths Through Age 15*. Ypsilanti, Michigan: High Scope Press.

South Dakota Department of Education and Cultural Affairs (November 1989). "1989 Minority Achievement Report." Pierre, South Dakota.

South Dakota Department of Education and Cultural Affairs (1989). *1988-89 Educational Statistics Digest*. Pierre, South Dakota.

South Dakota Department of Education and Cultural Affairs (1990). *Status Report: Special Education in South Dakota for School Year 1989-90*. Pierre, South Dakota.

South Dakota Department of Education and Cultural Affairs (January 1990). "FY 1989 Chapter I Evaluation Highlights." Pierre, South Dakota.

South Dakota Department of Education and Cultural Affairs (Spring, 1990). "South Dakota State Testing Program Results for the Standard Achievement Test, 8th Edition and the Otis-Lennon School Ability Test, 6th Edition." Pierre, South Dakota.

U.S. General Accounting Office (GAO) (March 1990). *Special Education: Estimates of Handicapped Indian Preschoolers and Sufficiency of Services*, Briefing Report to Congressional Requesters.

HEALTH POLICY AND STATISTICS

Aberdeen Area Tribal Health Issues and Solutions (August 7-10, 1990). Report developed by The Aberdeen Area Tribal Chairmen's Health Board in cooperation with the Aberdeen Area Tribal Health Directors, and presented at the National Consultation Conference on Indian Health Services in St. Paul, Minnesota.

National Center for Health Statistics (1988). *Vital Statistics of the United States, 1988*. Washington, D.C.: Department of Health and Human Services.

South Dakota Department of Health, Center for Health Policy and Statistics (1988). *South Dakota Vital Statistics and Health Status, 1988*. Pierre, South Dakota.

South Dakota Department of Health, Center for Health Policy and Statistics (1989). *South Dakota Vital Statistics and Health Status, 1989*. Pierre, South Dakota.

"South Dakota 1989-90 Youth Risk Behavior Survey" (1990). South Dakota Department of Education and Cultural Affairs, Office of Educational Services. Pierre, South Dakota.

JOB TRAINING/EMPLOYMENT

South Dakota Department of Labor, Labor Market Information Center, Aberdeen, South Dakota (February 7, 1991). Ad hoc report on percent of labor market unemployed, on average, during 1989, by county.

State Job Training Coordinating Council, "Working for South Dakota! Annual Report to the Governor, 1989-90."

U.S. Department of Labor (June 1987). *Workforce 2000: Work and Workers for the 21st Century*. Indianapolis, Indiana: Hudson Institute.

William T. Grant Commission on Work, Family, and Citizenship. (November 1988). *The Forgotten Half: Pathways to Success for American's Youth and Young Families*. Washington, D.C.: Youth and America's Future: The William T. Grant Commission on Work, Family, and Citizenship.

U.S. Department of Commerce, Bureau of Economic Analysis. Average per capita income in South Dakota counties. (Ad hoc report).

JUVENILE DELINQUENCY AND JUVENILE JUSTICE

Austin, James, "America's Growing Correctional-Industrial Complex," *NCCD Focus*, National Council on Crime and Delinquency, December 1990.

Catalano, Richard (1989). "A Risk Factor Based Approach to Delinquency Prevention," Keynote address, 1989 National Conference of State Juvenile Justice Advisory Groups, Reno, Nevada, May 7-10.

Community Research Associates (1990). "South Dakota Juvenile Justice System Study: Final Report." Unpublished report prepared for the South Dakota Juvenile Justice Study Committee, Department of Corrections, Pierre, South Dakota.

Hawkins, David, J.M. Jenson, R.F. Catalano, and D.M. Lishner (1988). "Delinquency and Drug Abuse: Implications for Social Services."

Hawkins, J.D. and J. Weise (1985). "The Social Development Model: An Integrated Approach to Delinquency Prevention."

Leon, Seth (December 1987). "Juvenile Justice Formula." New York State Council on Children and Families

South Dakota Department of Corrections (January 1991). *Report of the 1990 Juvenile Justice Study Committee*. Pierre, South Dakota.

South Dakota Department of Corrections (1990). Ad hoc report on juvenile commitments to state correctional facilities. Pierre, South Dakota.

South Dakota Department of Corrections (July 30, 1990). "The Corrections Substance Abuse Program: Report for Fiscal Year July 1, 1989 through June 30, 1990." Pierre, South Dakota.

South Dakota Unified Judicial System (1989). *Benchmark 1989: Annual Report of the South Dakota Unified Judicial System*. Pierre, South Dakota.

South Dakota Unified Judicial System (1990). Ad hoc report on delinquency petitions filed, by county. Pierre, South Dakota.

South Dakota Youth Advocacy Project (1990). Ad hoc report on juvenile detentions and jailings. Pierre, South Dakota.

MENTAL HEALTH

Beiser, Morton, M.D. (July 1990). "Persistent and Pervasive Mental Disorders Among Young School Children in a Rural Area of South Dakota." Division of Social and Cultural Psychiatry, Department of Psychiatry, University of British Columbia, July, 1990. Study sponsored by the Division of Mental Health, Pierre, South Dakota.

Froelich, Peter K. and Diane Weyer (April 1990). "An Evaluation of the Implementation and the Impacts of West River Mental Health Center's In-Home Therapy Program," prepared for The South Dakota Department of Human Services, Division of Mental Health, C.A.S.S.P. Project.

Froelich, Peter K. (July 1990). "An Evaluation of a Project to Create Mental Health Treatment Continuum for Abused/Neglected Children and Their Families in Pierre and Winner, South Dakota," prepared for The South Dakota Department of Human Services, Division of Mental Health, C.A.S.S.P. Project.

South Dakota Division of Mental Health Statistical Report (printout) on Children Served July 1, 1989 through June 30, 1990. Pierre, South Dakota.

Suicide Prevention/Treatment Project, Southeast Area Cooperative and McCords (Cummins Engine): 1990-91.

PLANNING AND COORDINATION

Bareis, Rosie (1989). *It's About Youth: A Planning Guide for Communities*. Salem, Oregon: Oregon Juvenile Services Commission and the Oregon Department of Education.

Jordon, K. Forbis (1990). "Project Fair: Alternative State Funding Allocation Methods for Local School District Programs to Service 'At-Risk' Students" (Project Summary). Tempe, Arizona: Arizona State University, College of Education.

Lofquist, William (1983). *Discovering the Meaning of Prevention*. Tucson, Arizona: Associates for Youth Development.

Lofquist, William (1990). *The Technology of Prevention Workbook*. Tucson, Arizona: Associates for Youth Development.

Lofquist, William (1990). *The Youth Opportunity Planning Process*. Tucson, Arizona: Associates for Youth Development.

Oregon Community Children and Youth Services Commission (1990). *1990 Comprehensive Planning Guide: Communities Investing in the Future*. Salem, Oregon.

Oregon Progress Board (January 1991). *Oregon Benchmarks: Setting Measurable Standards for Progress*. Salem, Oregon.

South Dakota Department of Education and Cultural Affairs (1991). *A Guide for Case Management Services in Local Communities*. Pierre, South Dakota.

Thomas, Pam Teaney (1990). "Creative Action Planning," in Northeast South Dakota Alcohol and Drug Abuse Council Action Plan. Aberdeen, South Dakota.

POPULATION STATISTICS: SOUTH DAKOTA AND U.S.

Center for the Study of Social Policy (1990). *Kids Count Data Book--State Profiles of Child Well-Being*. Washington, D.C.

Center for the Study of Social Policy (1991). *Kids Count Data Book--State Profiles of Child Well-Being*. Washington, D.C.

U.S. Department of Commerce, Bureau of the Census (1991). "1990 Population Characteristics: South Dakota" (Public Law 94-171 Data).

RUNWAY AND HOMELESS YOUTH

Jarvis, Sara V. *Profile of Youth Served by Southeastern Network Agencies: July 1988-June 1989*. Athens, Georgia: Southeastern Network of Youth and Family Services.

SOCIAL SERVICES

South Dakota Department of Social Services Annual Statistical Report: Fiscal Year 1989. Published by Statistical Analysis and Reports, Office of Management Information, Department of Social Services, Pierre, South Dakota.

South Dakota Department of Social Services (February 1991). "Count of Cases/Kids on Foodstamps for 1990" by County (Ad hoc report). South Dakota Department of Social Services, Office of Program Management, Pierre, South Dakota.

TEEN PREGNANCY

Hayes, Cheryl D. (1987). *Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing*. Washington, D.C. National Academy Press.

National Center for Health Statistics (1990). "Table 1. Number of Births in 1987 to Mothers Under Age 20," and "Table 2. Rates of Teen Pregnancy, Abortion and Birth in 1985 and 1980 and for Whites and Nonwhites in 1985" from *Teenage Pregnancy in the United States*, published by The Alan Guttmacher Institute, 1989.

APPENDIX A: RISK INDICATOR CORRELATION MATRIX

TABLE A1: CORRELATION OF SELECTED VARIABLES

Pearson product movement correlations are presented on the following table. Each pair of variables (defined in "Risk Indicators" in the report) contains three numbers: at the top is the r-value (or correlation) where 0.0 indicates no correlation and 1.0 indicates perfect correlation; the number of cases entered into the calculation (this is always 66--on for each county); and the statistical significance (expressed as $p = \#$).

For assistance in interpreting the table, turn to "Correlations Between Social Indicators" in the report.

| Correlations: | POPUL | NATAMER | UNEMPLOY | FOODSTMP | PETITION | INCOME | ADC | ALCDRUG | INFDEATH | LOWBIRTH | DIVORCES | MH | DRUGARST | DOC |
|---------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| POPUL | 1.0000 (66) P= . | .2589 (66) P= .018 | .0484 (66) P= .350 | -.0767 (66) P= .270 | .5092 (66) P= .000 | .2885 (66) P= .009 | -.0462 (66) P= .356 | .3758 (66) P= .001 | .0050 (66) P= .484 | .2449 (66) P= .024 | .4760 (66) P= .000 | -.1201 (66) P= .168 | .0928 (66) P= .229 | .1833 (66) P= .070 |
| NATAMER | .2589 (66) P= .018 | 1.0000 (66) P= . | .5377 (66) P= .000 | .7236 (66) P= .000 | .0237 (66) P= .425 | -.5831 (66) P= .000 | .7432 (66) P= .000 | .3917 (66) P= .001 | .6987 (66) P= .000 | .2554 (66) P= .019 | -.1303 (66) P= .149 | .1053 (66) P= .200 | -.0888 (66) P= .239 | -.0053 (66) P= .483 |
| UNEMPLOY | .0484 (66) P= .350 | .5377 (66) P= .000 | 1.0000 (66) P= . | .5760 (66) P= .000 | -.1049 (66) P= .201 | -.5802 (66) P= .000 | .5821 (66) P= .000 | .2454 (66) P= .023 | .5400 (66) P= .000 | .2518 (66) P= .021 | -.2057 (66) P= .049 | .1717 (66) P= .084 | -.1047 (66) P= .201 | -.0959 (66) P= .222 |
| FOODSTMP | -.0767 (66) P= .270 | .7236 (66) P= .000 | .5760 (66) P= .000 | 1.0000 (66) P= . | -.0849 (66) P= .249 | -.7742 (66) P= .000 | .9863 (66) P= .000 | .2558 (66) P= .019 | .7466 (66) P= .000 | .3099 (66) P= .006 | -.3352 (66) P= .003 | .2262 (66) P= .034 | -.0614 (66) P= .312 | .0119 (66) P= .462 |
| PETITION | .5092 (66) P= .000 | .0237 (66) P= .425 | -.1049 (66) P= .201 | -.0849 (66) P= .249 | 1.0000 (66) P= . | .2582 (66) P= .018 | -.0733 (66) P= .279 | .3705 (66) P= .001 | -.1461 (66) P= .121 | .3116 (66) P= .005 | .4361 (66) P= .000 | -.0005 (66) P= .498 | -.0060 (66) P= .481 | .5926 (66) P= .000 |
| INCOME | .2885 (66) P= .009 | -.5831 (66) P= .000 | -.5802 (66) P= .000 | -.7742 (66) P= .000 | .2582 (66) P= .018 | 1.0000 (66) P= . | -.7493 (66) P= .000 | -.0585 (66) P= .320 | -.6887 (66) P= .000 | -.0840 (66) P= .251 | .5649 (66) P= .000 | -.0572 (66) P= .324 | .1216 (66) P= .165 | .0626 (66) P= .309 |
| ADC | -.0462 (66) P= .356 | .7432 (66) P= .000 | .5821 (66) P= .000 | .9863 (66) P= .000 | -.0733 (66) P= .279 | -.7493 (66) P= .000 | 1.0000 (66) P= . | .2664 (66) P= .015 | .7509 (66) P= .000 | .3384 (66) P= .003 | -.3047 (66) P= .006 | .1911 (66) P= .062 | -.0364 (66) P= .386 | -.0012 (66) P= .496 |
| ALCDRUG | .3758 (66) P= .001 | .3917 (66) P= .001 | .2454 (66) P= .023 | .2558 (66) P= .019 | .3705 (66) P= .001 | -.0585 (66) P= .320 | .2664 (66) P= .015 | 1.0000 (66) P= . | .2848 (66) P= .010 | .2377 (66) P= .027 | .4542 (66) P= .000 | .3223 (66) P= .004 | .1023 (66) P= .207 | .0506 (66) P= .343 |
| INFDEATH | .0050 (66) P= .484 | .6987 (66) P= .000 | .5400 (66) P= .000 | .7466 (66) P= .000 | -.1461 (66) P= .121 | -.6887 (66) P= .000 | .7509 (66) P= .000 | .2848 (66) P= .010 | 1.0000 (66) P= . | .2511 (66) P= .021 | -.2782 (66) P= .012 | .2321 (66) P= .030 | -.0234 (66) P= .426 | -.1059 (66) P= .199 |
| LOWBIRTH | .2449 (66) P= .024 | .2554 (66) P= .019 | .2518 (66) P= .021 | .3099 (66) P= .006 | .3116 (66) P= .005 | -.0840 (66) P= .251 | .3384 (66) P= .003 | .2377 (66) P= .027 | .2511 (66) P= .021 | 1.0000 (66) P= . | .2543 (66) P= .020 | -.1305 (66) P= .148 | -.0305 (66) P= .404 | .2322 (66) P= .030 |
| DIVORCES | .4760 (66) P= .000 | -.1303 (66) P= .149 | -.2057 (66) P= .049 | -.3352 (66) P= .003 | .4361 (66) P= .000 | .5649 (66) P= .000 | -.3047 (66) P= .006 | .4542 (66) P= .000 | -.2782 (66) P= .012 | .2543 (66) P= .020 | 1.0000 (66) P= . | .1199 (66) P= .169 | .2368 (66) P= .028 | .1827 (66) P= .071 |
| MH | -.1201 (66) P= .168 | .1053 (66) P= .200 | .1717 (66) P= .084 | .2262 (66) P= .034 | -.0005 (66) P= .498 | -.0572 (66) P= .324 | .1911 (66) P= .062 | .3223 (66) P= .004 | .2321 (66) P= .030 | -.1305 (66) P= .148 | .1199 (66) P= .169 | 1.0000 (66) P= . | .0099 (66) P= .469 | -.0224 (66) P= .429 |
| DRUGARST | .0928 (66) P= .229 | -.0888 (66) P= .239 | -.1047 (66) P= .201 | -.0614 (66) P= .312 | -.0060 (66) P= .481 | .1216 (66) P= .165 | -.0364 (66) P= .386 | .1023 (66) P= .207 | -.0234 (66) P= .426 | -.0305 (66) P= .404 | .2368 (66) P= .028 | .0099 (66) P= .469 | 1.0000 (66) P= . | -.0161 (66) P= .449 |
| DOC | .1833 (66) P= .070 | -.0053 (66) P= .483 | -.0959 (66) P= .222 | .0119 (66) P= .462 | .5926 (66) P= .000 | .0626 (66) P= .309 | -.0012 (66) P= .496 | .0506 (66) P= .343 | -.1059 (66) P= .199 | .2322 (66) P= .030 | .1827 (66) P= .071 | -.0224 (66) P= .429 | -.0161 (66) P= .449 | 1.0000 (66) P= . |

(Coefficient / (Cases) / 1-tailed Significance)

APPENDIX B: PRESENTATION OF RISK INDICATORS

LIST OF TABLES IN APPENDIX B

| | |
|------------|--|
| Table B1: | Food Stamp Usage By Children Per 1000, 1990 |
| Table B2: | Per Capita Personal Income, 1989 |
| Table B3: | Average Unemployment Rate, 1989 |
| Table B4: | Aid to Dependent Children Distributions, FY 1989 |
| Table B5: | Child Abuse and Neglect Statistics, FY 88 & 89 |
| Table B6: | Foster Care and Group/Residential Care, Average Monthly Caseloads by District, FY 1989 |
| Table B7: | Divorces, 1989 |
| Table B8: | Distribution of Native American Population, 1990 |
| Table B9: | Educationally Disadvantaged Youth, Chapter 1 Data, 1990 |
| Table B10: | Drug Related Arrests Leading to Prosecution, FY 1989 |
| Table B11: | Alcohol and Drug Treatment Clients Per 1,000 Residents, 1989 |
| Table B12: | Low Birth Weight Babies, 1989 |
| Table B13: | Infant Deaths Per 1,000 Births, 1989 |
| Table B14: | Commitments to Department of Corrections, FY 1989 |
| Table B15: | Delinquency Petitions Filed Per 1,000 Youth At Risk, FY 1989 |
| Table B16: | Children Receiving Mental Health Services, FY 1989 |

TABLE B1
FOOD STAMP USAGE BY CHILDREN PER 1000
1990

| COUNTY | CHILDREN RECEIVING ASSISTANCE | NUMBER PER 1000 CHILDREN | RANK | COUNTY | CHILDREN RECEIVING ASSISTANCE | NUMBER PER 1000 CHILDREN | RANK |
|-------------|-------------------------------------|-----------------------------|------|------------|-------------------------------------|-----------------------------|------|
| Aurora | 59 | 75.9 | 26 | Hyde | 34 | 72.6 | 23 |
| Beadle | 418 | 93.5 | 37 | Jackson | 290 | 268.0 | 57 |
| Bennett | 500 | 424.1 | 63 | Jerauld | 54 | 78.6 | 28 |
| Bon Homme | 128 | 73.9 | 24 | Jones | 18 | 47.5 | 7 |
| Brookings | 529 | 70.8 | 21 | Kingsbury | 96 | 64.3 | 14 |
| Brown | 968 | 92.3 | 36 | Lake | 260 | 88.6 | 34 |
| Brule | 113 | 81.1 | 30 | Lawrence | 509 | 86.5 | 33 |
| Buffalo | 316 | 422.5 | 62 | Lincoln | 264 | 52.7 | 10 |
| Butte | 298 | 125.5 | 47 | Lyman | 286 | 228.6 | 55 |
| Campbell | 23 | 48.2 | 8 | Marshall | 126 | 91.1 | 35 |
| Charles Mix | 715 | 281.9 | 58 | McCook | 106 | 67.5 | 17 |
| Clark | 75 | 56.5 | 11 | McPhearson | 35 | 36.8 | 5 |
| Clay | 423 | 129.0 | 48 | Meade | 490 | 64.6 | 15 |
| Codington | 702 | 105.3 | 42 | Mellette | 303 | 431.6 | 64 |
| Corson | 593 | 317.3 | 59 | Miner | 96 | 115.5 | 45 |
| Custer | 145 | 66.6 | 16 | Minnehaha | 2874 | 74.5 | 25 |
| Davison | 630 | 133.0 | 49 | Moody | 146 | 69.0 | 18 |
| Day | 353 | 186.9 | 53 | Pennington | 3874 | 163.3 | 51 |
| Deuel | 125 | 95.6 | 39 | Perkins | 60 | 49.1 | 9 |
| Dewey | 779 | 325.8 | 60 | Potter | 72 | 85.1 | 32 |
| Douglas | 64 | 62.0 | 12 | Roberts | 668 | 239.0 | 56 |
| Edmunds | 56 | 47.3 | 12 | Sanborn | 77 | 104.6 | 40 |
| Fall River | 285 | 139.6 | 50 | Shannon | 2697 | 464.8 | 65 |
| Faulk | 25 | 34.5 | 3 | Spink | 145 | 70.2 | 20 |
| Grant | 181 | 71.8 | 22 | Stanley | 81 | 95.5 | 38 |
| Gregory | 236 | 112.3 | 44 | Sully | 11 | 19.9 | 1 |
| Haakon | 33 | 34.4 | 2 | Todd | 1871 | 612.2 | 66 |
| Hamlin | 101 | 77.6 | 27 | Tripp | 378 | 195.8 | 54 |
| Hand | 75 | 62.9 | 13 | Turner | 159 | 78.7 | 29 |
| Hanson | 96 | 104.9 | 41 | Union | 300 | 109.0 | 43 |
| Harding | 20 | 36.6 | 4 | Wallworth | 286 | 179.0 | 52 |
| Hughes | 520 | 116.3 | 46 | Yankton | 459 | 84.2 | 31 |
| Hutchinson | 157 | 69.2 | 19 | Ziebach | 392 | 350.0 | 61 |

Note: Table describes the number of children receiving food stamp assistance during FY 1989, standardizes that number per 1,000 children 0-17, and provides the rank among counties which the number per 1,000 represents (1 = lowest, 66 = highest).

Source: South Dakota Department of Social Services, Food Stamp Assistance, Ad Hoc Report, February 1991.

TABLE B2
PER CAPITA PERSONAL INCOME
1989

| COUNTY | PER CAPITA PERSONAL INCOME | RANK | COUNTY | PER CAPITA PERSONAL INCOME | RANK |
|-------------|-------------------------------|------|------------|-------------------------------|------|
| Aurora | 10,399 | 54 | Hyde | 13,270 | 15 |
| Beadle | 13,584 | 10 | Jackson | 7,472 | 63 |
| Bennett | 10,377 | 55 | Jerauld | 10,438 | 53 |
| Bon Homme | 13,239 | 17 | Jones | 13,557 | 11 |
| Brookings | 12,293 | 34 | Kingsbury | 13,496 | 12 |
| Brown | 13,821 | 6 | Lake | 13,303 | 14 |
| Brule | 12,268 | 37 | Lawrence | 12,703 | 24 |
| Buffalo | 6,461 | 65 | Lincoln | 13,087 | 21 |
| Butte | 11,270 | 46 | Lyman | 10,834 | 49 |
| Campbell | 13,875 | 5 | Marshall | 12,002 | 41 |
| Charles Mix | 10,994 | 48 | McCook | 12,280 | 35 |
| Clark | 13,877 | 4 | McPhearson | 10,624 | 52 |
| Clay | 12,116 | 40 | Meade | 10,752 | 50 |
| Codington | 12,343 | 33 | Mellette | 8,870 | 59 |
| Corson | 7,765 | 62 | Miner | 12,612 | 25 |
| Custer | 12,361 | 32 | Minnehaha | 15,285 | 1 |
| Davison | 13,418 | 13 | Moody | 12,162 | 38 |
| Day | 11,984 | 42 | Pennington | 13,176 | 19 |
| Deuel | 10,996 | 47 | Perkins | 12,478 | 29 |
| Dewey | 8,132 | 61 | Potter | 12,504 | 28 |
| Douglas | 10,283 | 56 | Roberts | 9,284 | 58 |
| Edmunds | 11,537 | 44 | Sanborn | 12,393 | 31 |
| Fall River | 12,915 | 22 | Shannon | 4,625 | 66 |
| Faulk | 12,269 | 36 | Spink | 14,909 | 3 |
| Grant | 11,601 | 43 | Stanley | 12,513 | 27 |
| Gregory | 11,356 | 45 | Sully | 15,201 | 2 |
| Haakon | 13,688 | 9 | Todd | 6,685 | 64 |
| Hamlin | 10,663 | 51 | Tripp | 12,131 | 39 |
| Hand | 12,857 | 23 | Turner | 13,135 | 20 |
| Hanson | 9,691 | 57 | Union | 13,739 | 8 |
| Harding | 12,555 | 26 | Wallworth | 12,404 | 30 |
| Hughes | 13,813 | 7 | Yankton | 13,249 | 16 |
| Hutchinson | 13,190 | 18 | Ziebach | 8,574 | 60 |

Note: Per capita personal income is presented in dollars. The "Rank" is used to compare income levels per county with 1 representing the highest level and 66 representing the lowest.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, Per Capita Personal Income, FY 1989.

TABLE B3
AVERAGE UNEMPLOYMENT RATE
1989

| COUNTY | AVERAGE UNEMPLOYMENT RATE | RANK | COUNTY | AVERAGE UNEMPLOYMENT RATE | RANK |
|-------------|---------------------------------|------|------------|---------------------------------|------|
| Aurora | 1.6 | 4 | Hyde | 3.9 | 31 |
| Beadle | 3.9 | 31 | Jackson | 4.0 | 34 |
| Bennett | 2.7 | 16 | Jerauld | 2.7 | 16 |
| Bon Homme | 1.5 | 3 | Jones | 5.4 | 53 |
| Brookings | 5.5 | 55 | Kingsbury | 3.2 | 25 |
| Brown | 6.8 | 62 | Lake | 5.7 | 57 |
| Brule | 2.3 | 9 | Lawrence | 4.8 | 48 |
| Buffalo | 10.5 | 64 | Lincoln | 3.4 | 27 |
| Butte | 4.4 | 41 | Lyman | 4.8 | 48 |
| Campbell | 2.5 | 11 | Marshall | 4.6 | 46 |
| Charles Mix | 4.7 | 47 | McCook | 3.4 | 27 |
| Clark | 6.7 | 61 | McPhearson | 4.0 | 34 |
| Clay | 4.0 | 34 | Meade | 4.5 | 44 |
| Codington | 4.9 | 50 | Mellette | 4.4 | 41 |
| Corson | 13.6 | 66 | Miner | 3.6 | 29 |
| Custer | 2.9 | 19 | Minnehaha | 3.6 | 29 |
| Davison | 2.1 | 8 | Moody | 5.1 | 52 |
| Day | 5.4 | 53 | Pennington | 4.2 | 39 |
| Deuel | 3.9 | 31 | Perkins | 1.7 | 5 |
| Dewey | 8.4 | 63 | Potter | 2.7 | 16 |
| Douglas | 2.3 | 9 | Roberts | 5.7 | 57 |
| Edmunds | 5.0 | 51 | Sanborn | 2.6 | 14 |
| Fall River | 4.3 | 40 | Shannon | 11.1 | 65 |
| Faulk | 1.2 | 1 | Spink | 2.8 | 14 |
| Grant | 4.0 | 34 | Stanley | 4.5 | 44 |
| Gregory | 3.2 | 25 | Sully | 1.9 | 6 |
| Haakon | 3.1 | 24 | Todd | 6.5 | 60 |
| Hamlin | 4.4 | 41 | Tripp | 2.5 | 11 |
| Hand | 2.0 | 7 | Turner | 3.0 | 22 |
| Hanson | 2.9 | 19 | Union | 5.5 | 55 |
| Harding | 1.4 | 2 | Wallworth | 4.0 | 34 |
| Hughes | 3.0 | 22 | Yankton | 2.5 | 11 |
| Hutchinson | 2.9 | 19 | Ziebach | 6.2 | 59 |

Note: The Labor Information Center publicizes the average unemployment rate as a percentage. "Rank" is used to determine which counties have the highest (rank = 66) and lowest (rank = 1) unemployment rates.

Source: South Dakota Department of Labor, Labor Market Information Center, Average Annual Unemployment Rate, 1989, February 1991.

TABLE B4
AID TO DEPENDENT CHILDREN DISTRIBUTIONS
FY 1989

| COUNTY | AVERAGE NUMBER OF CHILDREN PER MONTH | NUMBER PER 1000 CHILDREN | RANK | COUNTY | AVERAGE NUMBER OF CHILDREN PER MONTH | NUMBER PER 1000 CHILDREN | RANK |
|-------------|--|-----------------------------|------|------------|--|-----------------------------|------|
| Aurora | 2 | 2.3 | 2 | Hyde | 8 | 15.3 | 18 |
| Beadle | 177 | 35.5 | 41 | Jackson | 175 | 142.5 | 58 |
| Bennett | 277 | 215.9 | 63 | Jerauld | 8 | 10.6 | 10 |
| Bon Homme | 33 | 16.8 | 21 | Jones | 6 | 13.9 | 16 |
| Brookings | 277 | 33.4 | 34 | Kingsbury | 35 | 21.7 | 27 |
| Brown | 435 | 37.7 | 43 | Lake | 97 | 29.9 | 33 |
| Brule | 35 | 23.0 | 29 | Lawrence | 229 | 35.2 | 38 |
| Buffalo | 161 | 199.3 | 62 | Lincoln | 66 | 12.0 | 13 |
| Butte | 155 | 59.5 | 50 | Lyman | 160 | 115.5 | 56 |
| Campbell | 6 | 11.5 | 12 | Marshall | 54 | 34.5 | 37 |
| Charles Mix | 341 | 121.6 | 57 | McCook | 42 | 23.7 | 30 |
| Clark | 16 | 10.9 | 11 | McPhearson | 2 | 1.9 | 1 |
| Clay | 199 | 54.0 | 48 | Meade | 175 | 20.7 | 23 |
| Codington | 251 | 34.1 | 36 | Mellette | 190 | 246.8 | 64 |
| Corson | 321 | 158.4 | 59 | Miner | 12 | 13.1 | 14 |
| Custer | 54 | 22.1 | 28 | Minnehaha | 1415 | 33.6 | 35 |
| Davison | 275 | 51.9 | 46 | Moody | 66 | 28.6 | 32 |
| Day | 151 | 73.1 | 51 | Pennington | 2082 | 79.5 | 53 |
| Deuel | 24 | 16.7 | 20 | Perkins | 29 | 21.4 | 26 |
| Dewey | 430 | 169.6 | 60 | Potter | 34 | 36.8 | 42 |
| Douglas | 12 | 10.5 | 9 | Roberts | 318 | 101.0 | 54 |
| Edmunds | 8 | 5.9 | 4 | Sanborn | 12 | 14.6 | 17 |
| Fall River | 128 | 57.4 | 49 | Shannon | 1722 | 268.2 | 65 |
| Faulk | 7 | 8.9 | 8 | Spink | 49 | 21.3 | 25 |
| Grant | 44 | 15.4 | 19 | Stanley | 33 | 35.4 | 40 |
| Gregory | 115 | 51.2 | 45 | Sully | 2 | 3.2 | 3 |
| Haakon | 20 | 19.1 | 22 | Todd | 1071 | 325.0 | 66 |
| Hamlin | 30 | 20.9 | 24 | Tripp | 167 | 78.5 | 52 |
| Hand | 9 | 6.8 | 6 | Turner | 52 | 24.0 | 31 |
| Hanson | 14 | 13.5 | 15 | Union | 158 | 52.0 | 47 |
| Harding | 4 | 6.6 | 5 | Wallworth | 182 | 105.0 | 55 |
| Hughes | 193 | 39.3 | 44 | Yankton | 211 | 35.3 | 39 |
| Hutchinson | 17 | 6.8 | 6 | Ziebach | 227 | 189.6 | 61 |

Note: ADC data are presented above as the number of children (recipients) per month who received ADC during FY 1989, and the standardized number per 1,000 children. Use rank to determine which counties have the highest (rank = 66) and lowest (rank = 1) ADC distribution rates.

Source: South Dakota Department of Social Services, Food Stamp Assistance, Ad Hoc Report, February 1991.

TABLE B5
CHILD ABUSE AND NEGLECT STATISTICS
FY 88 & 89

| Office | Investigations | Number Substantiated | Percent Substantiated | Percent of State Total |
|--------------------|----------------|----------------------|-----------------------|------------------------|
| Aberdeen | 947 | 361 | 38.1 | 4.1 |
| Belle Fourche | 676 | 301 | 44.5 | 3.4 |
| Brookings | 631 | 201 | 31.9 | 2.3 |
| Chamberlain | 592 | 241 | 40.7 | 2.7 |
| Deadwood | 627 | 314 | 50.1 | 3.6 |
| Eagle Butte | 752 | 389 | 51.7 | 4.4 |
| Hot Springs/Custer | 460 | 244 | 53.0 | 2.8 |
| Huron | 580 | 190 | 32.8 | 1.7 |
| Lake Andes | 164 | 80 | 48.8 | .9 |
| Martin | 527 | 387 | 73.4 | 4.4 |
| Mission | 1558 | 600 | 38.5 | 6.8 |
| Mitchell | 406 | 135 | 33.3 | 1.5 |
| Mobridge | 532 | 217 | 40.8 | 2.5 |
| Pierre | 947 | 297 | 31.4 | 3.4 |
| Pine Ridge | 1877 | 622 | 33.1 | 7.1 |
| Rapid City | 3681 | 1556 | 42.3 | 17.7 |
| Sioux Falls | 3597 | 1222 | 34.0 | 13.9 |
| Sisseton | 205 | 43 | 21.0 | .5 |
| Sisseton Tribe | 647 | 404 | 62.4 | 4.6 |
| Vermillion | 629 | 268 | 42.6 | 3.0 |
| Watertown | 738 | 185 | 25.1 | 2.1 |
| Winner | 575 | 234 | 40.7 | 2.7 |
| Yankton | 642 | 210 | 32.7 | 2.4 |
| Yankton Sioux Tr. | 186 | 96 | 51.6 | 1.1 |

Note: "Percent Substantial" represents the number per 100 investigations which were substantial and "percent of state total" represents the percent of substantial investigations which an office totals is of the State's state total.

Source: Department of Social Services, Child Protection Services, Child Protective Services to Families and Children, FY 89 Statistical Report, 1989.

TABLE B6
FOSTER CARE AND GROUP/RESIDENTIAL CARE
AVERAGE MONTHLY CASELOADS BY DISTRICT
FY1989

| Location | Caseload | Percent of Total |
|----------------------------------|--------------|------------------|
| Hot Springs | 11.5 | 2.1 |
| Pine Ridge | 58.3 | 10.7 |
| Martin | 17.2 | 3.1 |
| Pine Ridge District Total | 87 | 16.0 |
| Rapid City | 82.6 | 15.1 |
| Deadwood | 18.9 | 3.4 |
| Belle Fourche | 11.83 | 2.7 |
| Western District Total | 123.4 | 22.6 |
| Eagle Butte | 35.1 | 6.6 |
| Pierre | 7.8 | 1.4 |
| Mobridge | 6.6 | 1.2 |
| Chamberlain | 27.7 | 5.1 |
| Mission | 49.5 | 9.1 |
| Winner | 15.1 | 2.8 |
| Central District Total | 142.6 | 26.1 |
| Aberdeen | 10.1 | 1.9 |
| Sisseton | 0 | 0.0 |
| Watertown | 12.5 | 2.3 |
| Huron | 5.3 | 1.0 |
| Northeast District Total | 17.8 | 3.3 |
| Lake Andes | 5.3 | 1.0 |
| Yankton | 12.3 | 2.3 |
| Vermillion | 13.7 | 2.5 |
| Total | 31.1 | 5.7 |
| Brookings | 13.9 | 2.5 |
| Mitchell | 6.9 | 1.3 |
| Sioux Falls | 67.2 | 12.3 |
| Total | 88 | 16.1 |
| SUBTOTAL | 480 | 87.8 |
| Cath. Family Services | 3.6 | .66 |
| Lutheran Soc. Services | 28.6 | 5.2 |
| Catholic Soc. Services | 1 | .2 |
| Sisseton/Wahpeton | 21.4 | 4.0 |
| Yankton Sioux Tribe | 10.5 | 2.0 |
| SUBTOTAL | 66.8 | 12.2 |
| STATE TOTAL | 546.8 | |

Note: "Caseload" is the average number of youth in foster care and group/residential care per moth. "Percentage of Total" is the percentage that the location's caseload is of the state total.

Source: Department of Social Services, Child Protection Services, Child Protective Services to Families and Children, FY 89 Statistical Report, 1989.

Source: Child Protection Services Annual Report

**TABLE B7
DIVORCES
1989**

| COUNTY | NUMBER OF DIVORCES | DIVORCES PER 1000 POPULATION | RANK | COUNTY | NUMBER OF DIVORCES | DIVORCES PER 1000 POPULATION | RANK |
|-------------|-----------------------|---------------------------------|------|------------|-----------------------|---------------------------------|------|
| Aurora | 6 | 1.9 | 18 | Hyde | 2 | 1.2 | 8 |
| Beadle | 89 | 4.9 | 61 | Jackson | 5 | 1.8 | 17 |
| Bennett | 10 | 3.1 | 44 | Jerauld | 5 | 2.1 | 23 |
| Bon Homme | 14 | 2.0 | 20 | Jones | 5 | 3.8 | 55 |
| Brookings | 77 | 3.1 | 44 | Kingsbury | 13 | 2.2 | 26 |
| Brown | 136 | 3.8 | 55 | Lake | 43 | 4.1 | 57 |
| Brule | 13 | 2.4 | 30 | Lawrence | 100 | 4.8 | 60 |
| Buffalo | 0 | 0.0 | 1 | Lincoln | 46 | 3.0 | 42 |
| Butte | 29 | 3.7 | 54 | Lyman | 5 | 1.4 | 10 |
| Campbell | 3 | 1.5 | 14 | Marshall | 7 | 1.4 | 10 |
| Charles Mix | 22 | 2.4 | 30 | McCook | 16 | 2.8 | 39 |
| Clark | 13 | 3.0 | 42 | McPhearson | 4 | 1.2 | 8 |
| Clay | 33 | 2.5 | 35 | Meade | 76 | 3.5 | 52 |
| Codington | 76 | 3.3 | 47 | Mellette | 5 | 2.3 | 28 |
| Corson | 6 | 1.4 | 10 | Miner | 11 | 3.4 | 49 |
| Custer | 34 | 5.5 | 64 | Minnehaha | 628 | 5.1 | 63 |
| Davison | 63 | 3.6 | 53 | Moody | 19 | 2.9 | 40 |
| Day | 23 | 3.3 | 47 | Pennington | 517 | 6.4 | 66 |
| Deuel | 11 | 2.4 | 30 | Perkins | 16 | 4.1 | 57 |
| Dewey | 6 | 1.1 | 6 | Potter | 7 | 2.2 | 26 |
| Douglas | 6 | 1.6 | 16 | Roberts | 20 | 2.0 | 20 |
| Edmunds | 11 | 2.5 | 35 | Sanborn | 6 | 2.1 | 23 |
| Fall River | 34 | 4.6 | 59 | Shannon | 1 | 0.1 | 2 |
| Faulk | 4 | 1.5 | 14 | Spink | 20 | 2.5 | 35 |
| Grant | 24 | 2.9 | 40 | Stanley | 15 | 6.1 | 65 |
| Gregory | 6 | 1.1 | 6 | Sully | 5 | 3.1 | 44 |
| Haakon | 7 | 2.7 | 38 | Todd | 12 | 1.4 | 10 |
| Hamlin | 12 | 2.4 | 30 | Tripp | 16 | 2.3 | 28 |
| Hand | 8 | 1.9 | 18 | Turner | 18 | 2.1 | 23 |
| Hanson | 1 | 0.3 | 3 | Union | 35 | 3.4 | 49 |
| Harding | 4 | 2.4 | 30 | Wallworth | 12 | 2.0 | 20 |
| Hughes | 73 | 4.9 | 61 | Yankton | 65 | 3.4 | 49 |
| Hutchinson | 8 | 1.0 | 5 | Ziebach | 1 | 0.5 | 4 |

Note: Divorces are presented as the number per county in FY 1989, and standardized per 1,000 persons in the general population. "Rank" is used to determine which counties have the highest (rank = 66) and lowest (rank = 1) divorce rate in the state.

Source: Center for Health Policy and Statistics, South Dakota Department of Health, South Dakota Resident Vital Statistics, 1989.

TABLE B8
DISTRIBUTION OF NATIVE AMERICAN POPULATION
1990

| COUNTY | NUMBER OF RESIDENTS | NUMBER OF NATIVE AMERICANS | PERCENT NATIVE AMERICAN | RANK | COUNTY | NUMBER OF RESIDENTS | NUMBER OF NATIVE AMERICANS | PERCENT NATIVE AMERICAN | RANK |
|-------------|------------------------|----------------------------------|-------------------------------|------|------------|------------------------|----------------------------------|-------------------------------|------|
| Aurora | 3135 | 42 | 1.3 | 30 | Hyde | 1696 | 57 | 3.4 | 43 |
| Beadle | 18253 | 161 | 0.9 | 26 | Jackson | 2811 | 1193 | 42.4 | 58 |
| Bennett | 3206 | 1481 | 46.2 | 59 | Jerauld | 2425 | 5 | 0.2 | 5 |
| Bon Homme | 7089 | 155 | 2.2 | 38 | Jones | 1324 | 7 | 0.5 | 20 |
| Brookings | 25207 | 156 | 0.6 | 22 | Kingsbury | 5925 | 11 | 0.2 | 5 |
| Brown | 35580 | 982 | 2.8 | 41 | Lake | 10550 | 33 | 0.3 | 12 |
| Brule | 5485 | 383 | 7.0 | 50 | Lawrence | 20665 | 535 | 2.6 | 40 |
| Buffalo | 1759 | 1365 | 77.6 | 64 | Lincoln | 15427 | 58 | 0.4 | 17 |
| Butte | 7914 | 117 | 1.5 | 35 | Lyman | 3638 | 1051 | 28.9 | 57 |
| Campbell | 1965 | 3 | 0.2 | 5 | Marshall | 4844 | 271 | 5.6 | 45 |
| Charles Mix | 9131 | 1995 | 21.8 | 55 | McCook | 5688 | 28 | 0.5 | 20 |
| Clark | 4403 | 12 | 0.3 | 12 | McPherson | 3228 | 2 | 0.1 | 2 |
| Clay | 13186 | 395 | 3.0 | 42 | Meade | 21878 | 395 | 1.8 | 36 |
| Codington | 22698 | 260 | 1.1 | 29 | Mellette | 2137 | 999 | 46.7 | 60 |
| Corson | 4195 | 2034 | 48.5 | 61 | Miner | 3272 | 4 | 0.1 | 2 |
| Custer | 6179 | 155 | 2.5 | 39 | Minnehaha | 123809 | 1680 | 1.4 | 31 |
| Davison | 17503 | 243 | 1.4 | 31 | Moody | 6507 | 527 | 8.1 | 53 |
| Day | 6978 | 468 | 6.7 | 48 | Pennington | 81343 | 5835 | 7.2 | 51 |
| Deuel | 4522 | 10 | 0.2 | 5 | Perkins | 3932 | 56 | 1.4 | 31 |
| Dewey | 5523 | 3680 | 66.6 | 63 | Potter | 3190 | 26 | 0.8 | 24 |
| Douglas | 3746 | 22 | 0.6 | 22 | Roberts | 9914 | 2280 | 23.0 | 56 |
| Edmunds | 4356 | 19 | 0.4 | 17 | Sanborn | 2833 | 0 | 0.0 | 1 |
| Fall River | 7353 | 450 | 6.1 | 46 | Shannon | 9902 | 9374 | 94.7 | 66 |
| Faulk | 2744 | 6 | 0.2 | 5 | Spink | 7981 | 65 | 0.8 | 24 |
| Grant | 8372 | 33 | 0.4 | 17 | Stanley | 2453 | 155 | 6.3 | 47 |
| Gregory | 5359 | 284 | 5.3 | 44 | Sully | 1589 | 15 | 0.9 | 26 |
| Haakon | 2624 | 36 | 1.4 | 31 | Todd | 8352 | 6883 | 82.4 | 65 |
| Hamlin | 4974 | 10 | 0.2 | 5 | Tripp | 6924 | 670 | 9.7 | 54 |
| Hand | 4272 | 5 | 0.1 | 2 | Turner | 8576 | 26 | 0.3 | 12 |
| Hanson | 2994 | 7 | 0.2 | 5 | Union | 10189 | 34 | 0.3 | 12 |
| Harding | 1669 | 16 | 1.0 | 28 | Wallworth | 6087 | 467 | 7.7 | 52 |
| Hughes | 14817 | 994 | 6.7 | 48 | Yankton | 19252 | 412 | 2.1 | 37 |
| Hutchinson | 8262 | 22 | 0.3 | 12 | Ziebach | 2220 | 1420 | 64.0 | 62 |

Note: "Percent Native American" is the percent which Native Americans are of the entire county population. "Rank" is used to determine which county has the largest number of Native Americans (rank = 66) and the lowest number (rank = 1).

Source: U.S. Department of Commerce, Bureau of Census, 1990 South Dakota Population Figures, unpublished report.

TABLE B9
EDUCATIONALLY DISADVANTAGED YOUTH
CHAPTER 1 DATA, 1990

| DISTRICT | NUMBER ENROLLED | NUMBER LOW INCOME STUDENTS | NUMBER EDUCATIONAL DEPRIVED | NUMBER CHAPTER 1 PARTICIPANTS | % LOW INCOME | % EDUCATION- DEPRIVED | DEPRIVED % RECEIVING SERVICES | EDUCATIONALLY DISADVANTAGED INDEX RATE |
|---------------|--------------------|----------------------------------|-----------------------------------|-------------------------------------|-----------------|--------------------------|-------------------------------------|--|
| Alpena | 130 | 54 | 46 | 17 | 41.5 | 35.4 | 37.0 | 38.5 |
| Alcester | 490 | 188 | 132 | 67 | 38.4 | 26.9 | 50.8 | 32.7 |
| Agar | 68 | 15 | 16 | 13 | 22.1 | 23.5 | 81.3 | 22.8 |
| Aberdeen | 5252 | 692 | 795 | 131 | 13.2 | 15.1 | 16.5 | 14.2 |
| Andes Central | 411 | 242 | 168 | 133 | 58.9 | 40.9 | 79.2 | 49.9 |
| Arlington | 396 | 117 | 127 | 64 | 29.6 | 32.1 | 50.4 | 30.9 |
| Armour | 250 | 76 | 66 | 37 | 30.4 | 26.4 | 56.1 | 28.4 |
| Artesian | 166 | 77 | 59 | 37 | 46.4 | 35.5 | 62.7 | 41.0 |
| Astoria | 33 | | 10 | 10 | 0.0 | 30.3 | 100.0 | 15.2 |
| Avon | 254 | 86 | 56 | 36 | 33.9 | 22.1 | 64.3 | 28.0 |
| Baltic | 346 | 59 | 109 | 43 | 17.1 | 31.5 | 39.5 | 24.3 |
| Belle Fourche | 1204 | 446 | 414 | 146 | 37.0 | 34.4 | 35.3 | 35.7 |
| Bennett Co. | 590 | 315 | 307 | 168 | 53.4 | 52.0 | 54.7 | 52.7 |
| Beresford | 721 | 240 | 406 | 98 | 33.3 | 56.3 | 24.1 | 44.8 |
| Big Stone Cty | 170 | 24 | 18 | 18 | 14.1 | 10.6 | 100.0 | 12.4 |
| Bison | 232 | 81 | 36 | 17 | 34.9 | 15.5 | 47.2 | 25.2 |
| Bonnesteel | | | | | | | | |
| Fairfax | 270 | 76 | 39 | 35 | 28.2 | 14.4 | 89.7 | 21.3 |
| Bon Homme | 769 | 320 | 198 | 142 | 41.6 | 25.8 | 71.7 | 33.7 |
| Bowdle | 174 | 62 | 66 | 33 | 35.6 | 37.9 | 50.0 | 36.8 |
| Brandon Vly | 2115 | 301 | 339 | 123 | 14.2 | 16.0 | 36.3 | 15.1 |
| Bridgewater | 221 | 56 | 47 | 21 | 25.3 | 21.3 | 44.7 | 23.3 |
| Bristol | 170 | 66 | 21 | 11 | 38.8 | 12.4 | 52.4 | 25.6 |
| Britton | 490 | 146 | 90 | 66 | 29.8 | 18.4 | 73.3 | 24.1 |
| Brookings | 2794 | 551 | 530 | 84 | 19.7 | 19.0 | 15.9 | 19.4 |
| Browns Valley | 111 | 62 | 21 | 25 | 55.9 | 18.9 | 119.1 | 37.4 |
| Burke | 351 | 165 | 112 | 77 | 47.0 | 31.9 | 68.8 | 39.5 |
| Canistota | 196 | 68 | 48 | 32 | 34.7 | 24.5 | 66.7 | 29.6 |
| Canton | 905 | 214 | 202 | 56 | 23.7 | 22.3 | 27.7 | 23.0 |
| Castlewood | 323 | 123 | 101 | 33 | 38.1 | 31.3 | 32.7 | 34.7 |
| Centerville | 319 | 49 | 41 | 29 | 15.4 | 12.9 | 70.7 | 14.2 |
| Chamberlain | 1044 | 289 | 438 | 226 | 27.7 | 42.0 | 51.6 | 34.9 |
| Chester | 299 | 102 | 53 | 41 | 34.1 | 17.7 | 77.4 | 25.9 |
| Clark | 632 | 218 | 156 | 73 | 34.5 | 24.7 | 46.8 | 29.6 |
| Coleman | 197 | 52 | 66 | 42 | 26.4 | 33.5 | 63.6 | 30.0 |

TABLE B9 (Continued)
EDUCATIONALLY DISADVANTAGED YOUTH
CHAPTER 1 DATA, 1990

| DISTRICT | NUMBER ENROLLED | NUMBER LOW INCOME STUDENTS | NUMBER EDUCATIONAL DEPRIVED | NUMBER CHAPTER 1 PARTICIPANTS | % LOW INCOME | % EDUCATION- DEPRIVED | DEPRIVED % RECEIVING SERVICES | EDUCATIONALLY DISADVANTAGED INDEX RATE |
|----------------|--------------------|----------------------------------|-----------------------------------|-------------------------------------|-----------------|--------------------------|-------------------------------------|--|
| Colome | 238 | 103 | 71 | 53 | 43.3 | 29.8 | 74.7 | 36.6 |
| Conde | 83 | 29 | 22 | 14 | 34.9 | 26.5 | 63.6 | 30.7 |
| Corsica | 318 | 114 | 62 | 42 | 35.9 | 19.5 | 67.7 | 27.7 |
| Cresbard | 240 | 152 | 30 | 22 | 63.3 | 12.5 | 73.3 | 37.9 |
| Custer | 1164 | 361 | 188 | 161 | 31.0 | 16.2 | 85.6 | 23.6 |
| Dell Rapids | 643 | 159 | 117 | 60 | 24.7 | 18.2 | 51.3 | 21.5 |
| Delmont | 107 | 54 | 52 | 45 | 50.5 | 48.6 | 86.5 | 49.6 |
| DeSmet | 403 | 102 | 82 | 37 | 25.3 | 20.4 | 45.1 | 22.9 |
| Deubrook | 250 | 109 | 114 | 43 | 43.6 | 45.6 | 37.7 | 44.6 |
| Deuel | 631 | 197 | 217 | 105 | 31.2 | 34.4 | 48.4 | 32.8 |
| Doland | 257 | 146 | 38 | 24 | 56.8 | 14.8 | 63.2 | 35.8 |
| Douglas | 2887 | 919 | 811 | 206 | 31.8 | 28.1 | 25.4 | 30.0 |
| Dupree | 301 | 231 | 181 | 99 | 76.7 | 60.1 | 54.7 | 68.4 |
| Eagle Butte | 1114 | 706 | 142 | 105 | 63.4 | 12.8 | 73.9 | 38.1 |
| Edgemont | 259 | 42 | 32 | 15 | 16.2 | 12.4 | 46.9 | 14.3 |
| Egan | 129 | 45 | 33 | 16 | 34.9 | 25.6 | 48.5 | 30.3 |
| Elk Point | 490 | 160 | 152 | 63 | 32.7 | 31.0 | 41.5 | 31.9 |
| Elkton | 341 | 169 | 40 | | 49.6 | 11.7 | 0.0 | 30.7 |
| Elm Valley | 194 | 73 | 54 | 25 | 37.6 | 27.8 | 46.3 | 32.7 |
| Emery | 192 | 100 | 102 | 52 | 52.1 | 53.1 | 51.0 | 52.6 |
| Esteline | 275 | 119 | 36 | 36 | 43.3 | 13.1 | 100.0 | 28.2 |
| Ethan | 215 | 132 | 50 | 37 | 61.4 | 23.3 | 74.0 | 42.4 |
| Eureka | 269 | 111 | 65 | 53 | 41.3 | 24.2 | 81.5 | 32.8 |
| Faith | 195 | 111 | 68 | 28 | 56.9 | 34.9 | 41.2 | 45.9 |
| Faulkton | 303 | 98 | 69 | 44 | 32.3 | 22.8 | 63.8 | 27.6 |
| Flandreau | 855 | 366 | 214 | 147 | 42.8 | 25.0 | 68.7 | 33.9 |
| Florence | 145 | 63 | 68 | 20 | 43.5 | 46.9 | 29.4 | 45.2 |
| Freeman | 506 | 170 | 125 | 88 | 33.6 | 24.7 | 70.4 | 29.2 |
| Garretson | 409 | 103 | 96 | 31 | 25.2 | 23.5 | 32.3 | 24.4 |
| Gayville-Volin | 204 | 66 | 51 | 34 | 32.4 | 25.0 | 66.7 | 28.7 |
| Geddes | 148 | 77 | 41 | 25 | 52.0 | 27.7 | 61.0 | 39.9 |
| Gettysburg | 417 | 125 | 101 | 26 | 30.0 | 24.2 | 25.7 | 27.1 |
| Grant Deuel | 246 | 153 | 48 | 42 | 62.2 | 19.5 | 87.5 | 40.9 |

TABLE B9 (Continued)
EDUCATIONALLY DISADVANTAGED YOUTH
CHAPTER 1 DATA, 1990

| DISTRICT | NUMBER ENROLLED | NUMBER LOW INCOME STUDENTS | NUMBER EDUCATIONAL DEPRIVED | NUMBER CHAPTER 1 PARTICIPANTS | % LOW INCOME | % EDUCATION- DEPRIVED | DEPRIVED % RECEIVING SERVICES | EDUCATIONALLY DISADVANTAGED INDEX RATE |
|-------------------|--------------------|----------------------------------|-----------------------------------|-------------------------------------|-----------------|--------------------------|-------------------------------------|--|
| Gregory | 554 | 216 | 228 | 126 | 39.0 | 41.2 | 55.3 | 40.1 |
| Groton | 537 | 169 | 189 | 82 | 31.5 | 35.2 | 43.4 | 33.4 |
| Haakon | 455 | 100 | 75 | 56 | 22.0 | 16.5 | 74.7 | 19.3 |
| Hamlin Co | 628 | 331 | 187 | 123 | 52.7 | 29.8 | 65.8 | 41.3 |
| Hanson | 397 | 157 | 140 | 91 | 39.6 | 35.3 | 65.0 | 37.5 |
| Harding Co | 342 | 52 | 84 | 34 | 15.2 | 24.6 | 40.5 | 19.9 |
| Harrisburg | 615 | 126 | 69 | 20 | 20.5 | 11.2 | 29.0 | 15.9 |
| Harrold | 124 | 64 | 56 | 35 | 51.6 | 45.2 | 62.5 | 48.4 |
| Hecla- Houghto | 182 | 31 | 25 | 18 | 17.0 | 13.7 | 72.0 | 15.4 |
| Henry | 122 | 50 | 26 | 13 | 41.0 | 21.3 | 50.0 | 31.2 |
| Herried | 151 | 56 | 58 | 21 | 37.1 | 38.4 | 36.2 | 37.8 |
| Hill City | 505 | 162 | 94 | 65 | 32.1 | 18.6 | 69.2 | 25.4 |
| Hitchcock | 147 | 147 | 43 | 20 | 100.0 | 29.3 | 46.5 | 64.7 |
| Hosmer | 91 | 23 | 37 | 11 | 25.3 | 40.7 | 29.7 | 33.0 |
| Hot Spring | 1094 | 340 | 273 | 111 | 31.1 | 25.0 | 40.7 | 28.1 |
| Hoven | 316 | 145 | 45 | 9 | 45.9 | 14.2 | 20.0 | 30.1 |
| Howard | 600 | 188 | 123 | 84 | 31.3 | 20.5 | 68.3 | 25.9 |
| Hurley | 173 | 63 | 60 | 25 | 36.4 | 34.7 | 41.7 | 35.6 |
| Huron | 2705 | 700 | 800 | 306 | 25.9 | 29.6 | 38.3 | 27.8 |
| Hyde | 310 | 112 | 81 | 37 | 36.1 | 26.1 | 45.7 | 31.1 |
| Ipswich | 397 | 175 | 70 | 48 | 44.1 | 17.6 | 68.6 | 30.9 |
| Irene | 276 | 114 | 92 | 32 | 41.3 | 33.3 | 34.8 | 37.3 |
| Iroquois | 285 | 87 | 109 | 34 | 30.5 | 38.3 | 31.2 | 34.4 |
| Isabel | 120 | 74 | 41 | 15 | 61.7 | 34.2 | 36.6 | 48.0 |
| Jefferson | 708 | 302 | 292 | 76 | 42.7 | 41.2 | 26.0 | 42.0 |
| Jones Co | 281 | 158 | 50 | 32 | 56.2 | 17.8 | 64.0 | 37.0 |
| Kadoka | 402 | 151 | 159 | 99 | 37.6 | 39.6 | 62.3 | 38.6 |
| Kimball | 375 | 155 | 74 | 55 | 41.3 | 19.7 | 74.3 | 30.5 |
| Lake Preston | 268 | 119 | 55 | 33 | 44.4 | 20.5 | 60.0 | 32.5 |
| Langford | 264 | 118 | 64 | 40 | 44.7 | 24.2 | 62.5 | 34.5 |
| Lead- Deadwood | 1449 | 243 | 446 | 117 | 16.8 | 30.8 | 26.2 | 23.8 |
| Lemmon | 490 | 199 | 148 | 97 | 40.6 | 30.2 | 65.5 | 35.4 |

TABLE B9 (Continued)
EDUCATIONALLY DISADVANTAGED YOUTH
CHAPTER 1 DATA, 1990

| DISTRICT | NUMBER ENROLLED | NUMBER LOW INCOME STUDENTS | NUMBER EDUCATIONAL DEPRIVED | NUMBER CHAPTER 1 PARTICIPANTS | % LOW INCOME | % EDUCATION- DEPRIVED | DEPRIVED % RECEIVING SERVICES | EDUCATIONALLY DISADVANTAGED INDEX RATE |
|-------------------|--------------------|----------------------------------|-----------------------------------|-------------------------------------|-----------------|--------------------------|-------------------------------------|--|
| Lake Central | 1538 | 350 | 446 | 153 | 22.8 | 29.0 | 34.3 | 25.9 |
| Lennox | 1362 | 264 | 351 | 126 | 19.4 | 25.8 | 35.9 | 22.6 |
| Leola | 272 | 112 | 90 | 35 | 41.2 | 33.1 | 38.9 | 37.2 |
| Letcher | 165 | 71 | 44 | 26 | 43.0 | 26.7 | 59.1 | 34.9 |
| Lyman | 379 | 106 | 191 | 82 | 28.0 | 50.4 | 42.9 | 39.2 |
| McCook | 508 | 198 | 99 | 77 | 39.0 | 19.5 | 77.8 | 29.3 |
| McIntosh | 220 | 187 | 108 | 80 | 85.0 | 49.1 | 74.1 | 67.1 |
| McLaughlin | 456 | 342 | 256 | 128 | 75.0 | 56.1 | 50.0 | 65.6 |
| Marion | 325 | 189 | 90 | 42 | 58.2 | 27.7 | 46.7 | 43.0 |
| Meade | 3256 | 1080 | 636 | 324 | 33.2 | 19.5 | 50.9 | 26.4 |
| Menno | 334 | 121 | 99 | 60 | 36.2 | 29.6 | 60.6 | 32.9 |
| Midland | 122 | 50 | 45 | 28 | 41.0 | 36.9 | 62.2 | 39.0 |
| Milbank | 1357 | 309 | 264 | 81 | 22.8 | 19.5 | 30.7 | 21.2 |
| Miller | 631 | 199 | 242 | 129 | 31.5 | 38.4 | 53.3 | 35.0 |
| Mitchell | 3146 | 918 | 921 | 265 | 29.2 | 29.3 | 28.8 | 29.3 |
| Mobridge | 341 | 65 | 233 | 70 | 19.1 | 68.3 | 30.0 | 43.7 |
| Montrose | 230 | 87 | 53 | 42 | 37.8 | 23.0 | 79.3 | 30.4 |
| Mt. Vernon | 212 | 90 | 66 | 50 | 42.5 | 31.1 | 75.8 | 36.8 |
| Newell | 471 | 201 | 167 | 62 | 42.7 | 35.5 | 37.1 | 39.1 |
| New Underwo | 187 | 53 | 73 | 22 | 28.3 | 39.0 | 30.1 | 33.7 |
| Northwest | 54 | 24 | 11 | 11 | 44.4 | 20.4 | 100.0 | 32.4 |
| Northwestern | 295 | 82 | 78 | 38 | 27.8 | 26.4 | 48.7 | 27.1 |
| Oelrichs | 87 | 42 | 6 | 6 | 48.3 | 6.9 | 100.0 | 27.6 |
| Oldham- Ramona | 207 | 92 | 62 | 34 | 44.4 | 30.0 | 54.8 | 37.2 |
| Parker | 455 | 130 | 74 | 55 | 28.6 | 16.3 | 74.3 | 22.5 |
| Parkston | 648 | 267 | 176 | 111 | 41.2 | 27.2 | 63.1 | 34.2 |
| Pierre | 3049 | 619 | 331 | 100 | 20.3 | 10.9 | 30.2 | 15.6 |
| Plankinto | 262 | 109 | 71 | 47 | 41.6 | 27.1 | 66.2 | 34.4 |
| Platte | 702 | 240 | 134 | 62 | 34.2 | 19.1 | 46.3 | 26.7 |
| Pollock | 127 | 42 | 57 | 41 | 33.1 | 44.9 | 71.9 | 39.0 |
| Polo | 47 | 44 | 15 | 15 | 93.6 | 31.9 | 100.0 | 62.8 |
| Rapid City | 13035 | 3657 | 1238 | 396 | 28.1 | 9.5 | 32.0 | 18.8 |
| Redfield | 792 | 240 | 222 | 82 | 30.3 | 28.0 | 36.9 | 29.2 |

TABLE B9 (Continued)
EDUCATIONALLY DISADVANTAGED YOUTH
CHAPTER 1 DATA, 1990

| DISTRICT | NUMBER ENROLLED | NUMBER LOW INCOME STUDENTS | NUMBER EDUCATIONAL DEPRIVED | NUMBER CHAPTER 1 PARTICIPANTS | % LOW INCOME | % EDUCATION- DEPRIVED | DEPRIVED % RECEIVING SERVICES | EDUCATIONALLY DISADVANTAGED INDEX RATE |
|--------------|--------------------|----------------------------------|-----------------------------------|-------------------------------------|-----------------|--------------------------|-------------------------------------|--|
| Roscoe | 149 | 70 | 19 | 14 | 47.0 | 12.8 | 73.7 | 29.9 |
| Rosholt | 224 | 80 | 75 | 47 | 35.7 | 33.5 | 62.7 | 34.6 |
| Roslyn | 180 | 73 | 49 | 30 | 40.6 | 27.2 | 61.2 | 33.9 |
| Rutland | 153 | 52 | 32 | 19 | 34.0 | 20.9 | 59.4 | 27.5 |
| Scotland | 450 | 184 | 164 | 74 | 40.9 | 36.4 | 45.1 | 38.7 |
| Selby Area | 323 | 119 | 52 | 48 | 36.8 | 16.1 | 92.3 | 26.5 |
| Shannon | | | | | | | | |
| County | 1094 | 931 | 743 | 477 | 85.1 | 67.9 | 64.2 | 76.5 |
| Sioux Falls | 7010 | 903 | 4495 | 563 | 12.9 | 64.1 | 12.5 | 38.5 |
| Sioux Valley | 658 | 134 | 134 | 65 | 20.4 | 20.4 | 48.5 | 20.4 |
| Sisseton | 1229 | 738 | 804 | 314 | 60.1 | 65.4 | 39.1 | 62.8 |
| Smee | 124 | 121 | 71 | 51 | 97.6 | 57.3 | 71.8 | 77.5 |
| South Shore | 155 | 83 | 85 | 25 | 53.6 | 54.8 | 29.4 | 54.2 |
| Spearfish | 2196 | 502 | 842 | 136 | 22.9 | 38.3 | 16.2 | 30.6 |
| Stanley | | | | | | | | |
| County | 572 | 208 | 127 | 60 | 36.4 | 22.2 | 47.2 | 29.3 |
| Stickney | 176 | 85 | 48 | 38 | 48.3 | 27.3 | 79.2 | 37.8 |
| Sully Buttes | 342 | 111 | 107 | 48 | 32.5 | 31.3 | 44.9 | 31.9 |
| Summit | 121 | 63 | 36 | 20 | 52.1 | 29.8 | 55.6 | 41.0 |
| Timber Lake | 323 | 186 | 83 | 64 | 57.6 | 25.7 | 77.1 | 41.7 |
| Todd Co | 2048 | 1762 | 770 | 539 | 86.0 | 37.6 | 70.0 | 61.8 |
| Tripp | 200 | 25 | 54 | 23 | 12.5 | 27.0 | 42.6 | 19.8 |
| Tri Valley | 745 | 210 | 209 | 95 | 28.2 | 28.1 | 45.5 | 28.2 |
| Tulare | 189 | 70 | 50 | 28 | 37.0 | 26.5 | 56.0 | 31.8 |
| Veblen | 173 | 128 | 41 | 41 | 74.0 | 23.7 | 100.0 | 48.9 |
| Vermillio | 1533 | 484 | 416 | 146 | 31.6 | 27.1 | 35.1 | 29.4 |
| Viborg | 287 | 107 | 67 | 34 | 37.3 | 23.3 | 50.8 | 30.3 |
| Wagner | 738 | 521 | 354 | 220 | 70.6 | 48.0 | 62.2 | 59.3 |
| Wakonda | 197 | 47 | 47 | 17 | 23.9 | 23.9 | 36.2 | 23.9 |
| Wall | 343 | 79 | 73 | 28 | 23.0 | 21.3 | 38.4 | 22.2 |
| Warner | 273 | 70 | 59 | 34 | 25.6 | 21.6 | 57.6 | 23.6 |
| Watertown | 4254 | 1043 | 536 | 268 | 24.5 | 12.6 | 50.0 | 18.6 |
| Waubay | 338 | 101 | 171 | 79 | 29.9 | 50.6 | 46.2 | 40.3 |
| Waverly | 114 | 68 | 38 | 22 | 59.7 | 33.3 | 57.9 | 46.5 |

TABLE B9 (Continued)
EDUCATIONALLY DISADVANTAGED YOUTH
CHAPTER 1 DATA, 1990

| DISTRICT | NUMBER ENROLLED | NUMBER LOW INCOME STUDENTS | NUMBER EDUCATIONAL DEPRIVED | NUMBER CHAPTER 1 PARTICIPANTS | % LOW INCOME | % EDUCATION- DEPRIVED | DEPRIVED % RECEIVING SERVICES | EDUCATIONALLY DISADVANTAGED INDEX RATE |
|--------------|--------------------|----------------------------------|-----------------------------------|-------------------------------------|-----------------|--------------------------|-------------------------------------|--|
| Webster | 692 | 177 | 231 | 86 | 25.6 | 33.4 | 37.2 | 29.5 |
| Wessingto | 130 | 85 | 50 | 29 | 65.4 | 38.5 | 58.0 | 52.0 |
| Wess Springs | 168 | 83 | 190 | 56 | 49.4 | 113.1 | 29.5 | 81.3 |
| West Central | 908 | 251 | 293 | 79 | 27.6 | 32.3 | 27.0 | 30.0 |
| White Lake | 162 | 90 | 34 | 29 | 55.6 | 21.0 | 85.3 | 38.3 |
| White River | 444 | 345 | 181 | 137 | 77.7 | 40.8 | 75.7 | 59.3 |
| Willow Lake | 238 | 117 | 76 | 38 | 49.2 | 31.9 | 50.0 | 40.6 |
| Wilmot | 344 | 144 | 118 | 43 | 41.9 | 34.3 | 36.4 | 38.1 |
| Winner | 1213 | 400 | 514 | 186 | 33.0 | 42.4 | 36.2 | 37.7 |
| Wolsey | 253 | 107 | 71 | 45 | 42.3 | 28.1 | 63.4 | 35.2 |
| Wood | 72 | 48 | 27 | 12 | 66.7 | 37.5 | 44.4 | 52.1 |
| Woonsocket | 309 | 124 | 98 | 74 | 40.1 | 31.7 | 75.5 | 35.9 |
| Yankton | 2968 | 734 | 372 | 219 | 24.7 | 12.5 | 58.9 | 18.6 |
| TOTAL | 121968 | 39067 | 33675 | 13781 | 32.0 | 27.6 | 40.9 | 29.8 |

Note: These data available only by school district. Percentages are based upon Number Enrolled, where Number Enrolled is the number of students in a school district. The last column is an index rate which averages "% low income" and "% education deprived to yield an "educationally disadvantaged rate."

TABLE B10
DRUG RELATED ARRESTS LEADING TO PROSECUTION
FY 1989

| COUNTY | NUMBER ARRESTED | NUMBER ARRESTED PER 1000 | RANK | COUNTY | NUMBER ARRESTED | NUMBER ARRESTED PER 1000 | RANK |
|-------------|--------------------|-----------------------------|------|------------|--------------------|-----------------------------|------|
| Aurora | 36 | 11.5 | 64 | Hyde | 1 | 0.6 | 29 |
| Beadle | 80 | 4.4 | 55 | Jackson | 17 | 6.0 | 60 |
| Bennett | 15 | 4.7 | 56 | Jerauld | 5 | 2.1 | 44 |
| Bon Homme | 11 | 1.6 | 40 | Jones | 5 | 3.8 | 51 |
| Brookings | 36 | 1.4 | 38 | Kingsbury | 0 | 0.0 | 1 |
| Brown | 55 | 1.5 | 39 | Lake | 4 | 0.4 | 22 |
| Brule | 12 | 2.2 | 45 | Lawrence | 88 | 4.3 | 53 |
| Buffalo | 0 | 0.0 | 1 | Lincoln | 79 | 5.1 | 58 |
| Butte | 15 | 1.9 | 41 | Lyman | 71 | 19.5 | 66 |
| Campbell | 1 | 0.5 | 26 | Marshall | 0 | 0.0 | 1 |
| Charles Mix | 6 | 0.7 | 31 | McCook | 30 | 5.3 | 59 |
| Clark | 0 | 0.0 | 1 | McPhearson | 0 | 0.0 | 1 |
| Clay | 30 | 2.3 | 47 | Meade | 142 | 6.5 | 61 |
| Codington | 30 | 1.3 | 37 | Mellette | 0 | 0.0 | 1 |
| Corson | 0 | 0.0 | 1 | Miner | 0 | 0.0 | 1 |
| Custer | 43 | 7.0 | 62 | Minnehaha | 592 | 4.8 | 57 |
| Davison | 33 | 1.9 | 41 | Moody | 28 | 4.3 | 53 |
| Day | 3 | 0.4 | 23 | Pennington | 181 | 2.2 | 45 |
| Deuel | 0 | 0.0 | 1 | Perkins | 2 | 0.5 | 26 |
| Dewey | 0 | 0.0 | 1 | Potter | 3 | 0.9 | 34 |
| Douglas | 0 | 0.0 | 1 | Roberts | 0 | 0.0 | 1 |
| Edmunds | 2 | 0.5 | 26 | Sanborn | 1 | 0.4 | 23 |
| Fall River | 57 | 7.8 | 63 | Shannon | 0 | 0.0 | 1 |
| Faulk | 0 | 0.0 | 1 | Spink | 3 | 0.4 | 23 |
| Grant | 5 | 0.6 | 29 | Stanley | 2 | 0.8 | 33 |
| Gregory | 4 | 0.7 | 31 | Sully | 6 | 3.8 | 51 |
| Haakon | 5 | 1.9 | 41 | Todd | 0 | 0.0 | 1 |
| Hamlin | 0 | 0.0 | 1 | Tripp | 8 | 1.2 | 35 |
| Hand | 0 | 0.0 | 1 | Turner | 10 | 1.2 | 35 |
| Hanson | 1 | 0.3 | 21 | Union | 136 | 13.3 | 65 |
| Harding | 0 | 0.0 | 1 | Wallworth | 15 | 2.5 | 48 |
| Hughes | 49 | 3.3 | 50 | Yankton | 59 | 3.1 | 49 |
| Hutchinson | 2 | 0.2 | 20 | Ziebach | 0 | 0.0 | 1 |

Note: "Number Arrested per 1,000" is based on the total number of county residents. Use rank to determine the county with the highest (rank = 66) and lowest (rank = 1) number of drug arrests per 1,000.

TABLE B11
ALCOHOL AND DRUG TREATMENT CLIENTS PER 1000 RESIDENTS
1989

| COUNTY | NUMBER OF CLIENTS SERVED | NUMBER PER 1000 RESIDENTS | RANK | COUNTY | NUMBER OF CLIENTS SERVED | NUMBER PER 1000 RESIDENTS | RANK |
|-------------|-----------------------------|------------------------------|------|------------|-----------------------------|------------------------------|------|
| Aurora | 37 | 11.8 | 30 | Hyde | 11 | 6.5 | 13 |
| Beadle | 447 | 24.5 | 55 | Jackson | 57 | 20.3 | 47 |
| Bennett | 55 | 17.2 | 42 | Jerauld | 21 | 8.7 | 23 |
| Bon Homme | 45 | 6.3 | 12 | Jones | 5 | 3.8 | 6 |
| Brookings | 686 | 27.2 | 57 | Kingsbury | 44 | 7.4 | 18 |
| Brown | 750 | 21.1 | 49 | Lake | 381 | 36.1 | 62 |
| Brule | 33 | 6.0 | 10 | Lawrence | 684 | 33.1 | 61 |
| Buffalo | 27 | 15.3 | 38 | Lincoln | 68 | 4.4 | 7 |
| Butte | 168 | 21.2 | 50 | Lyman | 44 | 12.1 | 32 |
| Campbell | 5 | 2.5 | 1 | Marshall | 37 | 7.6 | 19 |
| Charles Mix | 119 | 13.0 | 34 | McCook | 33 | 5.8 | 9 |
| Clark | 27 | 6.1 | 11 | McPhearson | 15 | 4.6 | 8 |
| Clay | 384 | 29.1 | 58 | Meade | 331 | 15.1 | 37 |
| Codington | 333 | 14.7 | 35 | Mellette | 26 | 12.2 | 33 |
| Corson | 79 | 18.8 | 45 | Miner | 72 | 22.0 | 52 |
| Custer | 65 | 10.5 | 28 | Minnehaha | 2678 | 21.6 | 51 |
| Davison | 691 | 39.5 | 63 | Moody | 174 | 26.7 | 56 |
| Day | 70 | 10.0 | 27 | Pennington | 3648 | 44.8 | 66 |
| Deuel | 31 | 6.9 | 15 | Perkins | 63 | 16.0 | 40 |
| Dewey | 97 | 17.6 | 43 | Potter | 28 | 8.8 | 24 |
| Douglas | 13 | 3.5 | 3 | Roberts | 165 | 16.6 | 41 |
| Edmunds | 34 | 7.8 | 21 | Sanborn | 44 | 15.5 | 39 |
| Fall River | 300 | 40.8 | 64 | Shannon | 311 | 31.4 | 60 |
| Faulk | 8 | 2.9 | 2 | Spink | 56 | 7.0 | 16 |
| Grant | 59 | 7.0 | 16 | Stanley | 57 | 23.2 | 54 |
| Gregory | 53 | 9.9 | 26 | Sully | 12 | 7.6 | 19 |
| Haakon | 48 | 18.3 | 44 | Todd | 171 | 20.5 | 48 |
| Hamlin | 47 | 9.4 | 25 | Tripp | 102 | 14.7 | 35 |
| Hand | 28 | 6.6 | 14 | Turner | 31 | 3.6 | 4 |
| Hanson | 59 | 19.7 | 46 | Union | 120 | 11.8 | 30 |
| Harding | 6 | 3.6 | 4 | Wallworth | 67 | 11.0 | 29 |
| Hughes | 629 | 42.5 | 65 | Yankton | 573 | 29.8 | 59 |
| Hutchinson | 67 | 8.1 | 22 | Ziebach | 50 | 22.5 | 53 |

Note: Use rank to determine the county with the highest (n = 66) and lowest (n = 1) number of alcohol and drug treatment cases per 1,000 residents.

Source: South Dakota Department of Human Services, Division of Alcohol and Drug Abuse, South Dakota Fiscal Year 1990 Client Service Summary, September 1990.

TABLE B12
LOW BIRTH WEIGHT BABIES
1989

| COUNTY | LOW BIRTH WEIGHT BABIES | NUMBER PER 1000 BIRTHS | RANK | COUNTY | LOW BIRTH WEIGHT BABIES | NUMBER PER 1000 BIRTHS | RANK |
|-------------|----------------------------|---------------------------|------|------------|----------------------------|---------------------------|------|
| Aurora | 0 | 0.0 | 1 | Hyde | 0 | 0.0 | 1 |
| Beadle | 11 | 4.0 | 38 | Jackson | 0 | 0.0 | 1 |
| Bennett | 4 | 5.6 | 55 | Jerauld | 0 | 0.0 | 1 |
| Bon Homme | 3 | 3.0 | 31 | Jones | 0 | 0.0 | 1 |
| Brookings | 16 | 4.5 | 43 | Kingsbury | 4 | 4.3 | 40 |
| Brown | 25 | 4.4 | 42 | Lake | 0 | 0.0 | 1 |
| Brule | 5 | 5.5 | 54 | Lawrence | 21 | 7.0 | 63 |
| Buffalo | 0 | 0.0 | 1 | Lincoln | 6 | 2.6 | 28 |
| Butte | 6 | 4.6 | 45 | Lyman | 0 | 0.0 | 1 |
| Campbell | 0 | 0.0 | 1 | Marshall | 4 | 5.6 | 55 |
| Charles Mix | 5 | 2.7 | 29 | McCook | 0 | 0.0 | 1 |
| Clark | 3 | 4.0 | 38 | McPhearson | 0 | 0.0 | 1 |
| Clay | 4 | 2.3 | 27 | Meade | 19 | 5.0 | 48 |
| Codington | 16 | 4.3 | 40 | Mellette | 4 | 8.0 | 65 |
| Corson | 7 | 6.0 | 58 | Miner | 0 | 0.0 | 1 |
| Custer | 7 | 7.7 | 64 | Minnehaha | 93 | 4.7 | 46 |
| Davison | 11 | 3.6 | 34 | Moody | 0 | 0.0 | 1 |
| Day | 6 | 5.2 | 51 | Pennington | 90 | 5.4 | 53 |
| Deuel | 6 | 8.7 | 66 | Perkins | 0 | 0.0 | 1 |
| Dewey | 11 | 6.8 | 61 | Potter | 0 | 0.0 | 1 |
| Douglas | 0 | 0.0 | 1 | Roberts | 7 | 3.7 | 36 |
| Edmunds | 0 | 0.0 | 1 | Sanborn | 0 | 0.0 | 1 |
| Fall River | 6 | 5.3 | 52 | Shannon | 11 | 2.9 | 30 |
| Faulk | 0 | 0.0 | 1 | Spink | 4 | 3.1 | 32 |
| Grant | 10 | 6.9 | 62 | Stanley | 0 | 0.0 | 1 |
| Gregory | 0 | 0.0 | 1 | Sully | 0 | 0.0 | 1 |
| Haakon | 3 | 5.7 | 57 | Todd | 16 | 6.2 | 60 |
| Hamlin | 3 | 3.6 | 34 | Tripp | 4 | 3.2 | 33 |
| Hand | 0 | 0.0 | 1 | Turner | 6 | 5.0 | 48 |
| Hanson | 0 | 0.0 | 1 | Union | 6 | 3.8 | 37 |
| Harding | 0 | 0.0 | 1 | Wallworth | 5 | 5.1 | 50 |
| Hughes | 12 | 4.8 | 47 | Yankton | 14 | 4.5 | 43 |
| Hutchinson | 0 | 0.0 | 1 | Ziebach | 4 | 6.1 | 59 |

Note: Use "Rank" to determine counties with highest (rank = 66) and lowest (rank = 1) number of low birth weight babies per 1,000 births.

Source: Center for Health Policy and Statistics, South Dakota Department of Health, South Dakota Resident Vital Statistics, 1989.

TABLE B13
INFANT DEATHS PER 1000 BIRTHS
1989

| INFANT DEATHS | | | | | INFANT DEATHS | | | | |
|--------------------|---------------------|----------------------------|--------------------|------|--------------------|---------------------|----------------------------|--------------------|------|
| MOTHER'S COUNTY | NUMBER OF BIRTHS | NUMBER OF INFANT DEATHS | PER 1000 BIRTHS | RANK | MOTHER'S COUNTY | NUMBER OF BIRTHS | NUMBER OF INFANT DEATHS | PER 1000 BIRTHS | RANK |
| Aurora | 453 | 4 | 8.3 | 33 | Hyde | 249 | 2 | 8.0 | 26 |
| Beadle | 2776 | 18 | 6.5 | 17 | Jackson | 674 | 13 | 19.3 | 63 |
| Bennett | 715 | 13 | 18.2 | 62 | Jerauld | 384 | 1 | 2.6 | 1 |
| Bon Homme | 1011 | 13 | 12.9 | 56 | Jones | 255 | 1 | 3.9 | 4 |
| Brookings | 3589 | 26 | 7.2 | 21 | Kingsbury | 937 | 11 | 11.7 | 48 |
| Brown | 5721 | 49 | 8.6 | 29 | Lake | 1602 | 14 | 8.7 | 31 |
| Brule | 915 | 11 | 12.0 | 50 | Lawrence | 3016 | 37 | 12.3 | 54 |
| Buffalo | 562 | 15 | 26.7 | 65 | Lincoln | 2314 | 9 | 3.9 | 4 |
| Butte | 1296 | 14 | 10.8 | 46 | Lymon | 774 | 11 | 14.2 | 58 |
| Campbell | 311 | 1 | 3.2 | 2 | Marshall | 708 | 7 | 9.9 | 44 |
| Charles Mix | 1884 | 21 | 11.1 | 47 | McCook | 905 | 6 | 6.6 | 18 |
| Clark | 758 | 7 | 9.2 | 38 | McPherson | 446 | 4 | 9.0 | 36 |
| Clay | 1735 | 9 | 5.2 | 11 | Meade | 3808 | 30 | 7.9 | 25 |
| Codington | 3703 | 31 | 8.4 | 27 | Mellette | 503 | 3 | 6.0 | 14 |
| Corson | 1164 | 18 | 15.5 | 60 | Miner | 499 | 2 | 4.0 | 6 |
| Custer | 910 | 8 | 8.8 | 33 | Minnehaha | 19812 | 182 | 9.2 | 38 |
| Davison | 3039 | 27 | 8.9 | 35 | Moody | 1124 | 5 | 4.4 | 8 |
| Day | 1153 | 5 | 4.3 | 7 | Pennington | 16552 | 199 | 12.0 | 50 |
| Deuel | 686 | 5 | 7.3 | 22 | Perkins | 584 | 5 | 8.6 | 29 |
| Dewey | 1610 | 27 | 16.8 | 61 | Potter | 543 | 5 | 9.2 | 38 |
| Douglas | 665 | 6 | 9.0 | 36 | Roberts | 1908 | 23 | 12.1 | 53 |
| Edmunds | 687 | 4 | 5.8 | 12 | Sanborn | 512 | 3 | 5.9 | 13 |
| Fall River | 1140 | 12 | 10.5 | 45 | Shannon | 3855 | 108 | 28.0 | 66 |
| Faulk | 512 | 4 | 7.8 | 24 | Spink | 1299 | 9 | 6.9 | 20 |
| Grant | 1459 | 18 | 12.3 | 54 | Stanley | 474 | 4 | 8.4 | 27 |
| Gregory | 939 | 9 | 9.6 | 43 | Sully | 288 | 1 | 3.5 | 3 |
| Haakon | 529 | 4 | 7.6 | 23 | Todd | 2569 | 64 | 24.9 | 64 |
| Hamlin | 830 | 10 | 12.0 | 50 | Tripp | 1267 | 11 | 8.7 | 31 |
| Hand | 651 | 6 | 9.2 | 38 | Turner | 1200 | 8 | 6.7 | 19 |
| Hanson | 448 | 2 | 4.5 | 9 | Union | 1584 | 10 | 6.3 | 16 |
| Harding | 323 | 2 | 6.2 | 15 | Wallworth | 977 | 9 | 9.2 | 38 |
| Hughes | 2516 | 34 | 13.5 | 57 | Yankton | 3099 | 37 | 11.9 | 49 |
| Hutchinson | 1226 | 6 | 4.9 | 10 | Ziebach | 654 | 10 | 15.3 | 59 |

Note: Number of infant deaths are calculated per 1,000 live births. Use "rank" to determine counties with highest infant death rate (rank = 66) and lowest rate (rank = 1).

Source: Center for Health Policy and Statistics, South Dakota Department of Health, South Dakota Resident Vital Statistics, 1989.

TABLE B14
COMMITMENTS TO DEPARTMENT OF CORRECTIONS
FY 1989

| JUVENILE'S COUNTY | NUMBER OF COMMITMENTS | COMMITMENTS PER 1000 YOUTH AT RISK | RANK | JUVENILE'S COUNTY | NUMBER OF COMMITMENTS | COMMITMENTS PER 1000 YOUTH AT RISK | RANK |
|----------------------|--------------------------|--|------|----------------------|--------------------------|--|------|
| Aurora | 1 | 2.6 | 50 | Hyde | 0 | 0.0 | 1 |
| Beadle | 6 | 2.8 | 54 | Jackson | 0 | 0.0 | 1 |
| Bennett | 0 | 0.0 | 1 | Jerauld | 0 | 0.0 | 1 |
| Bon Homme | 0 | 0.0 | 1 | Jones | 0 | 0.0 | 1 |
| Brookings | 4 | 1.3 | 33 | Kingsbury | 0 | 0.0 | 1 |
| Brown | 8 | 1.9 | 42 | Lake | 1 | 0.8 | 28 |
| Brule | 0 | 0.0 | 1 | Lawrence | 4 | 1.5 | 36 |
| Buffalo | 0 | 0.0 | 1 | Lincoln | 12 | 4.6 | 61 |
| Butte | 1 | 0.9 | 29 | Lyman | 0 | 0.0 | 1 |
| Campbell | 0 | 0.0 | 1 | Marshall | 1 | 1.3 | 33 |
| Charles Mix | 12 | 9.0 | 64 | McCook | 0 | 0.0 | 1 |
| Clark | 1 | 1.4 | 35 | McPhearson | 2 | 4.3 | 57 |
| Clay | 5 | 3.8 | 56 | Meade | 7 | 1.9 | 42 |
| Codington | 29 | 9.2 | 65 | Mellette | 2 | 5.7 | 63 |
| Corson | 0 | 0.0 | 1 | Miner | 0 | 0.0 | 1 |
| Custer | 5 | 4.4 | 58 | Minnehaha | 36 | 2.4 | 48 |
| Davison | 5 | 2.3 | 47 | Moody | 0 | 0.0 | 1 |
| Day | 0 | 0.0 | 1 | Pennington | 45 | 4.5 | 59 |
| Deuel | 1 | 1.6 | 37 | Perkins | 1 | 1.6 | 37 |
| Dewey | 0 | 0.0 | 1 | Potter | 1 | 2.6 | 50 |
| Douglas | 1 | 1.8 | 40 | Roberts | 8 | 5.4 | 62 |
| Edmunds | 1 | 1.6 | 37 | Sanborn | 0 | 0.0 | 1 |
| Fall River | 2 | 2.0 | 44 | Shannon | 0 | 0.0 | 1 |
| Faulk | 0 | 0.0 | 1 | Spink | 1 | 1.0 | 31 |
| Grant | 5 | 3.7 | 55 | Stanley | 0 | 0.0 | 1 |
| Gregory | 2 | 2.7 | 53 | Sully | 0 | 0.0 | 1 |
| Haakon | 1 | 1.8 | 40 | Todd | 0 | 0.0 | 1 |
| Hamlin | 3 | 4.5 | 59 | Tripp | 13 | 12.6 | 66 |
| Hand | 0 | 0.0 | 1 | Turner | 1 | 1.0 | 31 |
| Hanson | 0 | 0.0 | 1 | Union | 3 | 2.2 | 46 |
| Harding | 0 | 0.0 | 1 | Wallworth | 2 | 2.6 | 50 |
| Hughes | 4 | 2.0 | 44 | Yankton | 6 | 2.5 | 49 |
| Hutchinson | 1 | 0.9 | 29 | Ziebach | 0 | 0.0 | 1 |

Note: Youth at risk are those age 10-17. "Rank" is used to determine the counties with the highest commitment rate (rank = 66) and the lowest (rank = 1).

Source: Unified Judicial System petition/commitment data base: ad hoc reports.

TABLE B15
DELINQUENCY PETITIONS FILED PER 1000 YOUTH AT RISK
FY 1989

| COUNTY | NUMBER OF PETITIONS | PETITIONS PER 1000 YOUTH AT RISK | RANK | COUNTY | NUMBER OF PETITIONS | PETITIONS PER 1000 YOUTH AT RISK | RANK |
|-------------|------------------------|--|------|------------|------------------------|--|------|
| Aurora | 2 | 5.1 | 15 | Hyde | 0 | 0.0 | 1 |
| Beadle | 36 | 17.1 | 40 | Jackson | 0 | 0.0 | 1 |
| Bennett | 4 | 8.8 | 23 | Jerauld | 6 | 16.5 | 39 |
| Bon Homme | 4 | 4.2 | 12 | Jones | 0 | 0.0 | 1 |
| Brookings | 61 | 19.6 | 46 | Kingsbury | 14 | 20.3 | 47 |
| Brown | 97 | 23.6 | 51 | Lake | 33 | 25.3 | 52 |
| Brule | 23 | 36.3 | 58 | Lawrence | 96 | 36.1 | 57 |
| Buffalo | 1 | 3.4 | 11 | Lincoln | 75 | 29.0 | 53 |
| Butte | 43 | 40.6 | 63 | Lyman | 5 | 6.8 | 18 |
| Campbell | 1 | 4.7 | 13 | Marshall | 7 | 9.3 | 24 |
| Charles Mix | 51 | 38.2 | 61 | McCook | 10 | 11.6 | 30 |
| Clark | 4 | 5.6 | 16 | McPhearson | 4 | 8.7 | 22 |
| Clay | 39 | 29.5 | 54 | Meade | 65 | 17.6 | 42 |
| Codington | 126 | 40.1 | 62 | Mellette | 8 | 22.7 | 49 |
| Corson | 8 | 10.6 | 28 | Miner | 8 | 17.4 | 41 |
| Custer | 14 | 12.3 | 34 | Minnehaha | 670 | 43.9 | 64 |
| Davison | 74 | 34.0 | 56 | Moody | 35 | 31.5 | 55 |
| Day | 9 | 9.5 | 25 | Pennington | 479 | 47.9 | 66 |
| Deuel | 8 | 12.5 | 35 | Perkins | 9 | 14.3 | 37 |
| Dewey | 1 | 1.3 | 7 | Potter | 3 | 7.8 | 21 |
| Douglas | 10 | 17.7 | 43 | Roberts | 55 | 37.0 | 59 |
| Edmunds | 4 | 6.2 | 17 | Sanborn | 0 | 0.0 | 1 |
| Fall River | 11 | 10.9 | 29 | Shannon | 0 | 0.0 | 1 |
| Faulk | 0 | 0.0 | 1 | Spink | 18 | 18.8 | 44 |
| Grant | 16 | 12.0 | 32 | Stanley | 3 | 7.0 | 19 |
| Gregory | 14 | 19.0 | 45 | Sully | 1 | 3.2 | 10 |
| Haakon | 8 | 14.6 | 38 | Todd | 5 | 4.7 | 13 |
| Hamlin | 9 | 13.5 | 36 | Tripp | 46 | 44.5 | 65 |
| Hand | 1 | 1.7 | 8 | Turner | 12 | 12.2 | 33 |
| Hanson | 5 | 9.5 | 25 | Union | 14 | 10.3 | 27 |
| Harding | 3 | 11.8 | 31 | Wallworth | 29 | 38.0 | 60 |
| Hughes | 46 | 22.9 | 50 | Yankton | 52 | 21.7 | 48 |
| Hutchinson | 8 | 7.0 | 19 | Ziebach | 1 | 2.7 | 9 |

Note: Youth at risk are those age 10-17. "Rank" is used to determine the counties with the highest petitions rate (rank = 66) and the lowest (rank = 1).

Source: Unified Judicial System petition/commitment data base: ad hoc reports.

TABLE B16
CHILDREN RECEIVING MENTAL HEALTH SERVICES
FY 1989

| COUNTY | CHILDREN SERVED | CHILDREN SERVED PER 1000 | RANK | COUNTY | CHILDREN SERVED | CHILDREN SERVED PER 1000 | RANK |
|-------------|-----------------|-----------------------------|------|------------|-----------------|-----------------------------|------|
| Aurora | 25 | 32.2 | 43 | Hyde | 17 | 36.3 | 49 |
| Beadle | 336 | 75.2 | 64 | Jackson | 1 | 0.9 | 1 |
| Bennett | 44 | 37.3 | 50 | Jerauld | 12 | 17.5 | 24 |
| Bon Homme | 22 | 12.7 | 15 | Jones | 20 | 52.8 | 60 |
| Brookings | 194 | 26.0 | 38 | Kingsbury | 29 | 19.4 | 28 |
| Brown | 290 | 27.7 | 40 | Lake | 159 | 54.2 | 61 |
| Brule | 65 | 46.6 | 55 | Lawrence | 158 | 26.8 | 39 |
| Buffalo | 73 | 97.6 | 66 | Lincoln | 32 | 6.4 | 4 |
| Butte | 39 | 16.4 | 22 | Lyman | 42 | 33.6 | 46 |
| Campbell | 14 | 29.3 | 42 | Marshall | 31 | 22.4 | 32 |
| Charles Mix | 47 | 18.5 | 26 | McCook | 20 | 12.7 | 15 |
| Clark | 10 | 7.5 | 6 | McPhearson | 31 | 32.6 | 45 |
| Clay | 44 | 13.4 | 18 | Meade | 96 | 12.7 | 15 |
| Codington | 161 | 24.1 | 36 | Mellette | 18 | 25.7 | 37 |
| Corson | 33 | 17.7 | 25 | Miner | 54 | 65.0 | 62 |
| Custer | 78 | 35.8 | 48 | Minnehaha | 277 | 7.2 | 5 |
| Davison | 221 | 46.6 | 55 | Moody | 68 | 32.2 | 43 |
| Day | 64 | 33.9 | 47 | Pennington | 391 | 16.5 | 23 |
| Deuel | 11 | 8.4 | 8 | Perkins | 29 | 23.8 | 34 |
| Dewey | 35 | 14.6 | 21 | Potter | 56 | 66.1 | 63 |
| Douglas | 12 | 11.6 | 13 | Roberts | 31 | 29.0 | 41 |
| Edmunds | 28 | 23.6 | 33 | Sanborn | 30 | 44.8 | 54 |
| Fall River | 99 | 48.5 | 57 | Shannon | 262 | 48.6 | 54 |
| Faulk | 15 | 20.7 | 31 | Spink | 42 | 20.3 | 29 |
| Grant | 25 | 9.9 | 11 | Stanley | 35 | 41.3 | 52 |
| Gregory | 43 | 20.5 | 30 | Spilly | 8 | 14.5 | 20 |
| Haakon | 13 | 13.5 | 19 | Todd | 126 | 41.2 | 51 |
| Hamlin | 11 | 8.4 | 8 | Tripp | 84 | 43.5 | 53 |
| Hand | 15 | 12.6 | 14 | Turner | 16 | 7.9 | 7 |
| Hanson | 9 | 9.8 | 10 | Union | 29 | 10.5 | 12 |
| Harding | 3 | 5.5 | 3 | Wallworth | 82 | 51.3 | 59 |
| Hughes | 352 | 78.7 | 65 | Yankton | 131 | 24.0 | 35 |
| Hutchinson | 43 | 19.0 | 27 | Ziebach | 5 | 4.5 | 2 |

Note: Table describes the number of children receiving mental health services during FY 1989, standardizes that number per 1,000 children 0-17, and provides the rank among counties which the number per 1,000 represents (1 = lowest, 66 = highest).

Source: South Dakota Division of Mental Health, unpublished report, 1990.

APPENDIX C: MAPS DISPLAYING DISTRIBUTION OF RISK DATA

LIST OF MAPS CONTAINED IN APPENDIX C

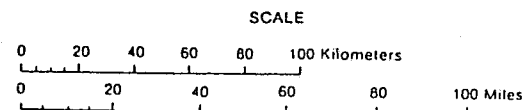
South Dakota County Names
Petitions to Juvenile Court, FY 1989
Unemployment Rate, 1989 Annual Average
Children Receiving Mental Health Services
Infant Death Rates, 1980-89
Average Monthly Juvenile ADC Cases, FY 1989
Persons Receiving Drug/Alcohol Treatment, 1990
Per Capita Income, 1988
Juvenile Population, 1990
Native American Population, 1990
Commitments to DOC

SOUTH DAKOTA COUNTY NAMES

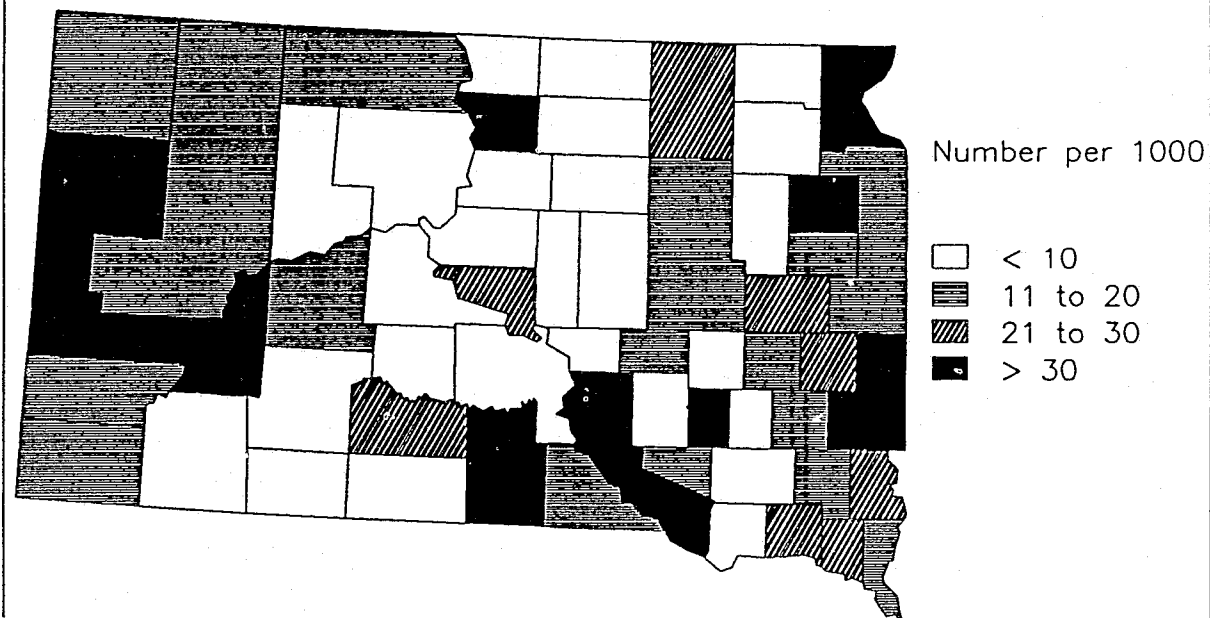


- ⊙ Place of 50,000 to 100,000 inhabitants
- Place of 25,000 to 50,000 inhabitants

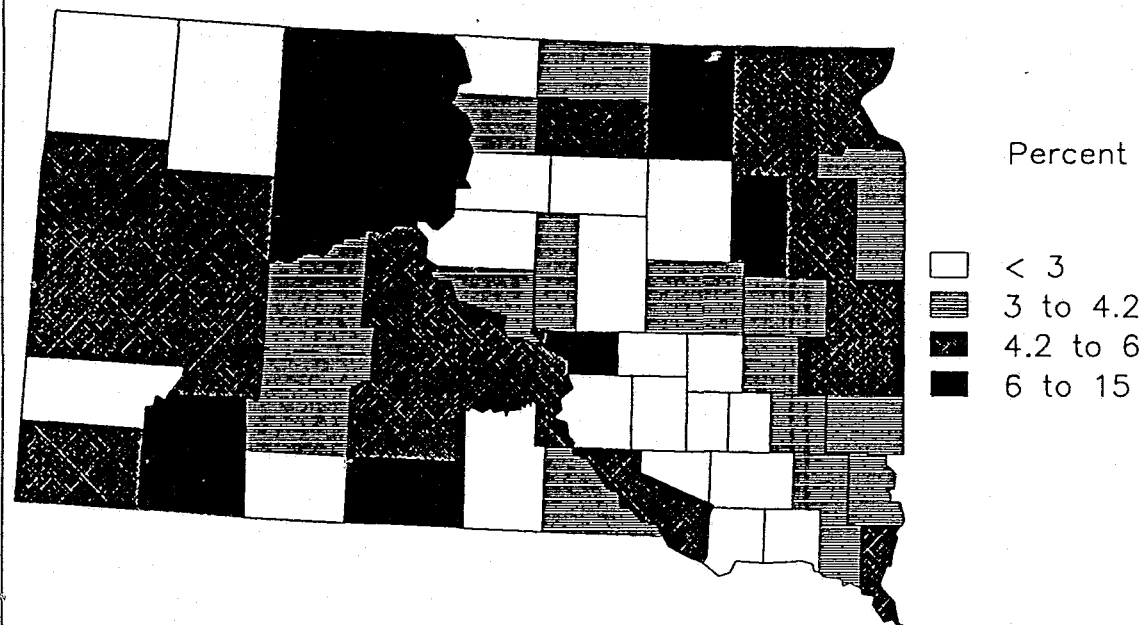
All political boundaries are as of January 1, 1980



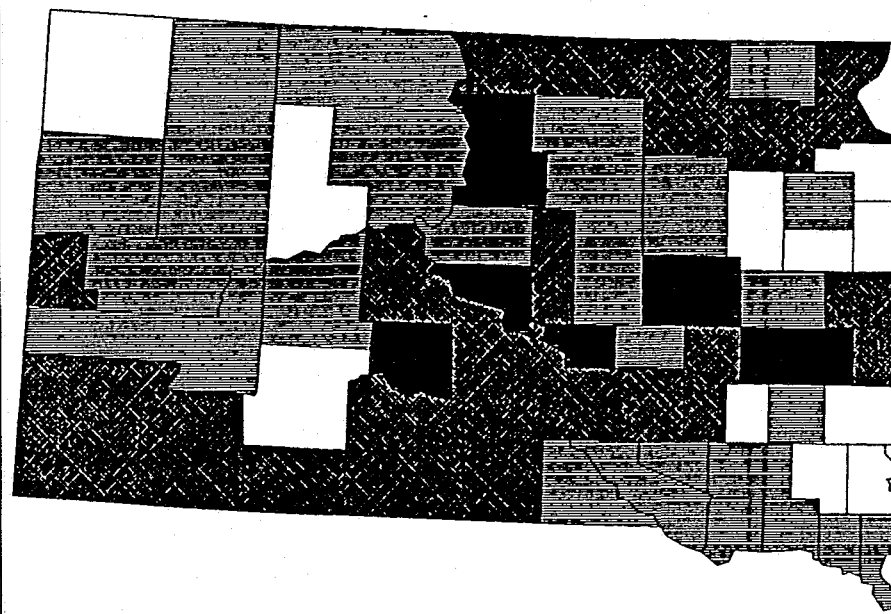
PETITIONS TO JUVENILE COURT
PER 1000 JUVENILE RESIDENTS
(fy 1989)







UNEMPLOYMENT RATE
1989 ANNUAL AVERAGE
(STATE RATE = 4.2 %)



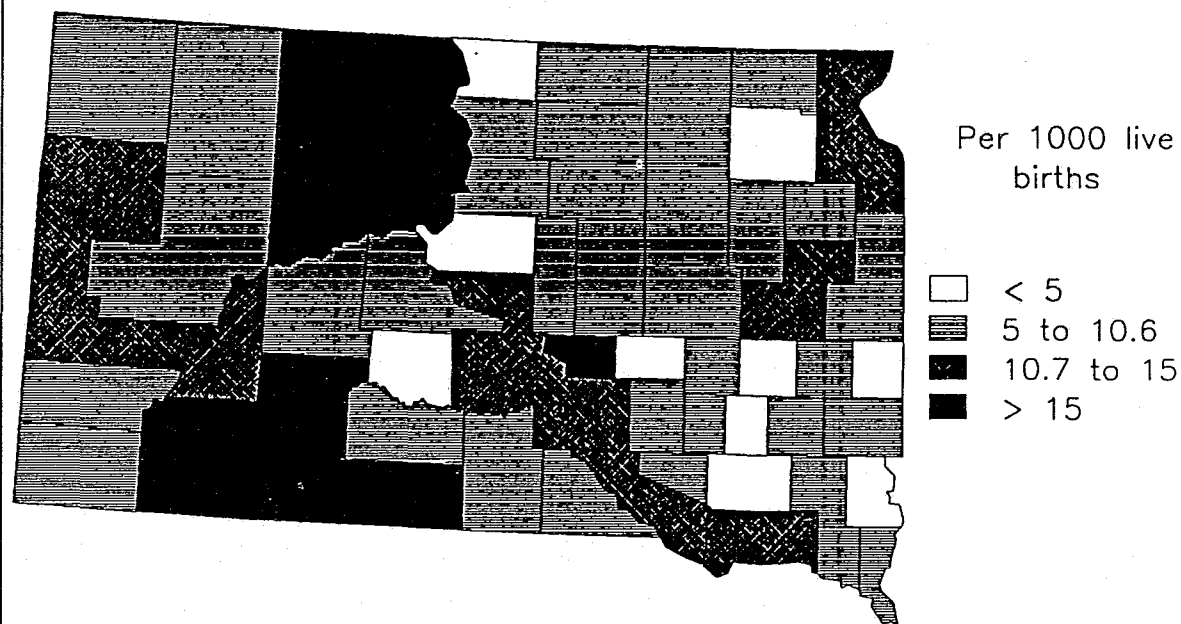
CHILDREN RECEIVING MENTAL HEALTH SERVICES
PER 1000 JUVENILES



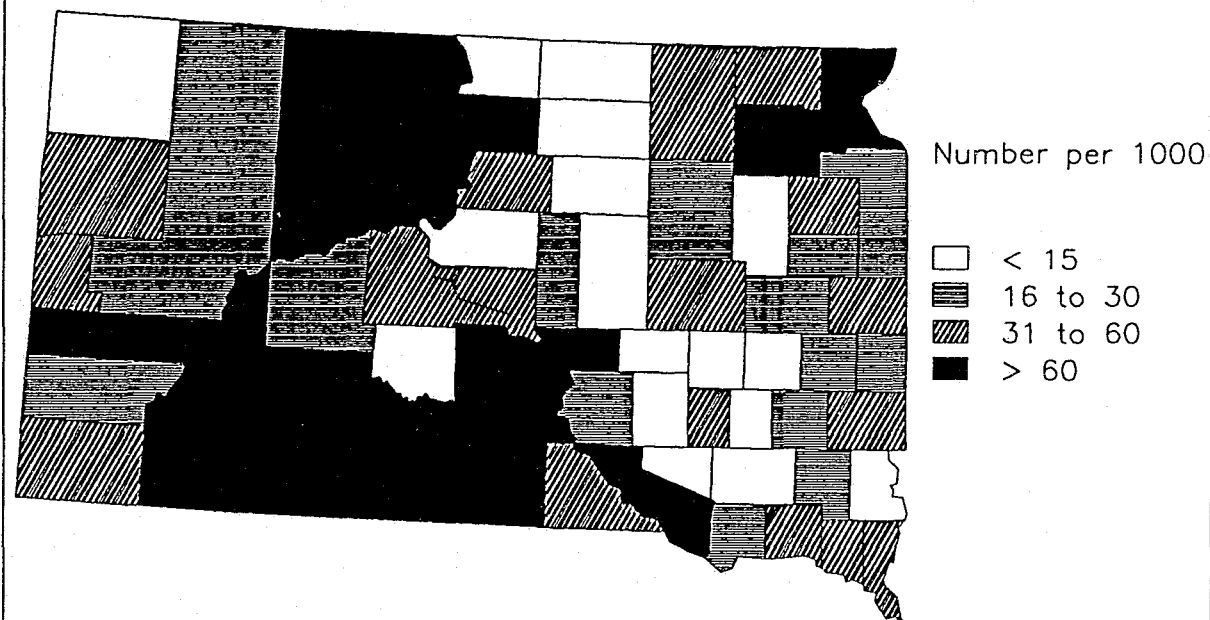
Number per 1000

-  < 10
-  10 to 25
-  26 to 50
-  > 50

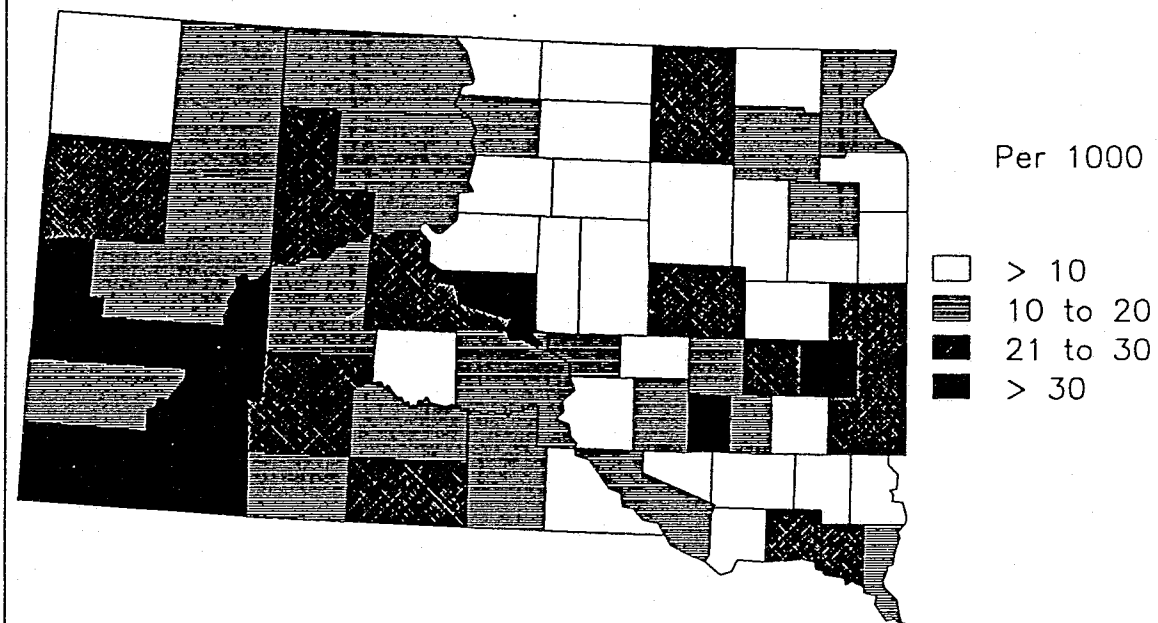
INFANT DEATH RATES
1980-1989 RATES PER 1000 LIVE BIRTH
(STATE AVERAGE = 10.6%)



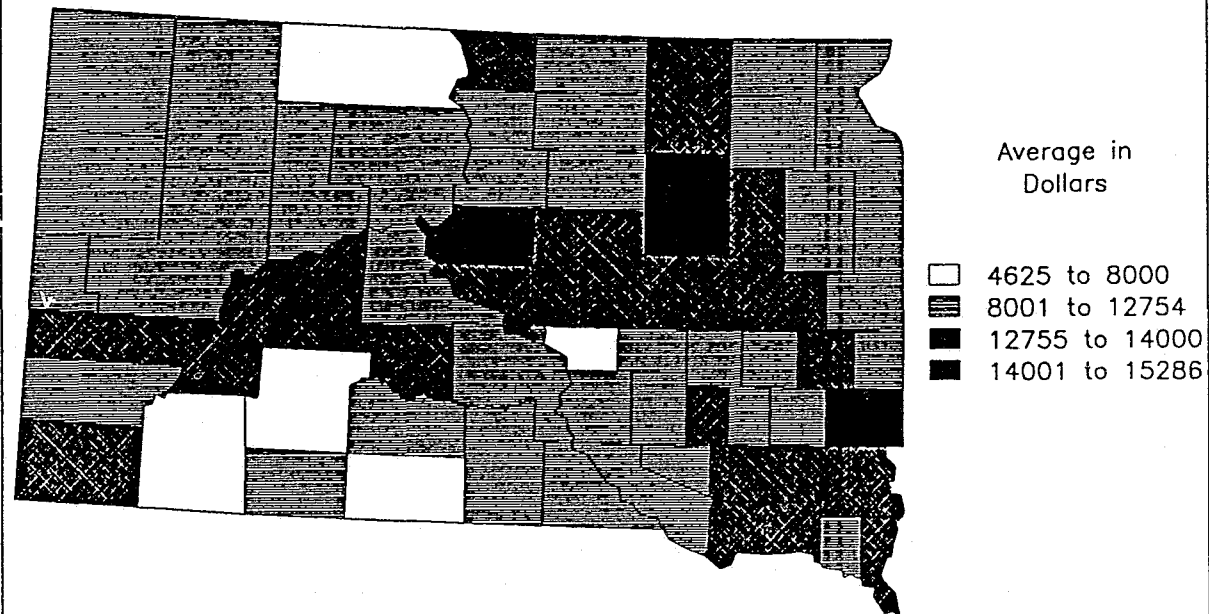
AVERAGE MONTHLY JUVENILE ADC CASES
PER 1000 JUVENILE RESIDENTS
(fv 1989)



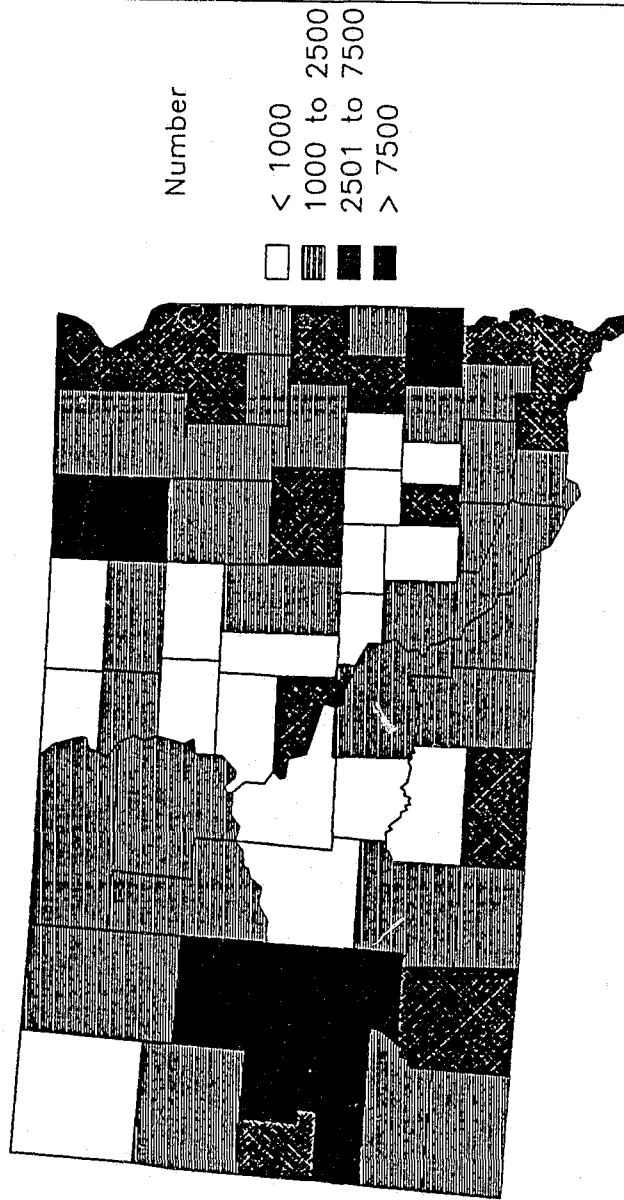
PERSONS RECEIVING DRUG/ALCOHOL TREATMENT
PER 1000 COUNTY RESIDENTS
1990



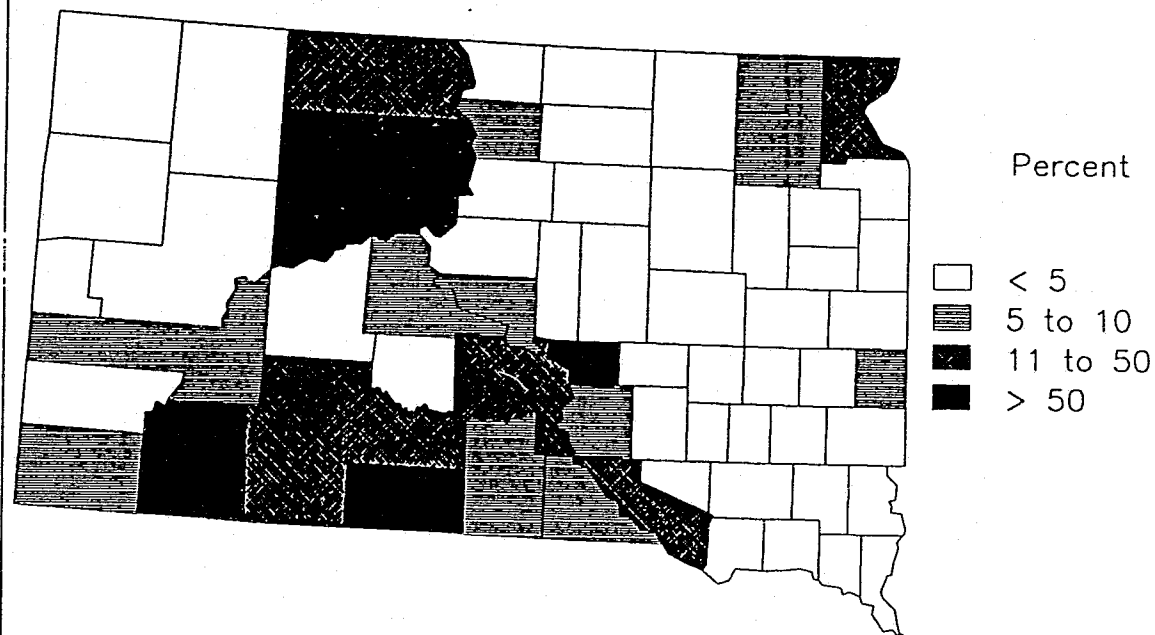
PER CAPITA INCOME
1988 FIGURES
(STATE AVERAGE = \$12,754)



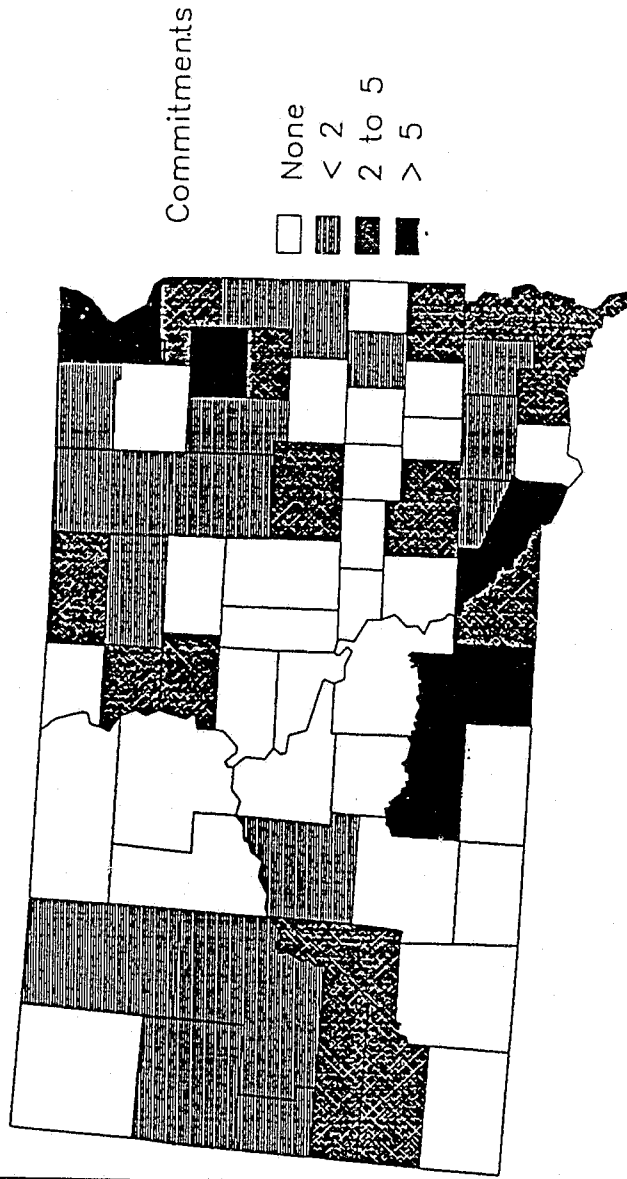
JUVENILE POPULATION
PERSONS 0 TO 17
1990 US CENSUS DATA



NATIVE AMERICAN POPULATION
PERCENT OF ALL RESIDENTS IN COUNTY
1990 CENSUS DATA



COMMITMENTS TO DOC Per 1000 Youth at Risk



APPENDIX D: COMPOSITE RISK INDEX EXAMPLES

**TABLE D1
COMPOSITE HEALTH CARE INDEX EXAMPLE**

| COUNTY | LOW BIRTH WEIGHT RATE | LOW BIRTH WEIGHT RANK | INFANT DEATH RATE | INFANT DEATH RANK | HEALTH CARE INDEX | COUNTY | LOW BIRTH WEIGHT RATE | LOW BIRTH WEIGHT RANK | INFANT DEATH RATE | INFANT DEATH RANK | HEALTH CARE INDEX |
|-------------|-----------------------------|-----------------------------|-------------------------|-------------------------|-------------------------|------------|-----------------------------|-----------------------------|-------------------------|-------------------------|-------------------------|
| Aurora | 0.0 | 01 | 8.8 | 33 | 17 | Hyde | 0.0 | 01 | 8.0 | 26 | 14 |
| Beadle | 4.0 | 38 | 6.5 | 17 | 28 | Jackson | 0.0 | 01 | 19.3 | 63 | 32 |
| Bennett | 5.6 | 55 | 18.2 | 62 | 59 | Jerauld | 0.0 | 01 | 2.6 | 01 | 1 |
| Bon Homme | 3.0 | 31 | 12.9 | 56 | 44 | Jones | 0.0 | 01 | 3.9 | 04 | 3 |
| Brookings | 4.5 | 43 | 7.2 | 21 | 32 | Kingsbury | 4.3 | 40 | 11.7 | 48 | 44 |
| Brown | 4.4 | 42 | 8.6 | 29 | 36 | Lake | 0.0 | 01 | 8.7 | 31 | 18 |
| Brule | 5.5 | 54 | 12.0 | 50 | 52 | Lawrence | 7.0 | 63 | 12.3 | 54 | 59 |
| Buffalo | 0.0 | 01 | 26.7 | 65 | 33 | Lincoln | 2.6 | 28 | 3.9 | 04 | 16 |
| Butte | 4.6 | 45 | 10.8 | 46 | 46 | Lyman | 0.0 | 01 | 14.2 | 58 | 30 |
| Campbell | 0.0 | 01 | 3.2 | 02 | 2 | Marshall | 5.6 | 55 | 9.9 | 44 | 50 |
| Charles Mix | 2.7 | 29 | 11.1 | 47 | 38 | McCook | 0.0 | 01 | 6.6 | 18 | 10 |
| Clark | 4.0 | 38 | 9.2 | 38 | 38 | McPherson | 0.0 | 01 | 9.0 | 36 | 19 |
| Clay | 2.3 | 27 | 5.2 | 11 | 19 | Meade | 5.0 | 48 | 7.9 | 25 | 37 |
| Codington | 4.3 | 40 | 8.4 | 27 | 34 | Mellette | 8.0 | 65 | 6.0 | 14 | 40 |
| Corson | 6.0 | 58 | 15.5 | 60 | 59 | Miner | 0.0 | 01 | 4.0 | 06 | 4 |
| Custer | 7.7 | 64 | 8.8 | 33 | 49 | Minnehaha | 4.7 | 46 | 9.2 | 38 | 42 |
| Davison | 3.6 | 34 | 8.9 | 35 | 35 | Moody | 0.0 | 01 | 4.4 | 08 | 5 |
| Day | 5.2 | 51 | 4.3 | 07 | 29 | Pennington | 5.4 | 53 | 12.0 | 50 | 52 |
| Deuel | 8.7 | 66 | 7.3 | 22 | 44 | Perkins | 0.0 | 01 | 8.6 | 29 | 15 |
| Dewey | 6.8 | 61 | 16.8 | 61 | 61 | Potter | 0.0 | 01 | 9.2 | 38 | 20 |
| Douglas | 0.0 | 01 | 9.0 | 36 | 19 | Roberts | 3.7 | 36 | 12.1 | 53 | 45 |
| Edmunds | 0.0 | 01 | 5.8 | 12 | 7 | Sanborn | 0.0 | 01 | 5.9 | 13 | 7 |
| Fall River | 5.3 | 52 | 10.5 | 45 | 49 | Shannon | 2.9 | 30 | 28.0 | 66 | 48 |
| Faulk | 0.0 | 01 | 7.8 | 24 | 13 | Spink | 3.1 | 32 | 6.9 | 20 | 26 |
| Grant | 6.9 | 62 | 12.3 | 54 | 58 | Stanley | 0.0 | 01 | 8.4 | 27 | 14 |
| Gregory | 0.0 | 01 | 9.6 | 43 | 22 | Sully | 0.0 | 01 | 3.5 | 03 | 2 |
| Haakon | 5.7 | 57 | 7.6 | 23 | 40 | Todd | 6.2 | 60 | 24.9 | 64 | 62 |
| Hamlin | 3.6 | 34 | 12.0 | 50 | 42 | Tripp | 3.2 | 33 | 8.7 | 31 | 32 |
| Hand | 0.0 | 01 | 9.2 | 38 | 20 | Turner | 5.0 | 48 | 6.7 | 19 | 34 |
| Hanson | 0.0 | 01 | 4.5 | 09 | 5 | Union | 3.8 | 37 | 6.3 | 16 | 27 |
| Harding | 0.0 | 01 | 6.2 | 15 | 8 | Wallworth | 5.1 | 50 | 9.2 | 38 | 44 |
| Hughes | 4.8 | 47 | 13.5 | 57 | 52 | Yankton | 4.5 | 43 | 11.9 | 49 | 46 |
| Hutchinson | 0.0 | 01 | 4.9 | 10 | 6 | Ziebach | 6.1 | 59 | 15.3 | 59 | 59 |

Note: Low Birth Weight rate is per 1,000 population. These data are extracted from Table B12. Infant Death rate is number per 1,000 live births. These data are extracted from Table B13. The health care index is the average rank of low birth weight and infant death. See "Risk Indicators" in the report.

**TABLE D2
COMPOSITE AT-RISK INDEX RATING**

| COUNTY | UNEMPLOYMENT | ALCOHOL AND DRUG | MENTAL HEALTH | ADC | FOOD STAMPS | DRUG ARREST | PETITION | DIVORCE | LOW BIRTH WEIGHT | INFANT DEATH | INCOME | INDEX RATING |
|-------------|--------------|---------------------|------------------|-----|----------------|----------------|----------|---------|---------------------|-----------------|--------|-----------------|
| Aurora | 4 | 30 | 43 | 2 | 26 | 64 | 15 | 18 | 01 | 33 | 54 | 26 |
| Beadle | 33 | 55 | 64 | 41 | 37 | 55 | 40 | 61 | 38 | 17 | 10 | 41 |
| Bennett | 15 | 42 | 50 | 63 | 63 | 56 | 23 | 44 | 55 | 62 | 55 | 48 |
| Bon Homme | 3 | 12 | 15 | 21 | 24 | 40 | 12 | 20 | 31 | 56 | 17 | 23 |
| Brookings | 55 | 57 | 38 | 34 | 21 | 38 | 46 | 44 | 43 | 21 | 34 | 39 |
| Brown | 62 | 49 | 40 | 43 | 36 | 39 | 51 | 55 | 42 | 29 | 06 | 41 |
| Brule | 10 | 10 | 56 | 29 | 30 | 45 | 58 | 30 | 54 | 50 | 37 | 37 |
| Buffalo | 64 | 38 | 66 | 62 | 62 | 1 | 11 | 01 | 01 | 65 | 65 | 40 |
| Butte | 40 | 50 | 22 | 50 | 47 | 41 | 63 | 54 | 45 | 46 | 46 | 46 |
| Campbell | 13 | 1 | 42 | 12 | 8 | 26 | 13 | 14 | 01 | 02 | 05 | 12 |
| Charles Mix | 47 | 34 | 26 | 57 | 58 | 31 | 61 | 30 | 29 | 47 | 48 | 43 |
| Clark | 61 | 11 | 06 | 11 | 11 | 1 | 16 | 42 | 38 | 38 | 04 | 22 |
| Clay | 33 | 58 | 18 | 48 | 48 | 47 | 54 | 35 | 27 | 11 | 40 | 38 |
| Codington | 50 | 35 | 36 | 36 | 42 | 37 | 62 | 47 | 40 | 27 | 33 | 40 |
| Corson | 66 | 45 | 25 | 59 | 59 | 1 | 28 | 10 | 58 | 60 | 62 | 43 |
| Custer | 18 | 28 | 48 | 28 | 16 | 62 | 34 | 64 | 64 | 33 | 32 | 39 |
| Davison | 8 | 63 | 55 | 46 | 49 | 41 | 56 | 53 | 34 | 35 | 13 | 41 |
| Day | 54 | 27 | 47 | 51 | 53 | 22 | 25 | 47 | 51 | 07 | 42 | 39 |
| Deuel | 30 | 15 | 08 | 20 | 39 | 1 | 35 | 30 | 66 | 22 | 47 | 28 |
| Dewey | 63 | 43 | 21 | 60 | 60 | 1 | 07 | 06 | 61 | 61 | 61 | 40 |
| Douglas | 8 | 3 | 13 | 9 | 12 | 1 | 43 | 16 | 01 | 36 | 56 | 18 |
| Edmunds | 51 | 21 | 33 | 4 | 60 | 26 | 17 | 35 | 01 | 12 | 44 | 28 |
| Fall River | 40 | 64 | 57 | 49 | 50 | 63 | 29 | 59 | 52 | 45 | 22 | 48 |
| Faulk | 1 | 2 | 31 | 8 | 3 | 1 | 01 | 14 | 01 | 24 | 36 | 11 |
| Grant | 33 | 16 | 11 | 19 | 22 | 29 | 32 | 40 | 62 | 54 | 43 | 33 |
| Gregory | 24 | 26 | 30 | 45 | 44 | 31 | 45 | 06 | 01 | 43 | 45 | 31 |
| Haakon | 24 | 44 | 195 | 22 | 2 | 41 | 38 | 38 | 57 | 23 | 09 | 45 |
| Hamlin | 43 | 25 | 08 | 24 | 27 | 1 | 36 | 30 | 34 | 50 | 51 | 30 |
| Hand | 7 | 14 | 14 | 6 | 13 | 1 | 08 | 18 | 01 | 38 | 23 | 13 |
| Hanson | 21 | 46 | 10 | 15 | 41 | 21 | 25 | 03 | 01 | 09 | 57 | 23 |
| Harding | 2 | 4 | 03 | 5 | 4 | 1 | 31 | 30 | 01 | 15 | 26 | 11 |
| Hughes | 23 | 65 | 65 | 44 | 46 | 50 | 50 | 61 | 47 | 57 | 07 | 47 |
| Hutchinson | 18 | 22 | 27 | 6 | 19 | 20 | 19 | 05 | 01 | 10 | 18 | 15 |

TABLE D2 (Continued)
COMPOSITE AT-RISK INDEX RATING

| COUNTY | UNEMPLOYMENT | ALCOHOL AND DRUG | MENTAL HEALTH | ADC | FOOD STAMPS | DRUG ARREST | PETITION | DIVORCE | LOW BIRTH WEIGHT | INFANT DEATH | INCOME | INDEX RATING |
|------------|--------------|---------------------|------------------|-----|----------------|----------------|----------|---------|---------------------|-----------------|--------|-----------------|
| Hyde | 30 | 13 | 49 | 18 | 23 | 29 | 01 | 08 | 01 | 26 | 15 | 19 |
| Jackson | 33 | 47 | 01 | 58 | 57 | 60 | 01 | 17 | 01 | 63 | 63 | 36 |
| Jerauld | 18 | 23 | 24 | 10 | 28 | 44 | 39 | 23 | 01 | 01 | 53 | 24 |
| Jones | 53 | 6 | 60 | 16 | 7 | 51 | 01 | 55 | 01 | 04 | 11 | 24 |
| Kingsbury | 26 | 18 | 28 | 27 | 14 | 1 | 47 | 26 | 40 | 48 | 12 | 26 |
| Lake | 58 | 62 | 61 | 33 | 34 | 22 | 52 | 57 | 01 | 31 | 14 | 39 |
| Lawrence | 47 | 61 | 39 | 38 | 33 | 54 | 57 | 60 | 63 | 54 | 24 | 48 |
| Lincoln | 26 | 7 | 04 | 13 | 10 | 58 | 53 | 42 | 28 | 04 | 21 | 24 |
| Lyman | 49 | 32 | 46 | 56 | 55 | 66 | 18 | 10 | 01 | 58 | 49 | 40 |
| Marshall | 46 | 19 | 32 | 37 | 35 | 1 | 24 | 10 | 55 | 44 | 41 | 31 |
| McCook | 28 | 9 | 15 | 30 | 17 | 59 | 30 | 39 | 01 | 18 | 35 | 26 |
| McPherson | 33 | 8 | 45 | 1 | 5 | 1 | 22 | 08 | 01 | 36 | 52 | 19 |
| Meade | 43 | 37 | 15 | 23 | 15 | 61 | 42 | 52 | 48 | 25 | 50 | 37 |
| Mellette | 40 | 33 | 37 | 64 | 64 | 1 | 49 | 28 | 65 | 14 | 59 | 41 |
| Miner | 30 | 52 | 62 | 14 | 45 | 1 | 41 | 49 | 01 | 06 | 25 | 30 |
| Minnehaha | 28 | 51 | 05 | 35 | 25 | 57 | 64 | 63 | 46 | 38 | 01 | 38 |
| Moody | 52 | 56 | 44 | 32 | 18 | 53 | 55 | 40 | 01 | 08 | 38 | 36 |
| Pennington | 39 | 66 | 23 | 53 | 51 | 45 | 66 | 66 | 53 | 50 | 19 | 48 |
| Perkins | 5 | 40 | 34 | 26 | 92 | 26 | 37 | 57 | 01 | 29 | 29 | 34 |
| Potter | 15 | 24 | 63 | 42 | 32 | 34 | 21 | 26 | 01 | 38 | 28 | 29 |
| Roberts | 57 | 41 | 41 | 54 | 56 | 1 | 59 | 20 | 36 | 53 | 58 | 43 |
| Sanborn | 15 | 39 | 54 | 17 | 40 | 22 | 01 | 23 | 01 | 13 | 31 | 23 |
| Shannon | 65 | 60 | 58 | 65 | 65 | 1 | 01 | 02 | 30 | 66 | 66 | 44 |
| Spink | 13 | 16 | 29 | 25 | 20 | 22 | 44 | 35 | 32 | 20 | 03 | 24 |
| Stanley | 45 | 54 | 52 | 40 | 38 | 33 | 19 | 65 | 01 | 27 | 27 | 36 |
| Sully | 6 | 19 | 20 | 3 | 01 | 51 | 10 | 44 | 01 | 03 | 02 | 15 |
| Todd | 60 | 48 | 51 | 66 | 66 | 1 | 13 | 10 | 60 | 64 | 64 | 46 |
| Tripp | 10 | 35 | 53 | 52 | 54 | 35 | 65 | 28 | 33 | 31 | 39 | 40 |
| Turner | 21 | 4 | 07 | 31 | 29 | 35 | 33 | 23 | 48 | 19 | 20 | 25 |
| Union | 56 | 30 | 12 | 47 | 43 | 65 | 27 | 49 | 37 | 16 | 08 | 35 |
| Wallworth | 38 | 29 | 59 | 55 | 52 | 48 | 60 | 20 | 50 | 38 | 30 | 44 |
| Yankton | 10 | 59 | 35 | 39 | 31 | 49 | 48 | 49 | 43 | 49 | 16 | 39 |
| Ziebach | 59 | 53 | 02 | 61 | 61 | 1 | 09 | 04 | 59 | 59 | 60 | 39 |

Note: The numbers under each column represent the county's rank & its rate on the individual social indicator. The last column, "Index Rating," is a composite rating which averages the rankings for all eleven indicators presented. Under this scenario, a higher index rating means that the county has, on average, higher ratings for the social indicators. See "Risk Indicators" in the report and tables B1-B15 else where in Appendix B.

APPENDIX E: SOUTH DAKOTA POPULATION DISTRIBUTION

TABLE E1
DISTRIBUTION OF JUVENILE POPULATION
FY 1989

| COUNTY | NUMBER OF RESIDENTS | NUMBER OF JUVENILE FEMALES | NUMBER OF JUVENILE MALES | TOTAL JUVENILES 0-17 | RANK | COUNTY | NUMBER OF RESIDENTS | NUMBER OF JUVENILE FEMALES | NUMBER OF JUVENILE MALES | TOTAL JUVENILES 0-17 | RANK |
|-------------|------------------------|----------------------------------|--------------------------------|----------------------------|------|------------|------------------------|----------------------------------|--------------------------------|----------------------------|------|
| Aurora | 3135 | 396 | 381 | 777 | 11 | Hyde | 1696 | 249 | 219 | 468 | 2 |
| Beadle | 18253 | 2201 | 2268 | 4469 | 54 | Jackson | 2811 | 566 | 516 | 1082 | 19 |
| Bennett | 3206 | 611 | 568 | 1179 | 21 | Jerauld | 2425 | 323 | 364 | 687 | 6 |
| Bon Homme | 7089 | 878 | 853 | 1732 | 34 | Jones | 1324 | 174 | 205 | 379 | 1 |
| Brookings | 25207 | 3701 | 3771 | 7473 | 62 | Kingsbury | 5925 | 701 | 792 | 1493 | 31 |
| Brown | 35580 | 5240 | 5245 | 10485 | 64 | Lake | 10550 | 1415 | 1519 | 2933 | 51 |
| Brule | 5485 | 703 | 691 | 1393 | 30 | Lawrence | 20665 | 2882 | 3003 | 5884 | 60 |
| Buffalo | 1759 | 329 | 419 | 748 | 10 | Lincoln | 15427 | 2401 | 2610 | 5010 | 57 |
| Butte | 7914 | 1118 | 1256 | 2374 | 45 | Lyman | 3638 | 621 | 630 | 1251 | 25 |
| Campbell | 1965 | 196 | 282 | 477 | 3 | Marshall | 4844 | 722 | 661 | 1383 | 29 |
| Charles Mix | 9131 | 1232 | 1304 | 2536 | 48 | McCook | 5688 | 768 | 802 | 1570 | 32 |
| Clark | 4403 | 601 | 726 | 1327 | 28 | McPherson | 3228 | 482 | 470 | 952 | 16 |
| Clay | 13186 | 1640 | 1638 | 3279 | 53 | Meade | 21878 | 3637 | 3947 | 7584 | 63 |
| Codington | 22698 | 3256 | 3412 | 6667 | 61 | Mellette | 2137 | 353 | 348 | 702 | 7 |
| Corson | 4195 | 897 | 972 | 1869 | 35 | Miner | 3272 | 423 | 408 | 831 | 12 |
| Custer | 6179 | 1019 | 1157 | 2176 | 43 | Minnehaha | 123809 | 18974 | 19621 | 38595 | 66 |
| Davison | 17503 | 2314 | 2425 | 4738 | 56 | Moody | 6507 | 1038 | 1077 | 2115 | 42 |
| Day | 6978 | 944 | 946 | 1899 | 36 | Pennington | 81343 | 11769 | 11952 | 23721 | 65 |
| Deuel | 4522 | 590 | 717 | 1307 | 27 | Perkins | 3932 | 603 | 617 | 1221 | 24 |
| Dewey | 5523 | 1221 | 1170 | 2391 | 46 | Potter | 3190 | 452 | 395 | 846 | 13 |
| Douglas | 3746 | 469 | 565 | 1033 | 18 | Roberts | 9914 | 1337 | 1457 | 2795 | 50 |
| Edmunds | 4356 | 575 | 609 | 1184 | 22 | Sanborn | 2833 | 365 | 371 | 736 | 9 |
| Fall River | 7353 | 1028 | 1014 | 2042 | 39 | Shannon | 9902 | 2865 | 2938 | 5803 | 59 |
| Faulk | 2744 | 347 | 378 | 725 | 8 | Spink | 7981 | 1023 | 1043 | 2066 | 40 |
| Grant | 8372 | 1152 | 1368 | 2521 | 47 | Stanley | 2453 | 476 | 372 | 848 | 14 |
| Gregory | 5359 | 773 | 1328 | 2102 | 41 | Sully | 1589 | 292 | 260 | 552 | 5 |
| Haakon | 2624 | 460 | 500 | 959 | 17 | Todd | 8352 | 1540 | 1517 | 3056 | 52 |
| Hamlin | 4974 | 631 | 671 | 1302 | 26 | Tripp | 6924 | 982 | 949 | 1931 | 37 |
| Hand | 4272 | 596 | 595 | 1192 | 23 | Turner | 8576 | 935 | 1087 | 2021 | 38 |
| Hanson | 2994 | 417 | 498 | 915 | 15 | Union | 10189 | 1367 | 1386 | 2753 | 49 |
| Harding | 1669 | 271 | 275 | 546 | 4 | Wallworth | 6087 | 772 | 826 | 1598 | 33 |
| Hughes | 14817 | 2177 | 2293 | 4470 | 55 | Yankton | 19252 | 2633 | 2816 | 5450 | 58 |
| Hutchinson | 8262 | 1067 | 1201 | 2269 | 44 | Ziebach | 2220 | 569 | 551 | 1120 | 20 |

Note: "Total Juveniles" 0-17 was extrapolated from PL94 data. Table describes the distribution of juvenile population during FY 1989, standardizes that number per 1,000 children 0-17, and provides the rank among counties which the number per 1,000 represents (1 = lowest, 66 = highest).

Source: U.S. Department of Commerce, Bureau of Census, 1990 South Dakota Population Figures, unpublished report.

TABLE E2
COMPARATIVE POPULATION PROFILE:
U.S. AND SOUTH DAKOTA¹

| Population Profiles | Year | National Data | South Dakota Data |
|---------------------------------|--------------------|---------------|-------------------|
| Total Population | 1990 | 245,807,000 | 713,000 |
| Percent population under 18 | 1990 | 26.0% | 27.6% |
| Percent population minority | 1985 (estimate) | 22.5% | 8.7% |
| Percent population metropolitan | 1990 | 77.1% | 29.1% |

¹Source: U.S. Bureau of the Census, Statistical Abstract of the United States, 1990, 110th Edition, Tables No. 28, 35; U.S. and Current Population Reports, "Population Estimates by Race and Hispanic Origin for States, 1985, P-25, No. 1040-RD-1, Tables 1-A and 11-A (as reported in Kids Count Data Book, 1991).

APPENDIX F: DRUG USE AMONG HIGH SCHOOL STUDENTS

TABLE F1

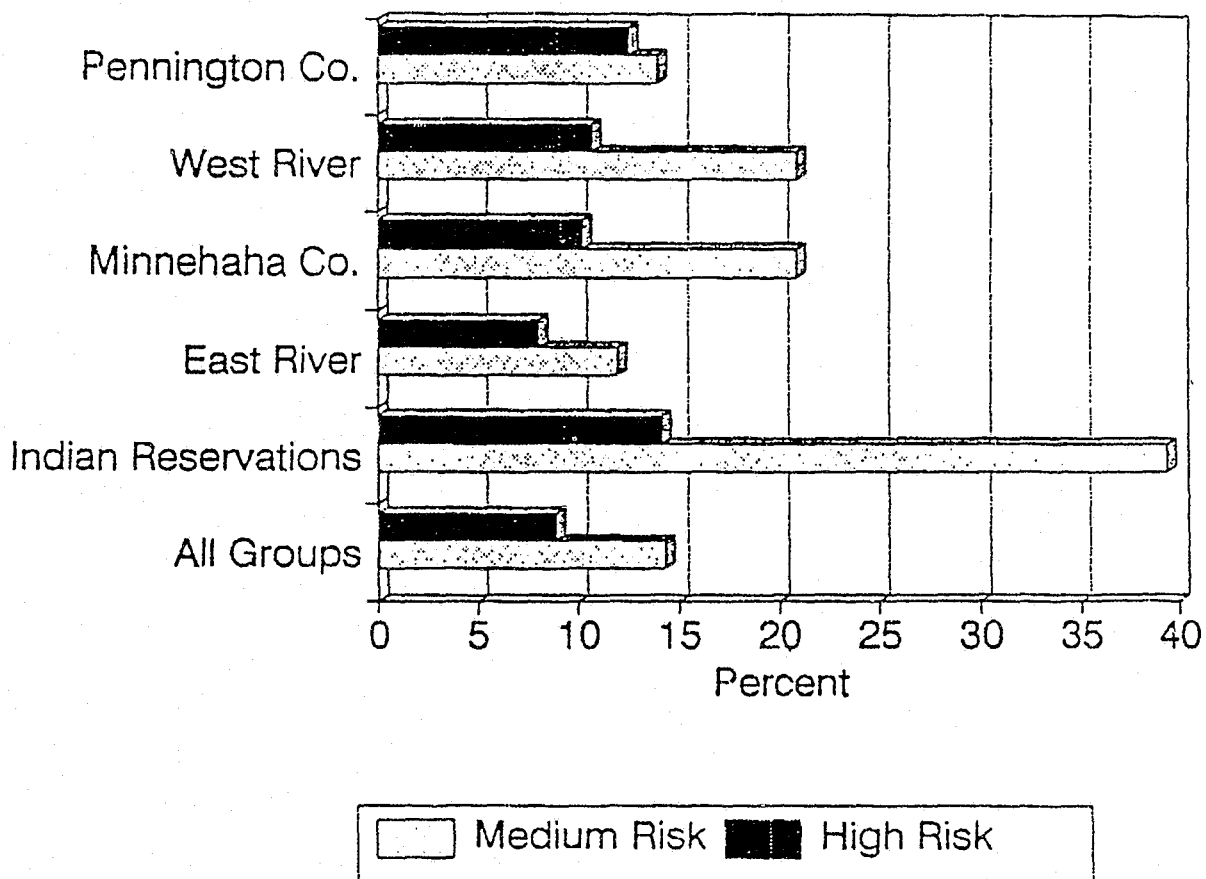
**PERCENTAGE OF SOUTH DAKOTA HIGH SCHOOL SENIORS
AT RISK OF DRUG AND ALCOHOL USE, 1989-90
BY LEVEL OF RISK AND REGION¹**

| LEVEL OF RISK | All Groups | Indian Reservations | East River except Minnehaha | Minnehaha County | West River excluding Pennington | Pennington County |
|--|------------|---------------------|-----------------------------|------------------|---------------------------------|-------------------|
| Level 1 (High Risk) 1. Multi-Drug Users 2. Stimulant Users 3. Heavy Marijuana Users 4. Heavy Alcohol Users | 8.9% | 14.1% | 8.0% | 10.2% | 10.7% | 12.5% |
| Level II (Moderate Risk) 5. Occasional Drug Users 6. Light Marijuana Users | 14.3% | 39.4% | 11.9% | 20.9% | 16.0% | 13.9% |
| Level III (Low Risk) 7. Tried a Drug (no current use) 8. Light Alcohol Users 9. Negligible or No Use | 76.7% | 46.4% | 80.1% | 68.9% | 73.2% | 73.6% |

Source: *The American Drug and Alcohol Survey, Drug and Alcohol Use Among South Dakota High School Seniors, 1989-90*, RMBSI, Inc., Fort Collins, Colorado. Study sponsored by: Department of Human Services Division of Alcohol and Drug Abuse and Department of Education, Pierre, South Dakota.

CHART F1

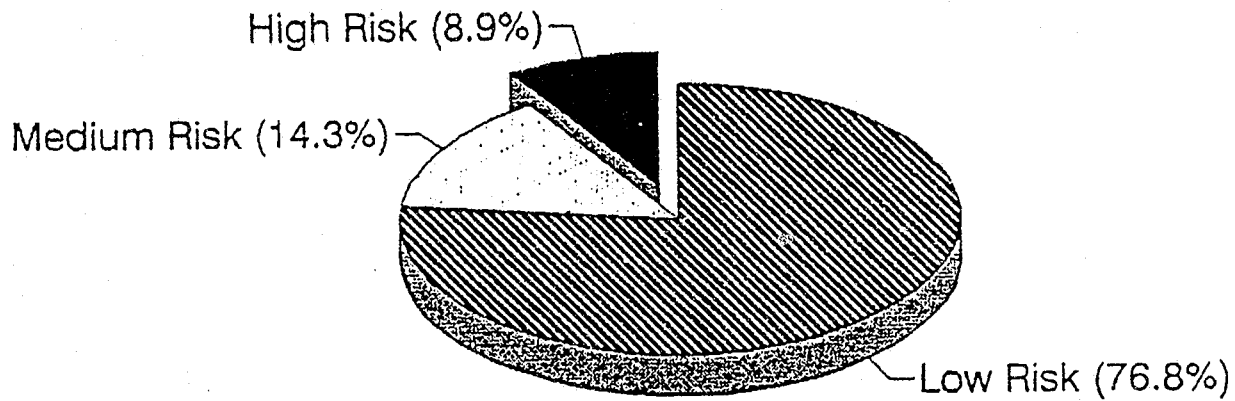
% of South Dakota High School Seniors At Risk from Substance Abuse by Region



Source: *The American Drug and Alcohol Survey, Drug and Alcohol Use Among South Dakota High School Seniors, 1989-90*, RMBSI, Inc., Fort Collins, Colorado.

CHART F2

Percentage of South Dakota High School Seniors At Risk from Substance Abuse



Source: The American Drug and Alcohol Survey, Drug and Alcohol Use Among South Dakota High School Seniors, 1989-90, RMBSI, Inc.

**APPENDIX G: NATIONALLY COMPARABLE MEASURES OF ADOLESCENT
AND CHILD WELL-BEING**

National and State Trends

The statistics in the *Kids Count Data Book* are compiled "to give children a voice, a voice that speaks through numbers and statistics, through trends and through the conclusions that can be drawn when we are more aware of how children are faring" (1991, p. 2).

By providing nationally comparable data on indicators of child and adolescent health, education, social, and economic well-being, each state can see how well, and how poorly, it is doing. The eight indicators of "child well-being" and four indicators of resources for children which *Kids Count* will be reporting each year are "widely regarded as significant and reliable indicators" (1991, p. 2).

Each state is given a rank from best to worst. Then a composite ranking is computed for each state. The *Kids Count* data for South Dakota, as well as the United States as a whole, are shown in Table 2. A ✓ is used indicate the eight indicators of child well-being that are used to develop the composite ranking for each state.

TABLE G1
NATIONALLY COMPARABLE MEASURES OF
ADOLESCENT AND CHILD WELL-BEING¹

| | National Data | | South Dakota Data | | | |
|--|---------------|--------------|-------------------|----------|--------------------|----------------|
| Maternal and Child Health | Year | Data | Year | Rank | Data | Percent Change |
| ✓Percent low birth weight babies (under 2,500 grams/5.5 pounds) | 1980 1988 | 6.8% 6.9% | 1980 1988 | 1 | 5.1% 4.7% | - 8 |
| Percent births with early prenatal care (first trimester) | 1988 | 79.9% | 1980 1988 | 46 30 | 69.1% 76.6% | - 11 |
| ✓Infant mortality rate (per 1000 live births) | 1980 1988 | 12.6 10.0 | 1980 1988 | 30 | 10.9 10.1 | - 7 |
| ✓Child death rate, ages 1-14 (per 100,000 children) | 1980 1988 | 39.5 33.2 | 1980 1988 | 20 | 47.9 31.0 | - 35 |
| Percent of children under 18 not covered by any health insurance | 1986- 1990 | 19.5% | 1986- 1990 | 33 | 20.3% | |
| Family Income/Supports | Year | Data | Year | Rank | Data | Percent Change |
| Per capita income | 1989 | \$17,596 | 1989 | 42 | 13,685 | |
| ✓Percent of Children in poverty | 1979 85-89 | 16.0 20.1 | 1989 85-89 | 32 | 20.6% 20.1% | -0- |
| Benefits as percent of poverty (AFDC and Food Stamps) | 1982 1990 | 68.2% | 1982 1990 | 29 27 | 70.4% 68.0% | - 3 |
| Education Support and Achievement | Year | Data | Year | Rank | Data | Percent Change |
| Educational expenditures per pupil | 1989 | \$4,423 | 1982 1989 | 39 42 | \$2,846 \$3,249 | |
| ✓Percent graduating from high school | 1982 1988 | 69.7 71.2 | 1982 1988 | 10 | 82.7% 79.6% | - 4 |
| Youth Risk Behaviors | Year | Data | Year | Rank | Data | Percent Change |
| ✓Teen violent death rate/Ages 15-19 (per 100,000 teens) | 1984 1988 | 62.4 69.7 | 1984 1988 | 46 | 83.9 96.5 | + 15 |
| ✓Percent teen out-of-wedlock births | 1980 1988 | 7.5 8.2 | 1980 1988 | 20 | 5.7 7.2 | + 26 |
| Percent of high school seniors who have used drugs last 12 months: | | | | | | |
| Alcohol | 1989 | 83 | 1989 | | 89 | |
| Marijuana | | 30 | | | 19 | |
| ✓Juvenile incarceration rate (per 100,000 juveniles) | 1979 1987 | 118 166 | 1979 1987 | 40 | 99 194 | + 96 |
| National Composite Ranking (✓ed indicators) | | | 1990 1991 | 26 24 | | |

¹Sources: 1. Percent of high school seniors who use drugs: RMBSI, Inc., *Drug and Alcohol Use Among South Dakota High School Seniors*, The American Drug and Alcohol Survey, Fort Collins, Colorado, 1989; 2. All other data: The Center for Social Policy, *Kids Count Data Book: State Profiles of Child Well-Being*, Washington, D.C., 1991.

APPENDIX H: SCHOOL COMPLETION DATA

TABLE H1

| SCHOOL COMPLETION | |
|--|--|
| Percent graduating from high school (1988) ¹ (Percent of students entering ninth grade who graduate on schedule-National Ranking 12) | 79.6% |
| Estimated percent of Native American students graduating from high school | estimates range from a high of 60%, to a low of 25% for some Indian reservations |
| School retention (public): Percent of students entering 9th grade in 1985-86 who graduated from high school in 1988-89 ² | 86.2% |
| Annual drop-out rate, 1987-88 ³ | |
| <u>Public</u> | |
| Grades 9 - 12 | |
| Grades 7 - 12 | 4.34% |
| Native American 7 - 12 | 2.99% |
| | 13.00% |
| <u>Non-Public</u> | |
| Grades 9 - 12 | |
| Grades 7 - 12 | 18.37% |
| Native American 7 - 12 | 13.06% |
| | 30.86% |
| <u>Total Public & Private</u> | |
| Grades 9 - 12 | 5.62% |
| Grades 7 - 12 | 3.97% |
| Native American 7 - 12 | 20.40% |

Note:

Annual drop-out rates are not considered reliable (rates not adjusted for migration; schools do not always know whether a student enrolling in another school; BIA schools are not required to report, and some do not). To improve the uniformity of drop-out data, the Department of Education has implemented a new system for reporting drop-outs, using a standard definition of "drop-out" and a standard reporting form. The first school year for which data will be available is 1989-90. Since drop-out data is based on enrollments in the previous school year, this more comparable and consistent data will not be available until 1991-92.

The Department of Education does not release drop-out data by school district. The graduation rate is the target measure of every drop-out prevention. Schools and communities will have to have this information to evaluate the effectiveness of their drop-out prevention efforts. Also, the drop-out rate should be a major indicator used in computing the index of need for youth at-risk. Without it, the indicator is incomplete.

¹Source: Kids Count Data Book, January, 1991. Graduation rate based on percentage of public ninth grade enrollments four years earlier, and corrected for interstate migration. The percent not graduating (i.e., 100% - 79.7% = 20.4%) is what is commonly referred to as the "drop-out rate." This indicator is now being stated in terms of percent graduating instead of percent not graduating to conform with national goals in education.

²Source: Department of Education. Does not include students attending Job Corps Center who graduate or students who earn G.E.D.

³Source: South Dakota Department of Education.

TABLE H2
ENROLLMENT IN EDUCATION PROGRAM BY ETHNICITY: 1989

| RACE/ETHNICITY | STATE POPULATION UNDER 18 ¹ | PUBLIC AND PRIVATE SCHOOL ENROLLMENT ² | CHAPTER 1 ENROLLMENT ³ | SPECIAL EDUCATION ENROLLMENT ⁴ |
|-----------------|--|---|--------------------------------------|---|
| Native American | 50,575 | 11.6% | 19.5% | 12.2% |
| Other | 7,914 | 1.6% | 1.4% | 1.4% |
| White | 637,515 | 86.9% | 78.9% | 86.3% |
| Total Number | 696,004 | 127,329 | 13,398 | 14,431 |
| Total Percent | 100.0% | 100.0% | 100.0% | 100.0% |

¹Source: U.S. Bureau of the Census, 1990,

²Source: Department of Education and Cultural Affairs, *1988-89 Statistical Digest*. Not all BIA schools reported; therefore this is a slight underestimate of the Native American student population.

³Department of Education and Cultural Affairs, *FY 1989 Chapter I Evaluation Highlights*.

⁴Source: Department of Education and Cultural Affairs, *Special Education in South Dakota for School Year 1989*. Does not include BIA school data for handicapped Native American youth.

APPENDIX I: RISK FACTORS FOR DELINQUENCY AND DRUG ABUSE

RISK FACTORS FOR DELINQUENCY AND DRUG ABUSE¹

- (1) Early frequency and variety of antisocial behaviors in the primary grades of elementary schools.
- (2) Parent and sibling drug use and criminal behavior.
- (3) Poor and inconsistent family-management practices.
- (4) Family conflict.
- (5) Family social and economic deprivation.
- (6) School failure.
- (7) Low degree of commitment to education and attachment.²
- (8) Peer factors (associated with delinquent friends).
- (9) Attitudes and beliefs (acceptance of deviance, approval of drug use v. acceptance of conventional norms).
- (10) Neighborhood attachment and community disorganization.
- (11) Mobility (frequent change of residence and school).
- (12) Physiological factors (attention-deficit disorder, hyperactivity).
- (13) Personality factors (sensation seeking, willingness to risk injury or illness).

RISK FACTORS ASSOCIATED WITH ADOLESCENT ANTI-SOCIAL BEHAVIOR³

Contextual or Community Factors

- (1) Economic and social deprivation.
- (2) Community disorganization and low levels of attachment among neighborhood groups.
- (3) High levels of transiency and mobility associated with areas in rapid transition.
- (4) Community norms and laws (legal norms) favorable to the tolerance of deviant (and illegal) behavior.
- (5) Availability of drugs.

RISK FACTORS ASSOCIATED WITH ADOLESCENT ANTI-SOCIAL BEHAVIOR³

INDIVIDUAL RISK FACTORS

Birth to Elementary School Age

- (1) Family history of alcoholism and crime.
- (2) Family management problems.

First few years of Elementary Schools

- (3) Early antisocial behavior and hyperactivity.
- (4) Parental drug use and positive attitudes toward use of drugs.

Mid to Late Elementary School

- (5) Academic failure.
- (6) Little commitment to school.
- (7) Alienation, rebelliousness, lack of social bonding.
- (8) Antisocial behavior in early adolescence.
- (9) Association with friends who use drugs or are delinquent.
- (10) Favorable attitudes toward drug use.
- (11) Early initiation of drug use and delinquency behavior.

Examples of indicators used for at-risk students are presented here.¹

- Member of minority racial/ethnic group
- Family in lower economic level (e.g., eligible for free or reduced lunch)
- Living in single-parent family
- Low educational status of family, especially mother
- Two or more years older than other students in same grade
- Poor school attendance (e.g., absent once a week or three or more times a month without a valid reason or acceptable excuse)
- Frequent transfers between schools
- Below grade level performance (e.g., one or more years behind their age level group in math or reading skill levels)
- Consistent low scores on standardized achievement tests (e.g., students who score at or below 25th percentile on standardized achievement tests)
- Lack of motivation/interest in school--low aspirations
- Disruptive or inappropriate behaviors in school or community (e.g., frequent suspensions;, trouble with the law)
- Unstable home; dysfunctional family situation
- Poor attitudes of parents toward school (lack of parental support or encouragement)
- Limited-English proficiency
- Employment in a job that interferes with schooling (e.g., 10 hours a week--potential interference; 15 or more hours a week--serious interference)
- Low self-esteem
- Alcohol/substance abuse
- Incompatible values with school (diverse value system)
- Medical health problems
- Teenage pregnancy or teenage parent (premature assumption of adult roles)
- Retention in one or more grades
- Limited involvement in extracurricular activities
- Severe depression--suicide attempts
- Above average or below average intelligence
- Inappropriate/poor peer relationships
- Victim of physical, emotional, or sexual abuse
- Eligibility for or participation in special education, compensatory, or remedial programs

¹From Davis, William E. and Edward J. McCaul, *At-Risk Children and Youth: A Crisis in Our Schools and Society*, Institute for the Study of At-risk Students, University of Main, 1990, pp. 50-51.

ENDNOTES

1. Extracted from "Delinquency and Drug Abuse: Implications for Social Services," J. David Haskins, J.M. Jenson, R.F. Catalano, D.M. Lishner, *Social Service Review* (June 1988).
2. The terms commitment and attachment are drawn from Social Control Theory (Hirschi, T. 1969) and represent elements of the social bond which integrate youth in conventional society and sustain law abiding behavior.
3. This list of factors was summarized from the keynote session of the Juvenile Delinquency Prevention Track, 1989 National Conference of State Juvenile Justice Advisory Groups, Reno, Nevada, May 7-10, "A Risk Factor Based Approach to Delinquency Prevention," presented by Richard Catalano, Ph.D., School of Social Work, University of Washington, Seattle.

**APPENDIX J: SPECIAL EDUCATION STUDENT PROFILE
(HANDICAPPING CONDITION)**

APPENDIX J

TOTAL ENROLLMENT AND SPECIAL EDUCATION ENROLLMENT

The following table summarizes the number of students enrolled in special education by school district.

Source: South Dakota Department of Education and Cultural Affairs, Center for Special Education, Status Report: Special Education in South Dakota, For School Year 1989-90.

TABLE J1

**1989-90 Total Enrollment and
1989-90 Special Education Enrollment**

| District | Special Ed Enrollment | Total Enrollment | Percent of Total Enrollment Served in Special Education |
|----------------|--------------------------|---------------------|---|
| Sioux Falls | 2251 | 15,422 | 14.60 |
| Rapid City | 1143 | 13361 | 8.55 |
| Aberdeen | 602 | 4541 | 13.26 |
| Watertown | 359 | 3932 | 9.13 |
| Meade | 243 | 3127 | 7.77 |
| Mitchell | 315 | 2829 | 11.13 |
| Yankton | 205 | 2818 | 7.27 |
| Brookings | 261 | 2783 | 9.38 |
| Pierre | 352 | 2782 | 12.65 |
| Douglas | 278 | 2774 | 10.02 |
| Huron | 303 | 2525 | 12.00 |
| Brandon Valley | 161 | 2057 | 7.83 |
| Todd County | 276 | 2047 | 13.48 |
| Spearfish | 198 | 2025 | 9.78 |
| Vermillion | 175 | 1435 | 12.20 |
| Lead-Deadwood | 160 | 1433 | 11.17 |
| Lake Central | 130 | 1378 | 9.43 |
| Lennox | 196 | 1367 | 14.34 |
| Milbank | 90 | 1258 | 7.15 |
| Winner | 79 | 1196 | 6.61 |
| Belle Fourche | 106 | 1178 | 9.00 |
| Custer | 125 | 1135 | 11.01 |
| Hot Springs | 106 | 1135 | 9.34 |
| Sisseton | 113 | 1116 | 10.13 |
| Eagle Butte | 179 | 1113 | 16.08 |
| Chamberlain | 51 | 1003 | 5.08 |
| Canton | 120 | 920 | 13.04 |
| West Central | 117 | 900 | 13.00 |
| Flandreau | 84 | 835 | 10.06 |
| Redfield | 100 | 812 | 12.32 |
| Mobridge | 57 | 756 | 7.54 |
| Bon Homme | 124 | 753 | 16.47 |
| Beresford | 76 | 750 | 10.13 |
| Wagner | 89 | 738 | 12.06 |
| Tri-Valley | 152 | 731 | 20.79 |
| Webster | 70 | 690 | 10.14 |
| Shannon County | 176 | 657 | 26.79 |
| Jefferson | 121 | 648 | 18.67 |
| Dell Rapids | 92 | 641 | 14.35 |
| Parkston | 104 | 636 | 16.35 |
| Deuel | 84 | 633 | 13.27 |
| Harrisburg | 80 | 625 | 12.80 |
| Hamlin | 38 | 616 | 6.17 |
| Miller | 44 | 611 | 7.20 |
| Howard | 52 | 605 | 8.60 |

TABLE J1 (Continued)

| District | Special Ed | Total | Percent of Total |
|--------------------|------------|-------|------------------|
| Sioux Valley | 63 | 603 | 10.45 |
| Bennett County | 16 | 601 | 2.66 |
| Haakon | 56 | 584 | 9.59 |
| Stanley County | 72 | 572 | 12.59 |
| Lemmon | 54 | 564 | 9.57 |
| Clark | 49 | 562 | 8.72 |
| Gregory | 47 | 540 | 8.70 |
| Groton | 61 | 537 | 11.36 |
| Hill City | 41 | 514 | 7.98 |
| Platte | 35 | 504 | 6.94 |
| Alcester-Hudson | 71 | 492 | 14.43 |
| Elk Point | 72 | 491 | 14.66 |
| Wessington Springs | 67 | 479 | 13.99 |
| Newell | 46 | 471 | 9.77 |
| Britton | 55 | 471 | 11.68 |
| McLaughlin | 98 | 456 | 21.49 |
| Scotland | 65 | 448 | 14.51 |
| Freeman | 56 | 448 | 12.50 |
| White River | 91 | 442 | 20.59 |
| Parker | 66 | 435 | 15.17 |
| Gettysburg | 35 | 417 | 8.39 |
| Garretson | 42 | 416 | 10.10 |
| DeSmet | 36 | 398 | 9.05 |
| Arlington | 27 | 393 | 6.87 |
| Andes Central | 70 | 389 | 17.99 |
| Hanson | 51 | 389 | 13.11 |
| Kadoka | 48 | 380 | 12.63 |
| Kimball | 27 | 374 | 7.22 |
| Lyman | 57 | 374 | 15.24 |
| Baltic | 37 | 352 | 10.51 |
| Sully Buttes | 34 | 352 | 9.66 |
| Burke | 24 | 350 | 6.86 |
| Harding County | 29 | 349 | 8.31 |
| Menno | 24 | 344 | 6.98 |
| Wall | 28 | 340 | 8.24 |
| Wilmot | 35 | 336 | 10.42 |
| Waubay | 52 | 325 | 16.00 |
| Ipswich | 35 | 325 | 10.77 |
| Salem | 58 | 319 | 18.18 |
| Marion | 47 | 318 | 14.78 |
| Timber Lake | 28 | 312 | 8.97 |
| Woonsocket | 43 | 312 | 13.78 |
| Centerville | 39 | 311 | 12.54 |
| Hyde | 28 | 303 | 9.24 |
| Faulkton | 37 | 299 | 12.37 |
| Castlewood | 34 | 298 | 11.41 |
| Chester | 34 | 298 | 11.41 |
| Northwestern | 23 | 295 | 7.80 |
| Viborg | 40 | 288 | 13.89 |
| Elkton | 36 | 286 | 12.59 |

TABLE J1 (Continued)

| District | Special Ed | Total | Percent of Total |
|-------------------|------------|-------|------------------|
| Dupree | 41 | 286 | 14.34 |
| Bonesteel-Fairfax | 38 | 285 | 13.33 |
| Irene | 42 | 279 | 15.05 |
| Jones County | 37 | 276 | 13.41 |
| Leola | 25 | 276 | 9.06 |
| Iroquois | 21 | 275 | 7.64 |
| Eureka | 49 | 274 | 17.88 |
| Warner | 30 | 270 | 11.11 |
| Lake Preston | 26 | 270 | 9.63 |
| Plankinton | 17 | 268 | 6.34 |
| Edgemont | 32 | 267 | 11.99 |
| Armour | 30 | 264 | 11.36 |
| Corsica | 22 | 259 | 8.49 |
| Selby | 21 | 254 | 8.27 |
| Wolsey | 21 | 253 | 8.30 |
| Avon | 19 | 253 | 7.51 |
| Grant-Deuel | 36 | 252 | 14.29 |
| Rosholt | 19 | 251 | 7.57 |
| Deubrook | 33 | 249 | 13.25 |
| Langford | 22 | 242 | 9.09 |
| Estelline | 20 | 239 | 8.37 |
| Faith | 29 | 239 | 12.13 |
| Bison | 20 | 239 | 8.37 |
| Colome | 19 | 239 | 7.95 |
| McIntosh | 33 | 233 | 14.16 |
| Montrose | 46 | 230 | 20.00 |
| Bridgewater | 37 | 218 | 16.97 |
| New Underwood | 7 | 217 | 3.23 |
| Ethan | 23 | 216 | 10.65 |
| Willow Lake | 16 | 214 | 7.48 |
| Mount Vernon | 20 | 212 | 9.43 |
| Tripp | 17 | 202 | 8.42 |
| Gayville-Volin | 33 | 200 | 16.50 |
| Wakonda | 35 | 199 | 17.59 |
| Colman | 21 | 197 | 10.66 |
| Elm Valley | 19 | 196 | 9.69 |
| Hoven | 34 | 195 | 17.44 |
| Canistota | 30 | 194 | 15.46 |
| Emery | 27 | 193 | 13.99 |
| Doland | 32 | 191 | 16.75 |
| Tulare | 20 | 189 | 10.58 |
| Hurley | 28 | 185 | 15.14 |
| Hecla-Houghton | 13 | 182 | 7.14 |
| Bowdle | 24 | 180 | 13.33 |
| Roslyn | 25 | 179 | 13.97 |
| Stickney | 16 | 171 | 9.36 |
| Veblen | 24 | 171 | 14.04 |
| Bristol | 17 | 170 | 10.00 |
| White Lake | 11 | 162 | 6.79 |
| Artesian | 18 | 159 | 11.32 |

TABLE J1 (Continued)

| District | Special Ed | Total | Percent of Total |
|-----------------|------------|---------|------------------|
| Wessington | 10 | 155 | 6.45 |
| South Shore | 14 | 155 | 9.03 |
| Letcher | 22 | 154 | 14.29 |
| Rutland | 13 | 152 | 8.55 |
| Roscoe | 12 | 149 | 8.05 |
| Herreid | 19 | 148 | 12.84 |
| Florence | 19 | 148 | 12.84 |
| Geddes | 10 | 147 | 6.80 |
| Hitchcock | 16 | 143 | 11.19 |
| Cresbard | 13 | 141 | 9.22 |
| Midland | 17 | 136 | 12.50 |
| Ramona | 12 | 134 | 8.96 |
| Alpena | 16 | 132 | 12.12 |
| Isabel | 9 | 129 | 6.98 |
| Egan | 5 | 126 | 3.97 |
| Harrold | 22 | 125 | 17.60 |
| Summit | 15 | 125 | 12.00 |
| Pollock | 25 | 124 | 20.16 |
| Smee | 33 | 120 | 27.50 |
| Henry | 10 | 115 | 8.70 |
| Big Stone City | 25 | 112 | 22.32 |
| Delmont | 15 | 107 | 14.02 |
| Waverly | 9 | 103 | 8.74 |
| New Effington | 15 | 98 | 15.31 |
| Oelrichs | . | 97 | . |
| Hosmer | 12 | 92 | 13.04 |
| Conde | 9 | 88 | 10.23 |
| Wood | 6 | 80 | 7.50 |
| Spencer | 17 | 75 | 22.67 |
| Agar | 13 | 70 | 18.57 |
| Polo | 6 | 66 | 9.09 |
| Northwest | 6 | 56 | 10.71 |
| Oldham | 7 | 47 | 14.89 |
| Glenham | 11 | 42 | 26.19 |
| Java | 12 | 38 | 31.58 |
| Astoria | 5 | 34 | 14.71 |
| Carthage | 10 | 33 | 30.30 |
| Elk Mountain | . | 22 | . |
| Lake Hendricks | 4 | . | . |
| Big Stone | . | . | . |
| Hermanson | 1 | . | . |
| Browns Valley | 5 | . | . |
| Greater Hoyt | 6 | . | . |
| Greater Scott | . | . | . |
| Foster Children | 71 | . | . |
| BIA Placements | 3 | . | . |
| Total | 14,431 | 127,115 | |