# High School Graduates: Projections for the Fifty States

– a joint publication of –

The Western Interstate Commission for Higher Education
National Institute of Independent Colleges and Universities
Teachers Insurance and Annuity Association

High School Graduates: Projections for the Fifty States

The Western Interstate Commission for Higher Education **WICHE**
Improving Education In The West

National Institute of Independent Colleges and Universities **nicu**

Teachers Insurance and Annuity Association **TIAA CREF**

WICHE, the Western Interstate Commission for
Higher Education, is a nonprofit regional
organization. It helps the thirteen member
states cooperatively provide high-quality,
cost-effective programs to meet the education
and manpower needs of the West. Member states
are Alaska, Arizona, California, Colorado,
Hawaii, Idaho, Montana, Nevada, New Mexico,
Oregon, Utah, Washington, and Wyoming.

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Foreword

After years of growth, higher education in the United States now faces a decline in the size of the traditional college-going population as well as shifting demographic patterns within that population. These enrollment factors and the pressures of inflation and constraints on government funds combine to present the most perplexing set of issues to face higher education planners and administrators in a generation.

Anticipated enrollments underlie most planning decisions in higher education. In an attempt to assist policy makers who must make those decisions, the Western Interstate Commission for Higher Education (WICHE) undertook to project the numbers of high school graduates who, of course, comprise a major group of college and university students each new term.

The initial analysis and projection, published by WICHE in June 1979 as Projections of High School Graduates in the West, covered the thirteen western states. That report was extremely well received and apparently filled an important gap in regional and national information for higher education. Because of this, WICHE staff has developed projections for the remaining thirty-seven states and the District of Columbia. Those are contained in this report.

The study will provide an improved basis for addressing a major aspect of state and institutional planning for postsecondary education, whether in public or private institutions. Many states have not made detailed projections of higher education enrollment potentials and this information will help to fill that significant gap. States that have made their own projections will have independent confirmation of their findings or a basis to examine differing assumptions and results.

This report was developed and written by William R. McConnell, director of WICHE's Student Exchange Program, as an activity of WICHE's Information Clearinghouse. He was assisted by Gloria Jimenez, Staff Associate in the Student Exchange Program.

We recognize and appreciate the co-sponsorship, in publishing this report, of the State-National Information Network for Independent Higher Education of the National Institute of Independent Colleges and Universities,

and the Teachers Insurance and Annuity Association. Their support reflects their recognition of the value of disseminating data relevant to the future of higher education and of the vital importance of planning to accommodate the changing higher education patterns of the 1980s and beyond. Nationwide distribution of this information was assisted through mailing lists supplied by the American Council on Education.

Our appreciation is expressed to each of those organizations, their staffs, and to the numerous individuals in the states who supplied data, answered questions, and commented on the compilations and projections.

Boulder, Colorado
November 1979

Phillip Sirotkin
Executive Director
Western Interstate Commission
for Higher Education

Introduction

It is well known among those involved in higher education that the traditional college-age population (18-21) in the United States will decrease greatly in the next fifteen years. The number of eighteen-year-olds is estimated to peak in 1979 and is projected to decrease 18 percent by 1986. After a brief upturn, the number is projected to decline further, so that in 1991 it will be some 26 percent below the 1979 peak. Because of these projections, "declining enrollment" is one of the terms most frequently heard in discussions about the future of higher education.

It is also known, in a general way, that the impact of these demographic trends will differ among regions and states. Patterns of annual births will differ, and past and future interstate migration will affect the future numbers of eighteen-year-olds. Some states have made careful projections taking these factors into account; others have not. In some states experiencing rapid growth, there has been a tendency to assume that in-migration will offset the effects of the national pattern and minimize or eliminate any impact of the national decline in college-age population.

There has been no up-to-date, systematic study available of the impact of these demographic trends on individual states and regions over the next fifteen years. One of the most feasible and useful approaches for such a study is a projection of high school graduates for each state. Such projections have been made in many states, but in many others they have not. WICHE developed such projections for the thirteen western states and published the results in June 1979 in Projections of High School Graduates in the West. Having determined that such an undertaking is feasible and useful to those concerned with higher education in states and institutions, WICHE decided to extend such a study to the rest of the states nationwide.

The State Higher Education Executive Officers (SHEEO) organization endorsed the project and called upon its members to cooperate in securing and submitting the necessary data. The individuals in each state who cooperated in the project are listed at the end of this report. The author made the projections in every case. The methodology is described in a later section

of the report, and an example of the detailed historical and projected data for one state is included. Photocopies of the detailed worksheets for any state are available from the author at WICHE.

The projections are generally for graduates of public high schools because of a lack of dependable data on nonpublic school enrollments and graduates in many of the states. However, for varying reasons, the projections for Alaska, Delaware, and Maryland do include graduates of both public and nonpublic schools.

Projections are not predictions. They are estimates of what will happen if the assumptions embedded in the projection factors are realized in the future. In the projections presented here, the projection ratios reflect the combined influence of a number of factors; in most cases, the assumptions embedded in them are that the combined influence of these factors will be similar in the future to their combined influence in the recent past, as interpreted by the author.

There are two general tests of the reasonableness of these projections. First, the knowledge of the state-level contacts about their own states was considered. Historical and projection worksheets and other analytical materials were sent to the state-level contacts for their comments, especially on the projections. In many cases it was possible to make a direct comparison between the projections reported here and similar projections developed at the state level. In nearly every state, the state-level contact either confirmed that these projections are consistent with those made in the state, or, at least, reported that upon examination they appeared reasonable. In two or three states, the state-level contacts responded that their own projections differed from these, and they felt theirs were more accurate.

The second test is a comparison of the sum of the individual state projections with other projections of related data. Table 1 shows such comparisons for the years when the peaks and valleys occur in the nationwide data. The sum of the individual state projections shows a quite consistent relationship to the other measures, especially in the percentage changes from 1979 levels shown in the right-hand part of the table. The final page of table 2, later in the report, compares the annual figures for the measures shown in columns 1 and 2 of table 1.

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TABLE 1

Comparison of Sum of Individual State Projections with Other Projections of Related Data

Year	State Projections of Graduates Summed	Author's Nation-wide Projection of Public HS Graduates*	NCES Projec-tion of Public HS Graduates	Bureau of Census Projection of 18-Year-Old Population	Actual US Births 18 Years Earlier	Percent Change From 1979				
						Col 1	Col 2	Col 3	Col 4	Col 5
	Column 1	Column 2	Column 3	Column 4	Column 5					
1979	2,844,871	2,882,000	2,834,000	4,286,000	4,268,000					
1986	2,327,723	2,373,000	2,384,000	3,520,000	3,502,000	-18%	-18%	-16%	-18%	-18%
1988	2,450,040	2,507,000		3,653,000	3,731,000	-14%	-13%		-15%	-13%
1991	2,130,812	2,129,000		3,237,000	3,137,000	-25%	-26%		-24%	-26%
1995	2,279,201	2,257,000	Series II 3,495,000 Series III 3,033,000		3,327,000	-20%	-22%	Ser II -18% Ser III-29%		-22%

* Nationwide projections done in a manner comparable to the state-by-state projections and based on published nationwide data.

SOURCES: Births--Column 2 and column 5. Statistical Abstract of the United States, 1978 and National Center for Health Statistics, Final Natality Statistics, 1977, Vol. 27, No. 11, Supplement February 5, 1979.

Enrollments--Column 2. National Center for Education Statistics, Digest of Education Statistics, 1977-78, table 30, page 35, and author's estimates of comparable data for 1977-78 based on different data series reported in Digest of Education Statistics, 1979.

Graduates--Historical for column 2, projected for column 3. National Center for Education Statistics, Projections of Education Statistics to 1986-87, table 10, page 37.

18-year-old population--Column 4. US Bureau of the Census, Current Population Reports, Series P-25, No. 601.

Projections such as those reported here can be monitored annually using each new year's report on elementary and secondary enrollments and high school graduates. Once the basic historical data are compiled and analyzed, the analyst can select projection factors to reflect the assumptions he or she wishes to use and can quickly calculate the projection. If such projections are to be within the range of reason, the analyst must develop a sensitive "feel" for the historical data and the influences at play in them. If such care is used, these projections are a valuable tool in studying future higher education enrollment expectations.

Future enrollments in higher education will not depend solely on the size of the traditional college-age population or the flow of high school graduates. The rate of participation in higher education by these groups will, of course, influence enrollments. Participation by older-age groups will be an important factor, as will the extent of full-time attendance versus part-time attendance. All of these require careful analysis. However, a realistic assessment of the potential impact of these factors leads to the conclusion that the change in the size of the traditional college-age group must be acknowledged as a crucial matter for all of higher education and for most individual institutions. It is hoped that this study will assist the higher education community and others involved in decision making about higher education in dealing with this crucial matter.

Projections of High School Graduates for the Fifty States and the District of Columbia

Individual state projections of high school graduates from 1979 through 1995 were made for each of the fifty states and the District of Columbia. Projections are for graduates of public high schools except in the cases of Alaska, Delaware, and Maryland where nonpublic school graduates are included.

With the exception of Wyoming, the projections show a common pattern:

- a decrease from the 1979 level to a low point in the 1984-87 period;
- an increase, in some cases very slight, to 1988 or 1989;
- a decrease to another low point in the 1990-94 period;
- an increase to 1995, the last year of the projection.

The increase in 1995 graduates reflects an increase in the number of births in 1977 that occurred in nearly every state. Nationwide, it was a 5 percent increase over 1976. However, preliminary data for 1978 indicate that the nationwide total was virtually unchanged from the 1977 level.

Figure 1 shows the pattern for each state in terms of the percentage change from the level projected for 1979. States are grouped into four regions: northeast, northcentral, southeast-southcentral, and west, based upon their similarities in patterns of projected graduates. On each regional display, the pattern of the nationwide projection and the pattern of the regional totals are shown. The sequence of the graphs for individual states is based on the size of the percentage decrease (or increase) shown at the low point occurring in the 1990-94 period.

Every state shows a decrease in projected high school graduates between 1979 and some point in the 1984-87 period; most show decreases of at least 10 percent and nearly half show decreases of 20 percent or more. These decreases and their magnitude are relatively certain to occur. Generally, decreases of comparable magnitude have, in fact, occurred in the enrollments in the elementary grades, with the low point reflected in the 1978-79 enrollment in one of grades 4 through 7. For example, in the table on Oregon near the end of this report, seventh-grade enrollment has decreased by 13 percent between 1973-74 and 1978-79. This projects out to a 12 percent decrease in graduates

Figure 1

Pattern of Projected Public High School Graduates
1979 - 1995, Northeast States

Percentage Change from Level Estimated for 1979

United States*

1986	1988	1991	1995
−18	−13	−26	−22

Northeast Region

1987	1988	1994	1995
−22	−22	−40	−38

District of Columbia

1987	1988	1994	1995
−39	−39	−60	−59

Rhode Island

1987	1988	1993	1995
−27	−27	−49	−45

Delaware**

1986	1988	1994	1995
−31	−29	−44	−41

New York

1987	1988	1994	1995
−25	−24	−43	−42
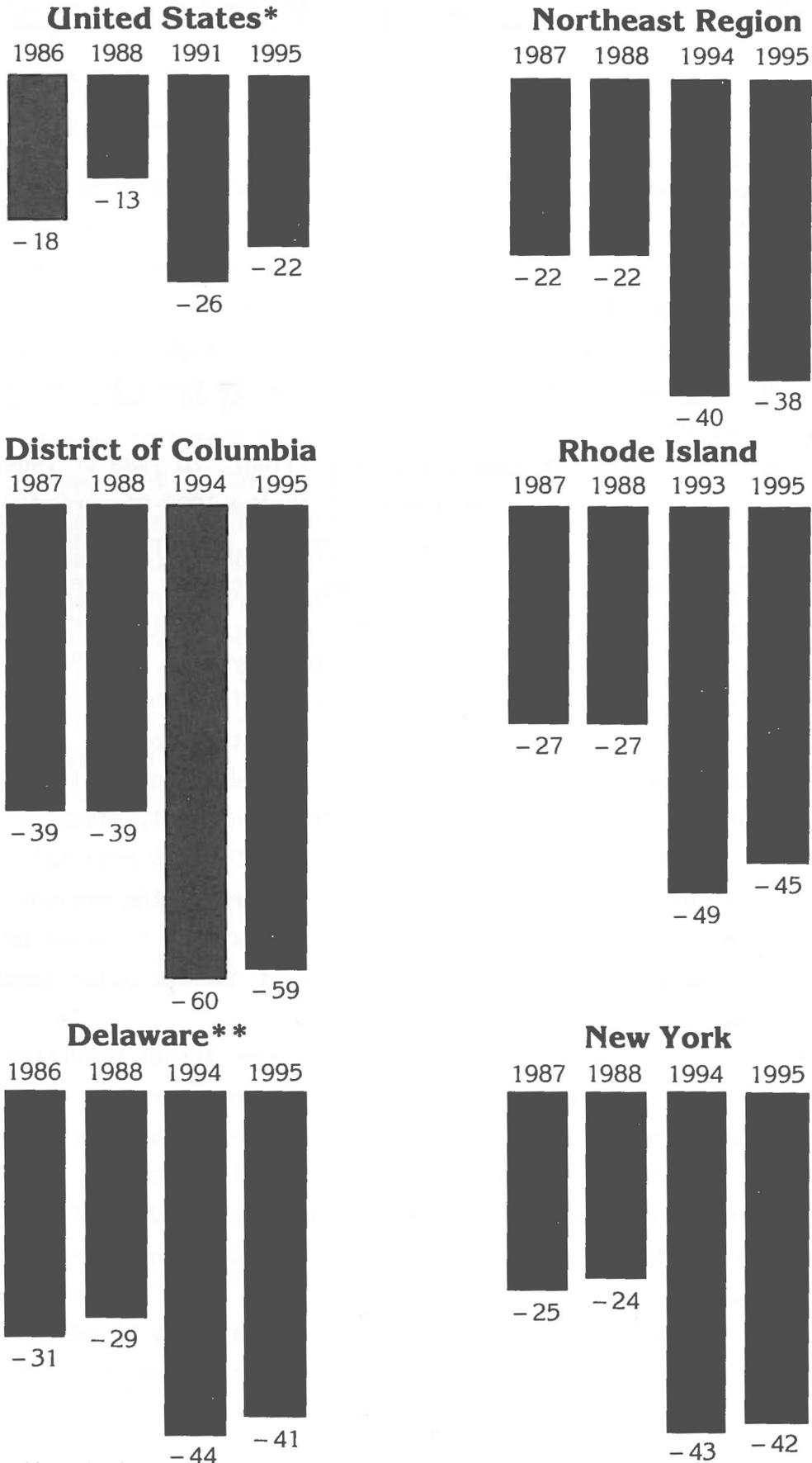
*Based on nationwide projection
**Delaware and Maryland projections include nonpublic schools

Massachusetts
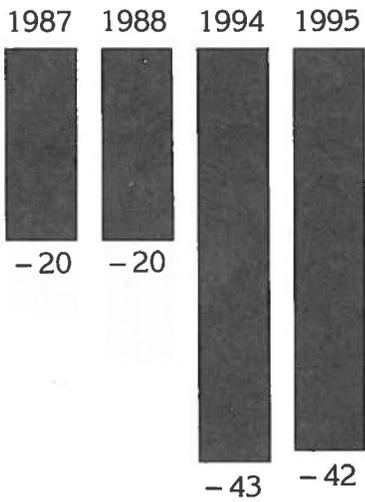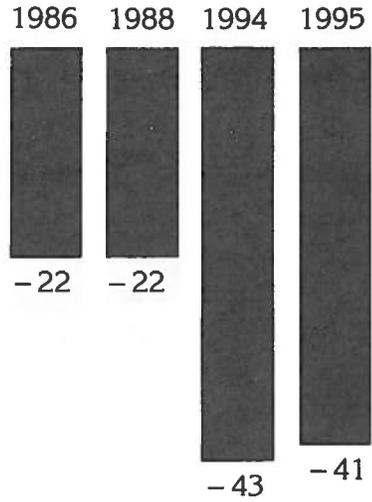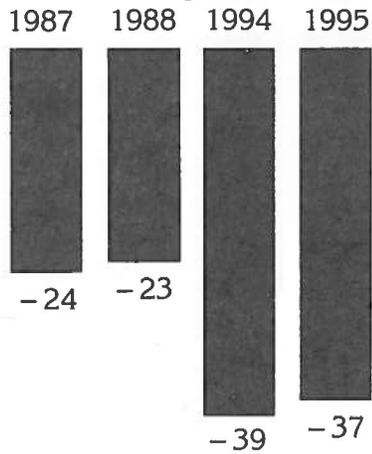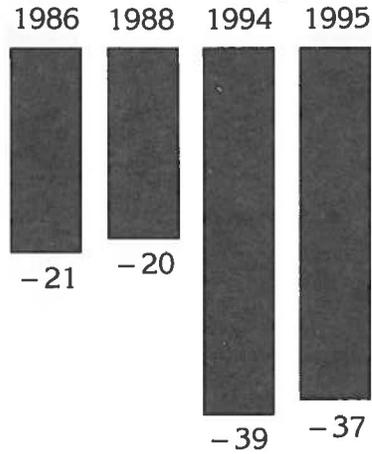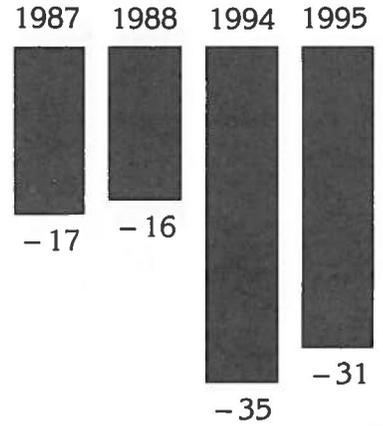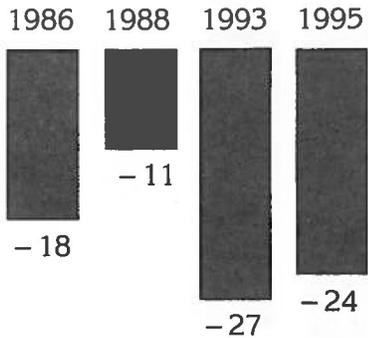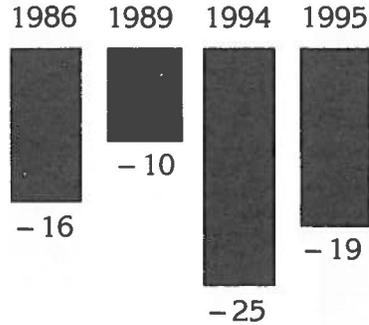
1987	1988	1994	1995
−20	−20	−43	−42

Connecticut

1986	1988	1994	1995
−22	−22	−43	−41

Pennsylvania

1987	1988	1994	1995
−24	−23	−39	−37

New Jersey

1986	1988	1994	1995
−21	−20	−39	−37

Maryland**

1987	1988	1994	1995
−17	−16	−35	−31

Vermont

1986	1988	1993	1995
−18	−11	−27	−24

Maine

1986	1989	1994	1995
−16	−10	−25	−19

New Hampshire

1985	1989	1993	1995
−9	−1	−18	−11

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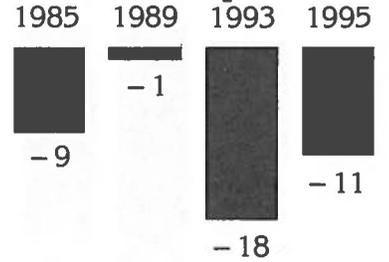
Figure 1 (continued)

# Pattern of Projected Public High School Graduates
1979 - 1995, Northcentral States

Percentage Change from Level Estimated for 1979

United States*

| 1986 | 1988 | 1991 | 1995 |

−18   −13   −26   −22

Northcentral Region

| 1986 | 1988 | 1994 | 1995 |

−23   −20   −32   −28

Michigan

| 1986 | 1988 | 1994 | 1995 |

−22   −18   −36   −32

Minnesota

| 1986 | 1988 | 1991 | 1995 |

−24   −21   −35   −28

Illinois

| 1986 | 1988 | 1991 | 1995 |

−25   −22   −34   −31

Ohio

| 1986 | 1989 | 1994 | 1995 |

−24   −20   −34   −31
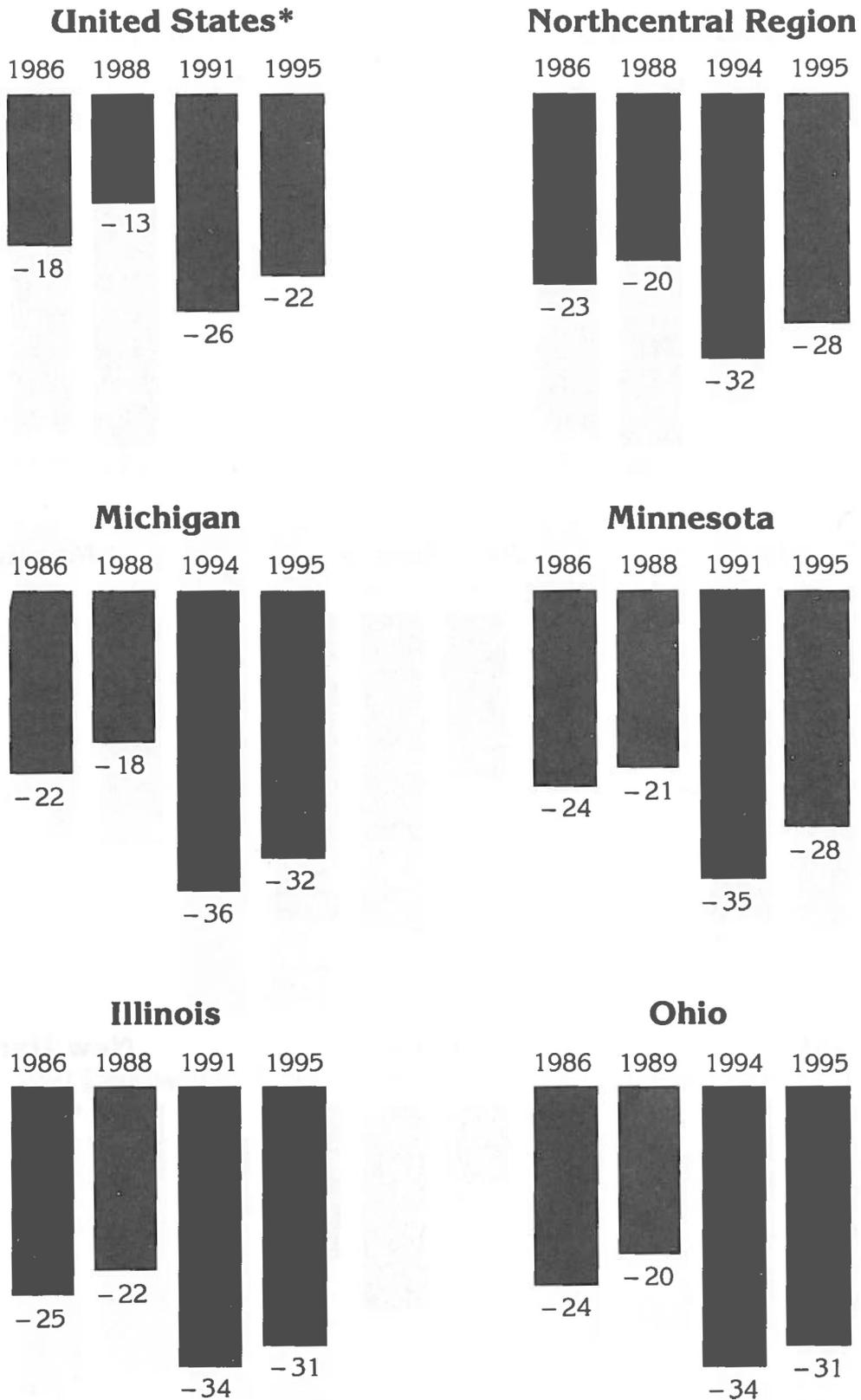
*Based on nationwide projection

Wisconsin
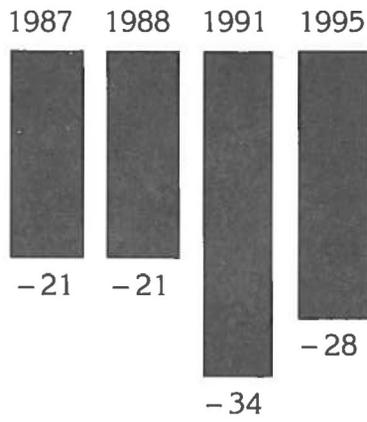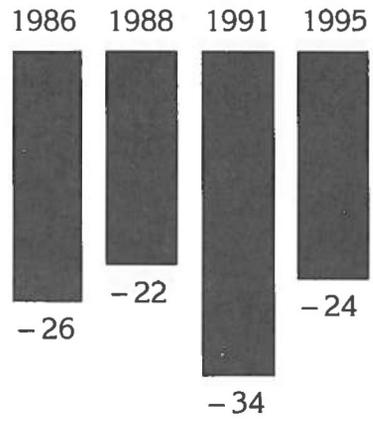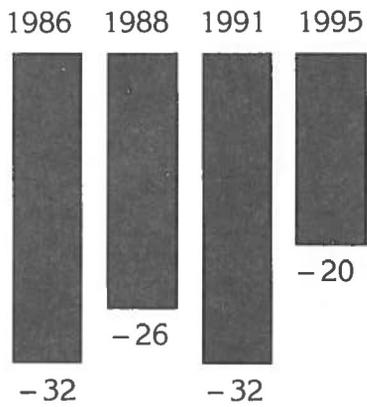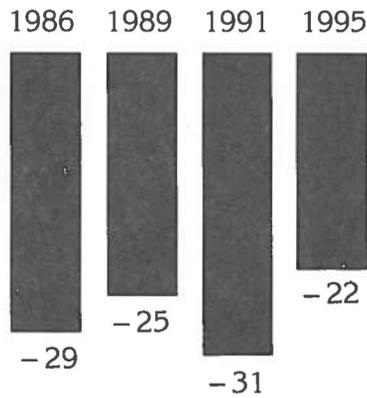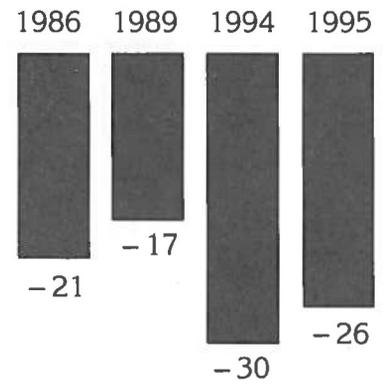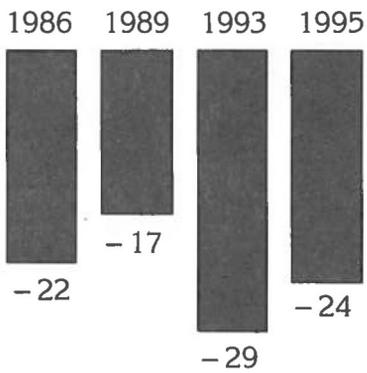
1987	1988	1991	1995
−21	−21	−34	−28

Iowa

1986	1988	1991	1995
−26	−22	−34	−24

North Dakota

1986	1988	1991	1995
−32	−26	−32	−20

South Dakota

1986	1989	1991	1995
−29	−25	−31	−22

Indiana

1986	1989	1994	1995
−21	−17	−30	−26

Missouri

1986	1989	1993	1995
−22	−17	−29	−24

Nebraska

1986	1989	1991	1995
−25	−20	−28	−21

Kansas

| 1986	1988	1991	1995
−25	−20	−28	−17

9
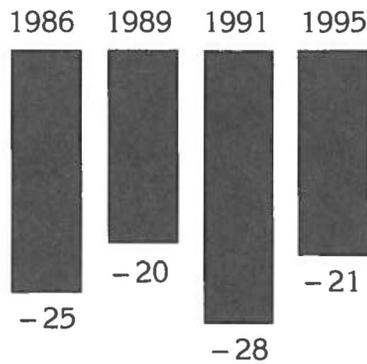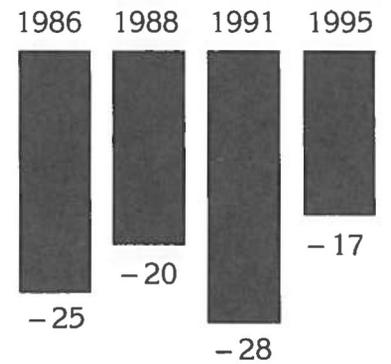
Figure 1 (continued)

# Pattern of Projected Public High School Graduates
1979 - 1995, Southeast and Southcentral States
Percentage Change from Level Estimated for 1979
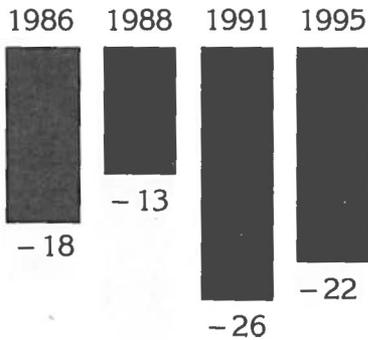
United States*

1986	1988	1991	1995
−18	−13	−26	−22

Southeast and Southcentral Region

1986	1989	1991	1995
−12	−4	−13	−7

Virginia

1985	1988	1994	1995
−16	−7	−26	−22

North Carolina

1986	1989	1994	1995
−16	−10	−25	−21

Mississippi

1986	1988	1994	1995
−13	−9	−23	−18

Kentucky

1986	1989	1992	1995
−16	−10	−22	−14

Georgia

1985	1988	1994**	1995
−11	−6	−20	−15

10
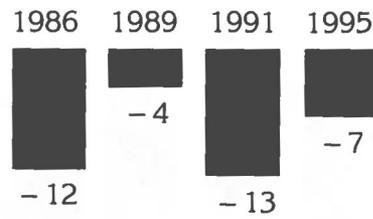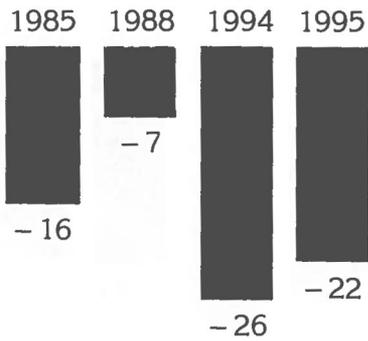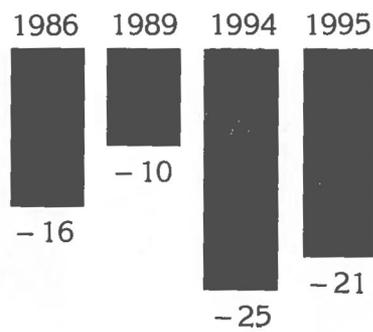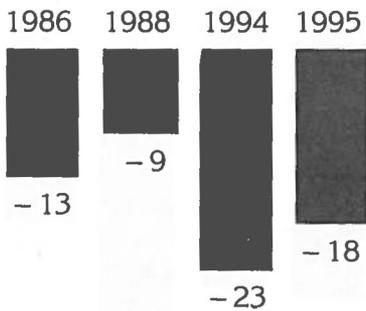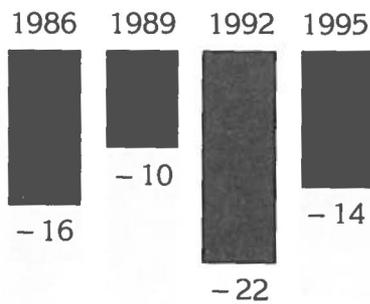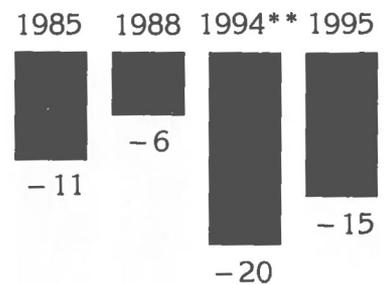
*Based on nationwide projection

**Ignores artifically small groups projected for 1990 and 1991

Alabama
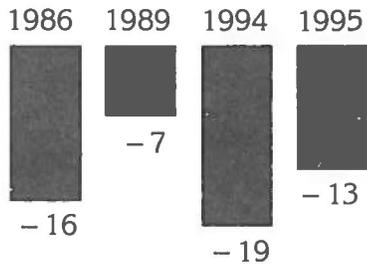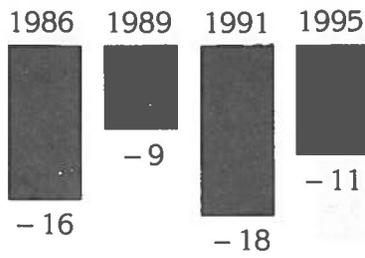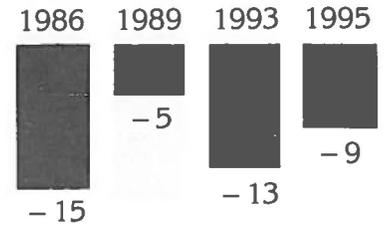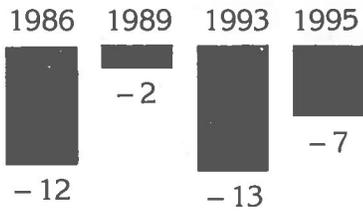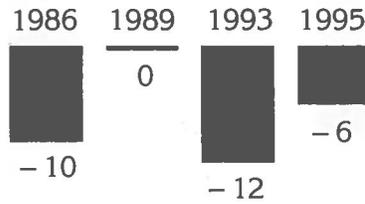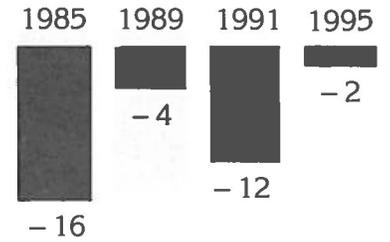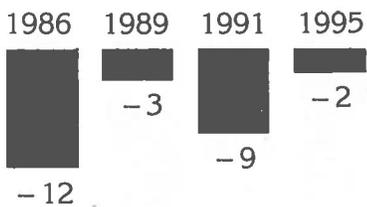
1986	1989	1994	1995
−16	−7	−19	−13

West Virginia

1986	1989	1991	1995
−16	−9	−18	−11

Florida

1986	1989	1993	1995
−15	−5	−13	−9

South Carolina

1986	1989	1993	1995
−12	−2	−13	−7

Tennessee

1986	1989	1993	1995
−10	0	−12	−6

Oklahoma

1985	1989	1991	1995
−16	−4	−12	−2

Arkansas

1986	1989	1991	1995
−12	−3	−9	−2

Louisiana

1986	1989	1992	1995
−6	−2	−8	+4

Texas

1985	1989	1991	1995
−7	+8	+1	+10

11
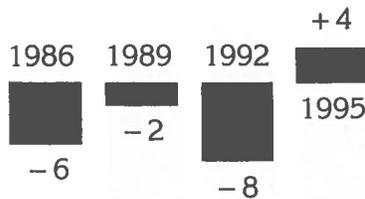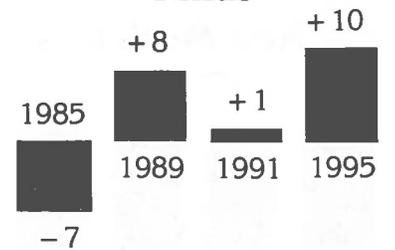
Figure 1 (continued)

# Pattern of Projected Public High School Graduates
1979 - 1995, Western States
Percentage Change from Level Estimated for 1979*

### United States**

1986 1988 1991 1995

−18
−13
−26
−22

Western Region

1985 1988 1991 1995

−14
−7
−16
−2

California

1986 1988 1991 1995

−17
−11
−24
−11
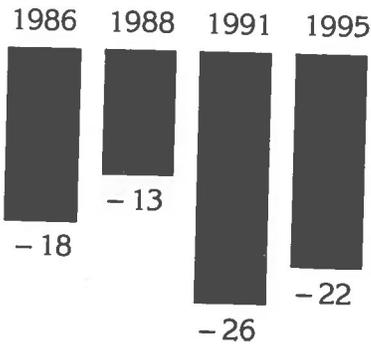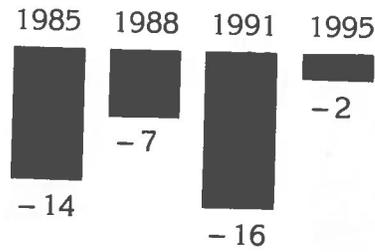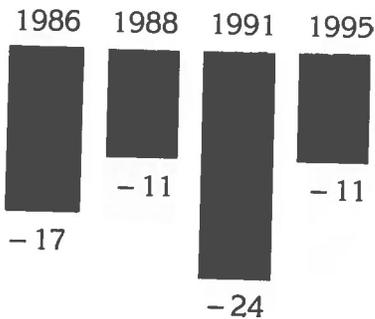
Western Region
Except California

1984 1989 1990 +9

1995

−12
−2
−8

New Mexico

1986 1988 1991 1995

−22
−20
−23
−15

Montana

1986 1989 1991 1995

−22
−14
−22
−9

Hawaii

1986 1988 1991 1995

−20
−13
−21
−8
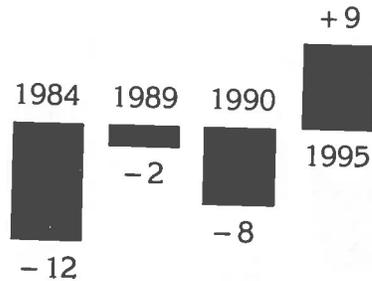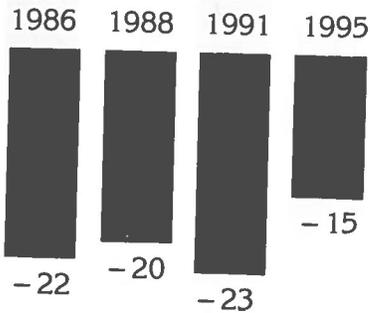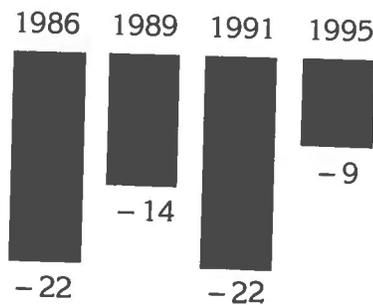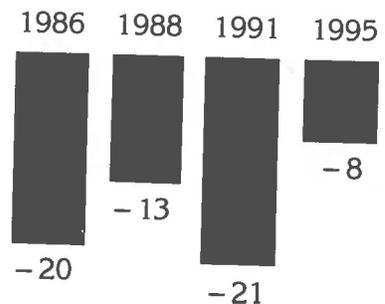
*This graph differs from Figure 1 in "Projections of High School Graduates in the West" published by WICHE, June 1979. There the percentage changes were from the individual state peaks occurring between 1975 and 1982. Here the changes are from the level estimated for 1979.

**Based on nationwide projection

***Includes nonpublic schools

Washington

1984	1988	1990	1995
−15	−5	−16	0

Oregon

1984	1988	1991	+4
−12	−1	−11	1995

Colorado

1984	1988	1990	1995
−14	−2	−10	0

Alaska***

1986	1989	1991	+6
−12	−1	−6	1995

Nevada

1986	+8	1991	+17
−9	1989	−4	1995

Arizona

1985	+6	1990	+16
−6	1989	−1	1995

Idaho

1984	+6	+1	+28
−10	1989	1990	1995

Utah

1984	+14	+12	+58
−10	1989	1990	1995

Wyoming

1984	+20	+21	+49
−7	1989	1990	1995

13
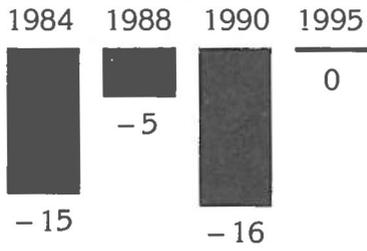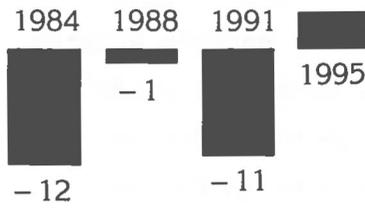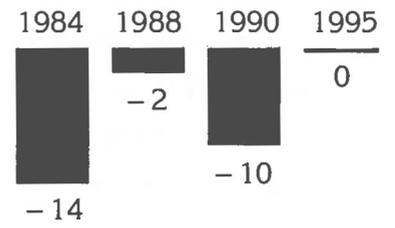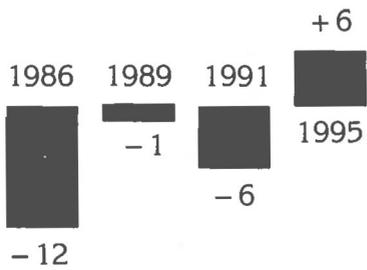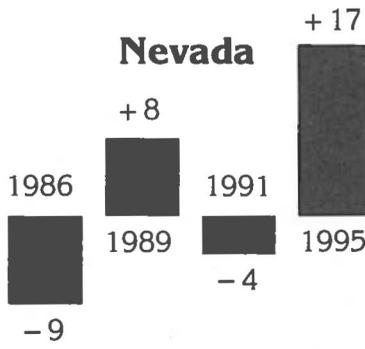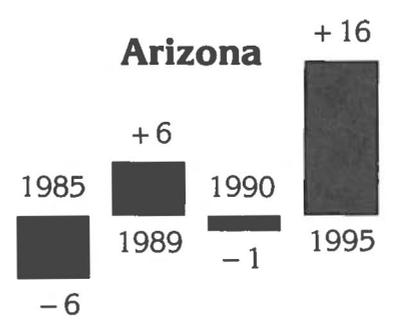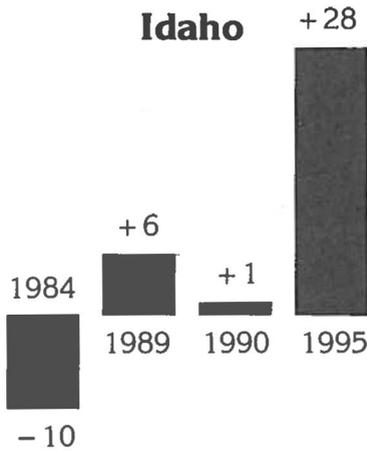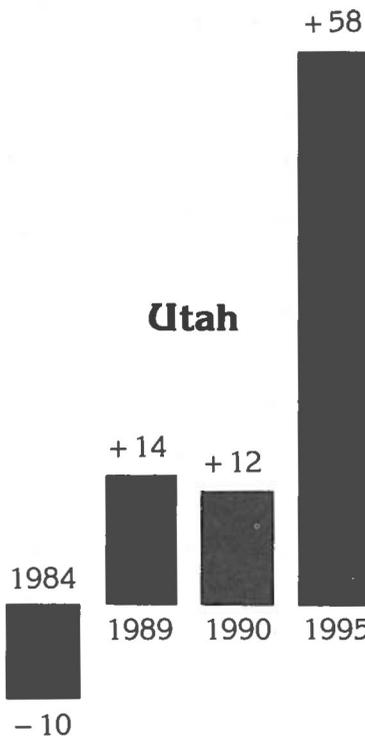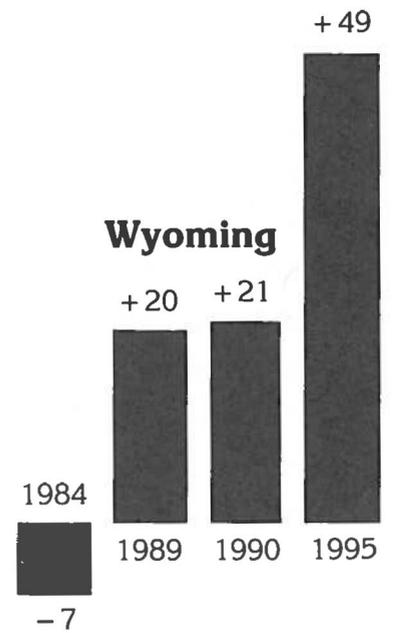
between 1979 and 1984. Migration, the main factor which could cause variation from the assumptions used in the projections, has relatively little impact on enrollments in the secondary school grades. As with most projections, the further into the future they go, the greater the chance that actual developments will depart from the assumptions used.

As noted above, the projections presented here are for public high school graduates except for three states where nonpublic school graduates are included. Many of the states simply do not have reliable data on nonpublic schools. However, the projection methodology used is such that the percentage changes depicted in figure 1 for public school graduates would not change substantially if reliable nonpublic school data were available and the projections included both public and nonpublic school graduates. In a few cases, it was possible to compare the public school projections reported here with state-produced projections of public and nonpublic graduates, and the comparisons showed a difference of no more than a percentage point or two in the percentage change in graduates between 1979 and the early 1990s. The author is confident that the same would be true in other states with very few exceptions, if reliable nonpublic school data could be included and projections of total public and nonpublic graduates could be made.

There are notable similarities among most of the states in some regions, and notable contrasts among the various regions. For this reason, the regional groupings are the focus of discussion of the state-by-state patterns. Using this process, a nationwide perspective is developed.

The northeast region shows a 1994 low point 40 percent below the 1979 level, compared to a national low point in 1991 that is 26 percent below the 1979 level. Every state in the area extending from Massachusetts to Washington, D.C., shows a decrease of 35 percent or more between 1979 and 1993 or 1994. Only the three northern New England states show significantly smaller decreases, and these decreases are also smaller than those shown for any of the states in the northcentral region.

The regional total for the northcentral region also reaches its low point in 1994, when it is 32 percent below the 1979 level. However, most states in this region reach their low points in 1991, and the 1994 regional low point results from the influence of the pattern in the states of Ohio, Indiana, and Michigan in the eastern part of this region. The 1990s low points range from 36 percent to 28 percent below 1979, with the smaller decreases occurring in

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the southwestern part of the region.

The regional total for the southeast-southcentral area shows the smallest decrease between 1979 and the early 1990s of any of the four regions, 13 percent in 1991. However, the general uniformity found among most states in the northeast and northcentral regions is not evident here. The largest decreases are shown for Virginia and North Carolina in the northeast part of the region, but these are significantly smaller than the decreases in nearby northeastern states and smaller than any of the decreases in the northcentral region. The four states in the western part of this region show the smallest decreases for the latter part of the projection period. Actually, Texas shows increases over 1979 throughout the period after 1988 and Louisiana shows an increase by 1995. The remaining states of the southeast-southcentral region do not fit any particular pattern. Most of the states in the region reach their 1990s low points in 1993 or 1994, with only four having lows in 1991, the year of the national low point.

The western region shows a 1990s low point in 1991 that is 16 percent below the 1979 level and a 1995 figure only 2 percent below the 1979 level. California accounts for roughly half of the regional total and, when California is excluded, the balance of the region shows a 1990 low point 8 percent below the 1979 level and a 1995 figure 9 percent above the 1979 level. This pattern for the western region contrasts dramatically with the patterns for the other three regions in the last few years of the projection period due to a difference in the patterns of births since 1973.

Nine of the thirteen western states are projected to have 1995 high school graduates equal to or exceeding the 1979 number, by as much as 50 percent in Utah and Wyoming. Only California, Hawaii, New Mexico, and Montana are projected to remain in 1995 substantially below the 1979 level.

The implications of these projections of high school graduates for higher education planning are self-evident. The projections for most of the states in the northeast and northcentral regions have one set of implications, those for such states as Arkansas or Colorado have another, and those for Utah or Wyoming still another. The projections for the late 1980s and early 1990s are highly important because they influence the nature of the appropriate planning response to the initial downturn. In the absence of long-range projections, carefully monitored, developments in the next five to eight years could be very misleading.

The sizes of the decreases in high school graduates and their variation among states, coupled with the responses which institutions make to the decreases, may result in substantial changes in existing patterns of migration of students for college attendance. Institutions, especially those enrolling large proportions of their students from outside their immediate area, will want to monitor developments in this regard.

Major Underlying Factors

The major factors underlying the pattern of projected high school graduates are the historical pattern of annual births, migration in the past and projected for the future, and the rates of persistence of students in the later years of high school.

Births

Annual numbers of births establish a basic underlying pattern as to the sizes of the successive age groups in the population. This pattern will be modified by other factors, especially migration. However, only very heavy migration in a particular pattern over time is likely to alter the basic pattern of increases and decreases established by the pattern of births.

Figure 2 shows the pattern of annual births from 1959 to 1977 for each of the four regions and for the nationwide sum of the regions. The scale uses index numbers with 1961 as the base. The divergence of the regional lines over the last ten years, especially in the last four years, is striking. An upward pitch since 1973 is found generally in the western states; the steepness in this regional line is influenced by the remarkable pattern in Utah, where the current birth rate is reported to be double the national rate.

Migration

The existence of interstate migration is well recognized. The media report migration to the sun belt, to the retirement areas, and to the energy states. Except for people relocating at retirement, the migrating population tends to be heavily weighted with young adults and their children. Age groups at the pre-school level and enrollments in the elementary school grades will reflect substantially the impact of migration, while enrollments in secondary school grades will reflect relatively little impact.

The pattern of annual births is also influenced by migration. A period of two or three years of heavy in-migration will generally be reflected in an upturn in the annual number of births. The divergence of the regional birth lines in figure 2 is undoubtedly due, in large measure, to the interregional migration of young adults. It is migration, for instance, which accounts for Wyoming deviating from the common pattern shown in these projections.

Figure 3 shows the annual total of projected high school graduates for each of the regions and for the national sum of the regions. The scale is the same as that used in figure 2, but the base year for the index numbers is 1979, eighteen years later than the base year used for the births shown in figure 2. While the influences of other factors are also involved, the main influence reflected in the differences between figures 2 and 3 is migration. The divergence of the regional lines in figure 2 is increased in figure 3. Especially notable is the different positioning of the southeast-southcentral line on figure 3.

The differences between the regional lines for births and for projected graduates in figures 2 and 3 are further examined in figure 4. The gaps between the lines for a given region are due primarily to past migration and to the migration built into the projection ratios used.

Rates of Persistence in Later High School Years

During the later high school years, there will almost always be substantial decreases in the enrollment of a given cohort as it moves from tenth grade to eleventh grade, from eleventh grade to twelfth grade, and from twelfth grade to the actual graduating group. Sometimes these significant decreases begin earlier than tenth grade. The decreases are due largely to students who drop out.

In some states, especially in most of the western states, a decrease in grade-to-grade ratios can be observed in recent years, indicating an increasing proportion of dropouts. In general, in making the state-by-state projections, it was assumed that there will be no further decline in these ratios even though a number of states show steady declines up to the present. Because constant ratios for these late high school grades have been used throughout the projection period, the influence of dropouts is held constant in the projections and, except for the first three or four years of the projections, this factor does not cause any of the variation in annual numbers of projected graduates.

Figure 2
Pattern of Births By Region, 1959-1977*

Legend:
- Northeast Region
- Northcentral Region
- Southeast-Southcentral Region
- Western Region
- United States

Y-axis values: 1.025, 1.000, .950, .900, .850, .800, .750, .700, .650, .600

X-axis: Births 1959, 1961, 1964, 1968, 1970, 1973, 1977

*Using births reported by the states
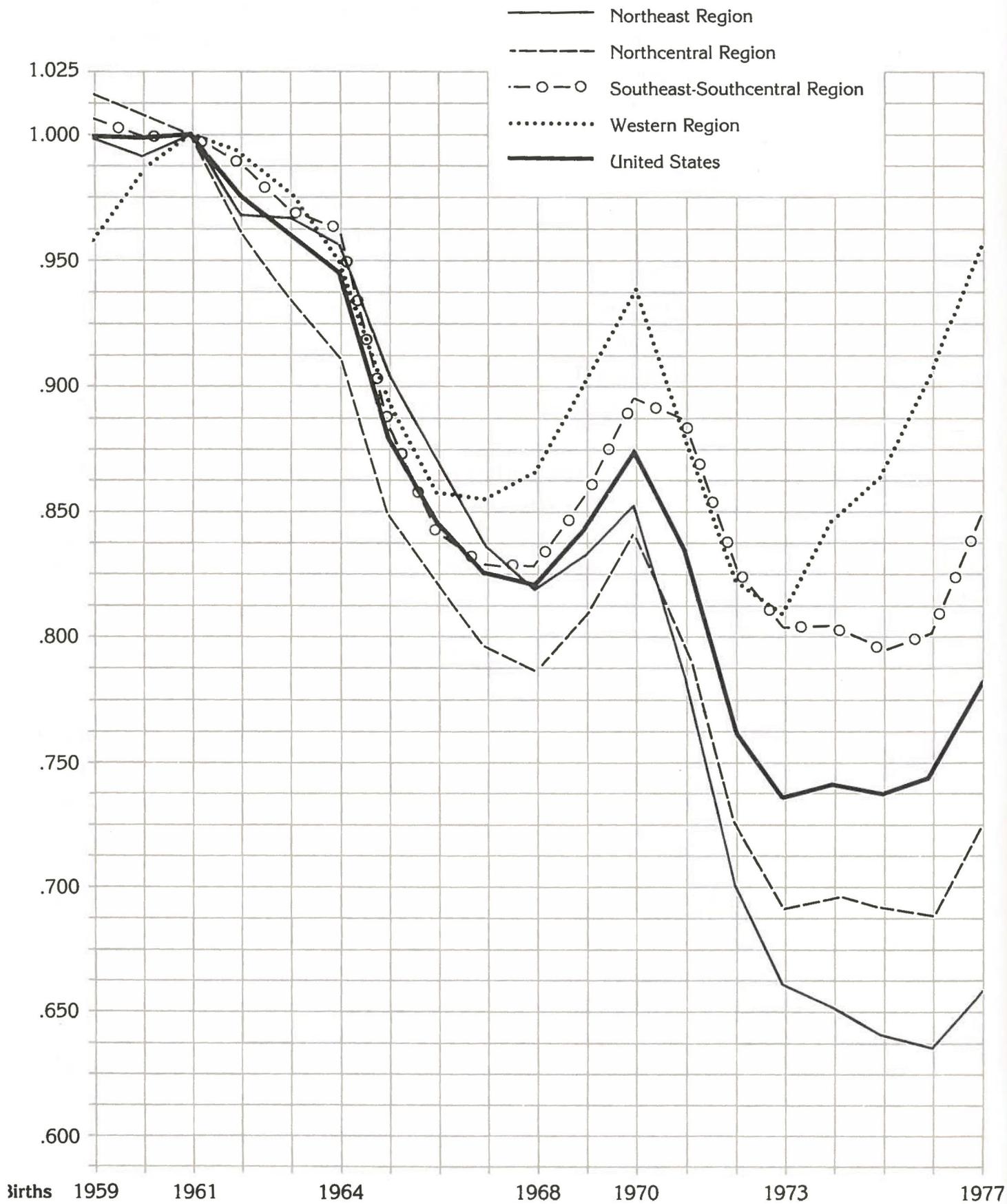
Figure 3
Pattern of High School Graduates By Region, 1977-1995

Legend:
- Northeast Region
- Northcentral Region
- —O—O— Southeast-Southcentral Region
- ·········· Western Region
- United States*
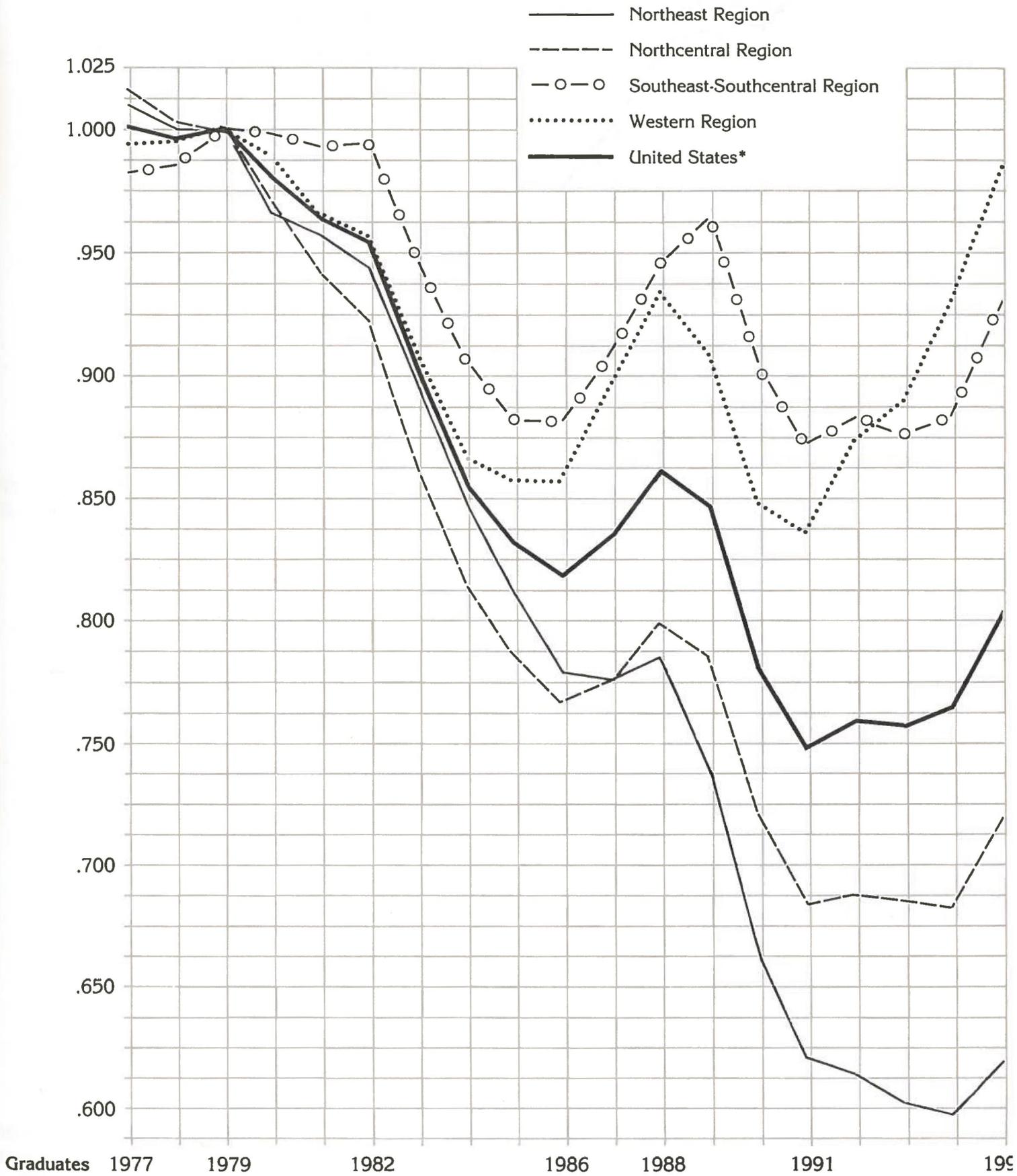
Graduates 1977 1979 1982 1986 1988 1991 199

Figure 4

Comparison of Births with Projected Graduates

——— Births, 1959-1977

·········· Graduates (Actual, 1977 & 1978
Projected, 1979-1995)

Index numbers 1961 Births and

1979 Graduates = 1.000

Northeast

Northcentral

1959	1961	1964	1968	1970	1973	1977
1977	1979	1982	1986	1988	1991	1995
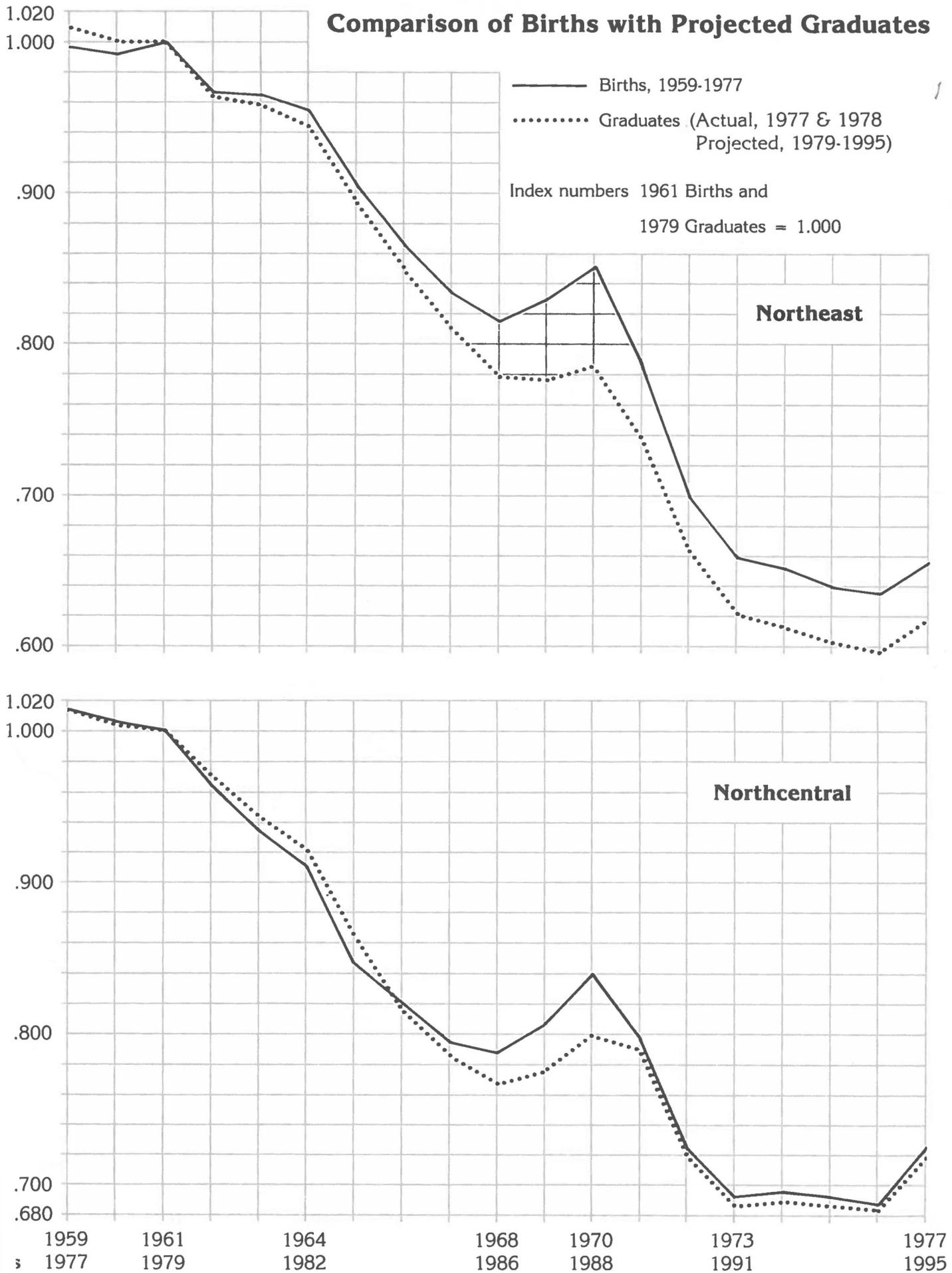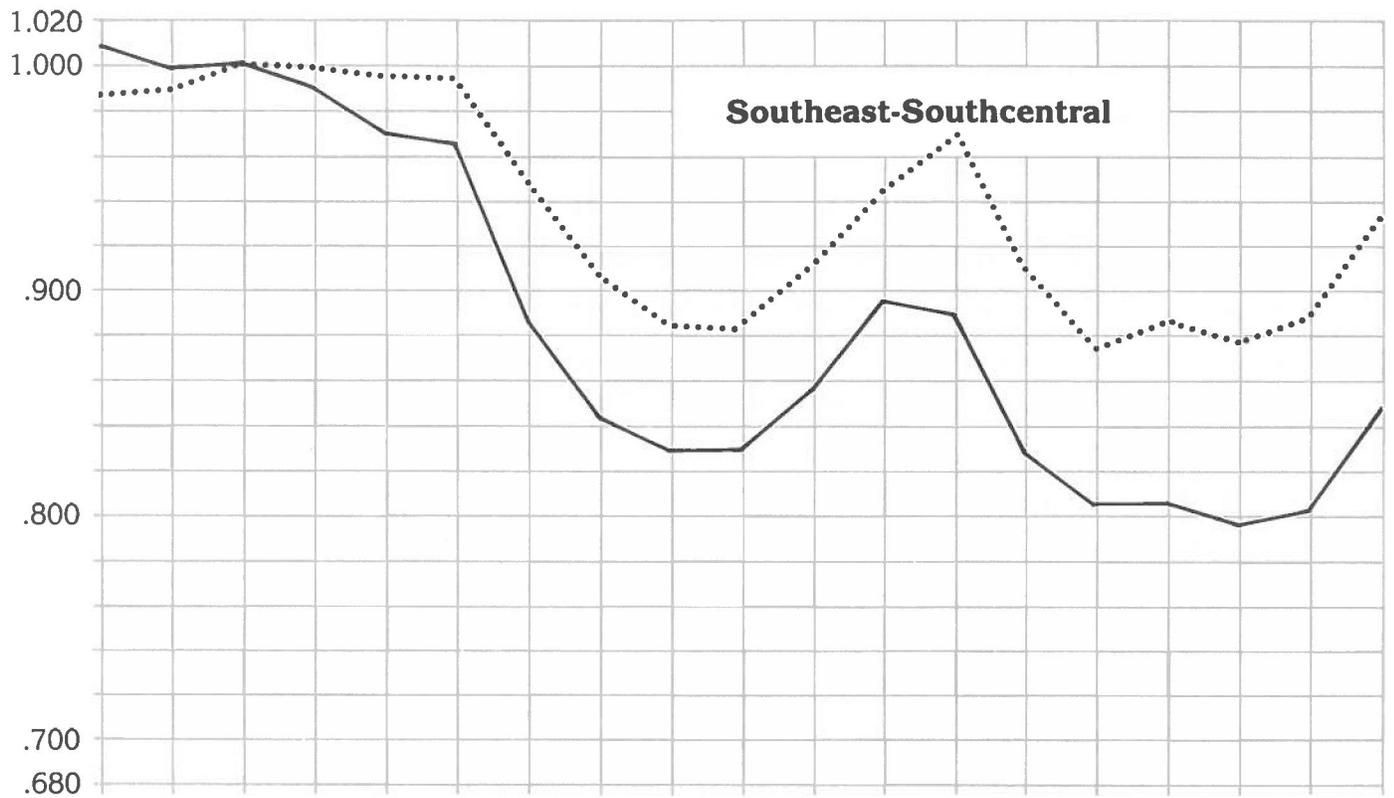
Southeast-Southcentral

| Births | 1959 | 1961 | 1964 | 1968 | 1970 | 1973 | 1977 |
| Graduates | 1977 | 1979 | 1982 | 1986 | 1988 | 1991 | 1995 |
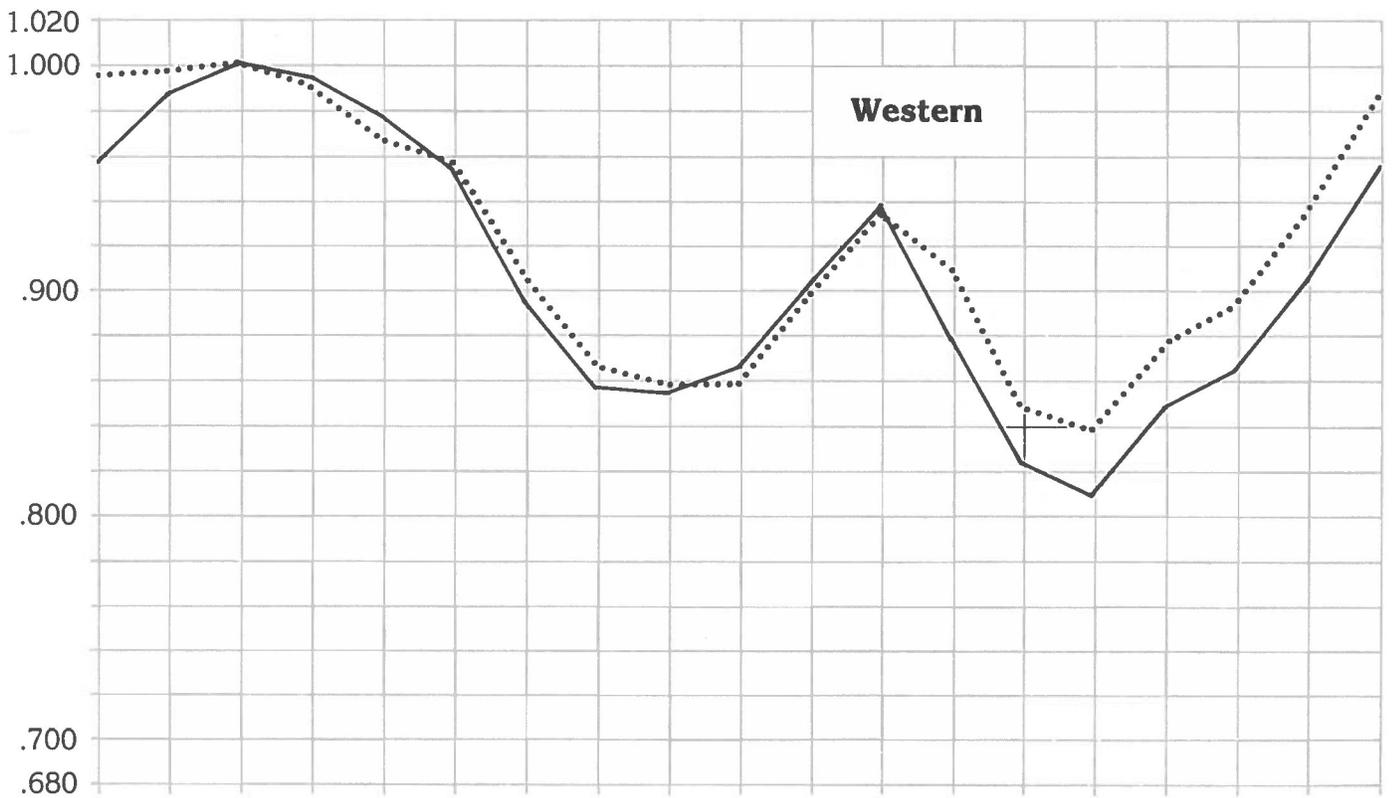
Western

| Births | 1959 | 1961 | 1964 | 1968 | 1970 | 1973 | 1977 |
| Graduates | 1977 | 1979 | 1982 | 1986 | 1988 | 1991 | 1995 |

Other Factors

The remaining factors to be mentioned have mainly to do with the interpretation of grade-to-grade ratios when analyzing historical data. When dealing with public school enrollments, as in the case of the projections presented here, enrollments in nonpublic schools and the interplay between public and nonpublic enrollments are important. Closings of nonpublic schools, as occurred in many states during the 1960s, will affect the grade-to-grade ratios in the same way as in-migration. Shifts from public to nonpublic schools, as have happened in some places in connection with pupil busing, will look the same as out-migration in the public school data.

Nonpromotion of significant numbers of first grade pupils is a common factor. Expansion of preschool and kindergarten programs will tend to reduce its impact. Nonpromotion will usually influence the ratios to a lesser extent at other grade levels. Minimum competency testing will tend to increase nonpromotion at whatever grade levels it is used.

Increasing numbers of pupils assigned to ungraded special education classes rather than to regular grade groups will have the same effect on grade-to-grade ratios as out-migration. Sizable numbers of other ungraded enrollments, varying greatly from year to year, cause special difficulty in interpreting the historical data in a number of states.

High school graduates have traditionally been viewed as the pool of those qualified to pursue college work; however, it may be necessary to examine developments regarding other avenues by which individuals become qualified for college. Declining ratios in late high school in some states may be related to recent increases in the number of seventeen- and eighteen-year-olds who take high school equivalency tests.

Year-by-Year Projections for Each State

Table 2 presents the annual number of graduates for each state, actuals reported by the states for the years 1971 through 1978, and projections developed by the author for each year 1979 through 1995. At the end of the table, the totals of the projections for all states are compared, year-by-year, to the author's independent nationwide projection based on published national data.

TABLE 2

Annual Public High School Graduates
Fifty States and the District of Columbia
Actuals 1971-1978, Projected 1979-1995

Year	Alabama	Alaska*	Arizona	Arkansas	California	Colorado
1971	44,722	4,021	23,407	25,965	262,878	31,910
1972	44,806	4,099	23,953	25,892	271,454	33,454
1973	44,441	4,142	24,012	25,705	268,178	33,358
1974	45,326	4,426	24,924	24,384	269,541	34,353
1975	46,633	4,414	25,665	26,836	273,411	34,963
1976	46,695	4,427	26,019	27,029	268,425	35,555
1977	46,765	4,705	27,223	27,628	264,625	36,647
1978	46,509	5,058	28,589	28,064	261,698	37,373
1979	47,457	5,482	29,195	28,151	260,878	37,265
1980	46,926	5,625	29,312	28,565	256,892	37,281
1981	46,302	5,587	29,482	28,622	249,082	36,703
1982	46,240	5,563	29,060	28,765	248,253	36,392
1983	44,328	5,208	28,359	26,963	234,551	34,616
1984	41,663	5,032	27,699	25,531	223,839	32,207
1985	40,359	4,960	27,315	24,817	218,432	32,495
1986	39,982	4,810	27,413	24,659	217,103	33,139
1987	40,940	5,101	29,383	25,449	226,228	34,658
1988	42,291	5,365	30,618	26,662	232,844	36,581
1989	44,113	5,441	30,982	27,437	220,142	36,267
1990	41,850	5,254	28,984	26,355	204,182	33,388
1991	39,544	5,163	29,645	25,681	198,432	33,433
1992	39,477	5,296	31,648	26,448	207,656	33,892
1993	38,533	5,347	31,893	26,296	211,415	34,858
1994	38,515	5,559	32,283	26,582	221,266	35,578
1995	41,198	5,832	33,733	27,638	231,571	37,384

*   Includes graduates of nonpublic schools.

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TABLE 2 (cont.)

Year	Connecticut	Delaware*	District of Columbia	Florida	Georgia	Hawaii
1971	36,248	8,568	4,736	75,415	56,982	10,471
1972	37,831	8,860	4,921	78,296	58,358	11,185
1973	39,349	9,142	5,195	81,471	57,755	11,147
1974	38,458	9,482	5,464	83,822	58,026	11,464
1975	40,479	9,779	5,302	85,651	59,803	11,283
1976	40,612	9,771	5,041	83,932	61,059	11,284
1977	39,485	9,737	5,395	89,116	62,234	11,637
1978	39,204	9,847	5,045	91,613	61,095	11,464
1979	39,051	9,831	5,681	89,033	64,649	11,468
1980	37,607	9,419	5,448	88,430	65,444	11,611
1981	37,879	9,239	5,107	88,401	64,335	11,674
1982	37,154	8,861	4,606	87,573	65,379	11,106
1983	35,560	8,334	4,490	82,464	62,747	10,360
1984	33,202	7,687	4,309	80,244	59,756	9,766
1985	31,543	6,965	3,882	76,421	57,299	9,241
1986	30,299	6,797	3,547	75,363	57,457	9,168
1987	30,529	6,804	3,470	78,483	58,188	9,600
1988	30,560	6,964	3,480	82,590	60,514	10,010
1989	28,528	6,683	3,280	84,821	60,293	9,712
1990	25,201	5,945	2,891	81,300	49,048	9,167
1991	23,554	5,519	2,562	78,546	46,681	9,112
1992	23,132	5,596	2,372	80,497	54,360	9,192
1993	22,632	5,578	2,302	77,095	52,094	9,373
1994	22,403	5,496	2,277	77,211	51,645	9,903
1995	22,845	5,817	2,337	80,847	55,014	10,526

* Includes graduates of nonpublic schools.

TABLE 2 (cont.)

Year	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky
1971	12,348	128,843	72,953	43,067	33,644	39,004
1972	12,834	136,410	74,587	44,044	34,163	41,040
1973	12,714	135,764	74,907	44,107	33,941	40,956
1974	12,776	139,104	75,666	43,194	33,225	41,522
1975	12,631	141,316	77,230	42,685	32,458	42,975
1976	12,344	142,394	78,011	41,685	32,212	41,700
1977	13,029	142,040	78,636	43,416	33,216	41,558
1978	13,301	140,690	78,000	43,726	32,307	41,611
1979	13,392	139,153	78,390	44,132	31,680	42,241
1980	13,422	134,735	76,349	42,956	30,796	41,266
1981	12,857	130,617	75,338	41,893	28,950	41,745
1982	12,771	127,968	74,791	40,229	27,763	41,033
1983	12,265	119,200	70,126	37,317	27,331	38,865
1984	12,015	112,352	65,038	34,959	25,250	36,941
1985	12,171	107,546	63,163	33,500	24,449	35,633
1986	12,474	104,840	61,604	32,733	23,760	35,279
1987	12,994	105,894	61,813	33,242	24,899	36,005
1988	13,800	109,078	63,985	34,215	25,485	37,336
1989	14,151	106,777	65,178	33,219	25,318	37,941
1990	13,473	97,055	60,480	30,695	23,679	34,703
1991	13,633	91,963	57,963	28,955	22,748	33,076
1992	14,518	91,963	56,920	30,205	23,275	32,965
1993	15,079	92,103	56,343	30,787	23,985	33,693
1994	15,969	92,611	55,148	30,943	25,102	34,117
1995	17,202	96,403	58,222	33,420	26,204	36,152

TABLE 2 (cont.)

Year	Louisiana	Maine	Maryland*	Massachu-setts	Michigan	Minnesota
1971	44,446	13,857	54,818	67,487	123,889	60,966
1972	45,563	14,356	56,778	73,179	126,410	63,135
1973	45,704	14,377	58,987	75,551	129,850	63,394
1974	46,808	14,491	60,267	75,700	132,624	63,981
1975	47,691	14,830	61,525	78,408	135,509	66,535
1976	47,446	15,200	62,068	79,300	135,162	66,424
1977	48,421	15,205	61,403	79,400	135,337	68,166
1978	47,183	15,364	61,991	78,348	132,759	68,414
1979	47,635	15,603	62,116	78,769	131,984	68,086
1980	47,472	15,462	61,488	77,644	127,462	67,616
1981	47,747	15,734	62,502	77,148	124,342	64,910
1982	47,671	14,944	61,682	76,021	121,647	61,772
1983	46,719	14,897	57,617	72,468	114,582	57,494
1984	46,310	13,910	54,942	69,130	109,163	54,164
1985	44,722	13,908	52,992	66,270	105,814	52,732
1986	44,582	13,095	51,552	63,977	102,733	51,893
1987	46,060	13,571	51,266	63,013	103,705	53,145
1988	46,838	13,751	52,201	62,883	107,714	53,911
1989	46,851	14,057	50,056	58,647	104,156	51,676
1990	45,345	12,728	45,240	52,487	94,750	46,707
1991	44,054	12,306	40,830	48,865	91,223	44,080
1992	43,694	11,821	40,661	47,395	88,557	45,212
1993	44,929	11,917	40,398	46,044	86,312	45,860
1994	46,007	11,772	40,351	44,610	84,669	46,161
1995	49,744	12,715	42,771	45,889	89,204	48,888

* Includes graduates of nonpublic schools.

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TABLE 2 (cont.)

Year	Missis-sippi	Missouri	Montana	Nebraska	Nevada	New Hampshire
1971	26,729	57,422	10,751	21,410	5,899	9,453
1972	26,529	58,876	10,912	21,720	6,206	9,733
1973	26,039	60,068	11,841	22,459	6,414	10,255
1974	26,444	62,183	12,135	22,276	7,001	10,633
1975	27,347	62,779	12,293	22,249	7,284	11,060
1976	26,733	63,942	12,136	22,237	7,566	11,380
1977	27,639	64,471	12,328	23,067	8,011	11,635
1978	27,665	64,564	12,184	23,052	8,233	11,748
1979	28,160	64,761	12,066	23,498	8,763	11,807
1980	27,672	64,423	12,034	22,559	8,795	11,719
1981	27,669	62,794	11,480	22,196	8,933	11,927
1982	27,006	62,687	10,936	21,109	9,118	11,775
1983	26,333	58,417	10,270	19,632	8,819	11,337
1984	25,200	54,478	9,859	18,461	8,116	11,173
1985	24,447	52,309	9,508	17,730	8,050	10,766
1986	24,404	50,642	9,408	17,627	7,954	10,911
1987	25,084	52,211	9,756	18,244	8,639	11,108
1988	25,677	53,456	10,137	18,655	9,076	11,543
1989	24,754	53,787	10,408	18,881	9,494	11,655
1990	23,145	48,938	9,491	17,886	8,720	10,620
1991	22,587	46,247	9,409	16,853	8,401	10,051
1992	22,257	46,791	10,135	17,538	8,644	10,110
1993	21,945	46,137	9,968	17,510	8,597	9,663
1994	21,742	46,366	10,410	17,591	9,507	9,738
1995	22,981	49,181	10,986	18,621	10,220	10,512

TABLE 2 (cont.)

Year	New Jersey	New Mexico	New York	North Carolina	North Dakota	Ohio
1971	87,718	16,261	192,807	68,821	11,182	143,812
1972	91,629	16,819	199,771	70,242	10,540	148,976
1973	91,507	17,248	204,037	69,322	10,632	151,251
1974	94,067	17,364	207,413	69,062	11,146	152,643
1975	97,985	18,438	210,780	70,094	10,750	156,854
1976	97,083	17,841	214,234	70,498	10,771	157,583
1977	97,494	17,988	212,907	71,146	10,991	156,220
1978	97,079	18,444	210,720	70,953	10,725	152,002
1979	97,643	18,942	209,692	71,898	10,707	151,534
1980	94,836	18,476	201,167	70,550	10,366	143,851
1981	93,636	18,097	198,731	69,043	10,140	139,215
1982	92,592	17,900	194,886	69,276	9,392	137,353
1983	88,518	16,569	185,438	65,500	8,674	128,542
1984	84,143	15,481	175,476	62,219	8,082	122,341
1985	80,233	15,184	165,726	61,155	7,767	118,557
1986	76,719	14,820	158,338	60,277	7,277	115,430
1987	77,124	15,004	156,975	60,998	7,400	116,464
1988	77,844	15,117	158,489	63,918	7,949	120,566
1989	73,485	14,975	144,700	64,656	7,788	120,670
1990	65,627	14,880	129,018	60,038	7,565	110,141
1991	62,016	14,544	121,201	57,633	7,263	103,393
1992	62,160	14,882	120,588	56,357	7,466	103,241
1993	60,323	14,700	118,893	54,108	7,922	102,043
1994	59,723	15,471	118,575	53,884	7,997	100,029
1995	61,860	16,111	120,888	56,499	8,540	103,912

TABLE 2 (cont.)

Year	Oklahoma	Oregon	Pennsylvania	Rhode Island	South Carolina	South Dakota
1971	37,896	32,757	153,568	10,435	33,382	11,784
1972	38,409	31,882	157,415	10,909	34,593	11,826
1973	37,351	31,221	154,045	10,802	34,721	11,821
1974	37,466	30,806	159,934	11,117	35,081	11,711
1975	37,809	30,668	163,124	11,042	36,312	11,579
1976	37,663	30,561	163,812	10,831	36,684	11,435
1977	38,577	30,258	160,665	10,796	36,373	11,290
1978	39,223	29,998	156,918	10,884	36,824	11,383
1979	39,745	30,851	155,311	11,592	37,845	11,171
1980	40,048	30,515	146,937	11,198	37,829	10,961
1981	39,141	29,652	144,919	10,864	38,241	10,442
1982	38,187	29,125	143,672	10,669	38,462	9,869
1983	35,541	27,850	135,651	10,390	36,860	9,081
1984	33,325	27,149	128,981	9,688	34,939	8,406
1985	33,232	27,230	123,434	9,267	33,783	7,979
1986	33,686	27,571	118,561	8,589	33,305	7,916
1987	35,222	29,307	117,898	8,447	34,100	7,949
1988	36,753	30,647	120,170	8,464	35,442	8,352
1989	38,018	29,943	115,033	8,103	36,977	8,379
1990	36,626	28,085	104,578	7,261	35,066	7,860
1991	34,785	27,462	98,118	6,760	34,683	7,726
1992	36,151	27,890	96,957	6,242	34,335	8,065
1993	36,440	28,616	95,348	5,905 _49%	33,083	8,151
1994	37,252	29,892	94,746	5,937	33,783	8,410
1995	38,784	32,147	98,210	6,396	35,338	8,710

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TABLE 2 (cont.)

Year	Tennessee	Texas	Utah	Vermont	Virginia	Washington
1971	50,691	148,105	19,097	5,899	60,132	50,902
1972	51,622	153,653	18,971	6,193	62,962	51,563
1973	52,115	153,529	18,993	6,497	62,679	50,988
1974	49,641	156,984	19,021	6,320	64,065	51,868
1975	49,363	159,487	19,668	6,546	65,558	50,990
1976	49,962	159,855	19,782	6,595	66,278	51,012
1977	49,290	163,574	19,801	6,684	67,373	50,885
1978	47,710	167,968	20,324	6,773	66,270	51,101
1979	48,406	170,892	20,667	6,867	68,203	51,568
1980	49,796	172,067	20,534	6,862	68,027	50,675
1981	50,146	170,305	20,064	6,700	67,404	49,670
1982	50,544	172,814	19,480	6,648	67,515	48,819
1983	48,464	165,276	18,877	6,217	63,270	46,266
1984	45,675	159,129	18,549	5,967	59,406	43,984
1985	44,224	158,882	19,379	5,737	57,215	44,271
1986	43,383	160,863	19,671	5,663	58,898	44,843
1987	45,425	167,767	20,742	5,820	60,188	47,232
1988	47,484	175,361	22,738	6,144	63,149	49,009
1989	48,311	183,821	23,644	5,979	59,615	47,992
1990	45,622	176,637	23,183	5,539	54,065	43,551
1991	43,801	172,294	23,983	5,060	51,614	43,612
1992	43,699	173,227	25,800	5,113	51,181	45,863
1993	42,411	177,039	27,283	4,997	50,437	46,527
1994	42,582	179,522	30,422	5,027	50,395	48,105
1995	45,387	188,088	32,702	5,194	53,473	51,507

TABLE 2 (cont.)

Year	West Virginia	Wisconsin	Wyoming	Total 50 States and District of Columbia	Independent Nationwide Projection*	Percent Difference 50-State Total vs. Indep. Proj.
1971	25,485	67,182	5,635	2,645,860	2,637,000	+0.3%
1972	22,159	69,819	5,778	2,725,315	2,699,000	+1.0
1973	24,541	70,789	5,653	2,740,965	2,730,000	+0.4
1974	25,401	69,341	5,760	2,775,911	2,763,000	+0.5
1975	24,631	70,979	5,648	2,829,329	2,823,000	+0.2
1976	24,879	70,355	5,757	2,831,260	2,837,000	-0.2
1977	24,719	72,366	5,861	2,847,433	2,837,000	+0.4
1978	23,986	71,295	6,074	2,833,353	2,858,000	-0.9
1979	23,570	71,288	6,102	2,844,871	2,882,000	-1.3
1980	23,197	69,664	6,150	2,790,136	2,853,000	-2.2
1981	22,883	67,473	6,120	2,744,081	2,821,000	-2.7
1982	22,683	66,236	6,163	2,712,160	2,770,000	-2.1
1983	21,658	62,354	5,869	2,568,534	2,637,000	-2.6
1984	20,604	60,018	5,658	2,441,616	2,498,000	-2.3
1985	20,023	57,105	5,812	2,365,634	2,417,000	-2.1
1986	19,877	56,836	5,995	2,327,723	2,373,000	-1.9
1987	20,392	56,284	6,502	2,376,722	2,426,000	-2.0
1988	20,643	56,566	7,015	2,450,040	2,507,000	-2.3
1989	21,527	54,182	7,300	2,409,803	2,458,000	-2.0
1990	20,456	48,905	7,390	2,221,800	2,210,000	+0.5
1991	19,215	47,107	7,426	2,130,812	2,129,000	+0.1
1992	19,253	48,872	7,896	2,157,465	2,145,000	+0.6
1993	19,477	48,871	8,285	2,149,545	2,133,000	+0.8
1994	19,915	48,792	8,242	2,170,233	2,150,000	+0.9
1995	20,913	51,422	9,063	2,279,201	2,257,000	+1.0%

* Same source as column 2, table 1. See footnotes there. Note that this column contains only public schools whereas the preceeding column includes nonpublic schools in three states.

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Methodology

1. The state higher education agency in each state was asked to put WICHE in touch with the agency concerned with elementary and secondary school enrollments and projections.

2. That agency was asked to provide historical data on births, grade-by-grade enrollments, and high school graduates for the period 1965-66 through 1978-79. Separate data for public schools and nonpublic schools were requested, as well as any authoritative projections available. The persons assisting in each state are listed at the end of this report.

3. After questions about the data had been clarified, WICHE compiled the data on a worksheet and calculated the grade-to-grade ratios.

4. Based on study of the historical ratios, ratios for use in the projection were selected and a projection worksheet was completed. Examples of the historical table and the projection table for one state are shown following this section. Photocopies of worksheets for these two tables for any state may be ordered from WICHE at a cost of $1.00 per set to cover postage, copying, and handling.

5. WICHE sent the worksheets to the contact person in each state asking for comment, particularly on the projections.

6. The projection technique used is the grade-progression method. Using the historical data, the ratio of enrollment in first grade to number of resident live births six years earlier is calculated for each first-grade group. The ratio of second-grade enrollment one year to first-grade enrollment the previous year is calculated for each second-grade group. Similarly, a column of ratios is calculated for each move from grade to grade through twelfth grade. The ratio of high school graduates to enrollment in twelfth grade is calculated for each high school graduate group. These ratios reflect the combined effect of:
    a. migration--in the case of these statewide data, the net migration into or out of the state of individuals of the particular age

or grade level involved.

b.   dropouts--especially in the later years of secondary school.

c.   nonpromotion--there is a tendency for a substantial proportion
     of first-grade students to be retained in first grade a second
     year, affecting both the ratio of first grade to births and the
     ratio of second grade to first grade. Lesser impact of this
     factor may occur at other grade levels.

d.   transfers from or to nonpublic schools--in these public school
     data, transfers from nonpublic schools affect the ratios,
     especially between sixth and seventh grade or between eighth and
     ninth grade, depending on the grade structure of the nonpublic
     schools. A general closing of nonpublic schools or a general
     shift to nonpublic schools would affect the ratios generally.

e.   shifting of students from regular grade groups to ungraded
     special education groups or vice versa--similar shifts to or
     from groups reported as ungraded, other than special education,
     cause special difficulties in interpreting the ratios. Ways of
     getting these reported by grade level should be pursued where
     this problem occurs.

f.   mortality.

The key step in the projection process is the selection of: (1) the
particular ratios to be used for each move from grade to grade; (2) the
ratios to be used to translate the known birth figures into projected
first-grade enrollments; and (3) the ratio between twelfth-grade enroll-
ment and graduates. In the projections presented in this report, the
selection of these ratios was done by examination, rather than using a
particular average from a specific period of the recent past. After
careful study of the historical ratios, a judgment was made as to the
appropriate ratio to use in each case.

In most cases, constant ratios selected for purposes of long-range
projections were used. Variances in the short range between these pro-
jections and actual enrollments or graduates should be carefully assessed
before concluding that the numbers projected for the longer range are
invalid.

EXAMPLE

TABLE 3
Oregon - Births, Enrollments by Grade,* and High School Graduates
Showing Progression Ratios - Public Schools

School Year	Year	Births Number	Ratio First Grade Births	1	2	3	4	5	6	7	8	9	10	11	12	Ratio Grads 12th Grade	Grads
1965-66	1959	36,634	1.053	38,570	37,286	37,632	37,337	37,266	37,061	37,784	37,196	36,241	34,685	33,306	31,127	.912	28,398
				.972	1.002	1.002	1.011	1.011	1.016	1.012	1.036	.993	.975	.949			
1966-67	1960	38,347	1.048	40,199	37,474	37,357	37,719	37,730	37,674	37,661	38,250	38,538	35,974	33,812	31,601	.921	29,111
				.960	.996	.994	1.011	1.005	1.003	1.008	1.022	.991	.975	.939			
1967-68	1961	37,475	1.086	40,700	38,605	37,326	37,147	38,147	37,916	37,797	37,948	39,099	38,194	35,091	31,736	.928	29,464
				.972	1.003	1.002	1.009	1.002	1.020	1.020	1.030	1.003	.973	.937			
1968-69	1962	36,983	1.105	40,854	39,544	38,715	37,402	37,492	38,224	38,687	38,543	39,073	39,200	37,155	32,875	.929	30,537
				.967	1.004	1.010	1.021	1.019	1.030	1.015	1.034	1.004	.976	.942			
1969-70	1963	34,863	1.128	39,336	39,507	39,705	39,090	38,192	38,203	39,358	39,252	39,849	39,215	38,276	34,991	.921	32,236
				.962	1.000	1.003	1.018	1.015	1.027	1.014	1.033	1.000	.962	.926			
1970-71	1964	33,500	1.122	37,599	37,825	39,505	39,822	39,805	38,764	39,248	39,908	40,546	39,856	37,732	35,452	.924	32,757
				.968	1.005	1.006	1.014	1.012	1.020	1.011	1.031	.997	.959	.924			
1971-72	1965	32,955	1.094	36,068	36,403	38,005	39,741	40,386	40,301	39,541	39,685	41,141	40,422	38,239	34,873	.914	31,882
				.968	1.000	1.002	1.006	1.012	1.008	1.006	1.018	.978	.930	.833			
1972-73	1966	32,446	1.086	35,231	34,923	36,401	38,088	39,989	40,861	40,642	39,775	40,383	40,223	37,611	33,778	.924	31,221
				.981	1.019	1.027	1.030	1.030	1.022	1.027	1.032	1.001	.954	.903			
1973-74	1967	31,446	1.133	35,636	34,554	35,589	37,372	39,215	41,193	41,774	41,724	41,028	40,415	38,353	33,952	.907	30,806
				.967	.998	1.004	1.006	1.008	1.012	1.011	1.008	.983	.927	.884			
1974-75	1968	32,136	1.117	35,901	34,456	34,478	35,717	37,604	39,529	41,676	42,234	42,042	40,315	37,478	33,917	.904	30,668
				.963	.997	1.003	1.012	1.008	1.016	1.002	.998	.984	.935	.894			
1975-76	1969	33,834	1.125	38,059	34,588	34,347	34,592	36,147	37,893	40,179	41,774	42,146	41,378	37,691	33,522	.912	30,561
				.956	.998	1.000	1.007	1.003	1.017	.998	1.015	.994	.929	.897			
1976-77	1970	35,353	1.114	39,370	36,395	34,533	34,361	34,822	36,239	38.548	40,079	42,415	41,896	38,438	33,823	.895	30,258
				.974	1.009	1.015	1.020	1.008	1.031	1.010	1.017	.977	.924	.888			
1977-78	1971	33,344	1.159	38.648	38,356	36,728	35,037	35,048	35,095	37,356	.38,940	40,744	41,445	38,725	34,144	.879	29,998
				.981	1.017	1.021	1.021	1.019	1.034	1.007	1.030	.988	.919	.885			
1978-79	1972	31,308	1.171	36,659	37,914	38,998	37,482	35,788	35,699	36,305	37,615	40,125	40,238	38,097	34,279		

* These enrollments are fall membership figures. The enrollments regularly reported and used by the Oregon Department of Education are year-long membership figures, considerably larger than the fall figures used here.

EXAMPLE

TABLE 4

Oregon - Projections of Enrollments by Grade,* and High School Graduates - Public Schools

School Year	Births Year	Births Number	Ratio First Grade Births	1	2	3	4	5	6	7	8	9	10	11	12	Ratio Grads/12th Grade	Grads
1978-79 (Act)	1972	31,308	1.171	36,659	37,914	38,998	37,482	35,788	35,699	36,305	37,615	40,125	40,238	38,097	34,279	.900	30,851 (Proj.)
Progression Ratios					.970	1.005	1.005	1.015	1.010	1.020	1.010	1.020	.985	.920	.890		
1979-80	1973	30,902	1.160	35,846	35,559	38,104	39,193	38,044	36,146	36,413	36,668	38,367	39,523	37,019	33,906	.900	30,515
1980-81	1974	32,506	1.120	36,407	34,771	35,737	38,295	39,781	38,424	36,869	36,777	37,401	37,791	36,361	32,947	"	29,652
1981-82	1975	33,352	1.120	37,354	35,315	34,945	35,916	38,869	40,179	39,192	37,238	37,513	36,840	34,768	32,361	"	29,125
1982-83	1976	34,840	1.120	39,021	36,233	35,492	35,120	36,455	39,258	40,983	39,584	37,983	36,950	33,893	30,944	"	27,850
1983-84	1977	37,467	1.120	41,963	37,850	36,414	35,669	35,647	36,820	40,043	41,393	40,376	37,413	33,994	30,165	"	27,149
1984-85					40,704	38,039	36,596	36,204	36,003	37,556	40,443	42,221	39,770	34,420	30,255	.900	27,230
1985-86						40,908	38,229	37,145	36,566	36,723	37,932	41,252	41,588	36,588	30,634	"	27,571
1986-87							41,113	38,802	37,516	37,297	37,090	38,691	40,633	38,261	32,563	"	29,307
1987-88								41,730	39,190	38,266	37,670	37,832	38,111	37,382	34,052	"	30,647
1988-89									42,147	39,974	38,649	38,423	37,265	35,062	33,270	.900	29,943
1989-90										42,990	40,374	39,422	37,847	34,284	31,205	"	28,085
1990-91											43,420	41,181	38,831	34,819	30,513	"	27,462
1991-92												44,288	40,563	35,725	30,989	"	27,890
1992-93													43,624	37,318	31,795	"	28,616
1993-94														40,134	33,213	"	29,892
1994-95															35,719	.900	32,147

* See footnote on preceding table.

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