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STUDY OF STUDIES

JULY 2002

in collaboration with

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Agenda

I. Introduction

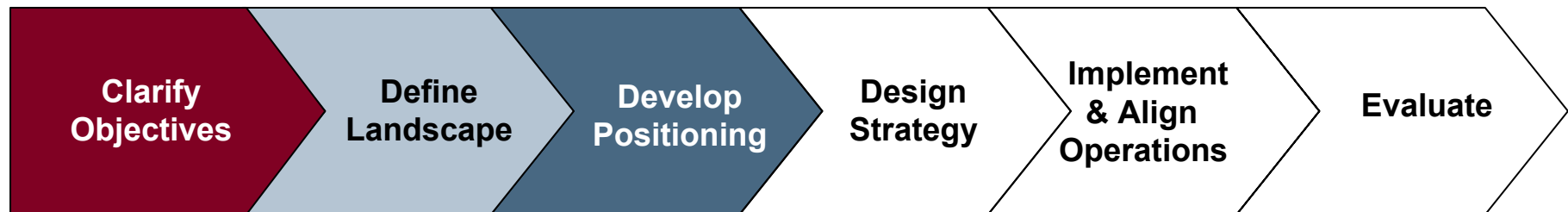
II. Key Statewide Issues Raised by Studies

A. K-12 Education

B. Post Secondary Education

III. Regional Differences

Defining the Landscape – to Understand Needs *and* Opportunities – Is the Next Phase In a Process to Develop a Positioning



Key Questions	Action Steps
<ul style="list-style-type: none"> • What is the landscape being considered? What are its boundaries? <p>Options for Impact</p> <ul style="list-style-type: none"> • What are the needs? • What is being done or is under consideration? • What is the range of possible interventions? • What is effective? <p>Other Funders</p> <ul style="list-style-type: none"> • How do (or would) interventions by the foundation fit into the landscape? <ul style="list-style-type: none"> - Relative scale of resources - Opportunities for leverage - Complications 	<ul style="list-style-type: none"> • Define taxonomy of educational landscape in Maine • Review relevant literature/recent research on needs specific to Maine and relevant national findings • Interview key experts and practitioners in the field • Survey educational constituents about needs and priorities (e.g., nonprofits, community members, etc.) • Analyze funding streams (e.g., Foundation Center database analysis, Maine Philanthropy Center data) • Interview key funders active in K-16 education in the region <ul style="list-style-type: none"> - Understand potential competing or complementary approaches - Understand best demonstrated practices of peers

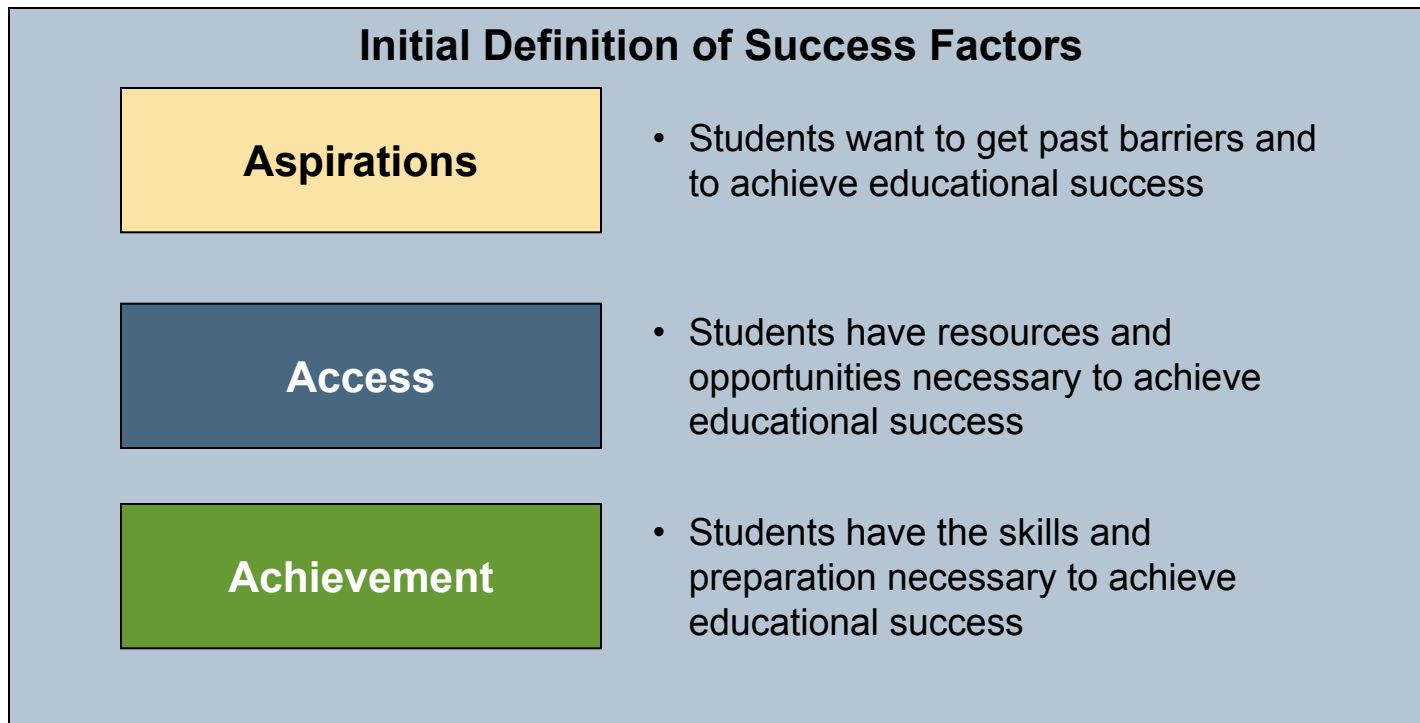


- Highly leveraged opportunities to create an effective foundation positioning and actionable strategy

The “Study-of-Studies” Is an Important First Step in Defining the Landscape

Study	Date	Source
<i>30 and 1000: How to Build a Knowledge-Based Economy in Maine and Raise Incomes to the National Average by 2010</i>	2001	State Planning Office
<i>A Decade of Progress and Some Lessons Learned</i>	2001	Maine Education Symposium
<i>A Fresh Look at College Going Rates in Maine</i>	2000	Finance Authority of Maine
<i>Aspirations Survey - Data from 60,000 Students Representing Every County in Maine, October 2001</i>	2001	National Center for Student Aspirations
<i>Barriers to College in Maine</i>	2001	Mitchell Institute
<i>Comparisons of Higher Education Information for New England States</i>	2001	Maine Education Policy Research Institute, USM
<i>Degree Recipients Older, Census Shows</i>	2001	Bangor Daily News
<i>Essential Programs and Services</i>	1997	Maine State Board of Education
<i>Higher Education Achievement in Maine</i>	1998	Maine Development Foundation
<i>Higher Education for All Maine People</i>	2001	Maine Center for Economic Policy
<i>Maine Kids Count</i>	2002	Maine Children's Alliance
<i>Maine Marks</i>	2001	Governor's Children's Cabinet
<i>Maine's Disappearing Youth: Implications of a Declining Youth Population</i>	2002	Maine Leadership Consortium
<i>Maine's Labor Force Analysis Regions</i>	N/A	N/A
<i>Measures of Growth 2002</i>	2002	Maine Development Foundation
<i>Quality Educators: The Best Opportunity for Maine Children</i>	2001	Maine Legislature
<i>Report of Blue Ribbon Commission on Postsecondary Attainment</i>	2002	Maine Legislature
<i>Report of the Commission on Higher Education Governance</i>	1996	Maine Legislature
<i>Rising to the Literacy Challenge</i>	2002	Jobs for the Future
<i>Survey of ME Citizens Who Have Not Attained a College Degree</i>	2001	SMS
<i>The Community College Gap in Maine Higher Education</i>	1998	Maine Center for Economic Policy
<i>The Condition of K-12 Public Education in ME</i>	2002	Maine Education Policy Research Institute, USM
<i>Types of Barriers Maine High School Students May Face in Fulfilling Post-Secondary Educational Aspirations</i>	N/A	Maine Education Policy Research Institute, USM
<i>The Public Policy Dilemma for Financing Opportunity for Higher Education in ME</i>	1997	Finance Authority of Maine
<i>Youth and the Labor Market in ME: Holding Our Own Will Not Hold Us</i>	N/A	Muskie School

Board Members Implicitly Outlined a Framework for Understanding the Factors Critical to Educational Success



**FSG Organized Its Research On Needs and Opportunities for Different Populations According to Three Goal Areas:
*Aspirations, Access, and Achievement***

Success Factors	Elementary	Middle School	High School	Traditional Post Secondary	Adult GED	Adult Post-Secondary	Job Training
Aspirations <i>Want to achieve educational success?</i>							
Access <i>Have the resources and opportunities to achieve educational success?</i>							
Achievement <i>Have the ability to achieve educational success?</i>							

Synthesis of external research will reveal areas where there are significant unmet needs and timely opportunities

Agenda

I. Introduction

II. Key Statewide Issues Raised by Studies

A. K-12 Education

B. Post Secondary Education

III. Regional Differences

The 'Study-of-Studies' Data Primarily Covers the K-12 and Post Secondary Populations

Success Factors	Elementary	Middle School	High School	Traditional Post Secondary	Adult GED	Adult Post-Secondary	Job Training
Aspirations <i>Want to achieve educational success?</i>							
Access <i>Have the resources and opportunities to achieve educational success?</i>							
Achievement <i>Have the ability to achieve educational success?</i>							

Primary focus
 Secondary focus

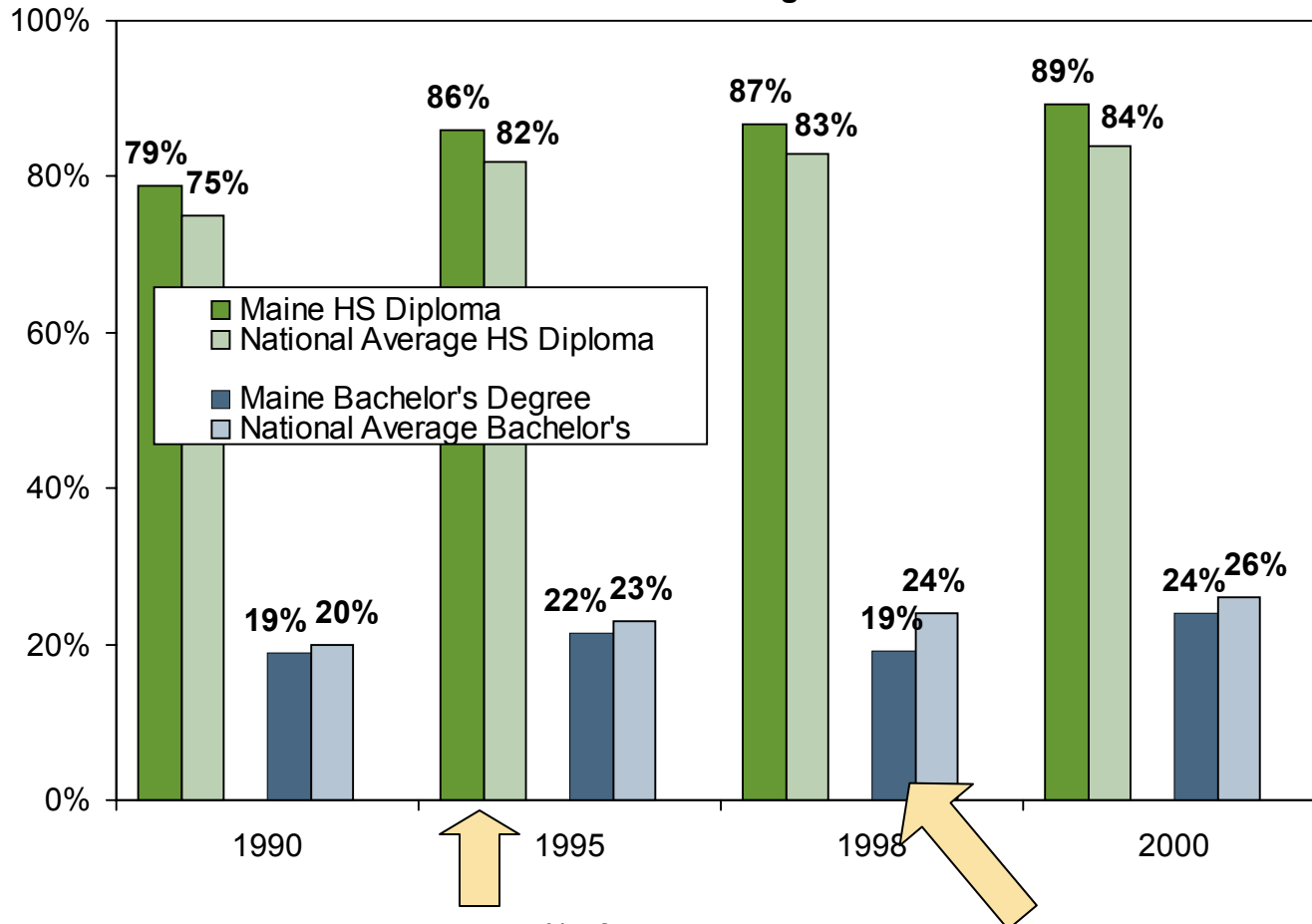
The primary focus of the studies is the gap between high school graduation and college degree attainment

Executive Summary

- The Study of Studies analysis focused on identifying critical needs across Maine’s educational landscape. Over 25 studies were reviewed, covering the full range of student populations including K-12, postsecondary, and nontraditional students. For each population, we examined three factors critical to educational success: aspirations, access, and achievement.
- Although a variety of issues were surfaced, the issue that stood out as the most critical was the disparity between Maine’s strong high-school graduation rates and low college attainment.
 - Maine outperforms the nation and the northeast region in K-12 achievement and high-school graduation rates. However, above average K-12 achievement does not translate into postsecondary success for the vast majority of Maine students.
 - Over the last decade, the gap between Maine’s national rankings for high school graduation and bachelor’s attainment has widened, rather than narrowed. This issue is potentially of greatest concern in Maine’s lower income regions.
- Based on initial analysis, our hypothesis is that the relative gap to college is greatest for Maine students 1) who don’t aspire to college after graduating from high school or 2) who aspire to go to college but don’t enroll. If college aspirations and enrollment for Maine students were to reach the national average and rates of college persistence were maintained for these new postsecondary students, it would result in 1,355 more students, or a 7% increase, graduating from college each year. For this to be true, Maine college persistence rates would have to remain constant – a challenge assuming these 1,355 students would have significant barriers to overcome once enrolled – similar to the barriers that may be preventing them from aspiring to or enrolling in a postsecondary program today.

Maine's Adult Population Outperforms the Nation in High School Graduation but Lags in Bachelor's Degree Attainment

Percentage of Maine Residents 25 and Older With a HS Diploma and a Bachelor's Degree

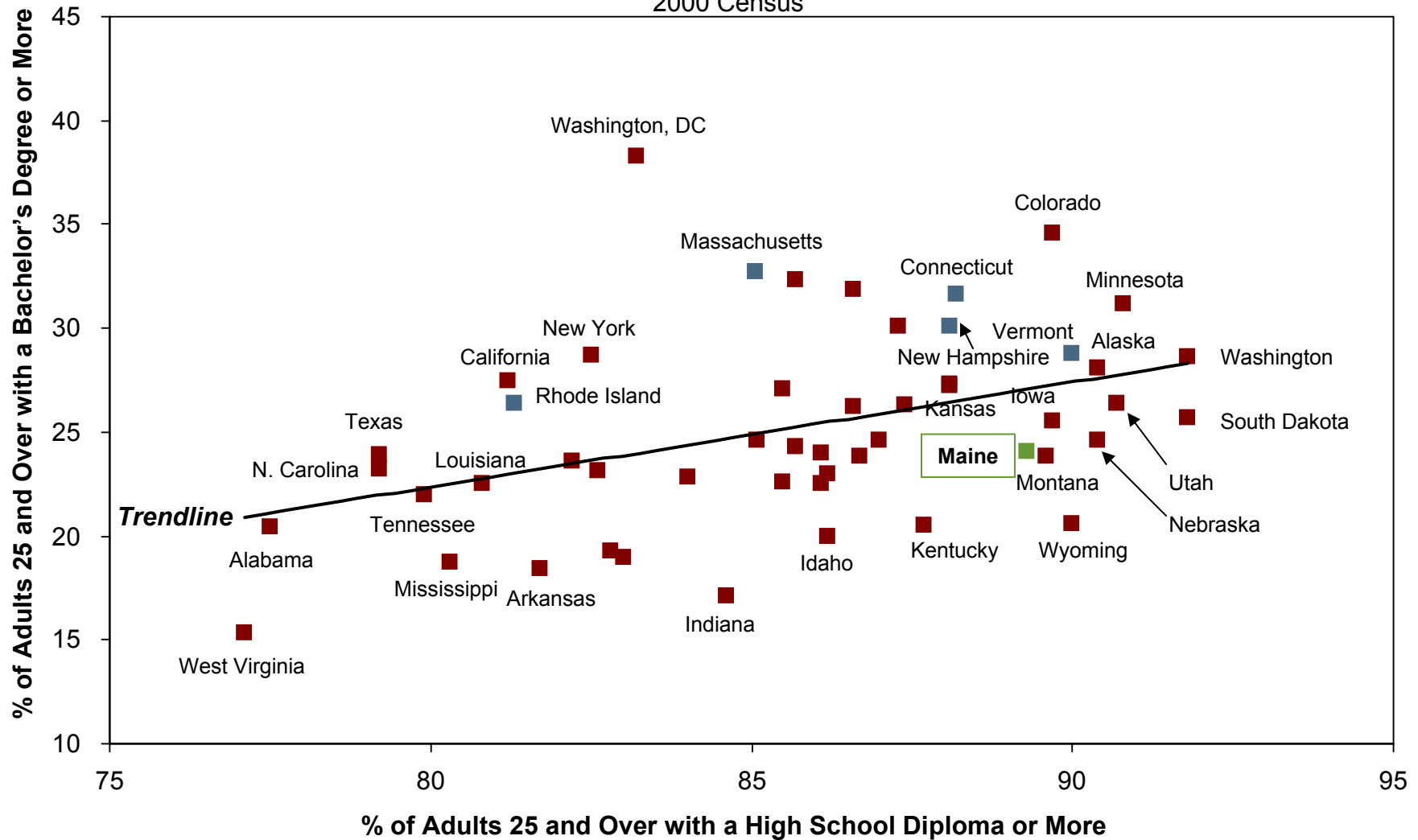


In the mid-1990s 91.8% of Maine's 18-24 year olds completed HS through a regular diploma or completing an alternative or GED program

In 1998 Maine's % of adults with a bachelor's degree or higher reached a low point, with a national ranking of 47

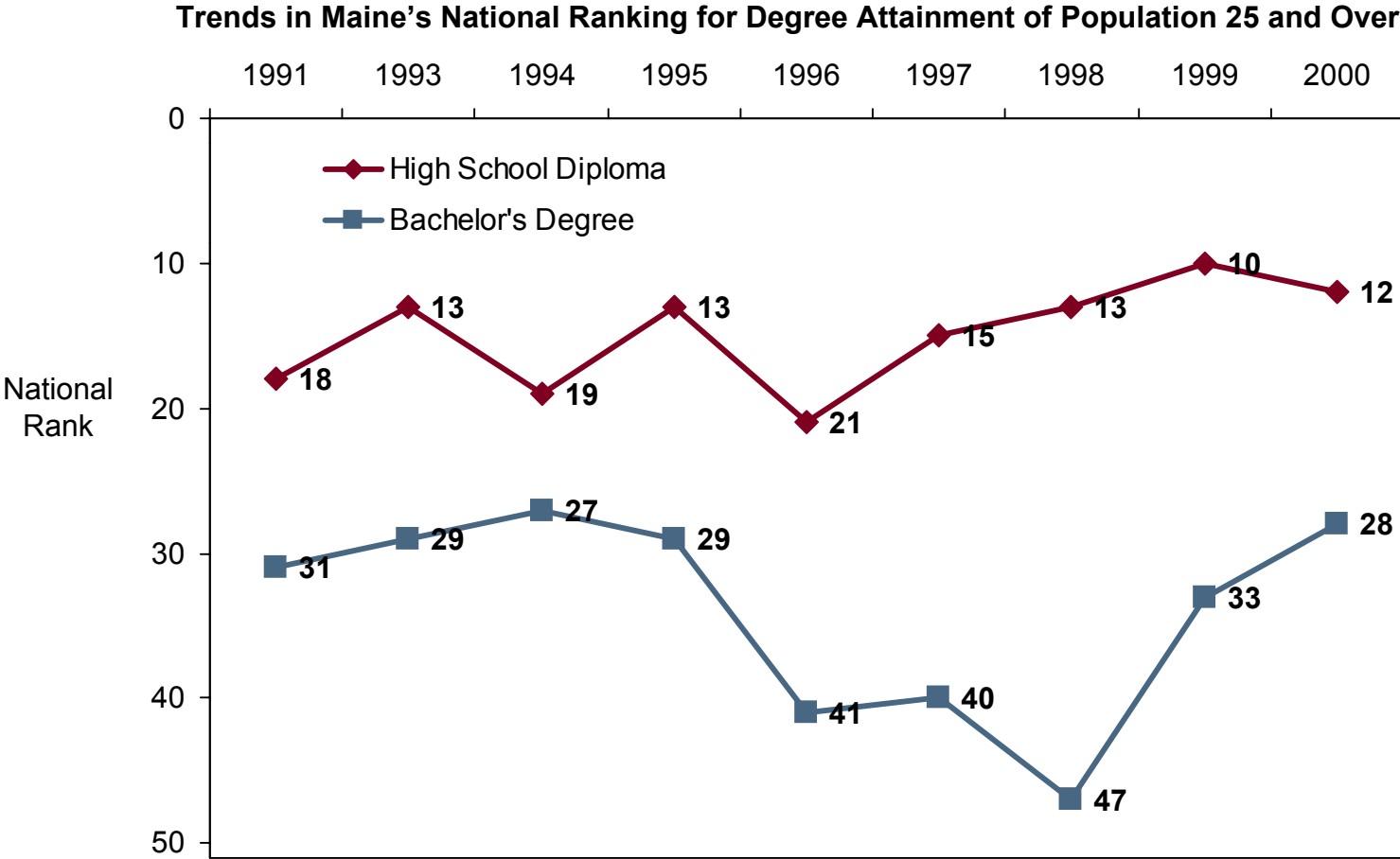
Maine's College Attainment Rates Are Below Expectations, Particularly Given the Performance of New England Peers

Rates of Attainment for a Bachelor's Degree vs. Rates of Attainment for a High School Diploma
2000 Census



Source: US Census Data, FSG Analysis

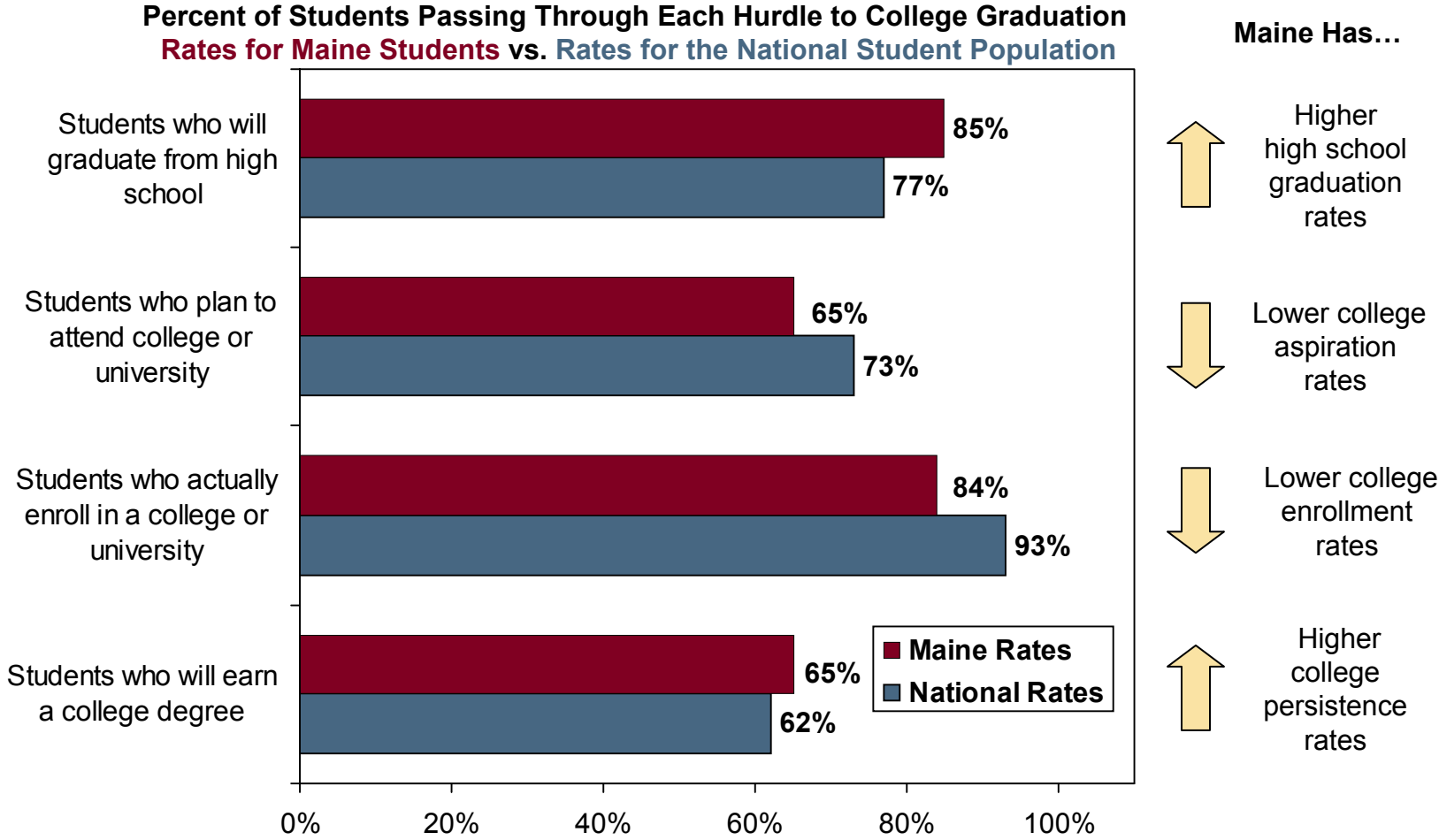
Over the Last Decade, the Gap Between Maine's National Rankings for High School and College Attainment Has Widened



Bachelor's degree attainment has improved since 1998, narrowing the gap from its widest point

Source: US Census Data, FSG Analysis

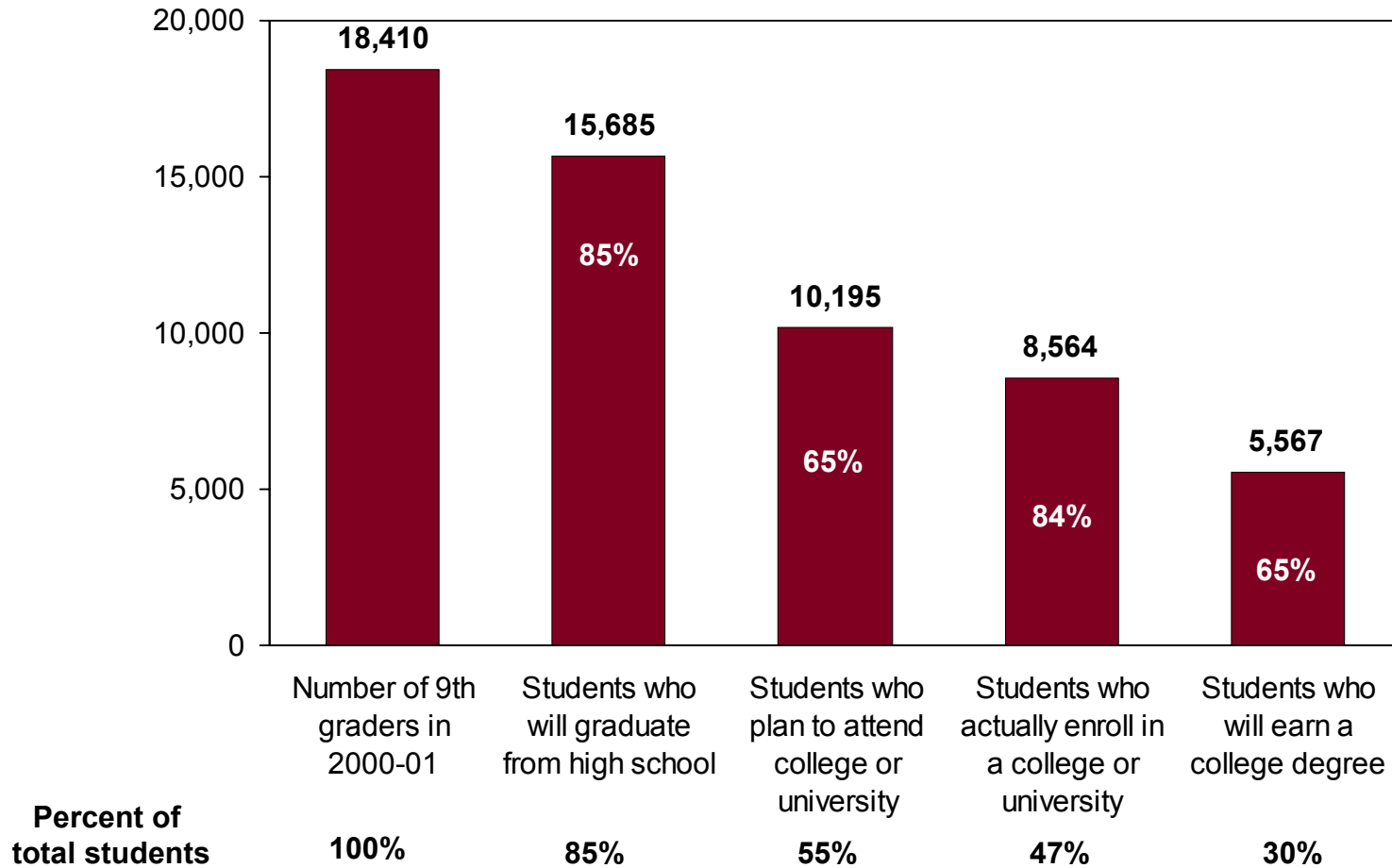
Maine Exceeds National Rates for High School Graduation and College Persistence, but Lags on Aspirations and Enrollment



Source for ME rates: Maine Education Policy Research Institute. Maine Department of Education (2001). National Center for Education Statistics (1999). Source for US rates: National Center for Education Statistics (1999) for Graduation Rate; National Library of Education (1992) for Intentions to Enroll in Postsecondary; US DOE (1997) for Postsecondary Enrollment Rate; NCES *Condition of Education 1996* for Postsecondary Persistence Rates

While 85% of Maine Ninth Graders are Expected to Graduate From High School, Only 31% Are Expected To Get a College Degree

Projected Educational Attainment of Maine Public School Ninth Grade Students



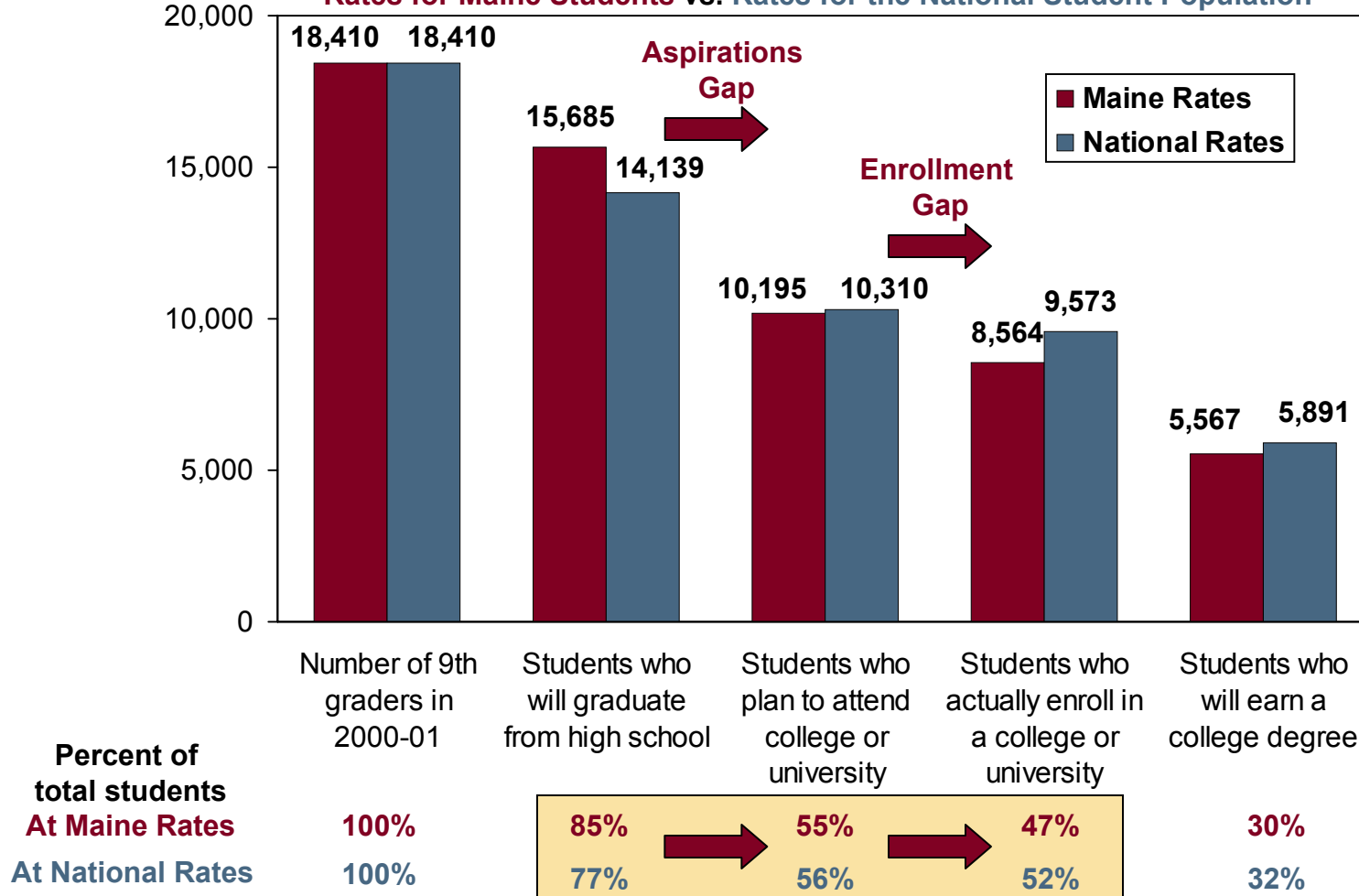
Post-secondary aspirations, enrollment and persistence rates contribute to the “gap” from high school graduation to college attainment

Note: % of students planning to attend modified to reflect most recent Maine Department of Education data

Source: Maine Education Policy Research Institute. Maine Department of Education (2001). National Center for Education Statistics (1999).

When Maine's Attainment Rate Is Disaggregated and Compared to National Expectations, the Largest Gaps Are Aspirations and Enrollment

Projected Educational Attainment of Maine Public School Ninth Grade Students
Rates for Maine Students vs. Rates for the National Student Population

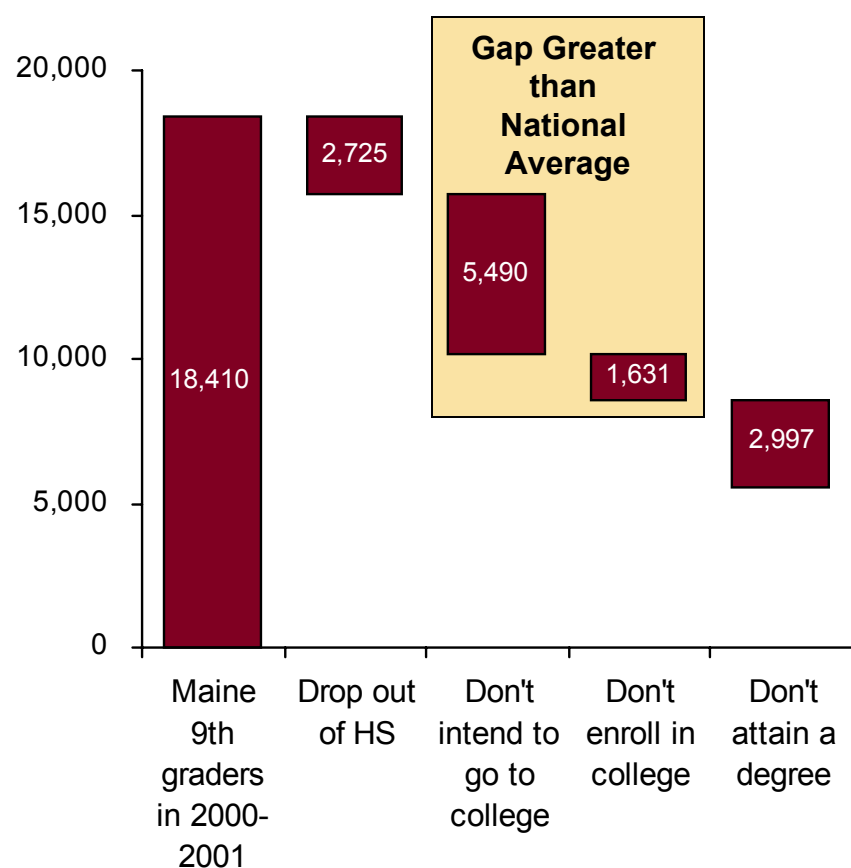


Source for ME rates: Maine Education Policy Research Institute. Maine Department of Education (2001). National Center for Education Statistics (1999).
 Source for US rates: National Center for Education Statistics (1999) for Graduation Rate; National Library of Education (1992) for Intentions to Enroll in Postsecondary; US DOE (1997) for Postsecondary Enrollment Rate; NCES *Condition of Education 1996* for Postsecondary Persistence Rates

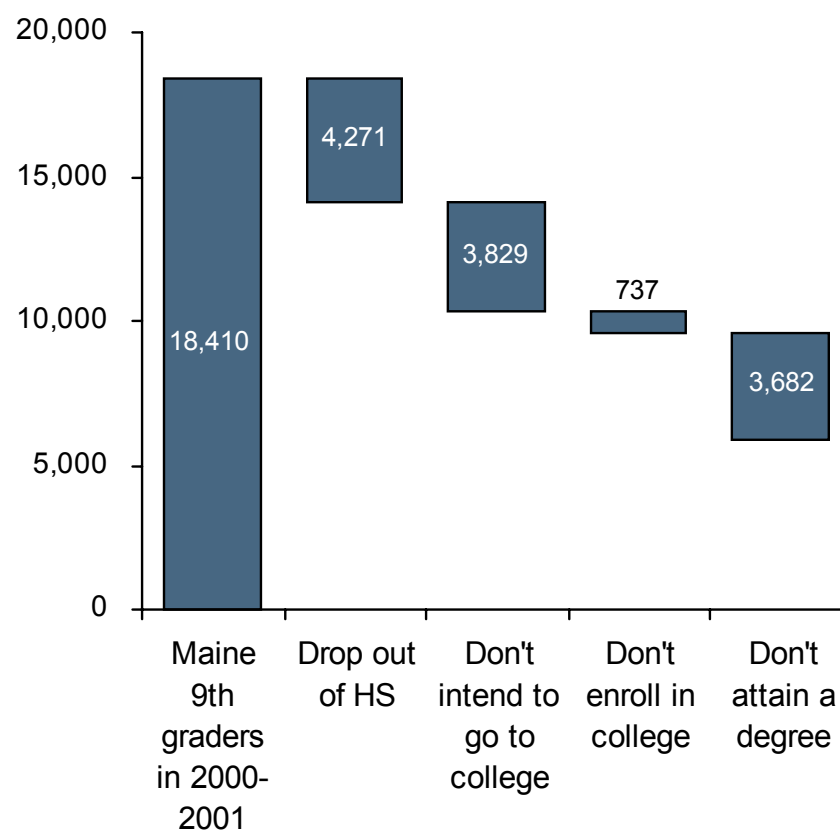
Relative to National Expectations, the 'Gap to College' Is Greater For Maine Students Who Don't Aspire To College or Aspire But Don't Enroll

Projected Educational Attainment of Maine Public School Ninth Grade Students

Status Quo
Rates for Maine Students



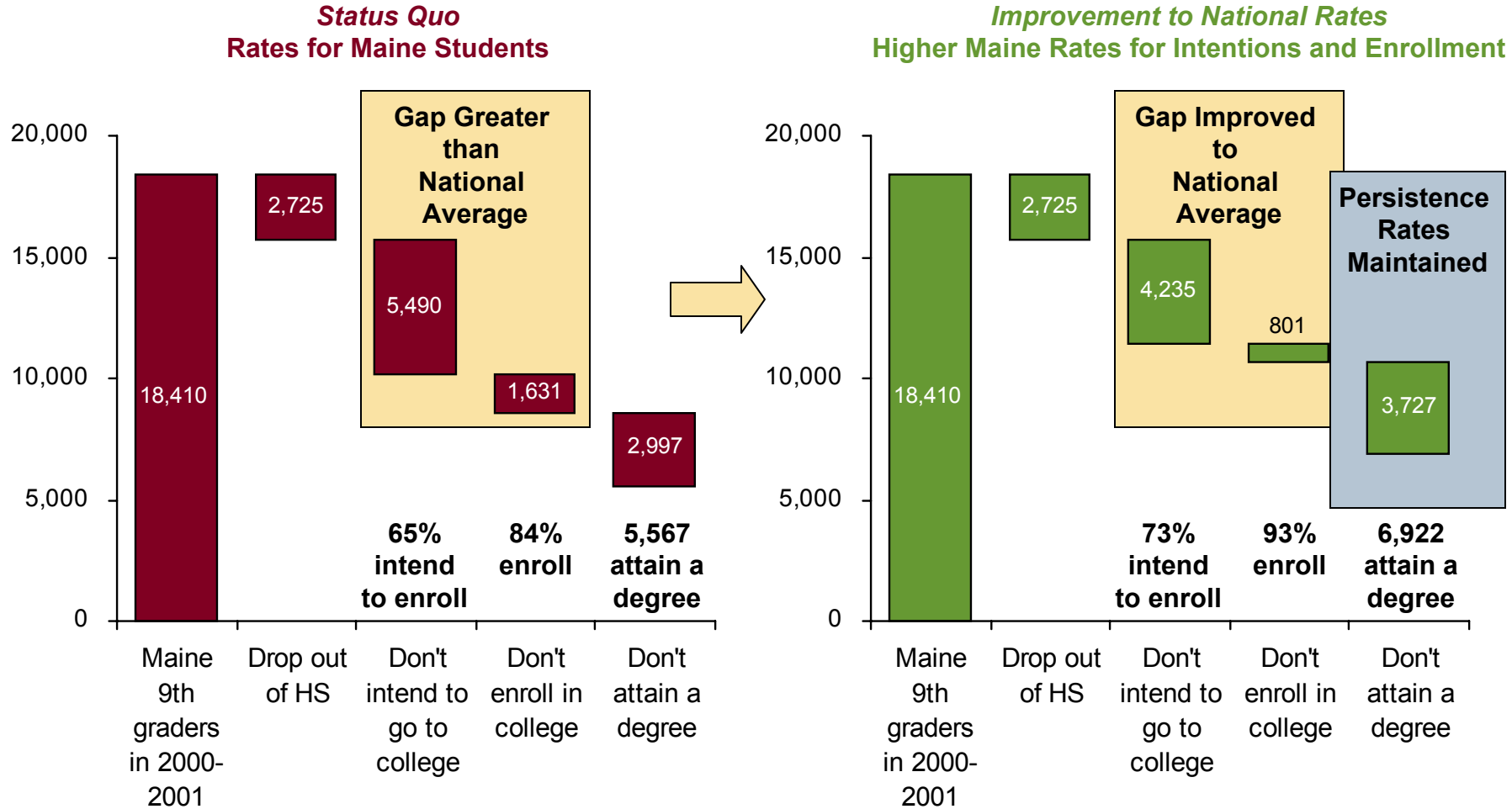
Comparison to National Expectations
Rates for the National Student Population



Source for ME rates: Maine Education Policy Research Institute. Maine Department of Education (2001). National Center for Education Statistics (1999). Source for US rates: National Center for Education Statistics (1999) for Graduation Rate; National Library of Education (1992) for Intentions to Enroll in Postsecondary; US DOE (1997) for Postsecondary Enrollment Rate; NCES *Condition of Education 1996* for Postsecondary Persistence Rates

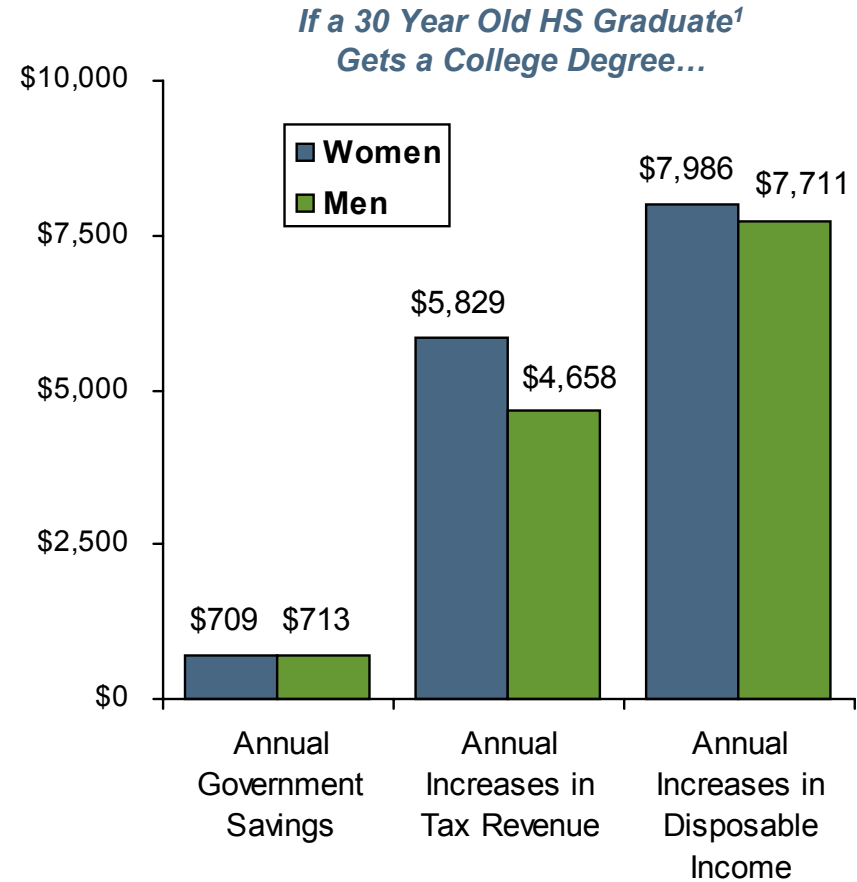
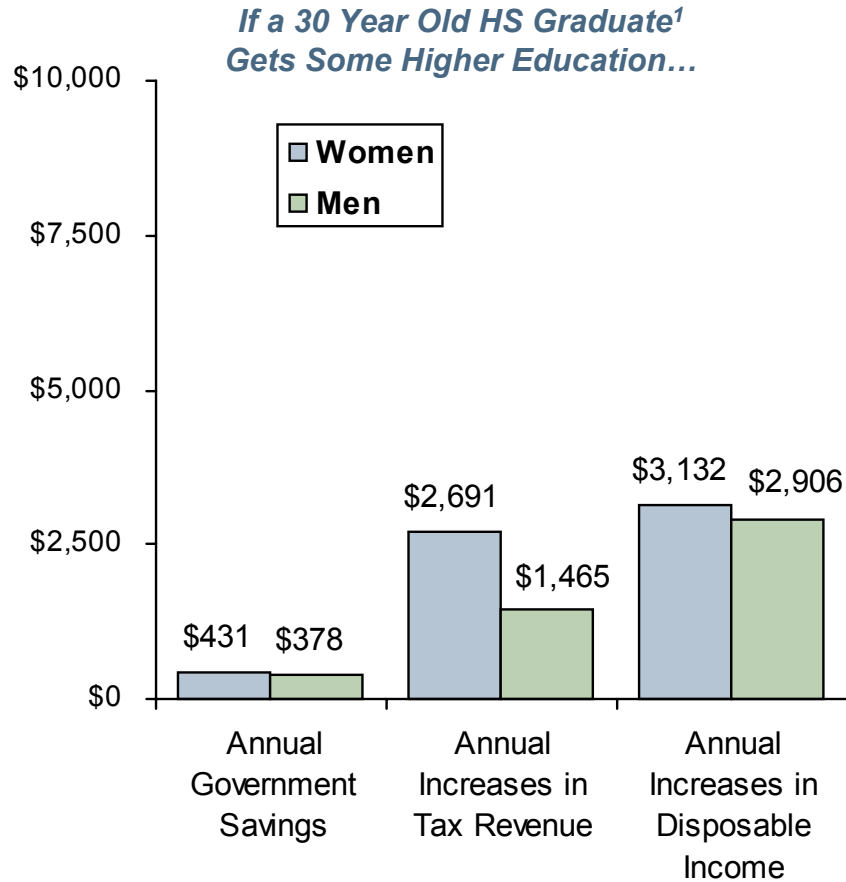
If Aspirations and Enrollment Increased to US Averages and Persistence Is Maintained, 1,355 More Students Would Attain Degrees Each Year

Projected Educational Attainment of Maine Public School Ninth Grade Students



Source for ME rates: Maine Education Policy Research Institute. Maine Department of Education (2001). National Center for Education Statistics (1999). Source for US rates: National Center for Education Statistics (1999) for Graduation Rate; National Library of Education (1992) for Intentions to Enroll in Postsecondary; US DOE (1997) for Postsecondary Enrollment Rate; NCES *Condition of Education 1996* for Postsecondary Persistence Rates

Each Additional Maine Student Attaining a Higher Degree Saves On Government Programs and Increases Tax Revenue and Income



For each class of Maine students, if 1,355 more attain college degrees, each year there would be an additional \$1M in government savings, \$7M in new tax revenue, and over \$10M in new disposable income²

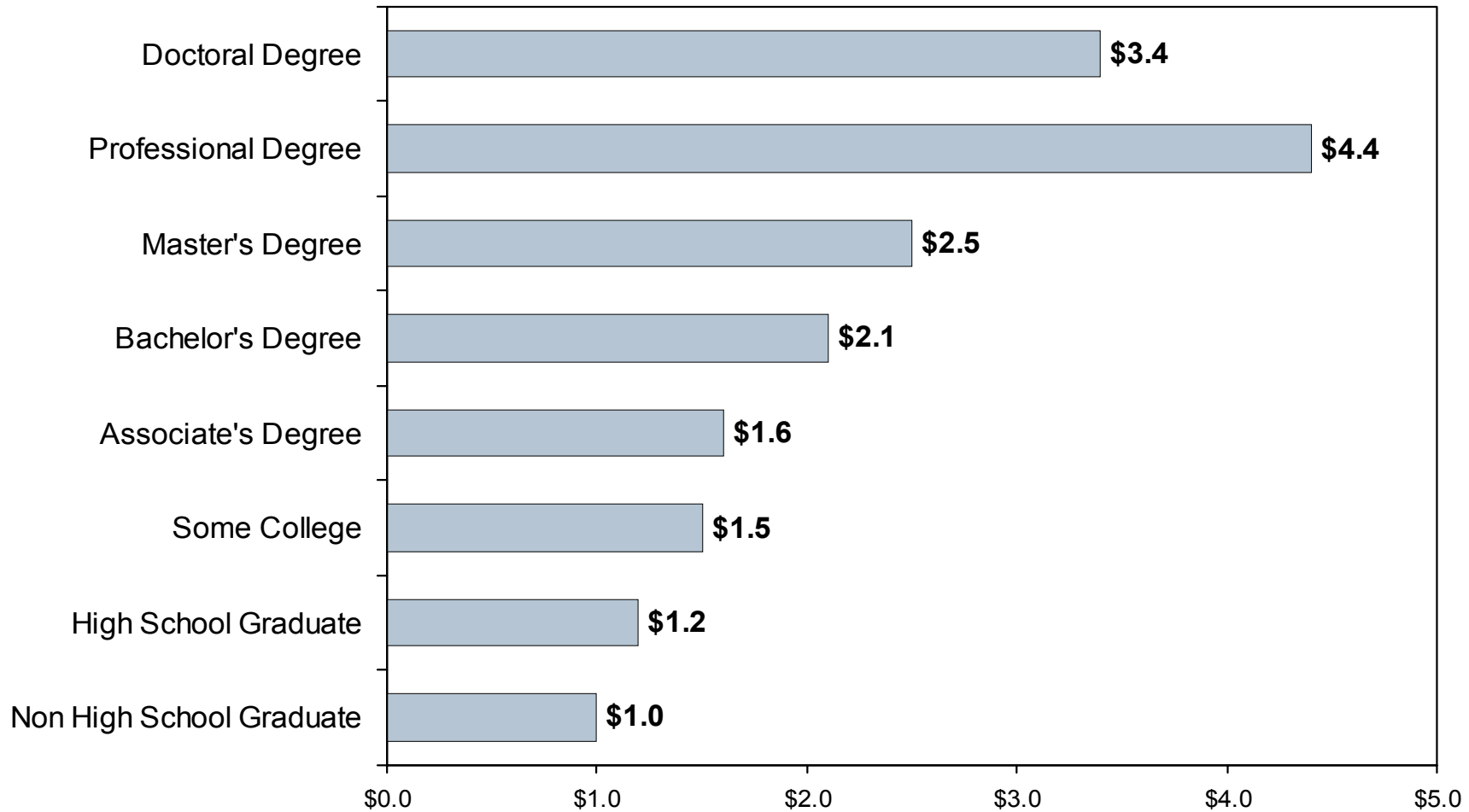
¹Statistics for Non-Hispanic White Population

²Calculations use national averages for 30 year old men and women (averaged), multiplied by the number of students

Source: *Higher Education for All Maine People*, Maine Center for Economic Policy; 1999 RAND study *Closing the Educational Gap: Benefits and Costs*

Over Their Adult Working Life, Maine Students With a Bachelor's Degree Earn \$900,000 More Than Those With Only a High School Diploma

Work-Life Earnings Estimates for Full-Time Workers
\$ Millions, Based on 1997-1999 Work Experience



Source: *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings*, US Census Bureau, July, 2002

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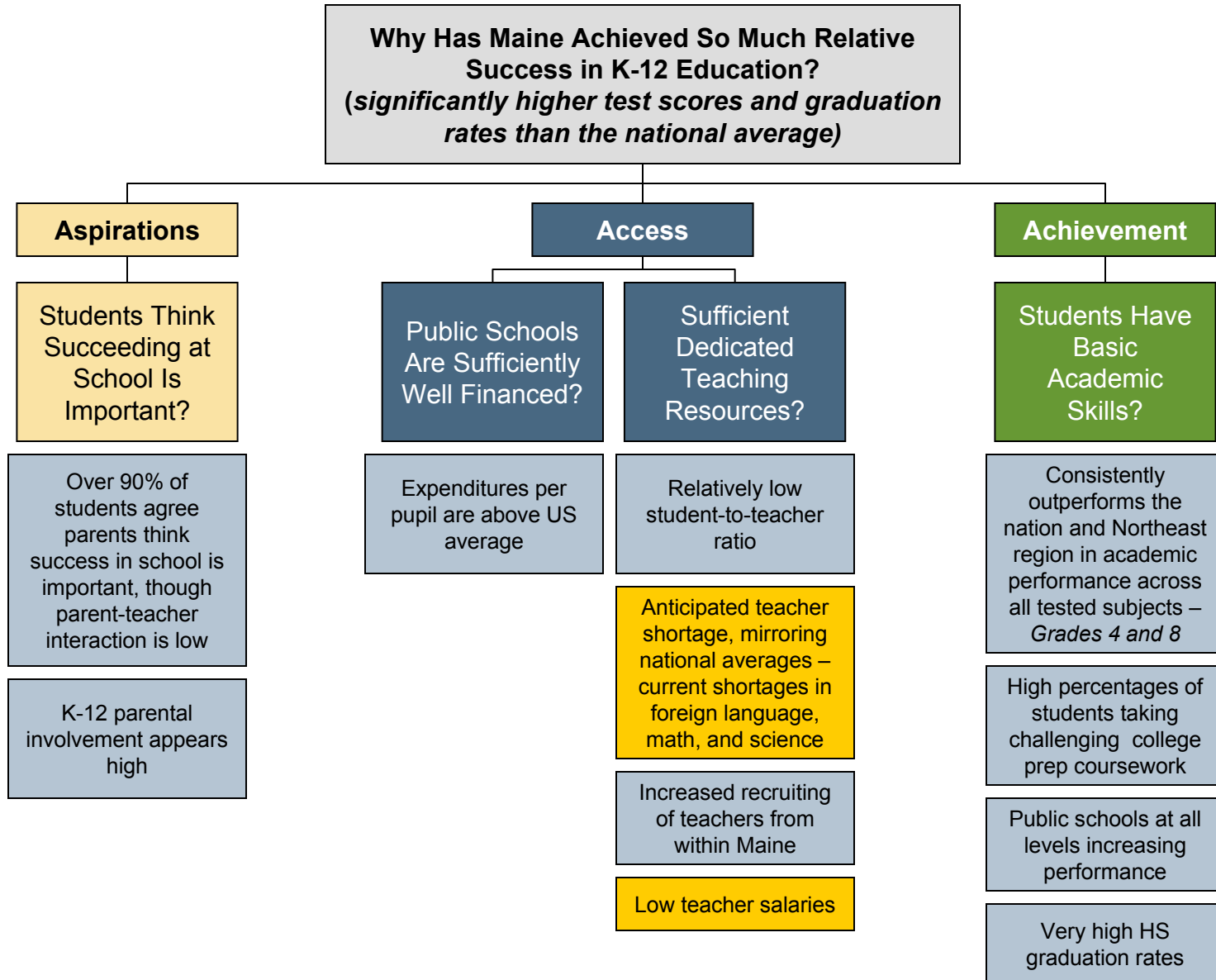
III. Regional Differences

Summary of K-12 Education

Studies show that Maine's K-12 educational system performs very well, both relative to the nation and the region

- Student **aspirations** to succeed in school, as measured by parental involvement in the schools, exceed national levels.
- **Access** issues, like K-12 public school funding and expenditures per pupil, are above national averages. Maine students enjoy better teacher-to-student ratios than the national average, although public schools may face a teacher shortage as the teaching population ages and retires.
- Maine consistently outperforms the nation and the northeast region on K-12 **achievement**. Maine students have significantly higher test scores and high school graduation rates (including GED recipients) than the national and northeast averages.

A Wide Variety of Factors May Be Contributing to Maine's Outstanding K-12 Achievement



Aspirations

Initial Definition of Success Factors

Aspirations

- Students want to get past barriers and to achieve educational success

Access

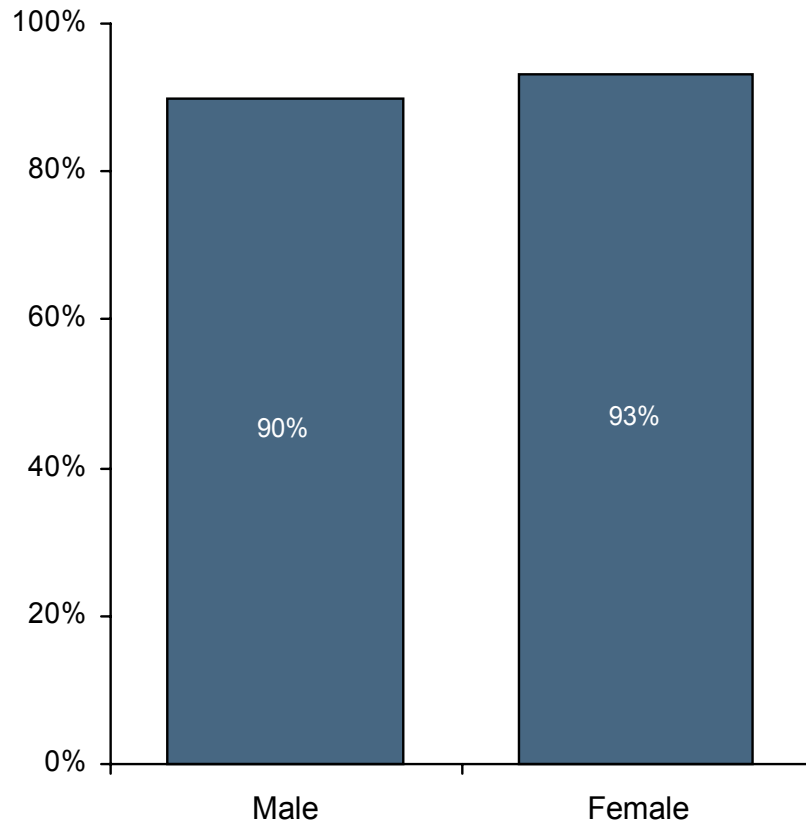
- Students have resources and opportunities necessary to achieve educational success

Achievement

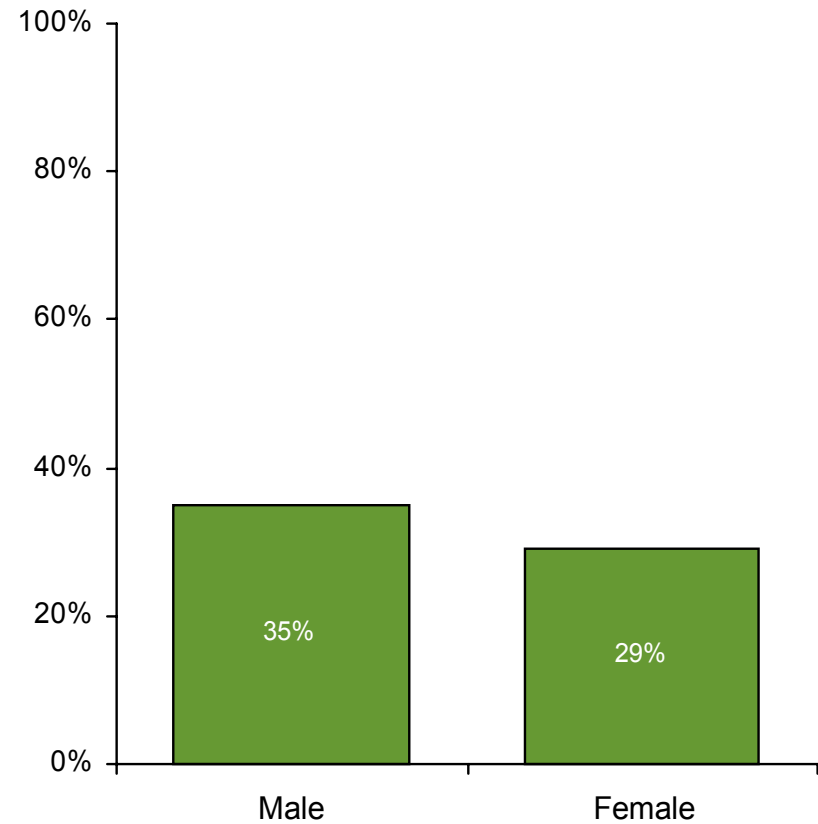
- Students have the skills and preparation necessary to achieve educational success

Success in School Is a Clear Parent Priority, Though Over 65% of Students Are Not Aware of Parent-Teacher Interaction

My Parents Care About My Success In School
% Agree or Strongly Agree



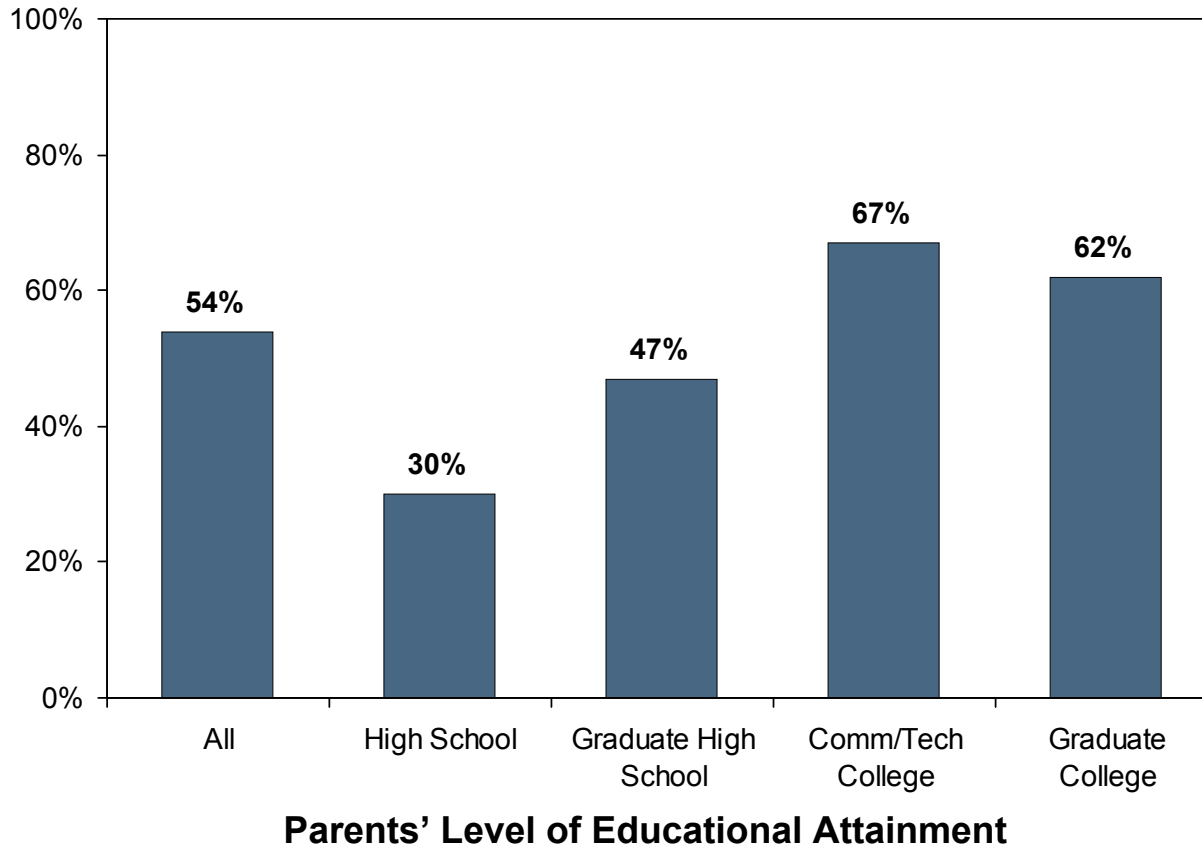
My Parents and My Teachers Talk to Each Other
% Agree or Strongly Agree



Source: National Center for Student Aspirations survey – Data collected from over 60,000 students representing every county in Maine

Parental Involvement in Children’s Education Appears High Overall, but is Linked to Parental Educational Attainment

Percentage of Maine Parents Who Attended 6 or More Meetings and Events at Their Children’s Schools, 2000



- The National Center for Education Statistics defines “high” parental involvement as involvement in **3** or more activities per year (*half of the MDF definition*)
- In 1996, the percent of parents nationwide with “high” parental involvement was
 - 69% for grades 3-5
 - 53% for grades 6-8
 - 39% for grades 9-12

Source: Maine Marks, taken from Maine Development Foundation 2000 Citizen/Business Survey; National Center for Education Statistics, 1996 National Household Education Survey.

Access

Initial Definition of Success Factors

Aspirations

- Students want to get past barriers and to achieve educational success

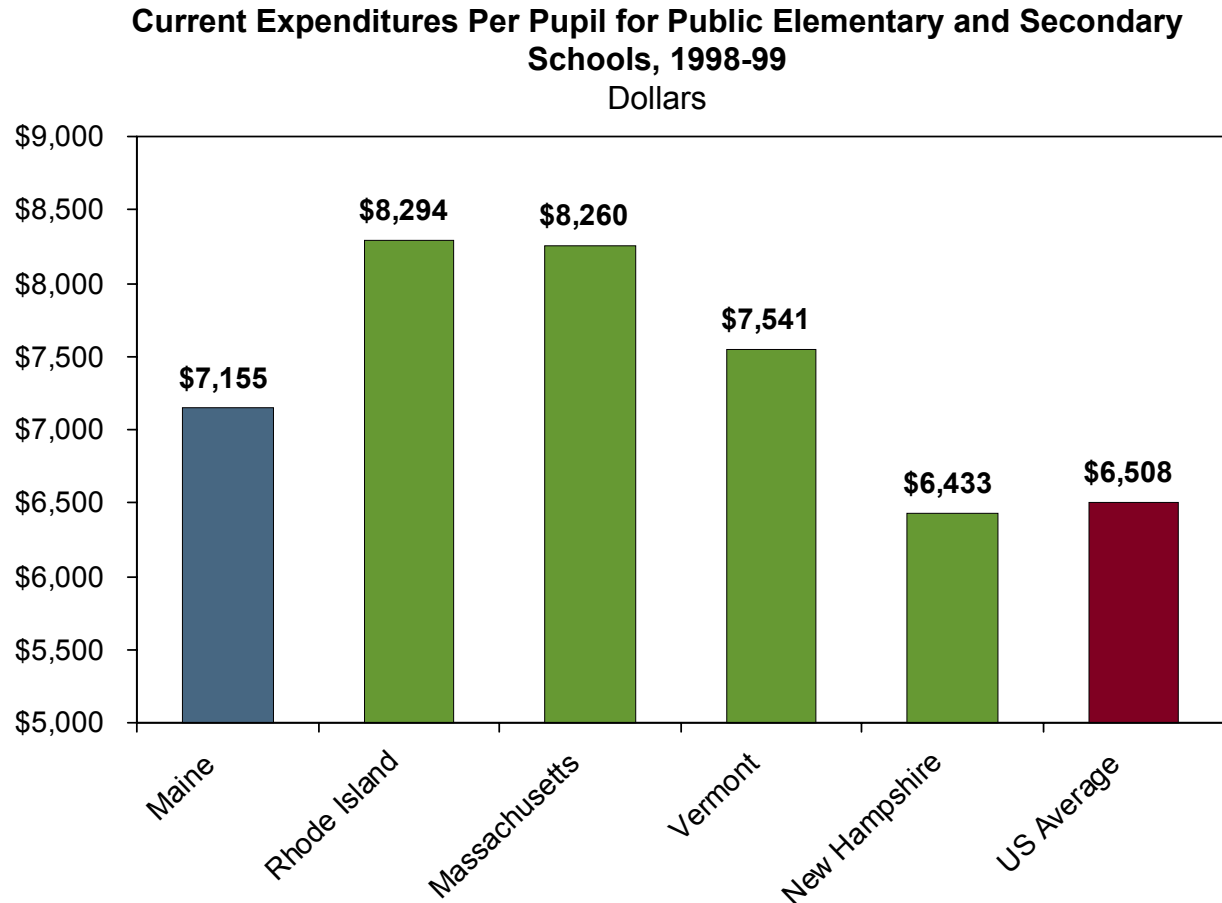
Access

- Students have resources and opportunities necessary to achieve educational success

Achievement

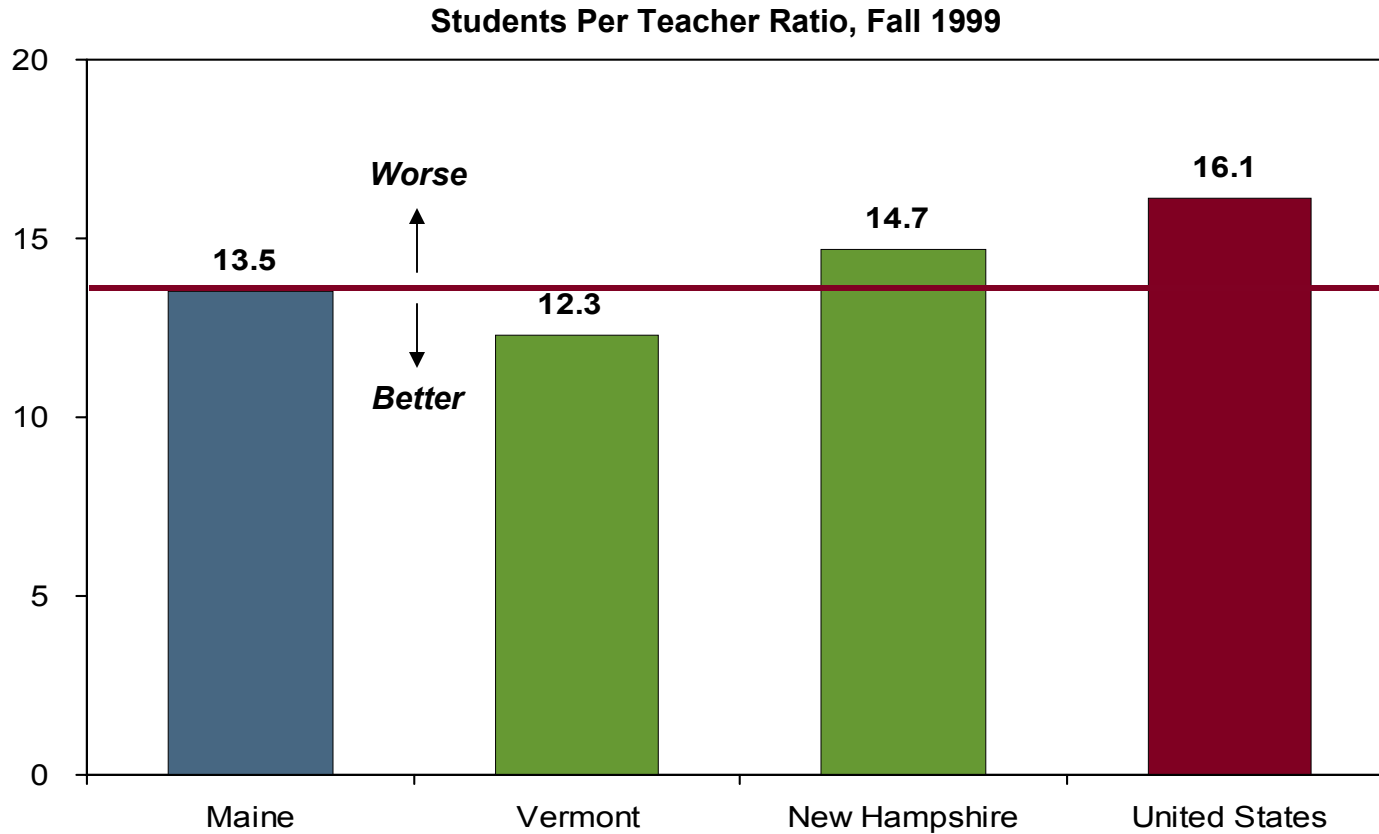
- Students have the skills and preparation necessary to achieve educational success

Maine Spending Per Pupil is Above US Average and New Hampshire, Although Below Other New England States



Source: National Center for Education Statistics, "Revenues and Expenditures for Public Elementary and Secondary Education", July 2001.

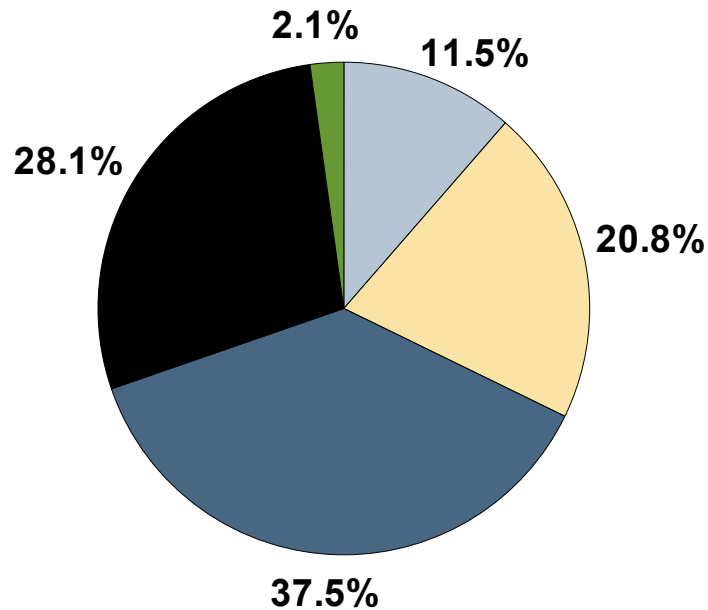
Maine Has A Student-to-Teacher Ratio Significantly Better Than the National Average



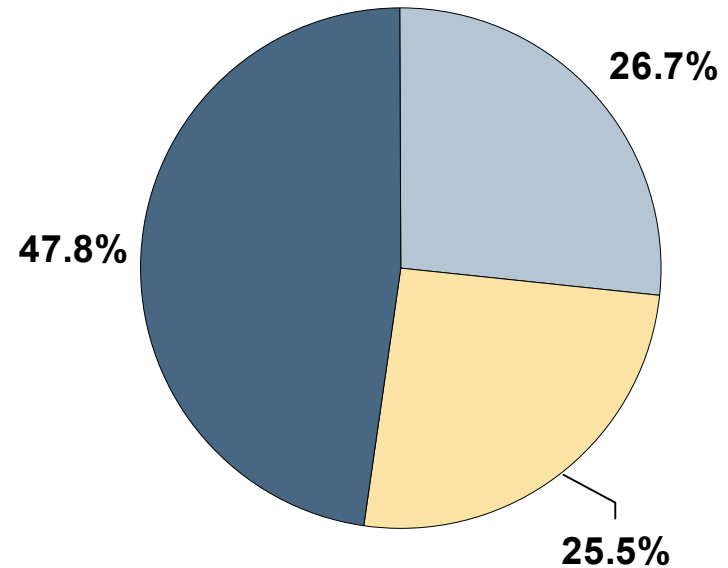
Source: Maine Education Policy Research Institute. NEA Rankings of the States.

Maine's Potential for Future Teacher Shortages Mirrors National Figures

Ages of Maine Teachers, 1999-00



Ages of All US Teachers, 1998



Maine could face a teacher shortage as many approach retirement

Source: Maine Education Policy Institute. Maine Department of Education. US Department of Commerce, Bureau of the Census, March Current Population Surveys.

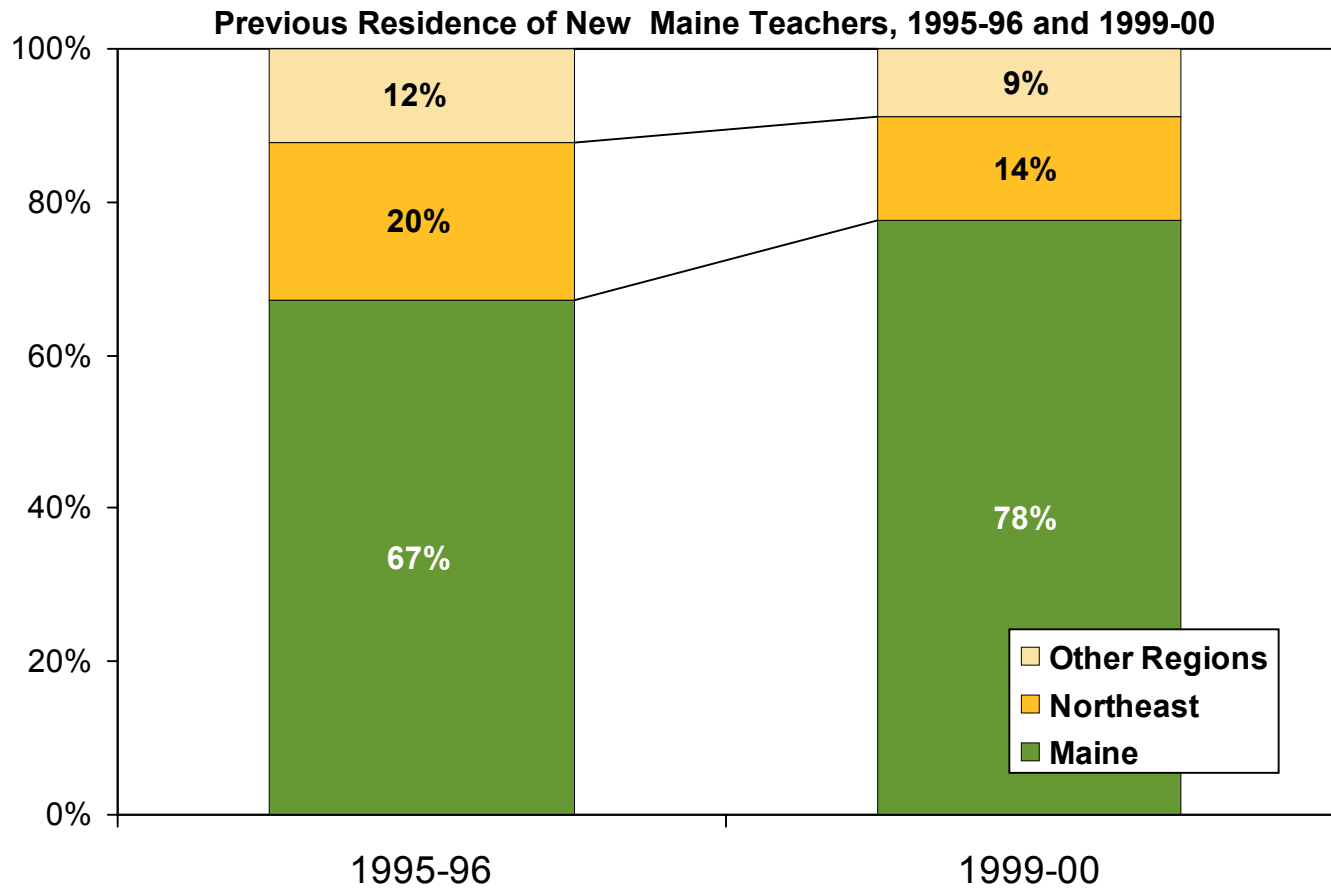
Current Teacher Shortages Are Most Pronounced in Foreign Languages, Math, Science, Special Education and Technology

Percent of Maine Principals that reported Slight or Considerable Educator Shortages

	<i>Elementary School</i>	<i>Middle School</i>	<i>High School</i>
Elementary Classroom Teachers	22%	-	-
Elementary Education Technicians	39%	-	-
English/Language Arts Teacher	-	31%	37%
Mathematics Teacher	-	72%	89%
Science Teacher	-	78%	87%
Social Studies Teacher	-	30%	20%
Foreign Languages Teacher	-	94%	91%
Visual or Performing Arts Teacher	-	72%	69%
Health or Physical Education Teacher	-	40%	33%
Career Preparation Teacher	-	58%	48%
Special Education Teacher	76%	76%	82%
Special Education Directors	-	82%	84%
Guidance/Counseling Staff	69%	74%	74%
Librarians	62%	68%	76%
Technology Coordinators/Specialists	-	85%	87%
Nurses	55%	55%	59%

Source: Maine Education Policy Research Institute, 1999

Maine Has Recently Recruited More New Teachers from In-State, Reflecting the Growing Role of the State’s Teacher Preparation Programs



**New Teachers
As a % of All Maine Teachers**

1995-96
7.4%

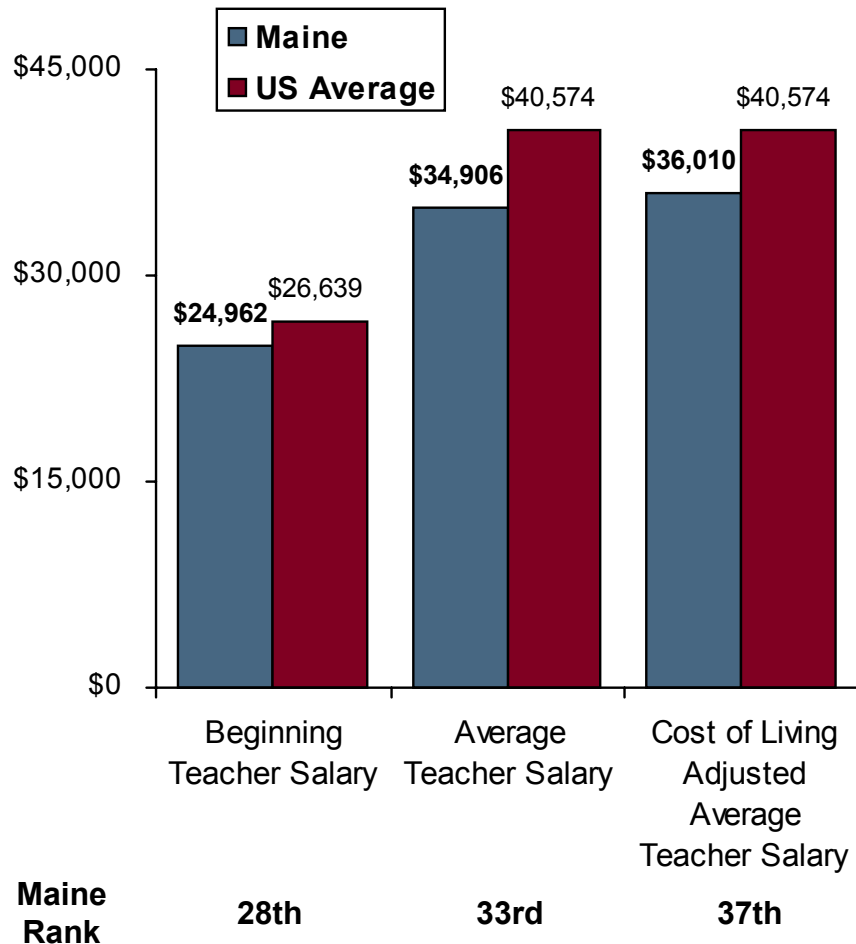
1999-00
11.3%

This trend could also signal a reduced ability to compete for teachers from other states, as all states experience increasing teacher shortages

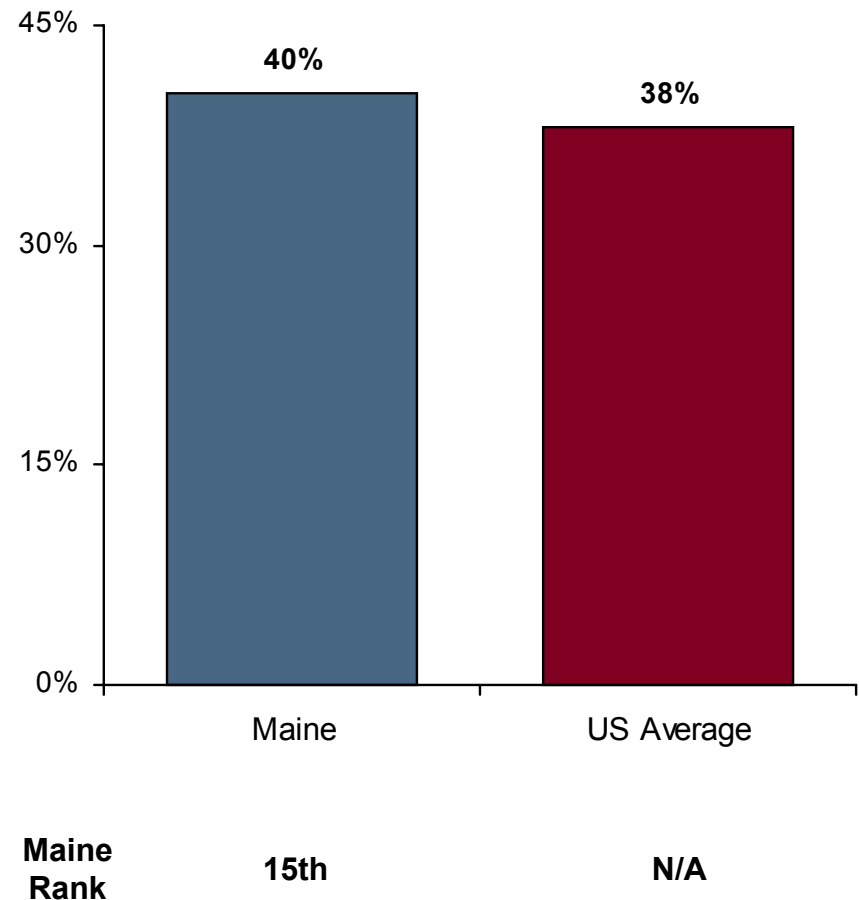
Source: *Quality of Educators: The Best Opportunity for Maine Children*, Final Report for the K-12 Educator Recruitment and Retention Commission, April 2001

While Maine’s Teacher Salaries Are Significantly Below Average, Salaries Are A Relatively Large Share of Public Education Spending

Comparison of Maine Teacher Salaries, 1998-99



Comparison of Education Spending on Teacher Salaries, 1998-99



Source: *Quality of Educators: The Best Opportunity for Maine Children*, Final Report for the K-12 Educator Recruitment and Retention Commission, April 2001

Achievement

Initial Definition of Success Factors

Aspirations

- Students want to get past barriers and to achieve educational success

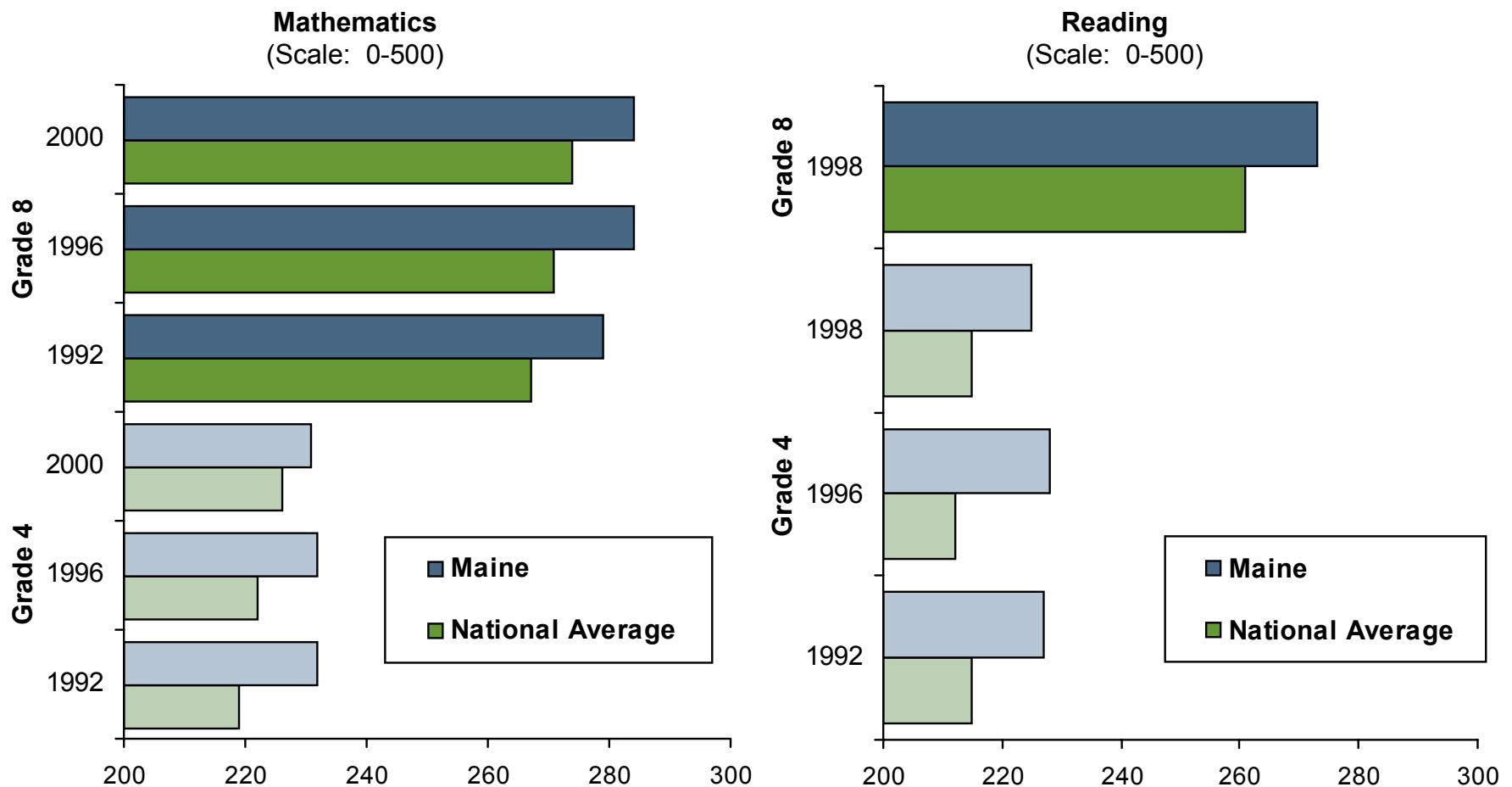
Access

- Students have resources and opportunities necessary to achieve educational success

Achievement

- Students have the skills and preparation necessary to achieve educational success

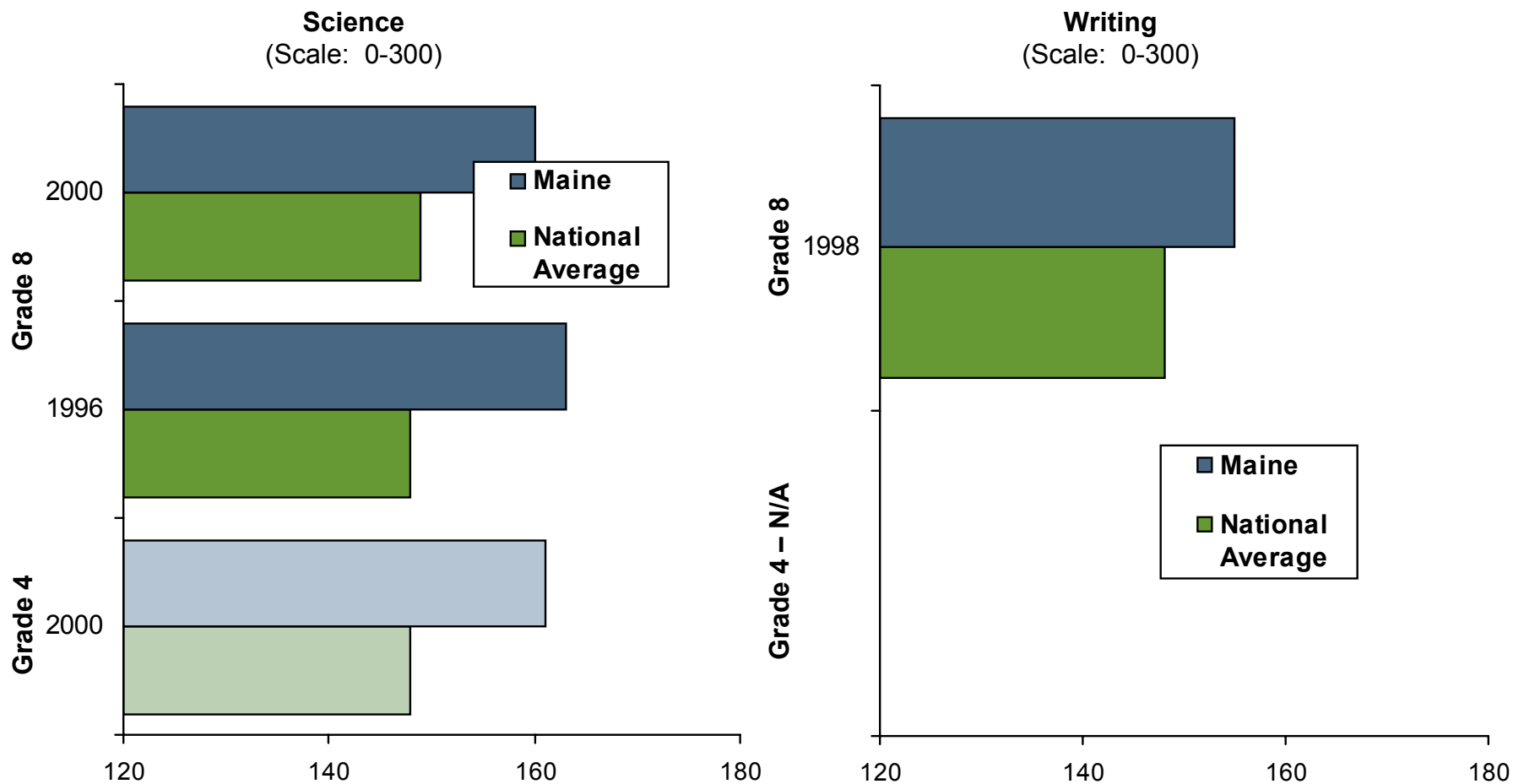
Maine Students Score High Above National Averages in Mathematics and Reading, In Both 4th and 8th Grades



Maine scores are also consistently above Northeast averages

Source: National Center for Education Statistics – *The Nation's Report Card State Profiles*- www.nces.ed.gov

Maine Students' Science and Writing Scores Also Exceed National Averages

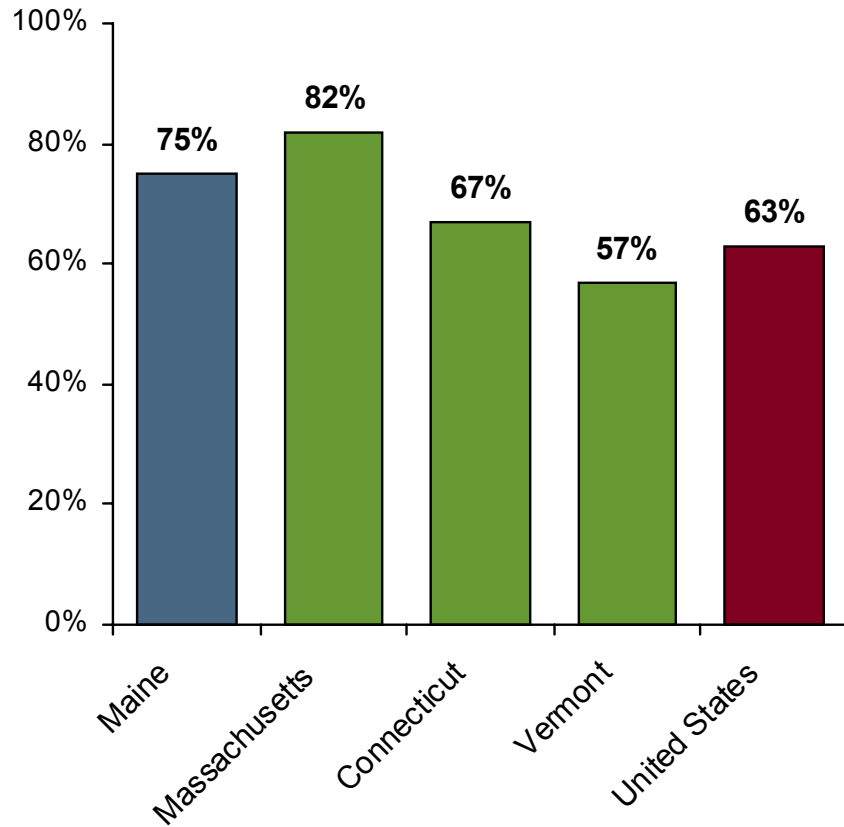


Only Connecticut, Minnesota and Montana score significantly higher than Maine students on either test

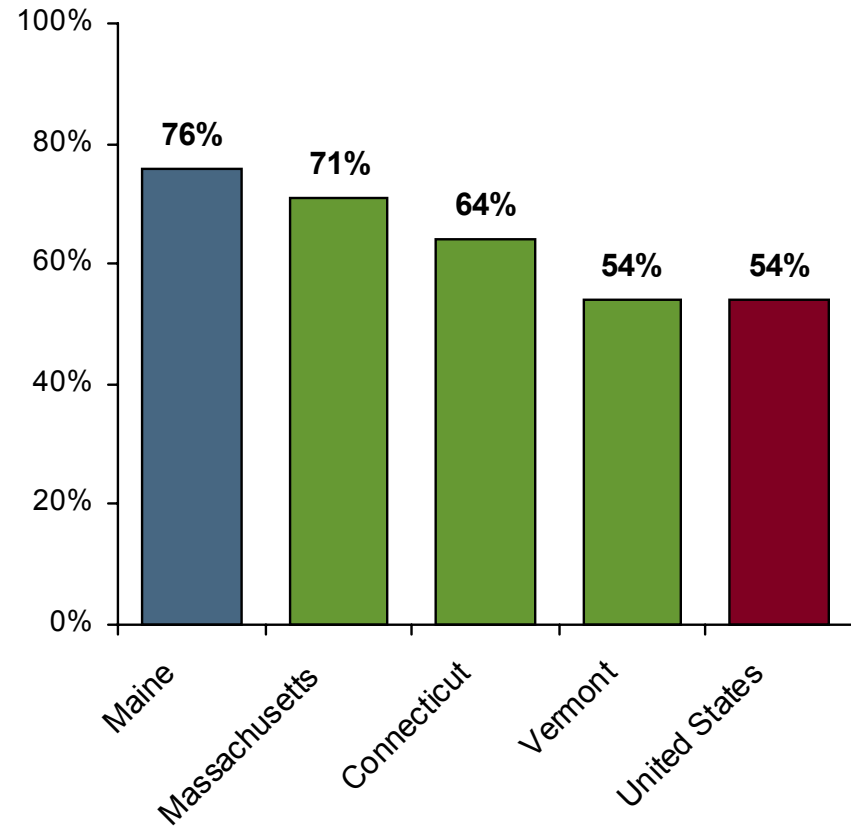
Source: National Center for Education Statistics – *The Nation's Report Card State Profiles*- www.nces.ed.gov

Maine Students Take Algebra 2 and Chemistry At Rates Much Higher Than the National Averages

Percent of High School Students Taking Algebra 2 or Equivalent by Graduation



Percent of High School Students Taking Chemistry by Graduation



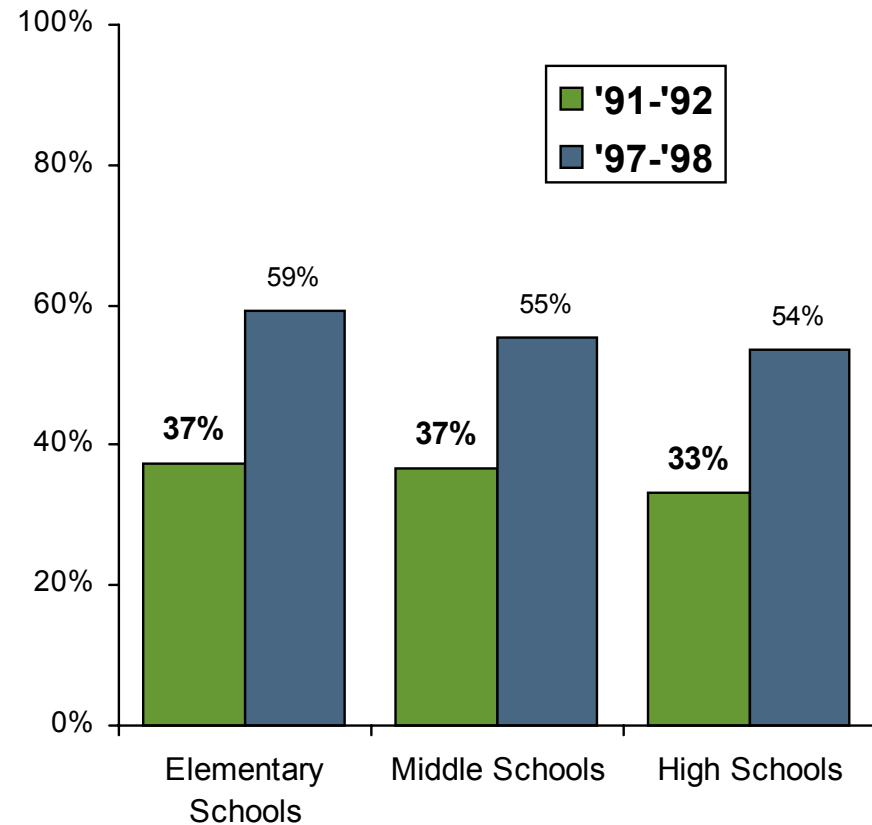
Source: *A Decade of Progress and Some Lessons Learned*, David Silvernail at USM; Maine Education Symposium August 9, 2001

The Percent of Maine Schools That Outperform Expectations on Standardized Tests Has Increased Consistently For Each School Type

**Definition of a
“Higher Performing” School:**

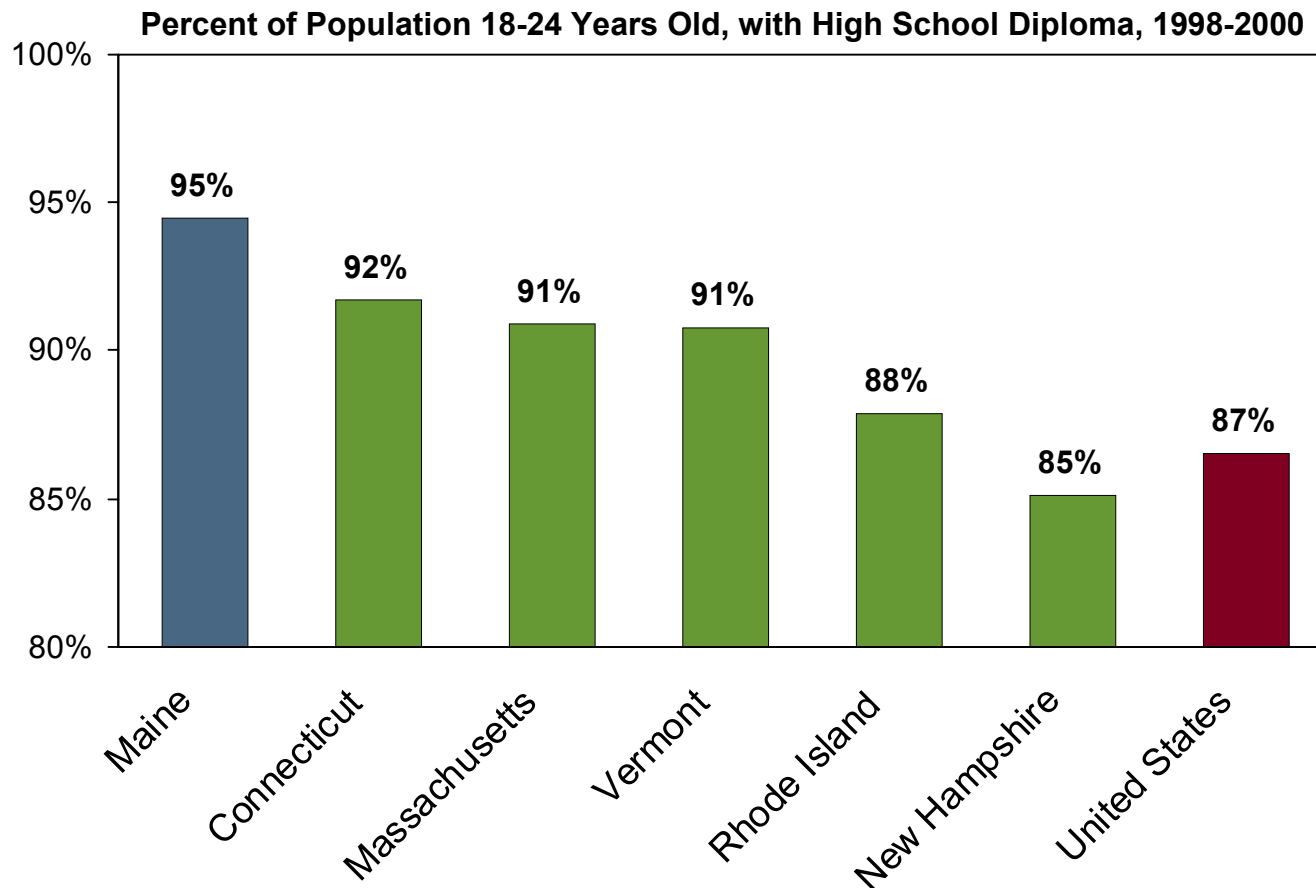
*Achievement on standardized
educational assessments
exceeds the predicted scores*

**% of “Higher Performing” Public Schools
'91-'92 versus '97-'98 School Years**



Source: *A Decade of Progress and Some Lessons Learned*, David Silvermail at USM; Maine Education Symposium August 9, 2001

Maine’s Recent High School Degree Attainment Eclipses All Other New England States and the US



Source: Maine Education Policy Research Institute. US Census Bureau, 2001, Current Population Survey, 1998, 1999, 2000.

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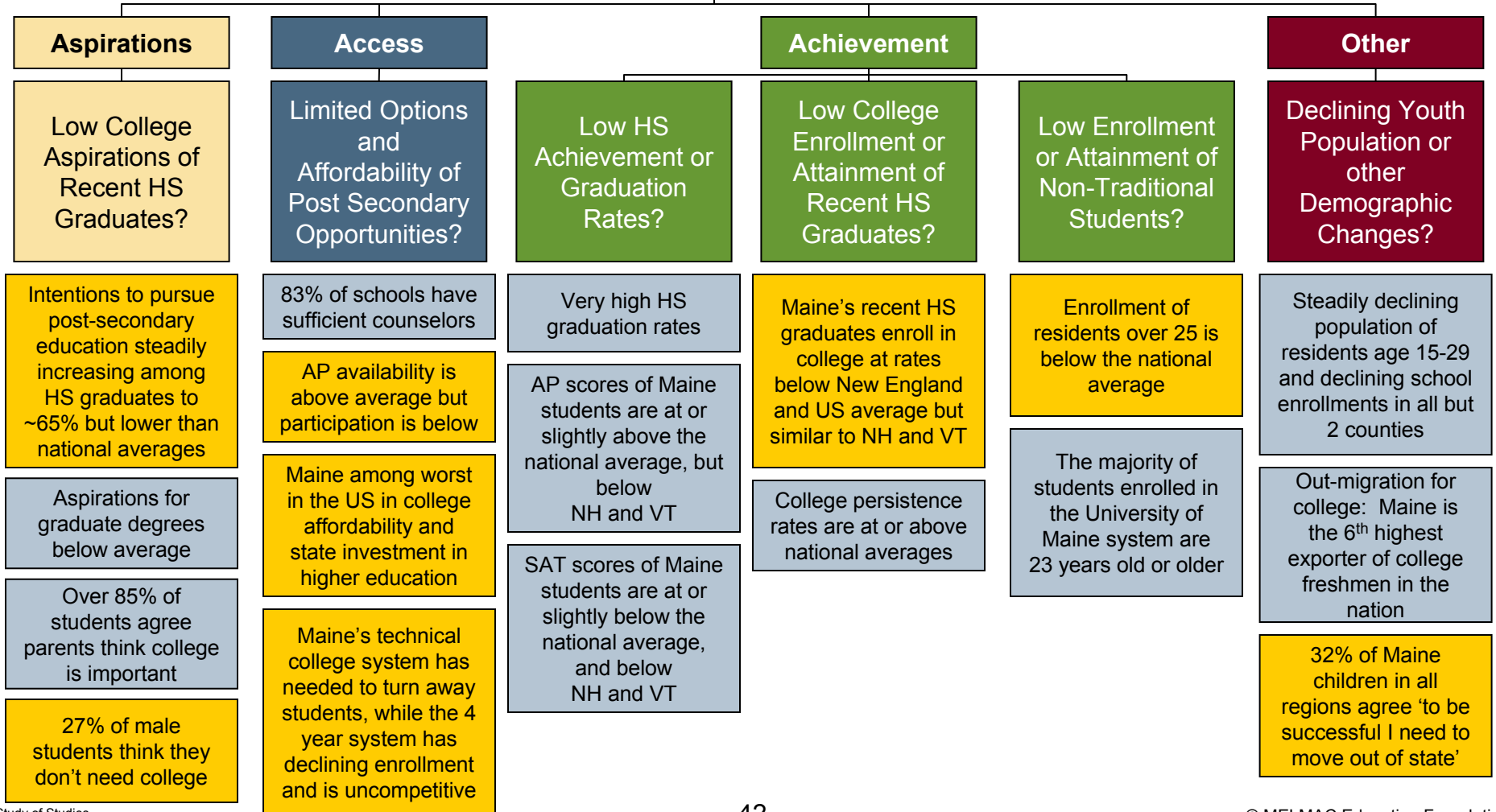
Summary of Post Secondary Education

Maine students underperform in post secondary attainment relative to the nation and the region:

- Student **aspirations** to pursue postsecondary education have been steadily increasing in Maine, but still trail national averages by approximately 10%. Parents' own educational attainment levels are critical, and are correlated to their children's educational success.
- **Access** to college preparation resources in high school (e.g., number of counselors, AP course availability) is above average in Maine, though the application of these resources may be an area for improvement. Access issues are also significant after students leave high school. This is true both for recent high school graduates and nontraditional students.
 - Cost is a significant barrier to college access. Maine ranks as one of the worst in the nation in both affordability and state investment in higher education.
 - Maine's postsecondary infrastructure lacks sufficient low-cost entry points, a key component of success for states successful in increasing bachelor's degree attainment rates. The technical college system appears to be at over-capacity.
- Lack of **achievement** at the high school or postsecondary levels does not appear to be a major factor contributing to Maine's low college attainment. Once students are in college, persistence rates are at or above national averages, although if enrollment rates increase colleges may have more difficulty retaining students who currently don't enroll in college.
- **Demographic factors** present a challenge to increasing Maine's statewide bachelor's degree attainment rates. Maine's youth population is steadily declining as the older population grows, and postsecondary enrollment for nontraditional students is below the national average. Maine is a net exporter of college freshmen to other states, primarily to attend 4 year institutions.

A Wide Variety of Factors May Be Contributing to Maine's Low Participation In Higher Education

Why is There Such Low Percentage of Adults in Maine with at Least a Bachelor's Degree?
(significantly lower than national average and decreasing in national rank)



Aspirations

Initial Definition of Success Factors

Aspirations

- Students want to get past barriers and to achieve educational success

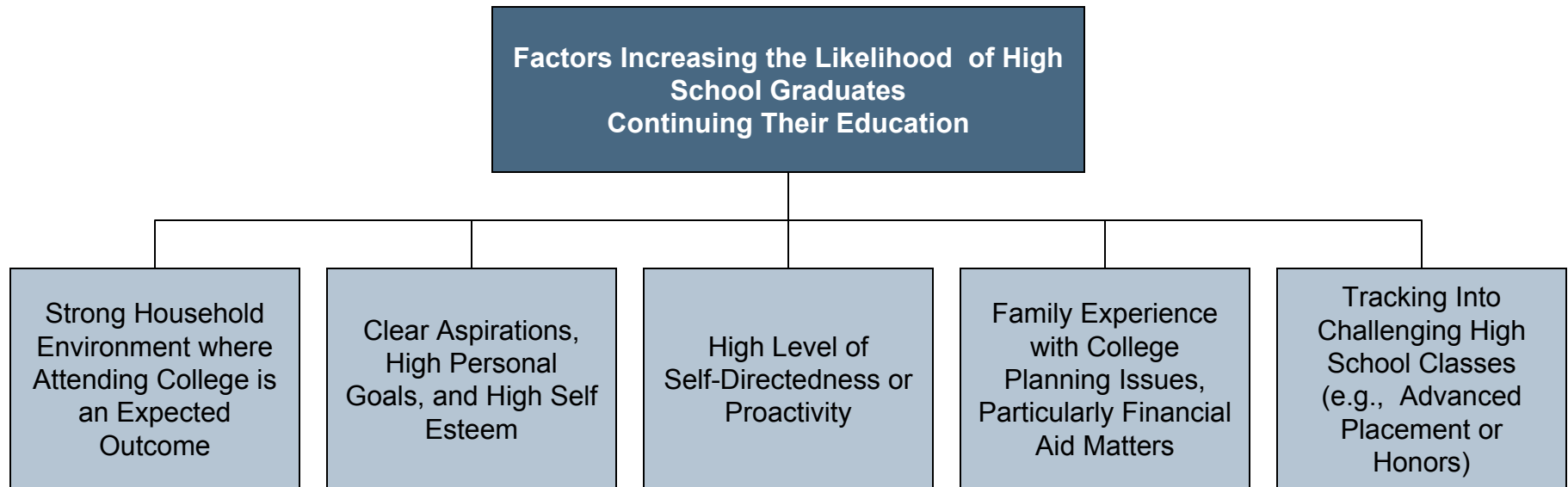
Access

- Students have resources and opportunities necessary to achieve educational success

Achievement

- Students have the skills and preparation necessary to achieve educational success

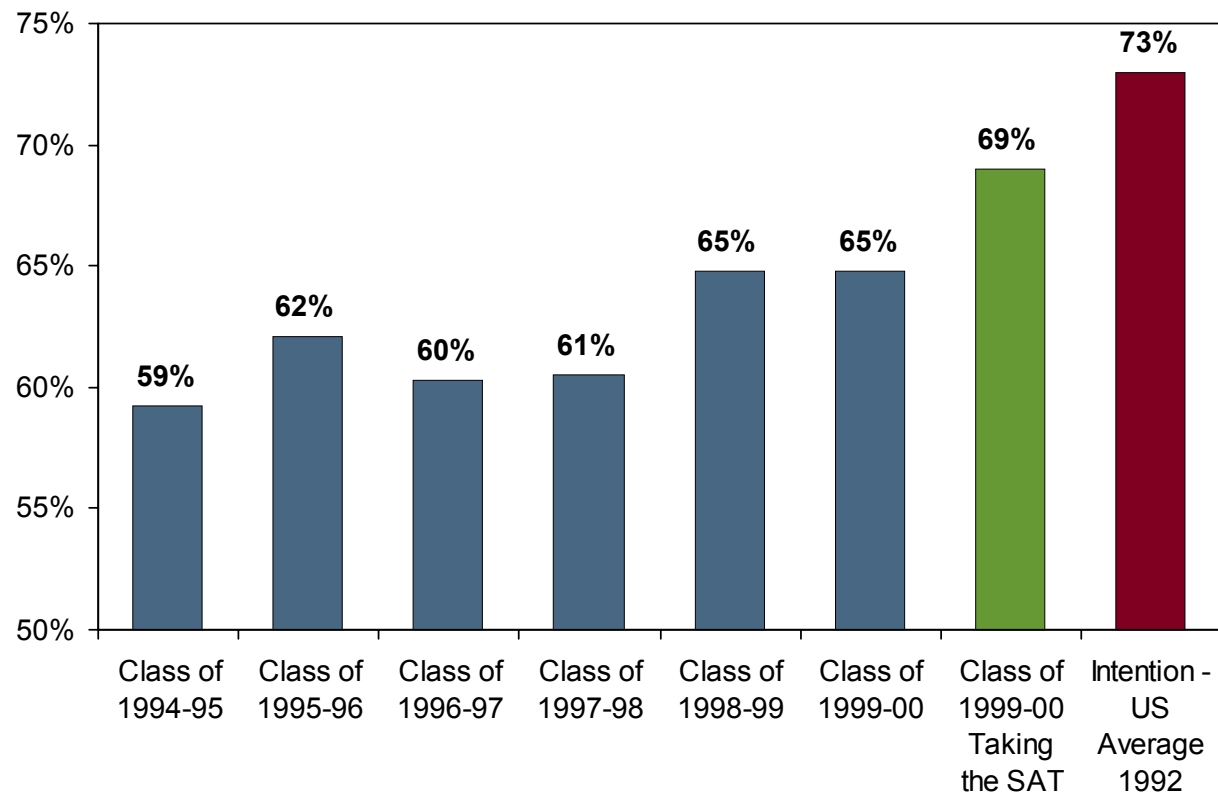
College Aspirations Are Determined by Multiple Environmental and Personal Factors



“While some areas of Maine are perceived by students as offering greater economic opportunity and access to jobs, the similarity in findings across the state is suggestive that a student’s academic background and tracking level are more significant predictors of college aspiration than is the area in which the student lives.”

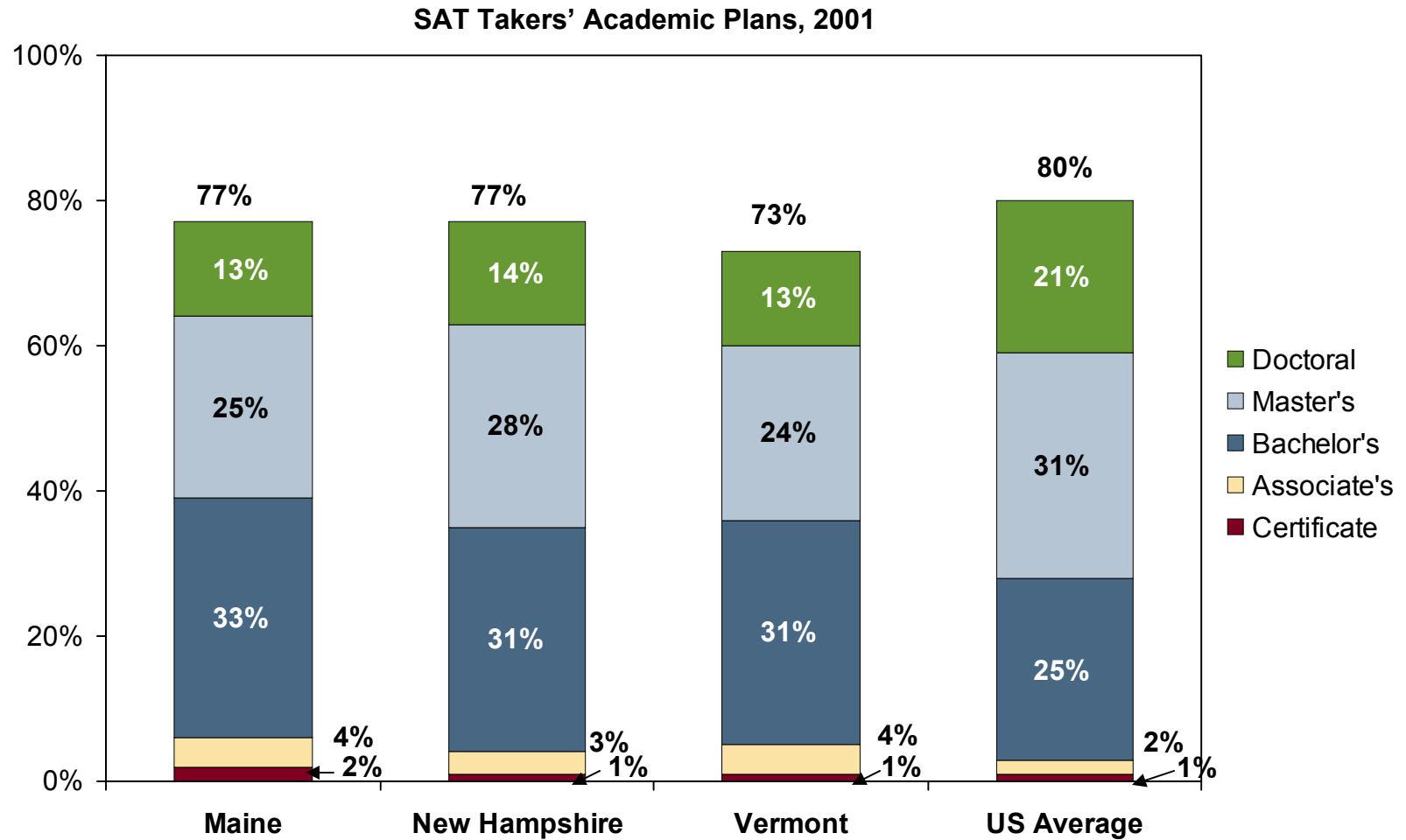
The Percent of Maine Public High School Graduates Intending to Go To College Has Increased 6% In the Past Five Years But Lags the Nation

Maine Public High School Graduates *Intending* to Pursue Post-Secondary Education



Source: Maine Education Policy Institute. Maine Department of Education. National Library of Education (1992) for US Average of Intentions to Enroll in Postsecondary Education

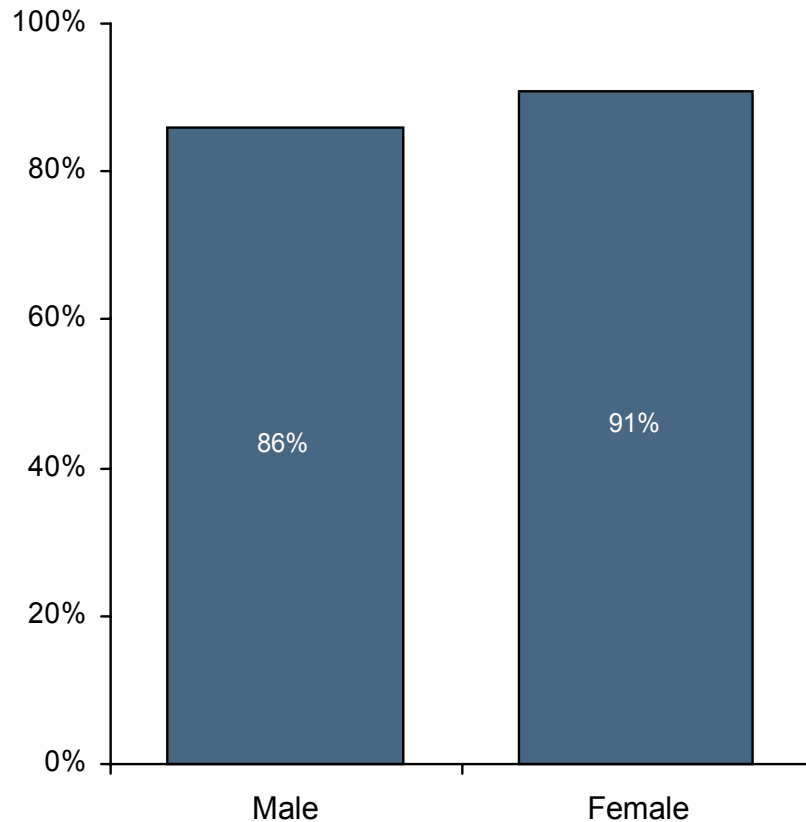
Maine SAT-Takers Have Below-Average Aspirations for Graduate Degrees, Though Similar to NH and Exceeding VT



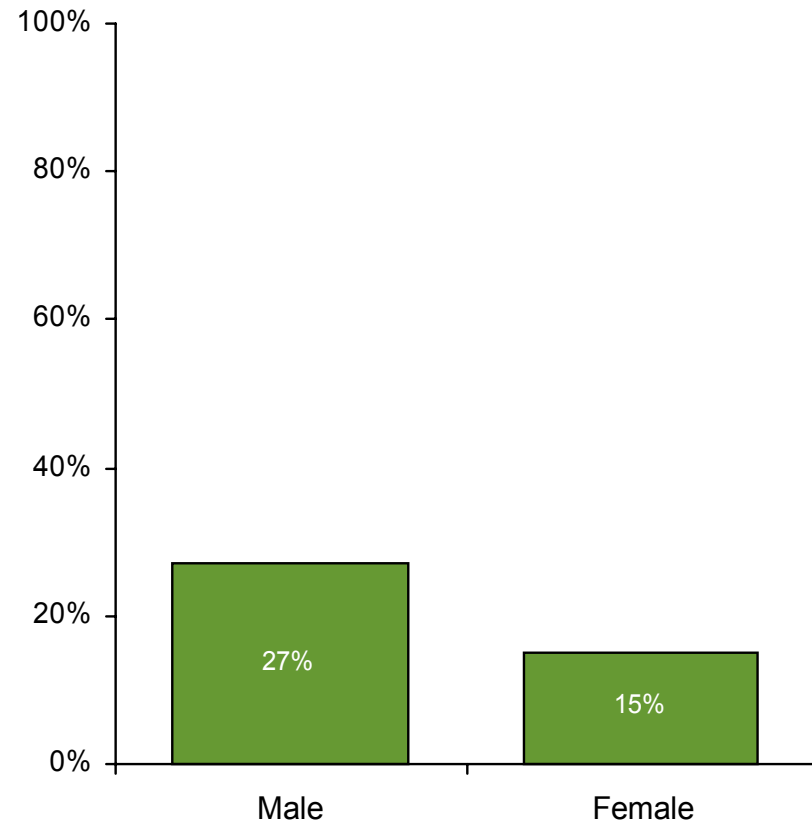
Source: Maine Education Policy Institute. The College Board, 2001

Over 85% of Maine Students Agree Parents Think College Is Important and Over ¾ of Students Believe College Is Necessary for Job Reasons

My Parents Think Going to College Is Important for Me...
% Agree or Strongly Agree



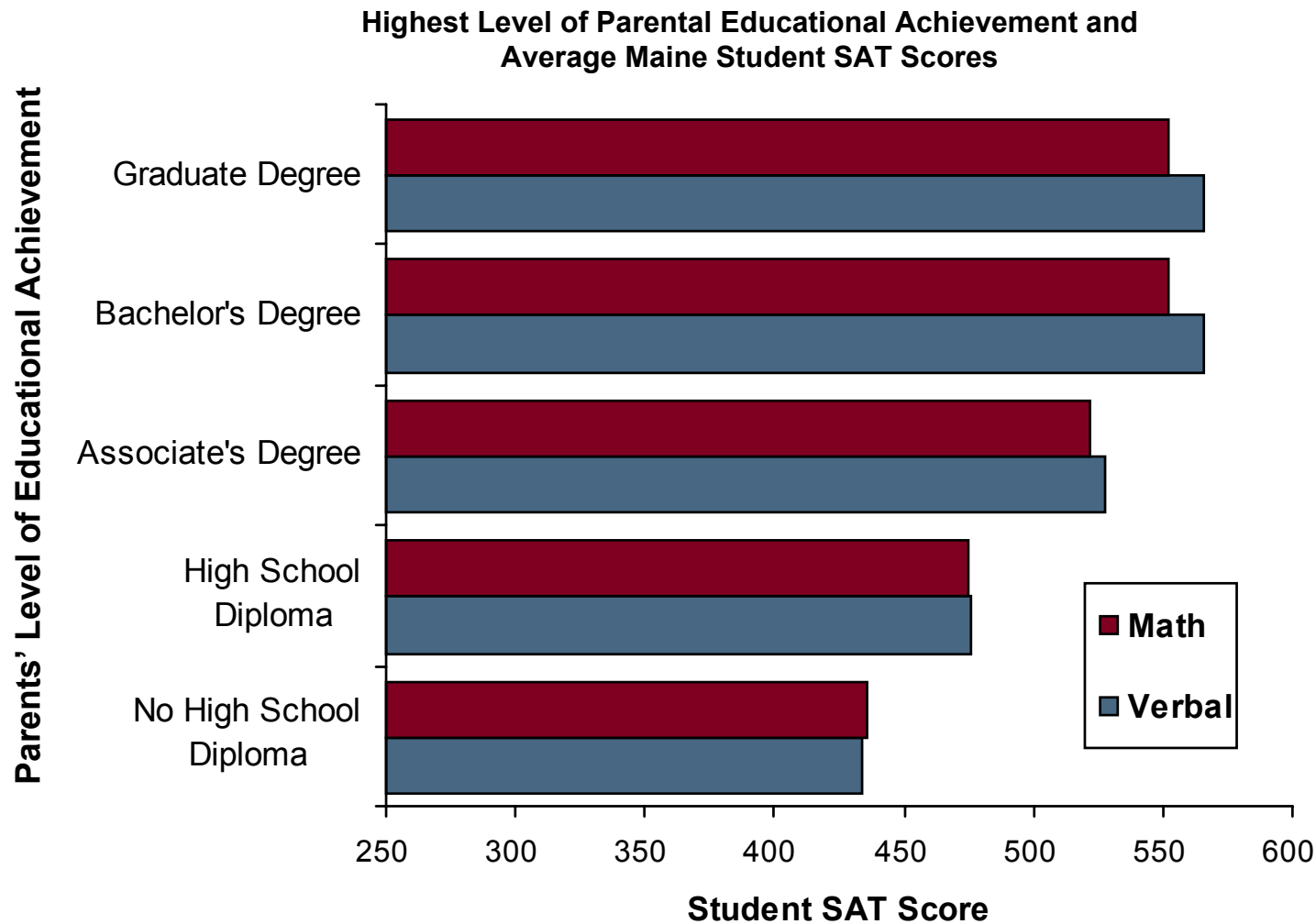
I Don't Need to Go To College To Get a Good Job...
% Agree or Strongly Agree



Female students tend to have stronger aspirations – both parent and personal – than male students

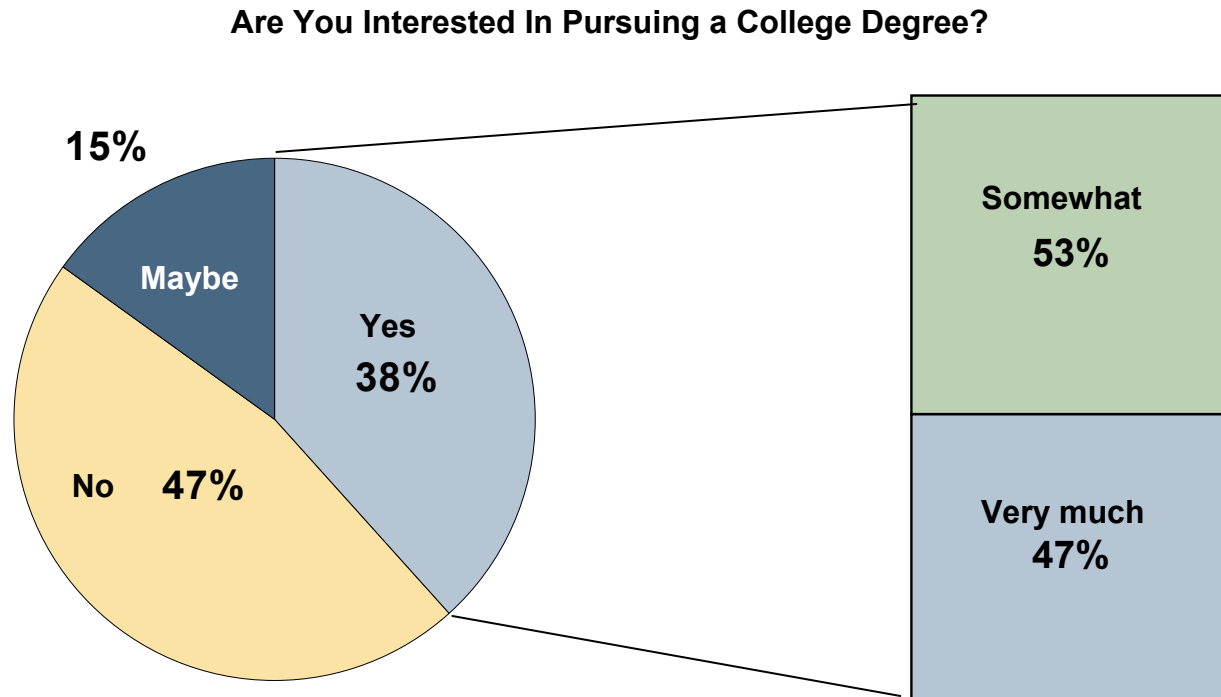
Source: National Center for Student Aspirations survey – Data collected from over 60,000 students representing every county in Maine

Parents' Own Aspirations and Educational Achievement Are Critical - Parents' Education is Strongly Correlated With Students' SAT Scores



Source: Maine Education Policy Research Institute. The College Board, 2001.

One Survey Reports that Over One-Third of Adults Are Interested In Pursuing a College Degree



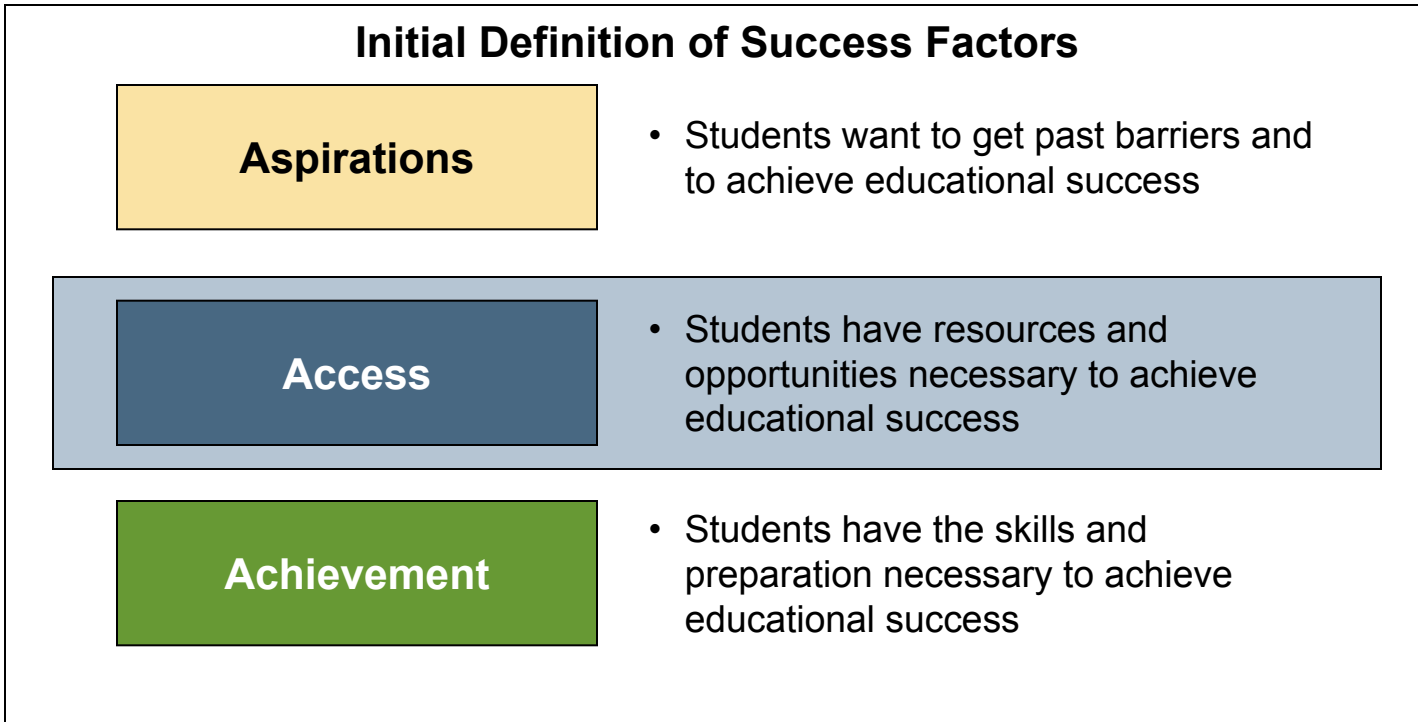
20% of adults without a college degree would be interested in enrolling in college within the next two years – representing 90,000 Maine adults age 18-55

Source: *Report to the Maine Technical College System: Survey of Maine Citizens Who Have Not Attained a College Degree*, Strategic Marketing Services, February 2001

Suggested Interventions

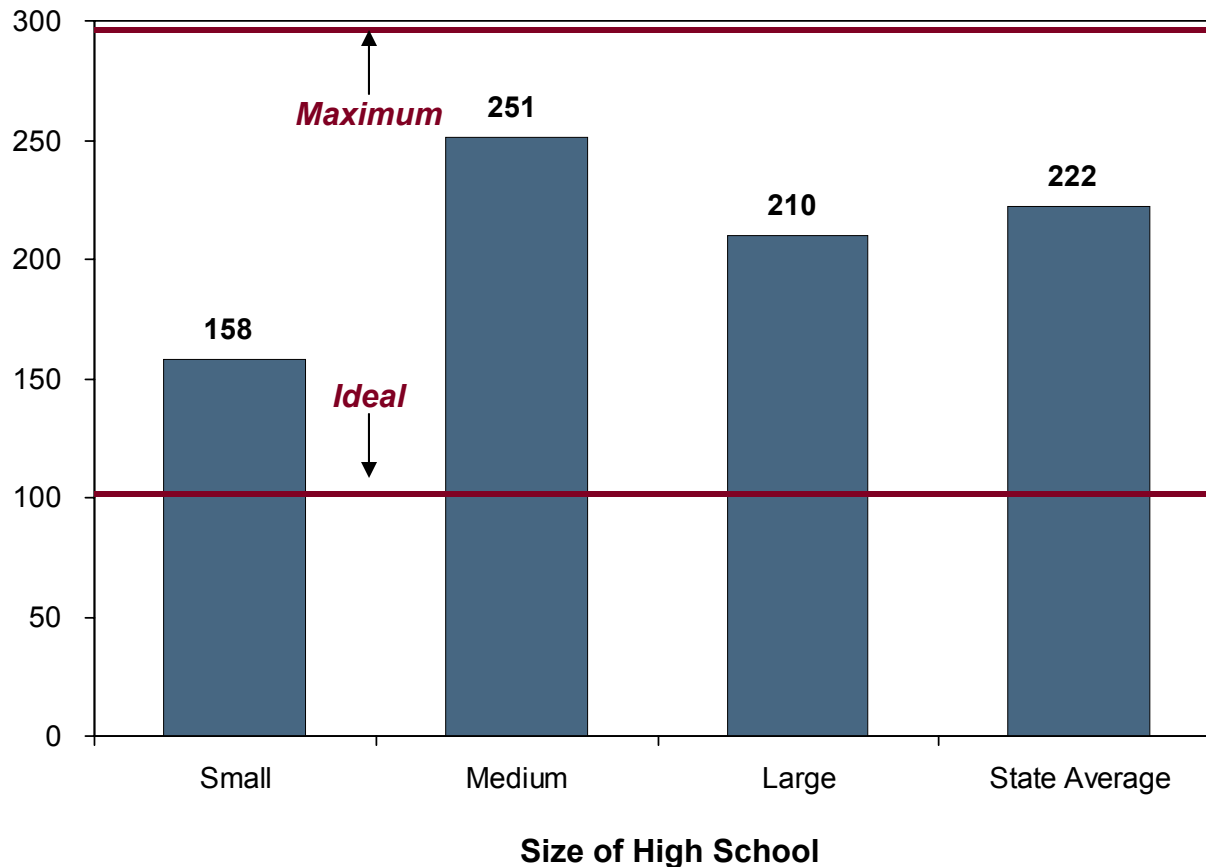
- Implement the Career Preparation component of Learning Results
 - MDF Task Force on Higher Education Achievement, March 1998 and Blue Ribbon Commission on Postsecondary Educational Attainment
- Expand career planning and counseling services
 - Offer assistance throughout K-12
 - Increase integration of work and education through internship and field experience opportunities
 - MDF Task Force on Higher Education Achievement, March 1998
 - Mobilize retiree volunteers, former local students currently in college, and other community resources to counsel current students on the value of higher education
 - Blue Ribbon Commission on Postsecondary Educational Attainment
 - Encourage and assist employers to counsel employees on career planning and educational choices
 - Blue Ribbon Commission on Postsecondary Educational Attainment
- Launch a public information and education campaign to reinforce the value of higher education and provide practical advice on overcoming real and perceived barriers to participation
 - MDF Task Force on Higher Education Achievement, March 1998

Access



Maine Student-to-Counselor Ratio Is Within the Recommended Range, Though 17% of Secondary Schools Report a Ratio Above the Maximum

Students per Counselor by Secondary School Size in Maine



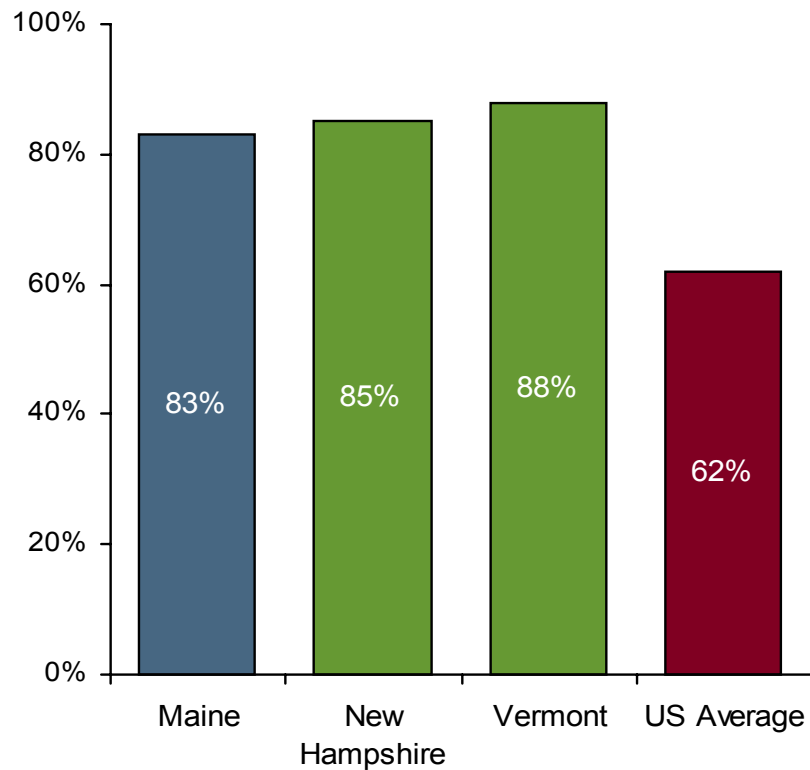
- The American School Counselors Association has recommended student-to-counselor ratios of 100 to one as an ideal standard, and 300 to one as the maximum standard
- **There is considerable variance among Maine schools, with 17% reporting having over 300 students per counselor**

However, it is unclear what share of counselors' time is spent providing pre-college guidance

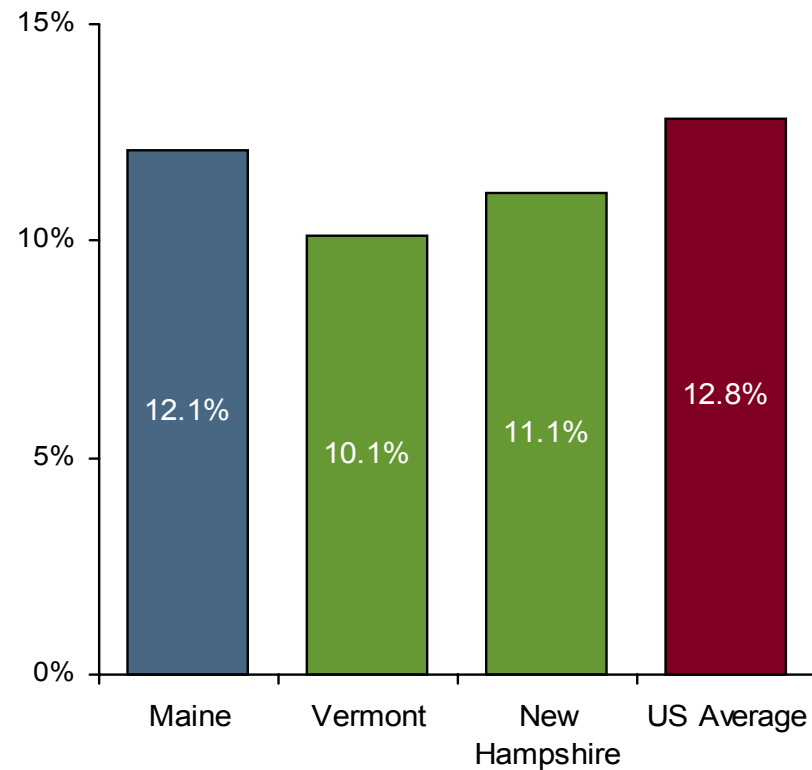
Source: Maine Education Policy Institute. 1994-95 Maine Public School Census Survey.

Significant Numbers of Maine Schools Offer Advanced Placement Courses, But Students Take AP Exams At Below Average Rates

High Schools Offering AP Courses, 2001
Percent

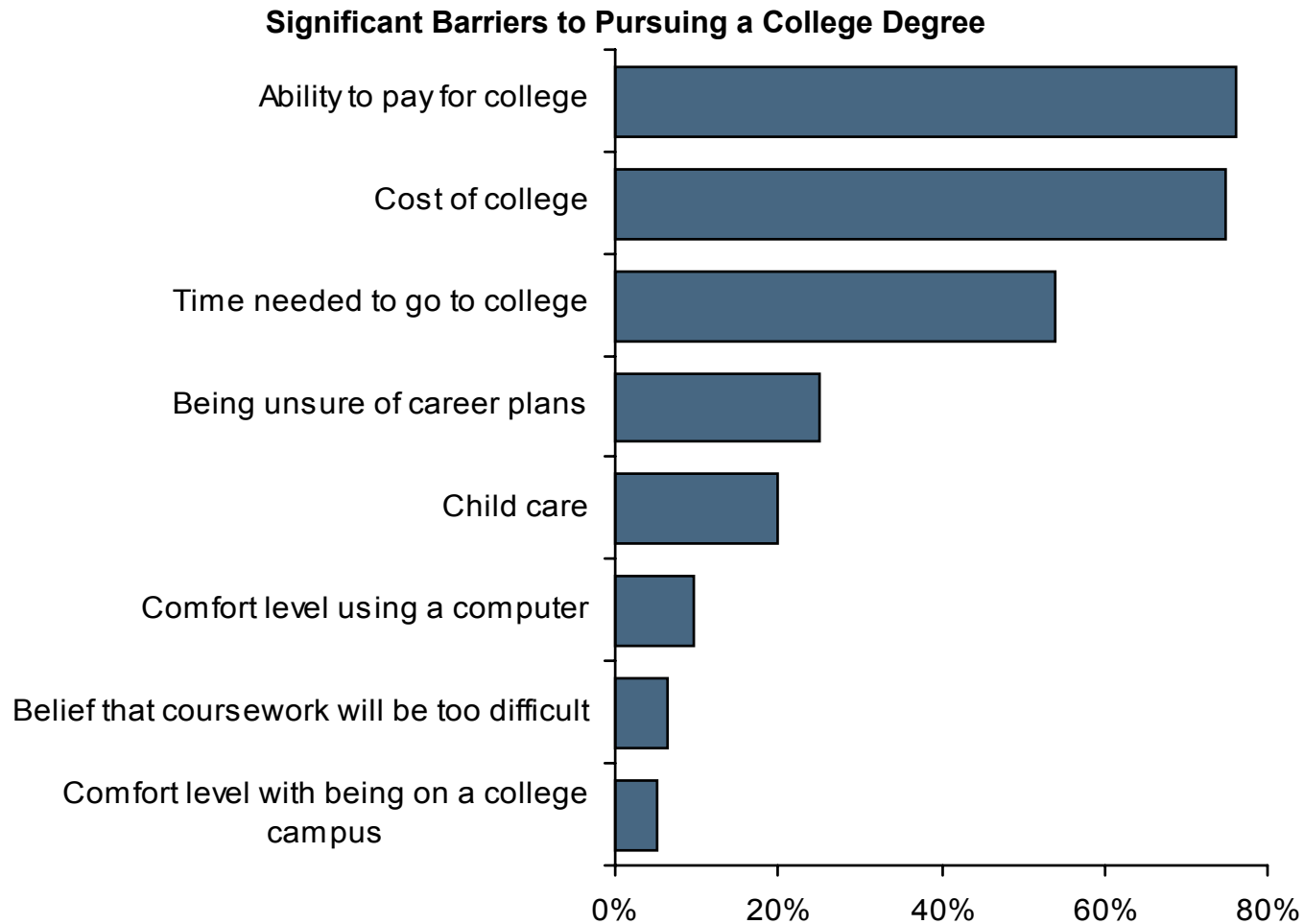


AP Test Participation Rates
Percent of 11th and 12th Graders



Source: Maine Education Policy Institute. The College Board, 2001.

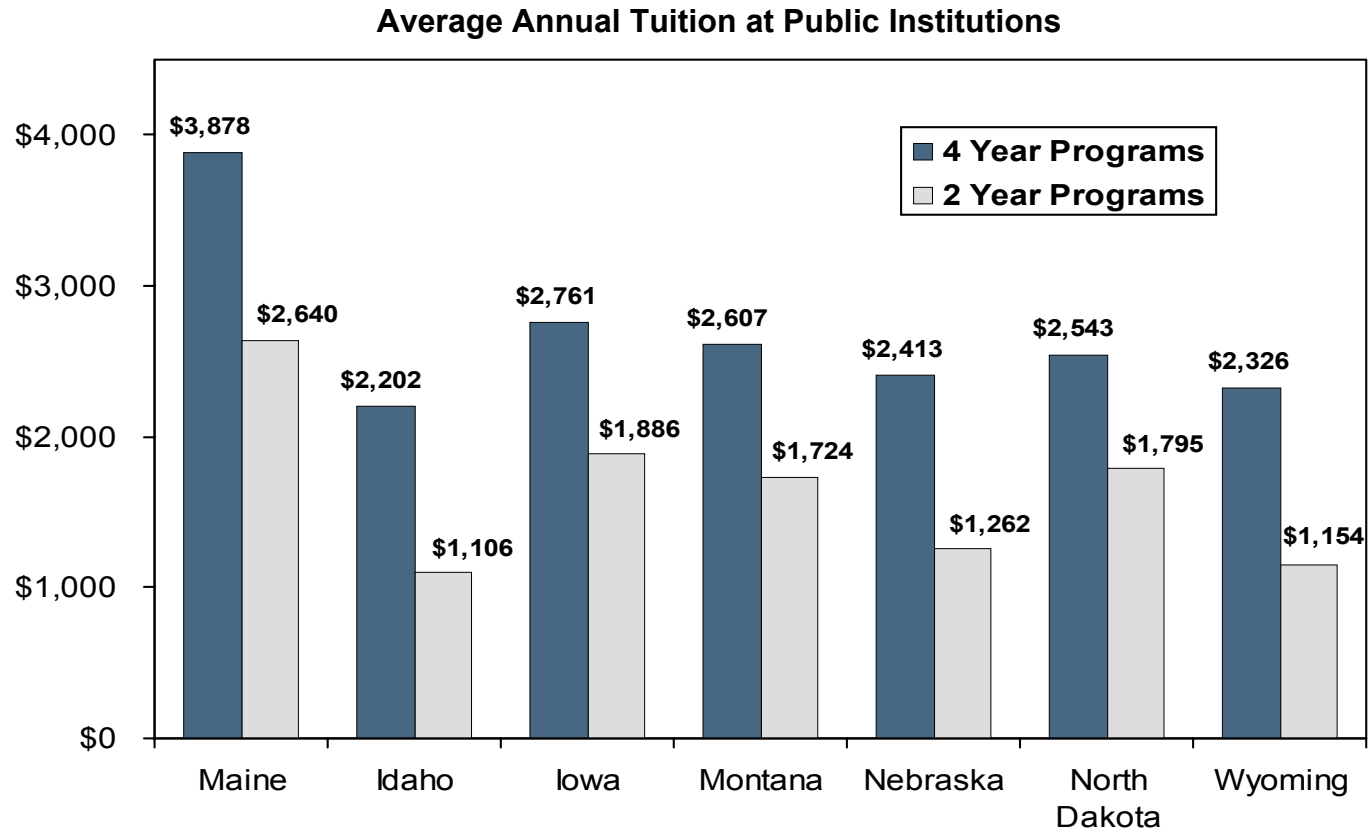
The Ability to Pay for College and Outright Cost Are the Most Common Barriers to Maine Adults Pursuing a College Degree



For one-third of adults, cost of college is the #1 barrier

Source: *Report to the Maine Technical College System: Survey of Maine Citizens Who Have Not Attained a College Degree*, Strategic Marketing Services, February 2001

Maine Has the Highest Tuition Rates When Compared to Demographically Similar States

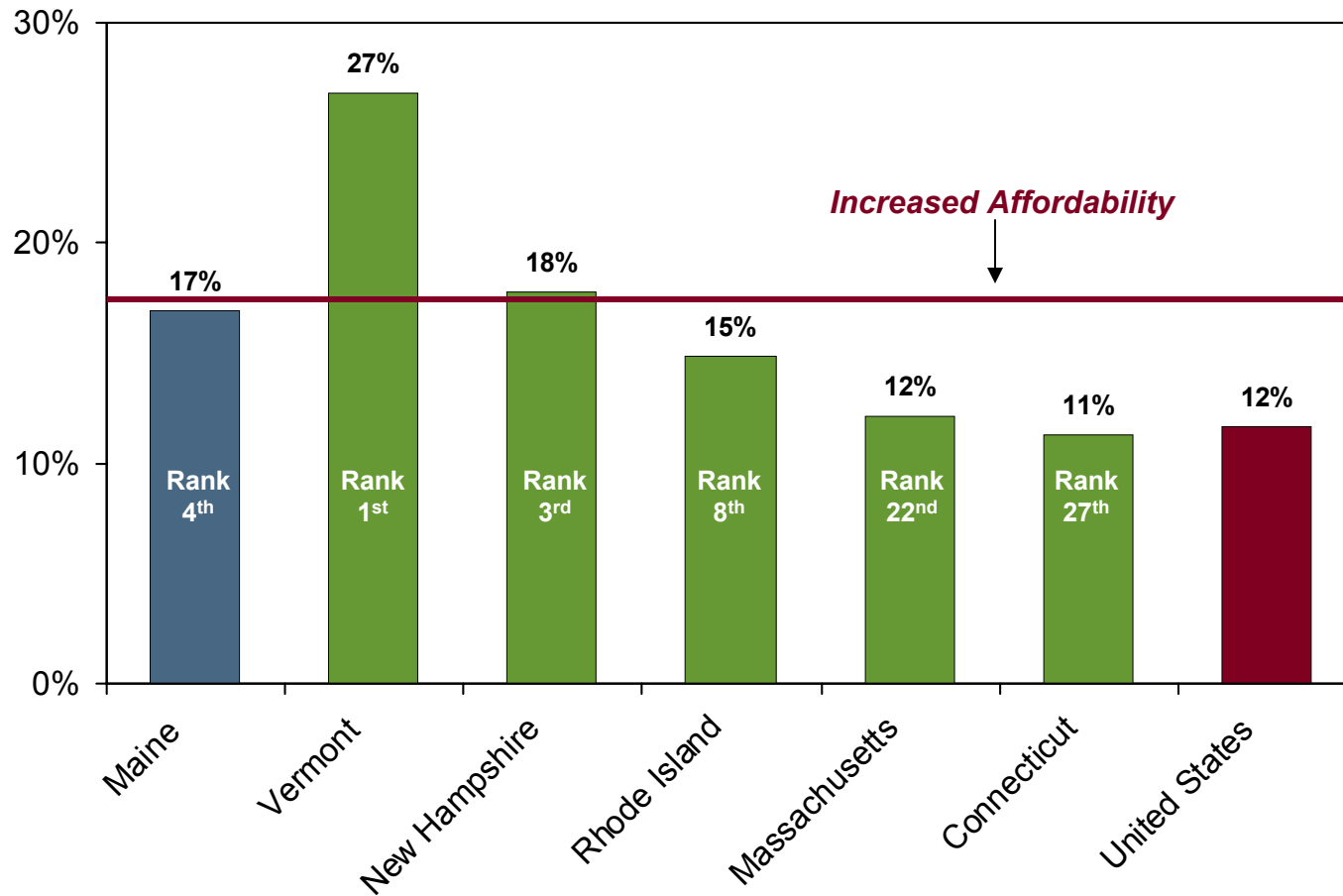


In 1999-2000, the average cost of a 2 year degree in Maine was the 4th highest in the country; a 4 year degree was the 11th highest

Source: *Higher Education for All Maine People*, The Maine Center for Economic Policy, 2001

When Compared to the Poorly Performing New England States, Maine Ranks 3rd of Six In Tuition Costs As a Percent of Income

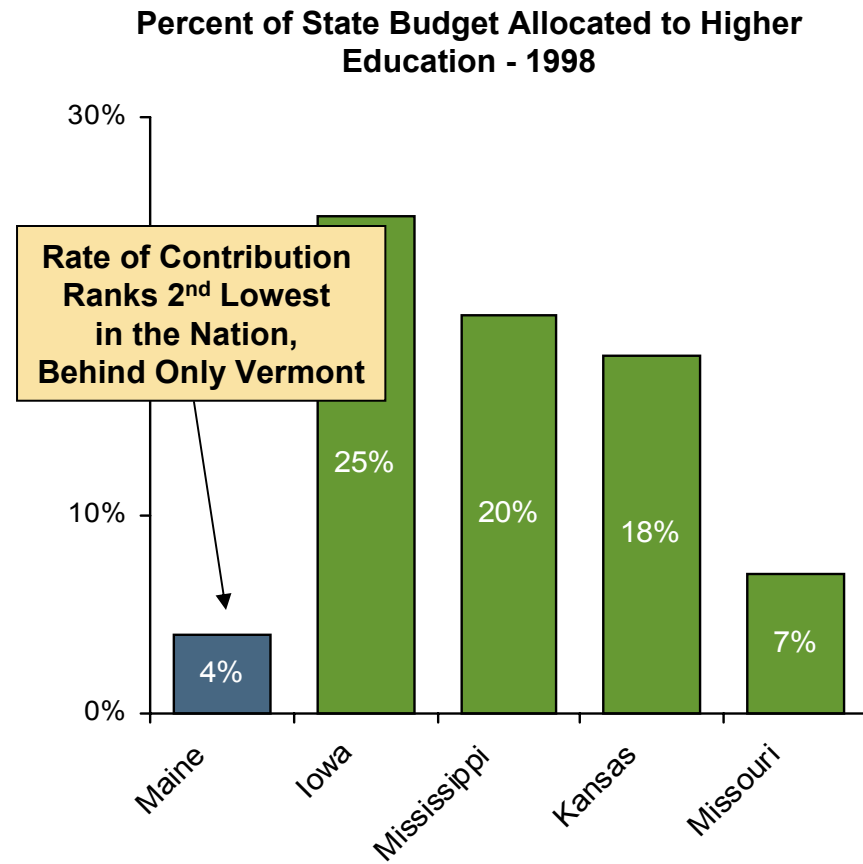
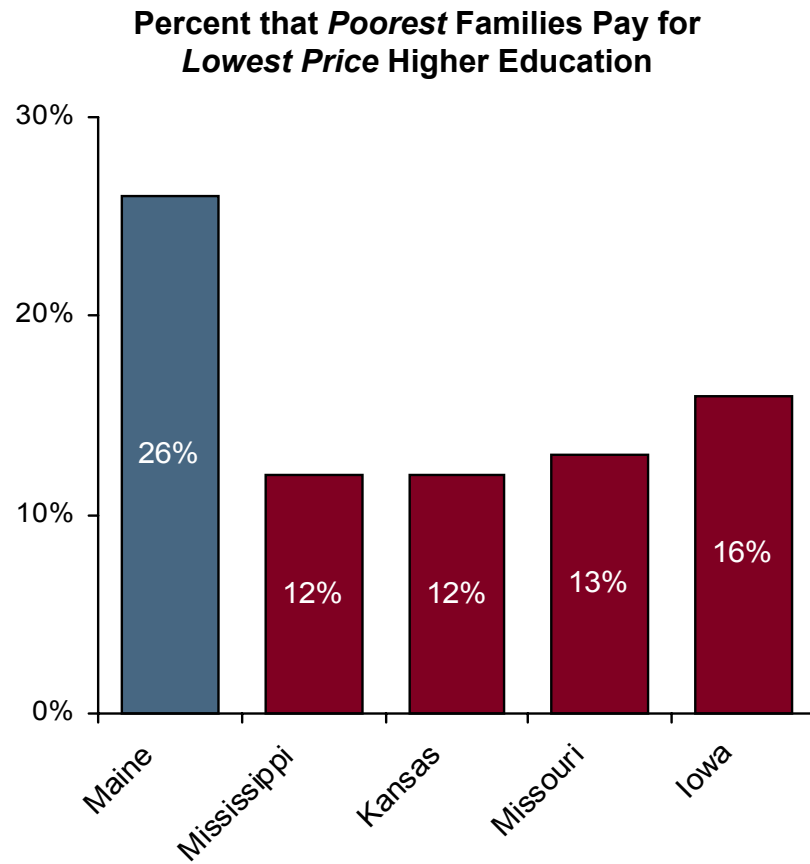
Higher Education Costs at 4 Year Public Institutions
as a Percent of Per Capita Personal Income



However, Maine’s tuition costs as a percent of income rank as the 4th worst in the nation –Vermont and New Hampshire are the 1st and 3rd least affordable

Source: *Comparisons of Higher Education Information for New England States*, October 2001, Maine Education Polity Research Institute, USM

When Compared to States Successful at Increasing Educational Attainment¹, Maine Is Behind in Affordability and State Contributions



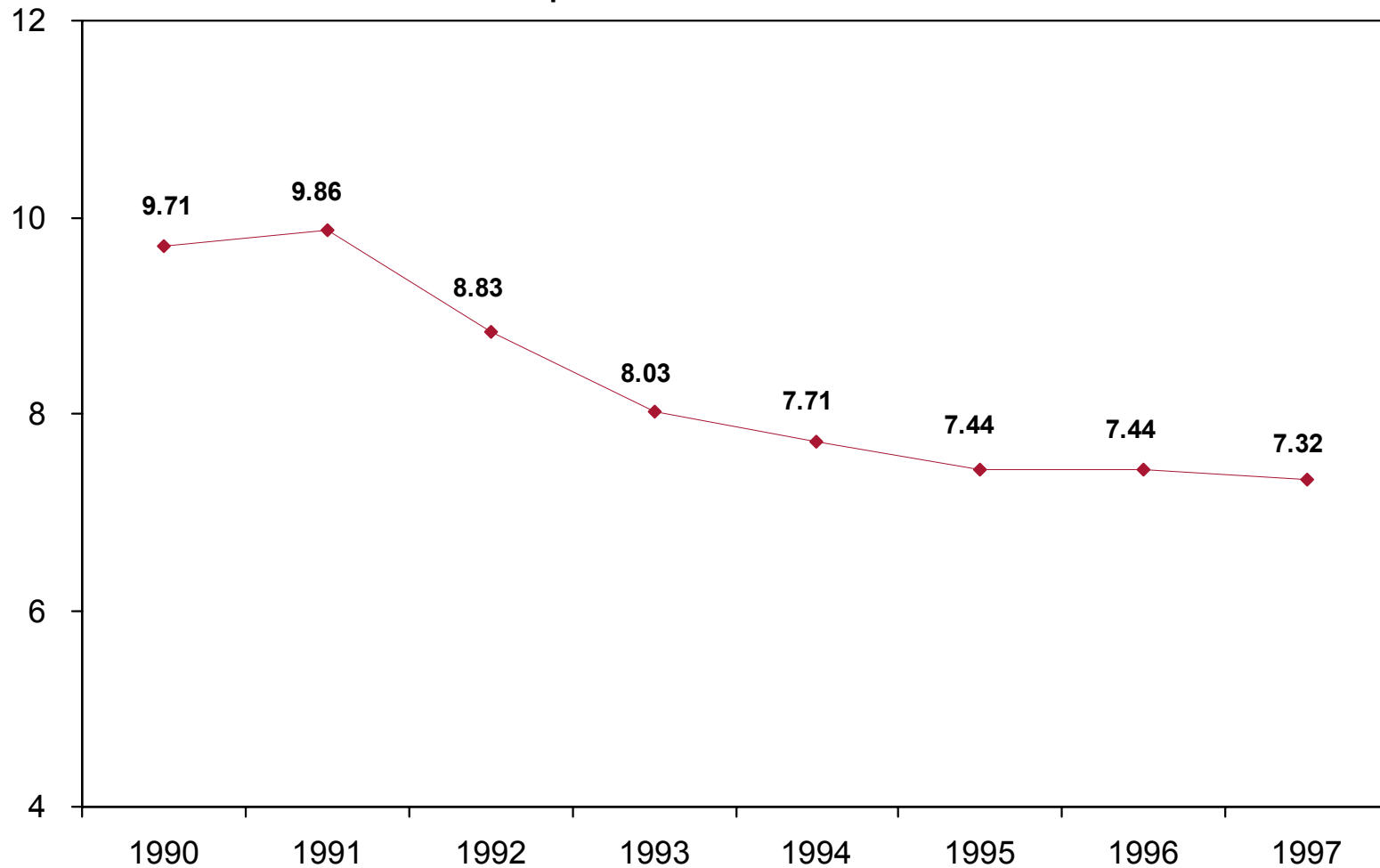
Access issues like affordability impact Maine's low attainment rates

¹ States that have increased their national standing in educational attainment the most between 1990 and 1998 – Each increased its rank by at least 9 places. Over the same time period, Maine fell 11 places nationally.

Source: *Higher Education for All Maine People*, The Maine Center for Economic Policy, 2001

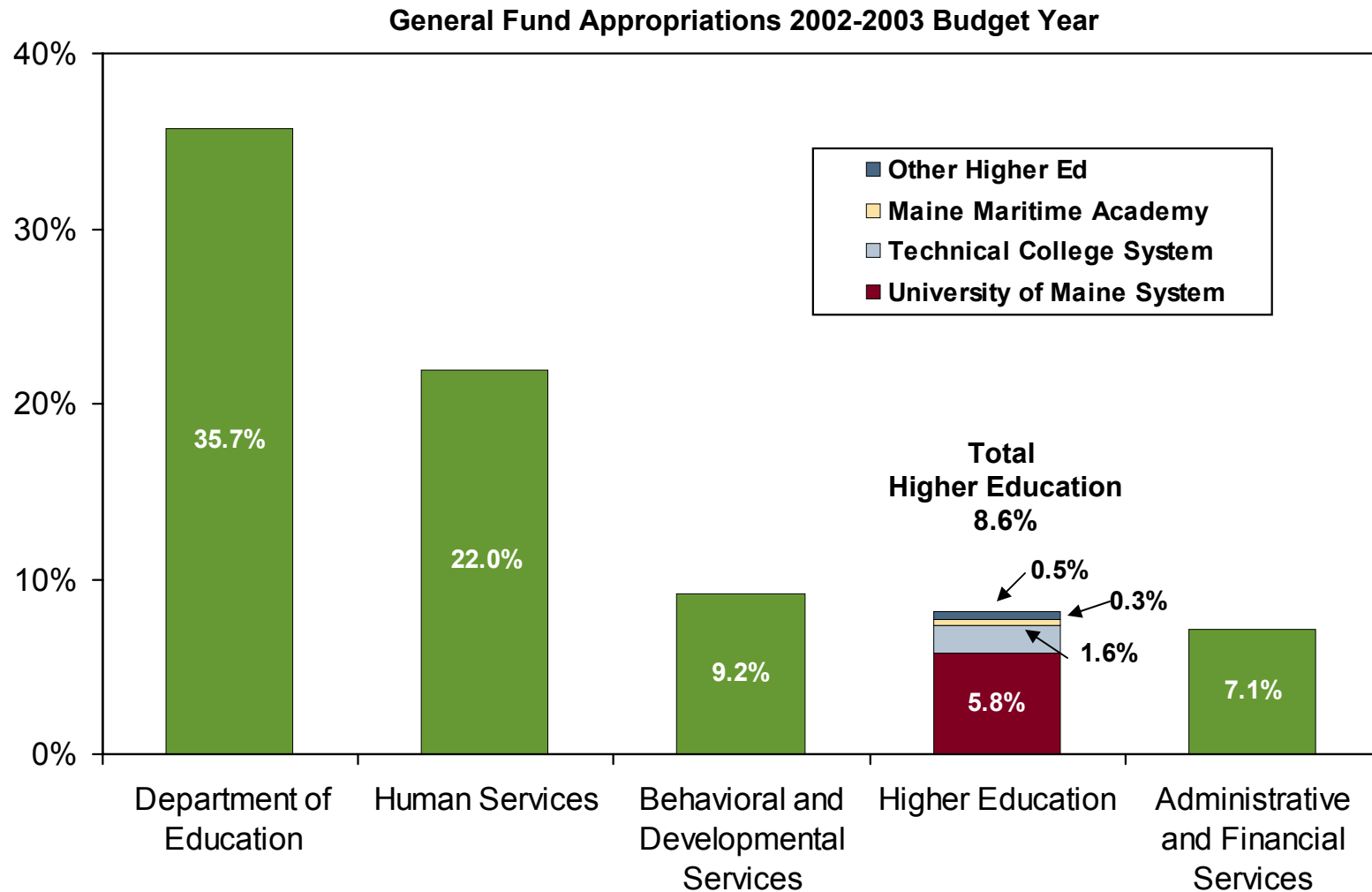
One Source Asserts Maine's Appropriations to Higher Education Have Declined Steadily From 1990 Through 1997

Maine Appropriations of State Tax Funds for Higher Education per \$1000 of Personal Income



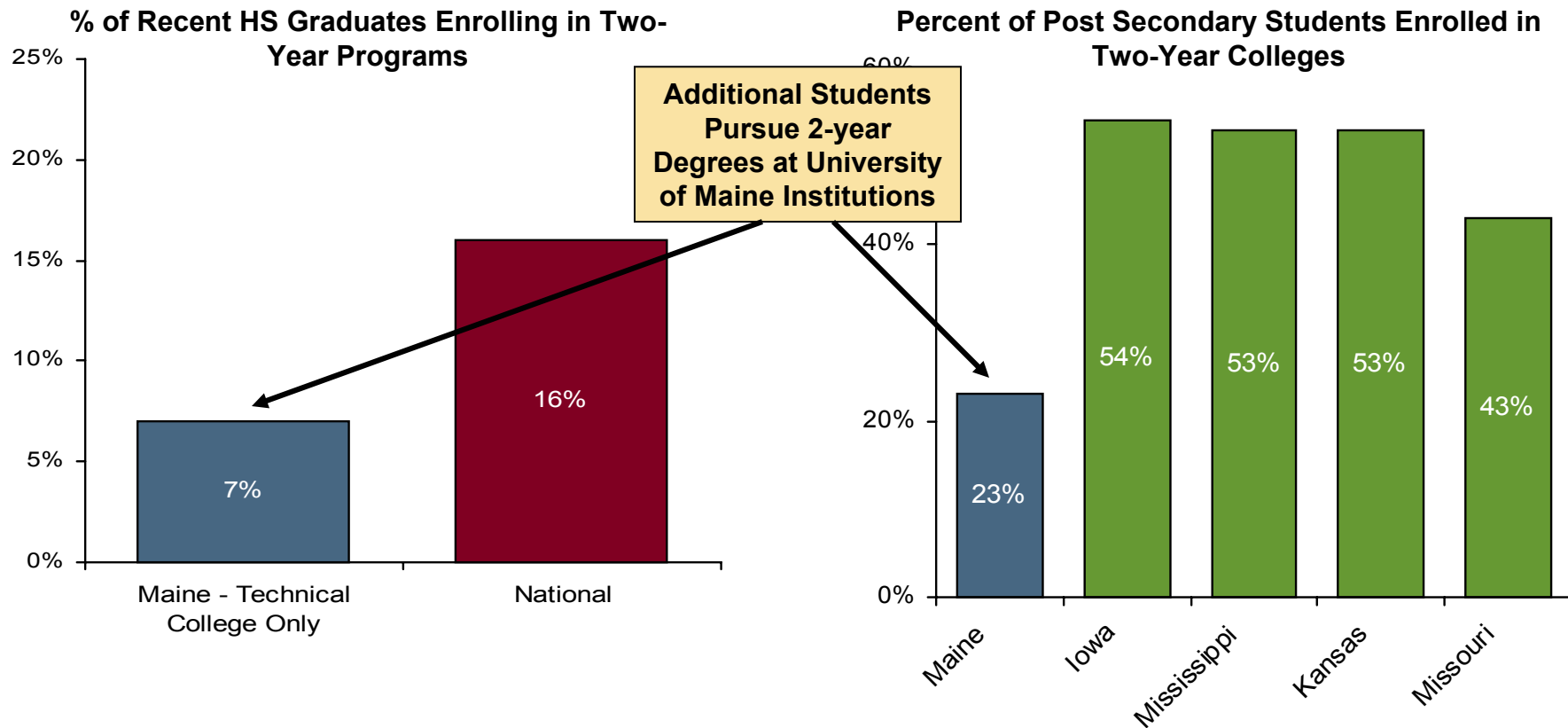
Source: Postsecondary Education OPPORTUNITY, May 28, 1997 and *The Public Policy Dilemma of Financing Opportunity for Higher Education in Maine*, FAME 1997

2003 Budget Allocations Are Reported At Over 8% for Higher Education – Indicating that This Finding Warrants Further Study



Source: Maine State Office of Fiscal and Program Review, 7/2/02

Preliminary Data Suggests Maine Has Under-Invested in Low Cost Entry Points, Key Components of Success for States That Have Increased Attainment Rates¹

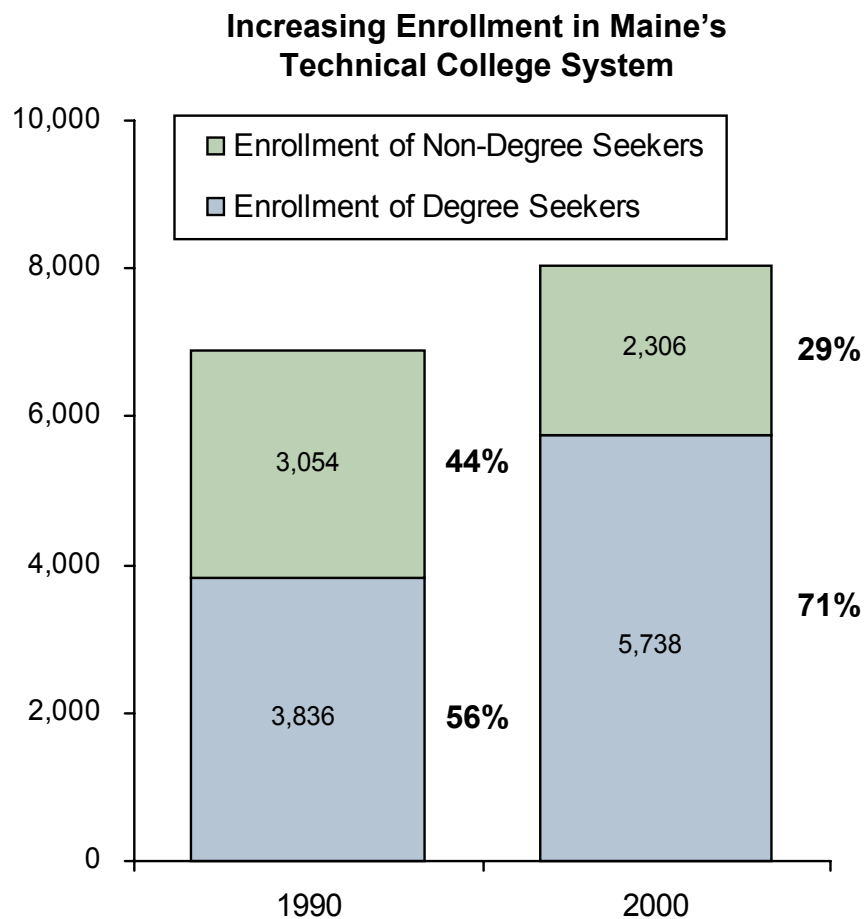


Maine is one of only three states without a formal community college system – though a Community College is being cooperatively implemented by the University of Maine System and the Technical College System

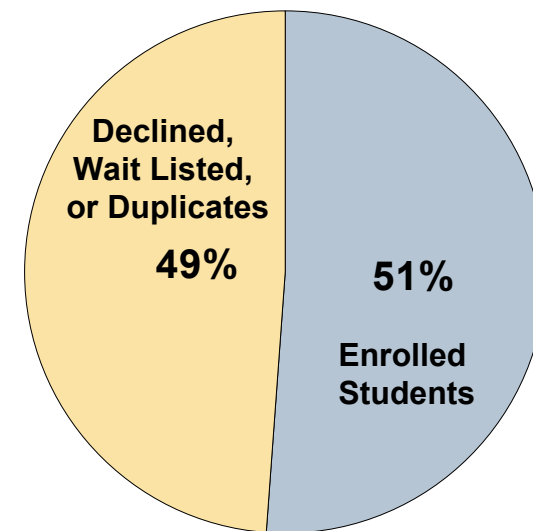
¹ States that have increased their national standing in educational attainment the most between 1990 and 1998 – Each increased its rank by at least 9 places. Over the same time period, Maine fell 11 places nationally.

Source: *Higher Education for All Maine People*, The Maine Center for Economic Policy, 2001
 Study of Studies

Since 1990, Maine’s Technical College System Has Expanded Enrollment, But Also Turned Away Students Due to Capacity Limitations



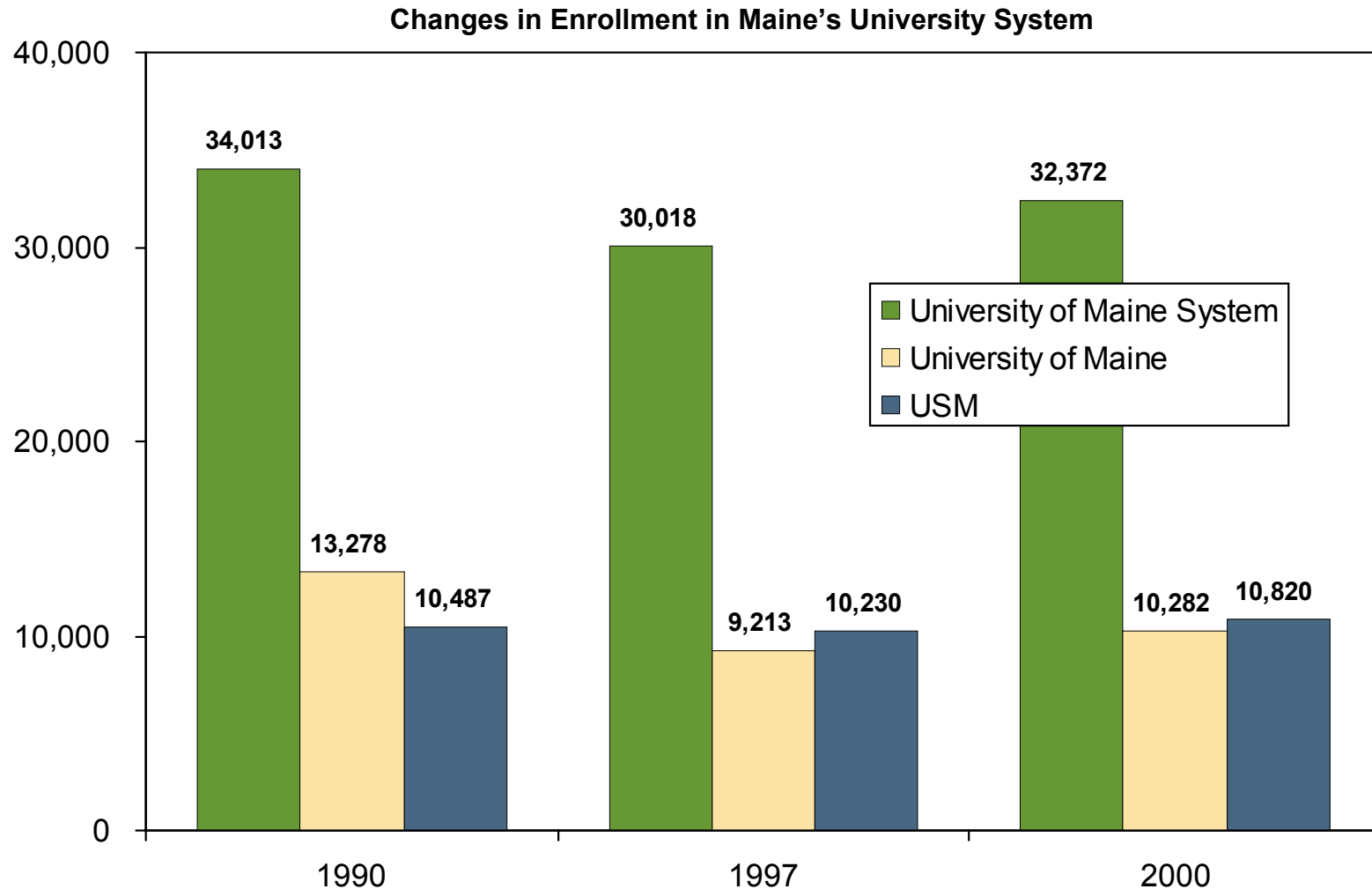
Relatively Small Share of Enrolled Students as a Percentage of Applications¹



- “The 1995 reported admissions rate was only 51%, owing primarily to lack of funding for additional faculty.”
- “The Technical College System estimates that it will take an additional \$1M to enroll all qualified applicants.”

¹ Some students apply to more than one program, but for many of the more desirable programs there is a waiting list of over 100 students
 Source: *Higher Education for All Maine People*, The Maine Center for Economic Policy, 2001; *Report of the Commission on Higher Education Governance*, July 1996

Over the Same Period, Enrollment In Maine’s University System Has Declined



Since the 1990s, the youth population has also been declining – more rapidly than the decline in University of Maine enrollments

Source: *Higher Education for All Maine People*, The Maine Center for Economic Policy, 2001

With the Exception of the Farmington Campus, University of Maine System Performs Poorly In National College Rankings

Campus	US News Ranking	Freshman Retention Rate	Graduation Rate
Orono	Third Tier*	79%	57%
Southern ME	Third Tier**	67%	27%
Augusta	Fourth Tier***	49%	35%
Farmington	First Tier***	75%	55%
Ft. Kent	Fourth Tier***	56%	42%
Machias	Third Tier***	71%	45%
Presque Isle	Fourth Tier****	64%	33%

*US News ranking of National Universities – Doctoral

** US News ranking of Northern Universities – Master’s

***US News ranking of Comprehensive Colleges in Northern US – Bachelor’s

**** US News ranking of Liberal Arts Colleges – Bachelor’s

Note: Rankings range from First Tier (highest) to Fourth Tier (lowest)

Source: US News and World Report website.

In 1995, Maine Was Virtually Last In the Nation When Comparing Numbers of Public Higher Education Students to High School Graduates

State Rankings

*Ratio of FTE Public Higher Education Students
to High School Graduates*

1. Arizona
2. California
3. Alabama
4. New Mexico
5. Colorado
6. Delaware
7. Kansas
8. North Carolina
9. Mississippi
10. Washington

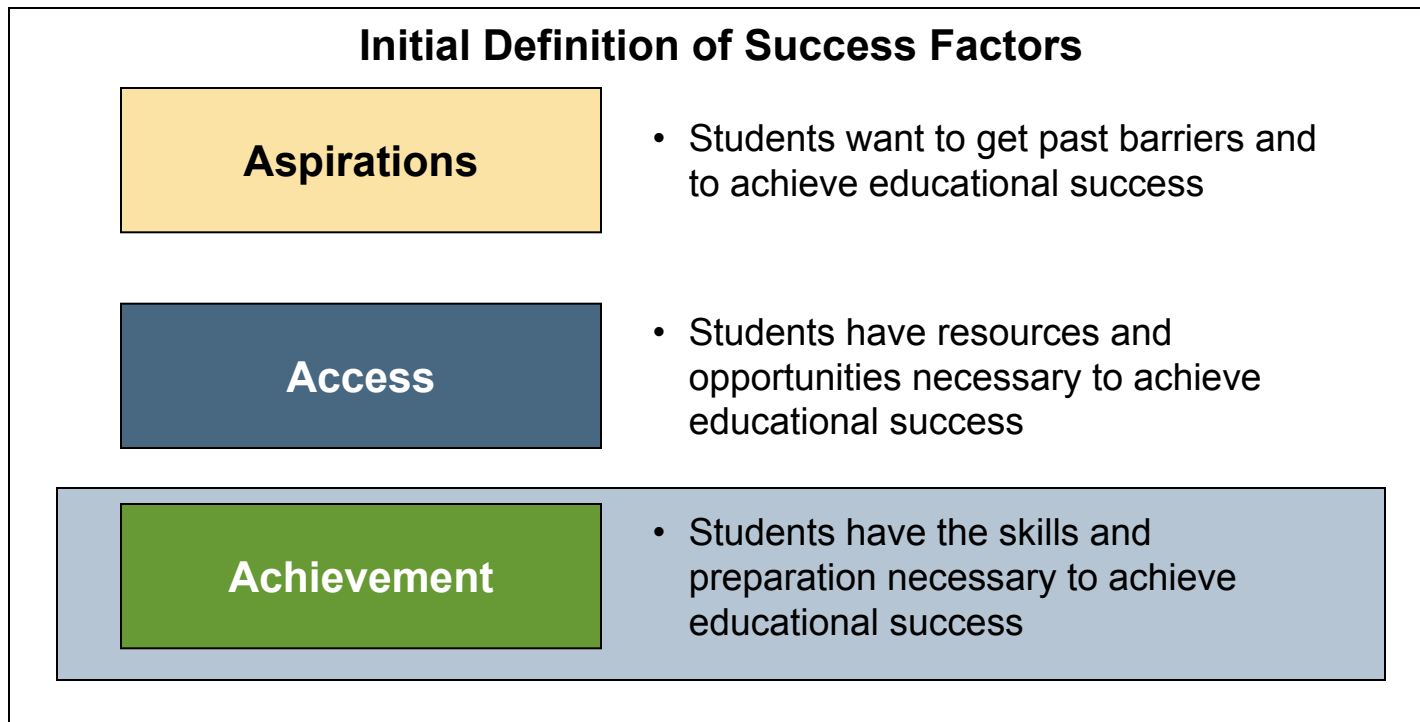
49. Maine

Source: *Report of the Commission on Higher Education Governance*, July 1996 from the Higher Education Report Card: 1995 Comparisons of State Public Higher Education Systems and National Trends, Research Associates of Washington

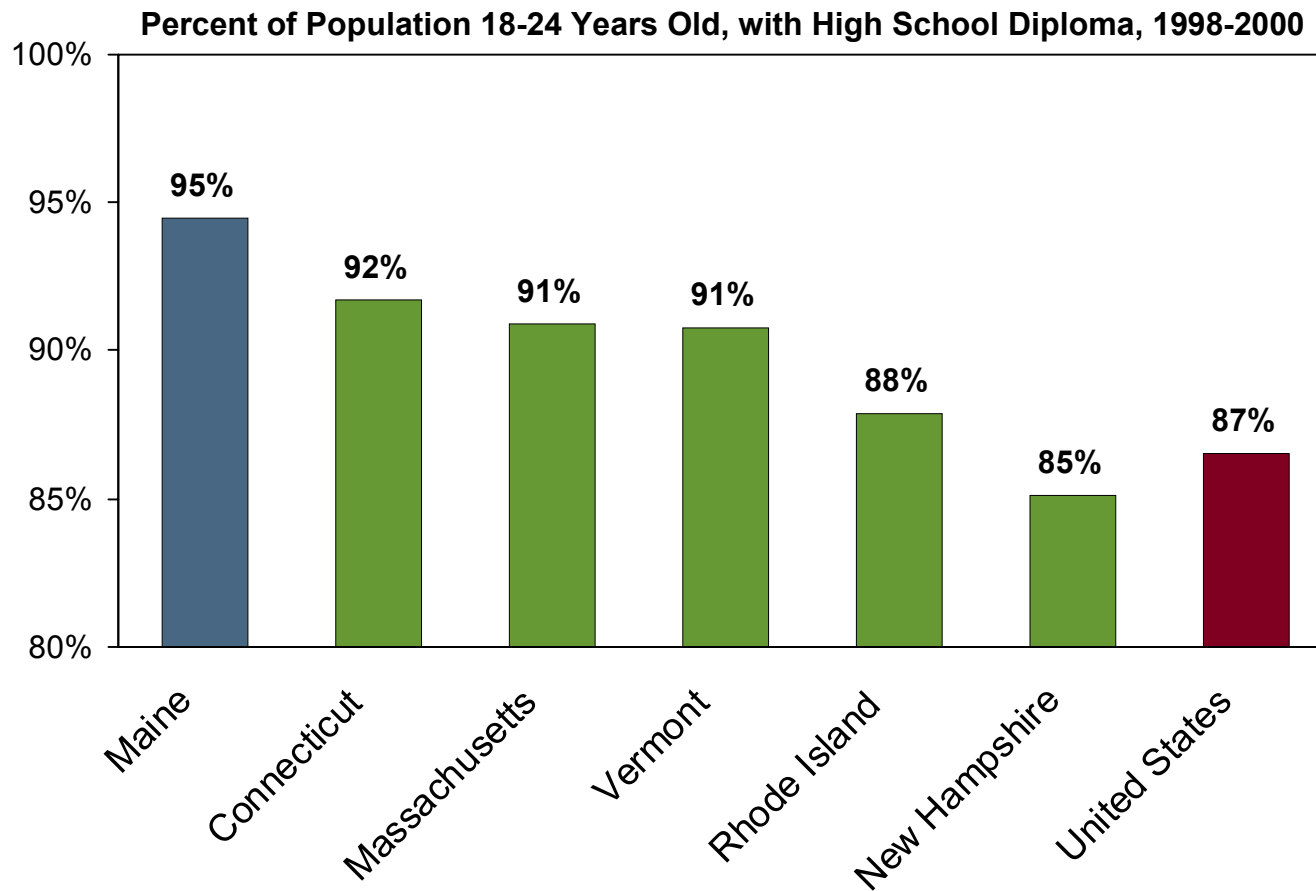
Suggested Interventions

- Provide low cost access to college and increase student aid for higher education
 - Pay attention to both traditional entry level and part-time students
 - Consider lowering entry-level tuition
 - Increase state grant funding which has remained static over 7 years despite substantial increases in tuition and the number of applicants
 - MDF Task Force on Higher Education Achievement, March 1998
 - Through endowment, expand institutional-based aid programs at UMS (and MMA and Technical Colleges if they wish to embark on private fundraising)
 - Initiate a program to forgive or repay loans for graduates choosing to work in Maine in targeted technology areas
 - 30 and 1000: How to Build a Knowledge Based Economy in Maine and Raise Incomes to the National Average by 2010
- Increase higher ed program accountability and assessment
 - Secure national accreditation for programs wherever available
 - Develop a “best practices” guide on the ways institutions measure and assess the satisfaction of students, graduates, and employers with their higher education experiences
 - MDF Task Force on Higher Education Achievement, March 1998
 - Form an Ad Hoc Task Force on Higher Education outside of state government and the university system
 - 30 and 1000
- Implement “Transition U.” as a vehicle for the incumbent workforce to return to higher education
 - 30 and 1000
- Establish a tier-one research university or a consortium of institutions (universities, research laboratories, teaching hospitals)
 - 30 and 1000
- Increase the capacity of the technical colleges
 - Report on the Commission for Higher Education Governance

Achievement

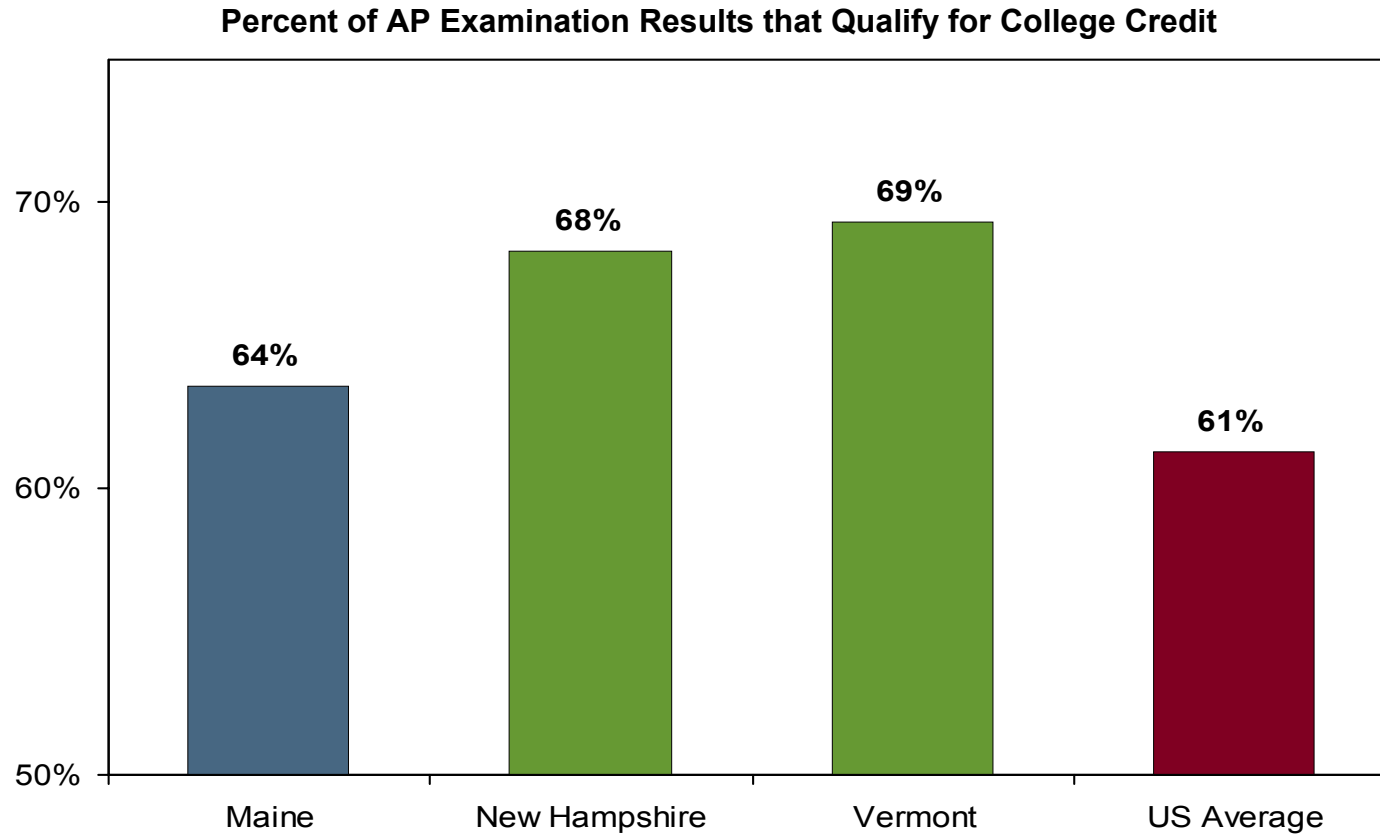


Maine’s Recent High School Degree Attainment Eclipses All Other New England States and the US



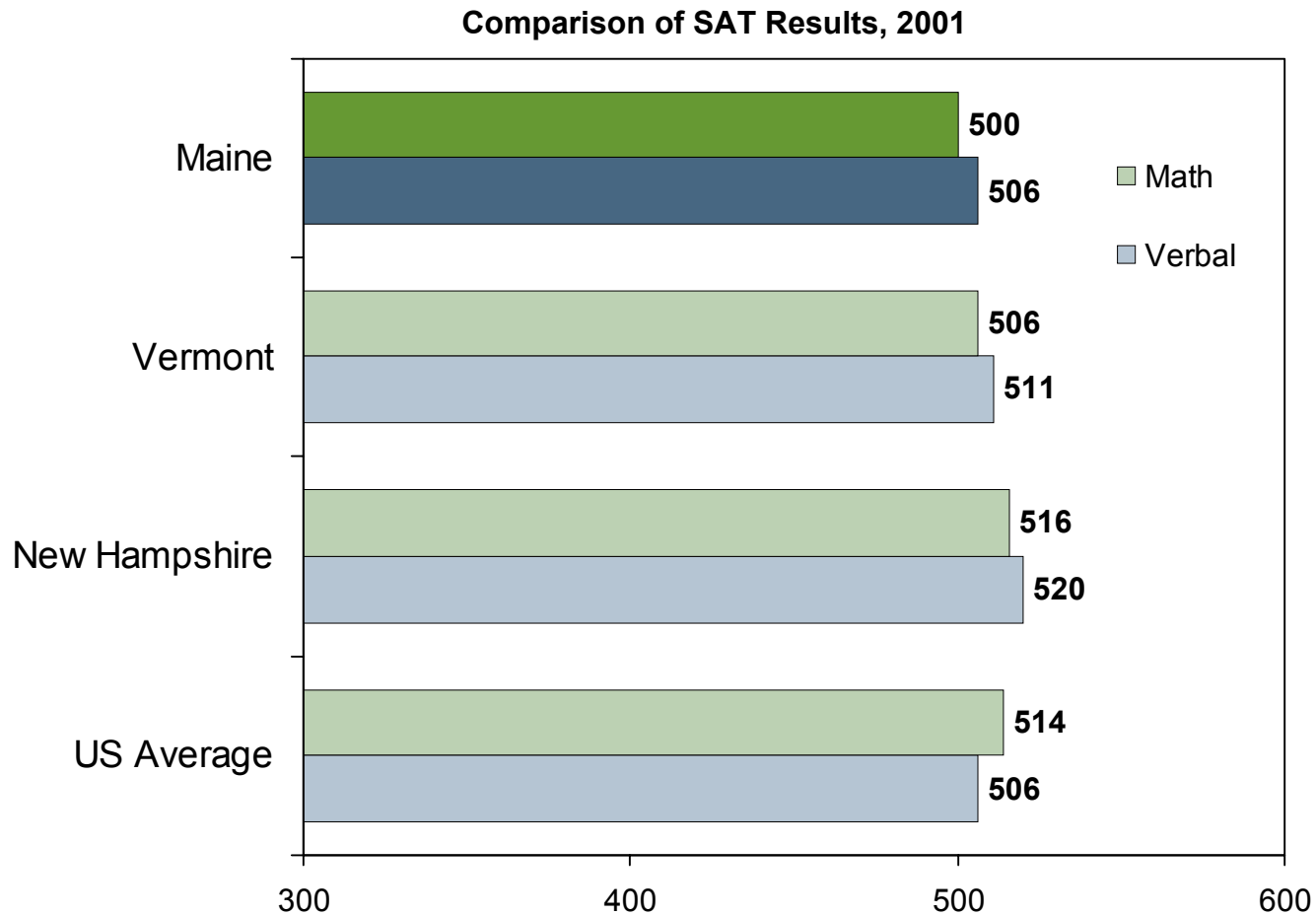
Source: Maine Education Policy Research Institute. US Census Bureau, 2001, Current Population Survey, 1998, 1999, 2000.

Maine Students Perform Above US Average On AP Tests, But Below Vermont and New Hampshire



Source: Maine Education Policy Institute. The College Board, 2001.

Maine Students Perform In Line With US Average on Verbal SAT Scores, and Slightly Below on Math

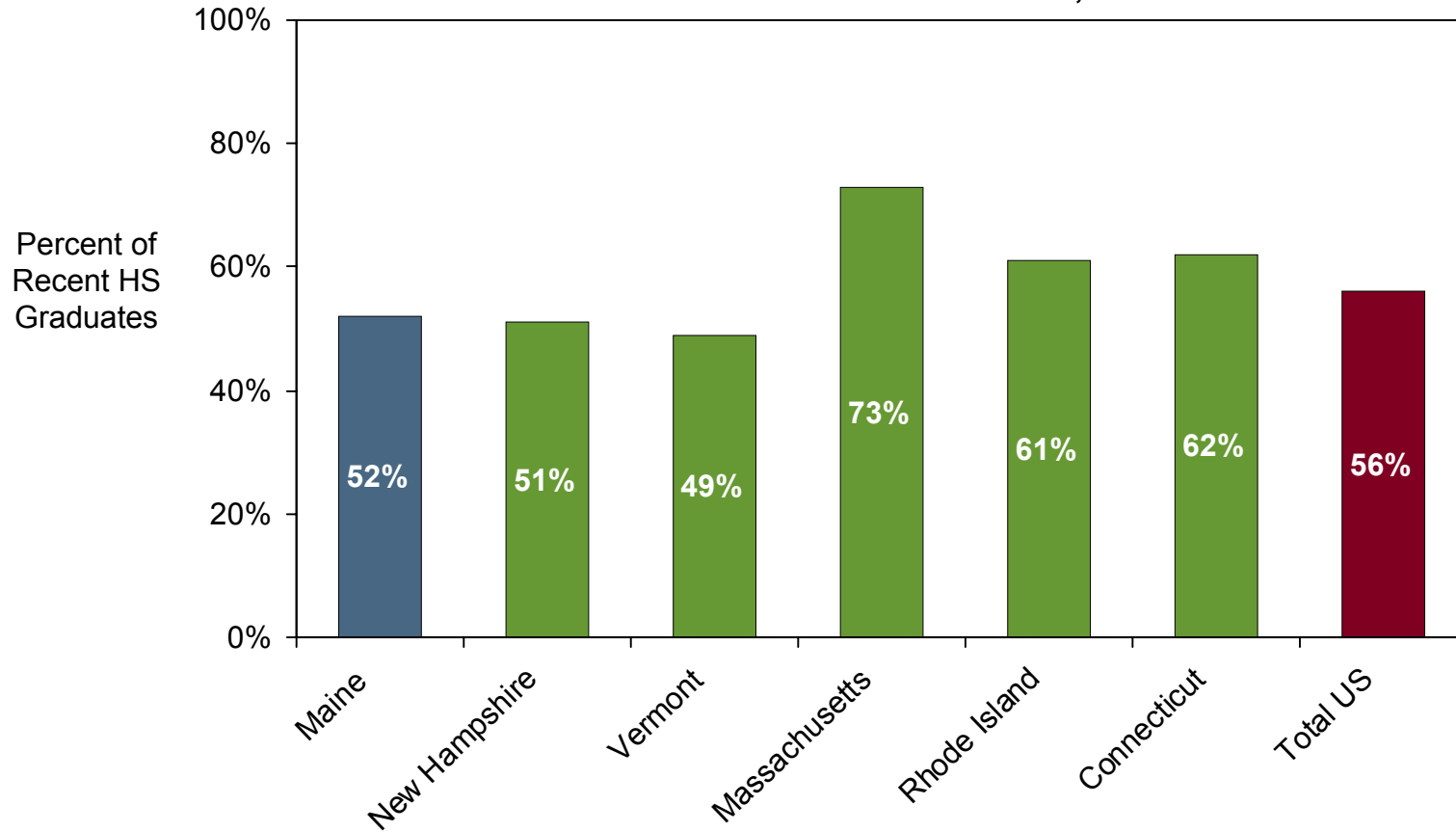


Maine students under-perform Vermont and New Hampshire SAT-takers

Source: Maine Education Policy Research Institute. The College Board, 2001.

Maine’s College Going Rate Trails the National Average and Three Other New England States

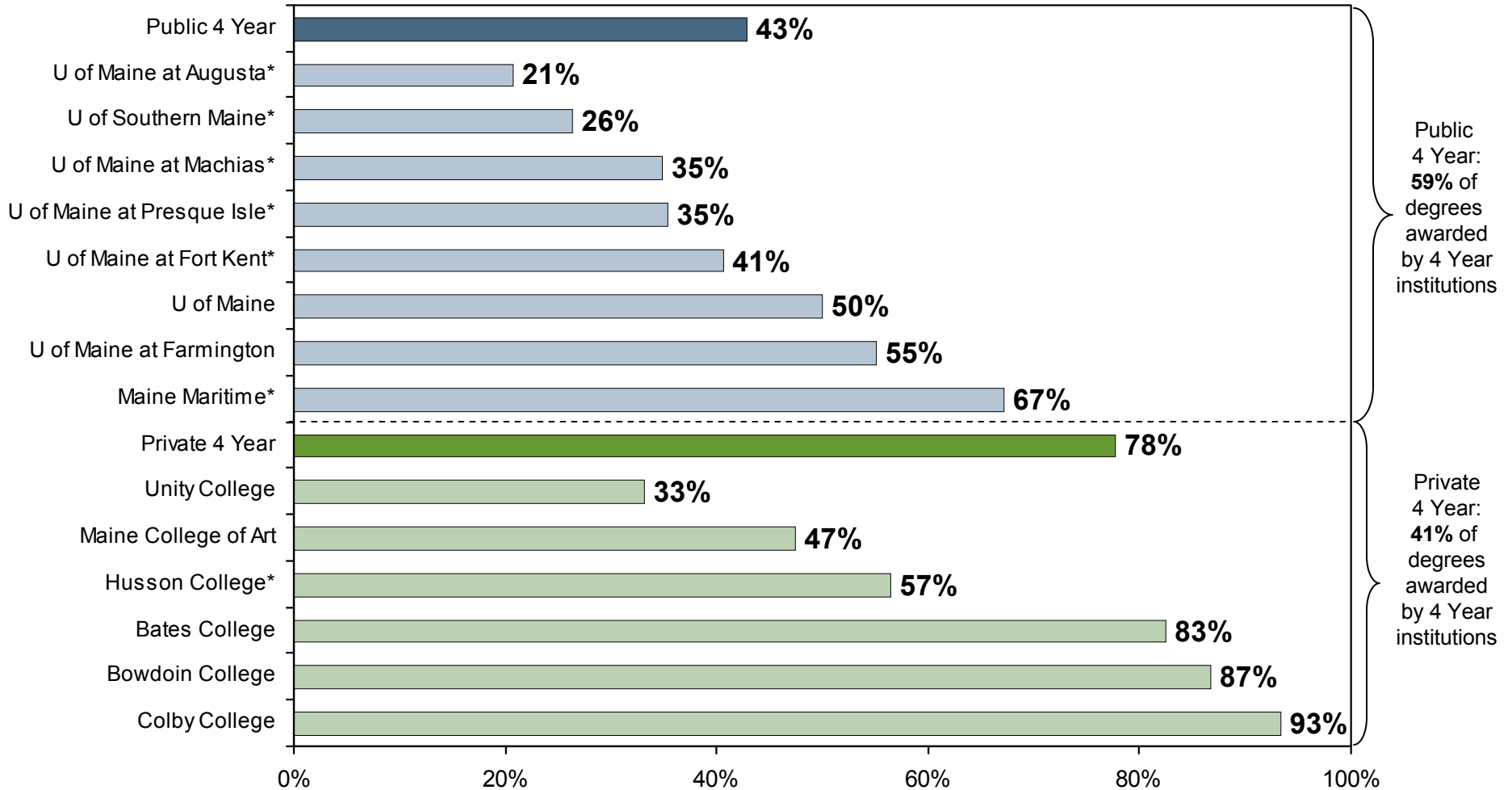
Percentage of Recent High School Graduates Enrolling as First Time Freshmen at 4- and 2-Year Institutions, Fall 1996



Source: *A Fresh Look at College-Going Rates in Maine*, December 2000, FAME – Data derived from NCES, Digest of Educational Statistics 1998, Table 205 p. 227

Over Half the Students Who Enroll In Maine's Public Institutions Do Not Get a Degree Within Six Years

Six-Year Graduation Rates at Maine Four-Year Colleges and Universities, 1997

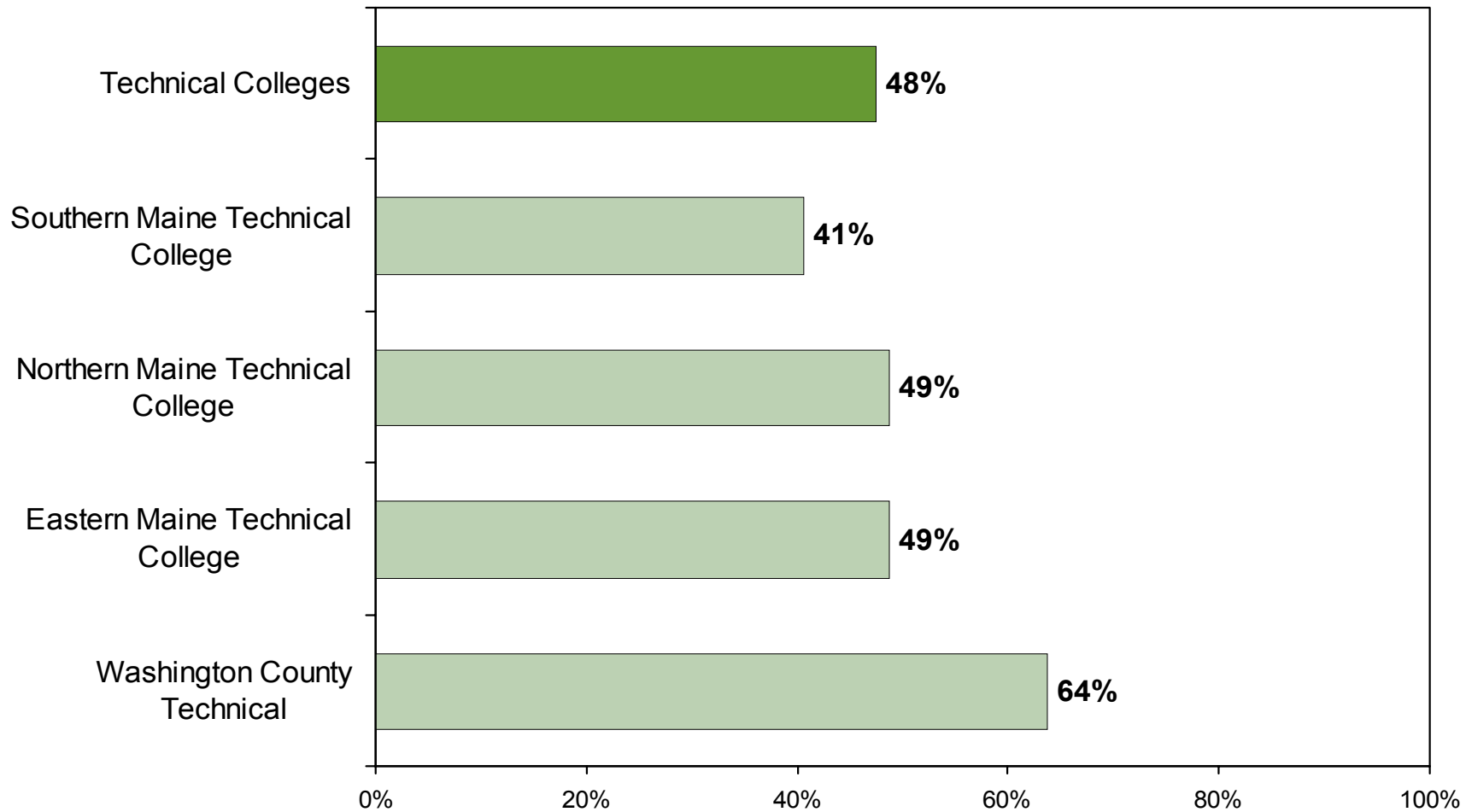


These rates tend to be similar to national averages

* Four-year colleges and universities that offer associate as well as bachelor's degree programs – Maine undergraduates interested in pursuing non-technical associate degrees enroll at a public or private four-year institution that offers both associate and bachelor's degree programs.

Similarly, Approximately Half of Students Attending Technical Colleges Graduate in 3 Years

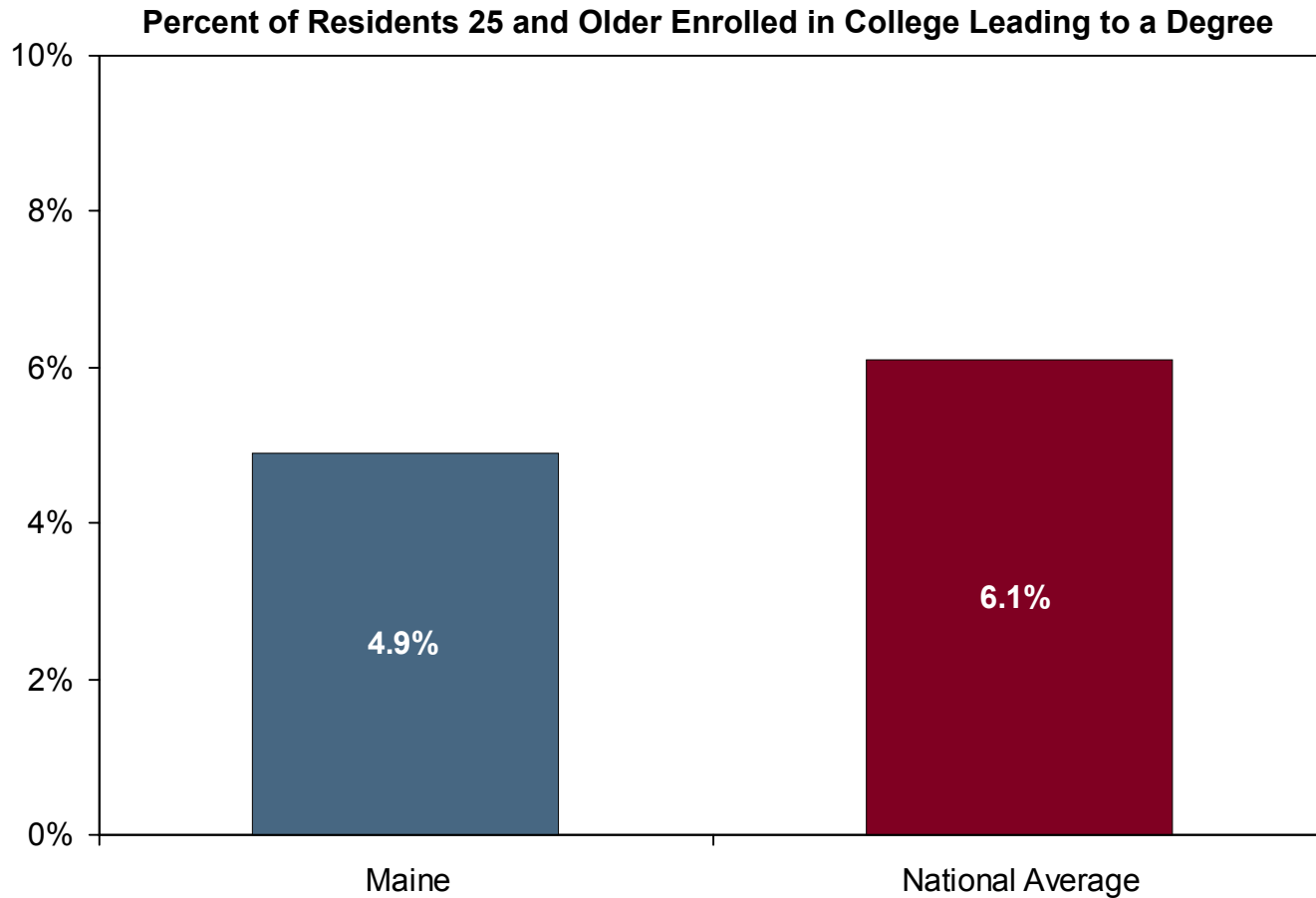
Three-Year Graduation Rates at Maine Technical Colleges, 1997



These rates tend to be better than national averages

Note: 3-year graduation rates for Central Maine Technical College, Kennebec Valley Technical College, and York County Technical College not available
Source: *A Fresh Look at College-Going Rates in Maine*, December 2000, FAME – NCES, IPEDS Graduation Rate Survey 1997, and US Department of Education, COOL Website

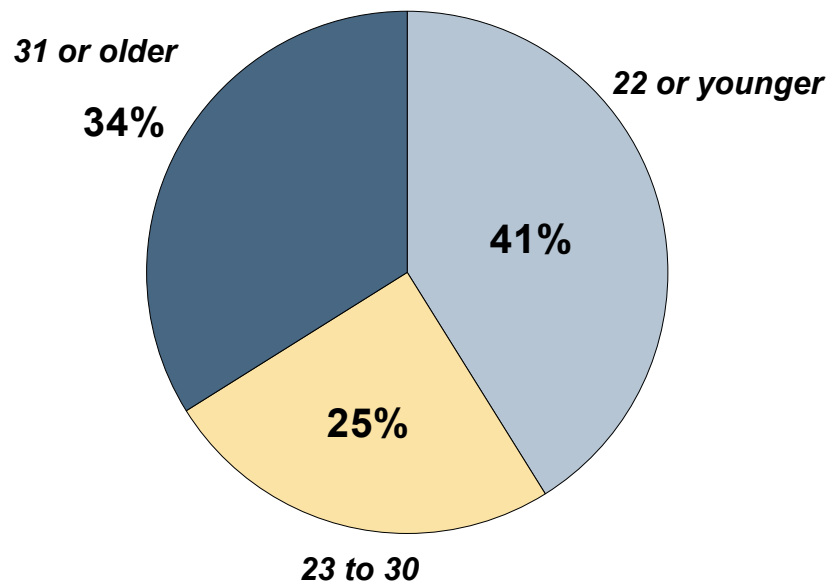
Post Secondary Enrollment of Non-Traditional Students Is Below the National Average



Source: *Higher Education Achievement in Maine*, Maine Development Foundation

Despite Under-Enrollment of the 25 and Older Population, the Majority of Students Enrolled in the Public University System Are Adults Over 22

Age Range of Enrolled Students at the University of
Maine System - 1995

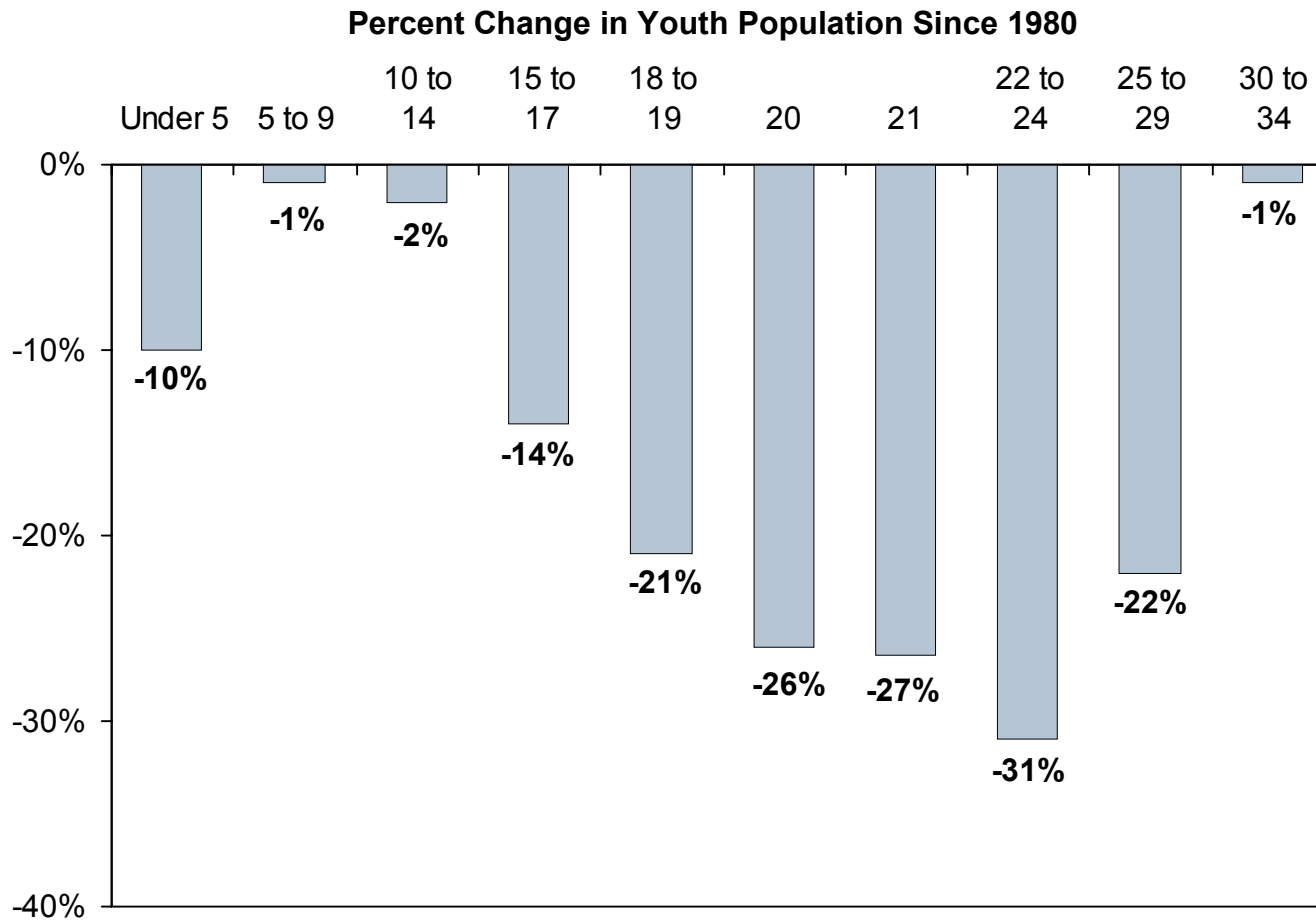


Source: *Report of the Commission on Higher Education Governance*, Maine Legislature July 1996

Suggested Interventions

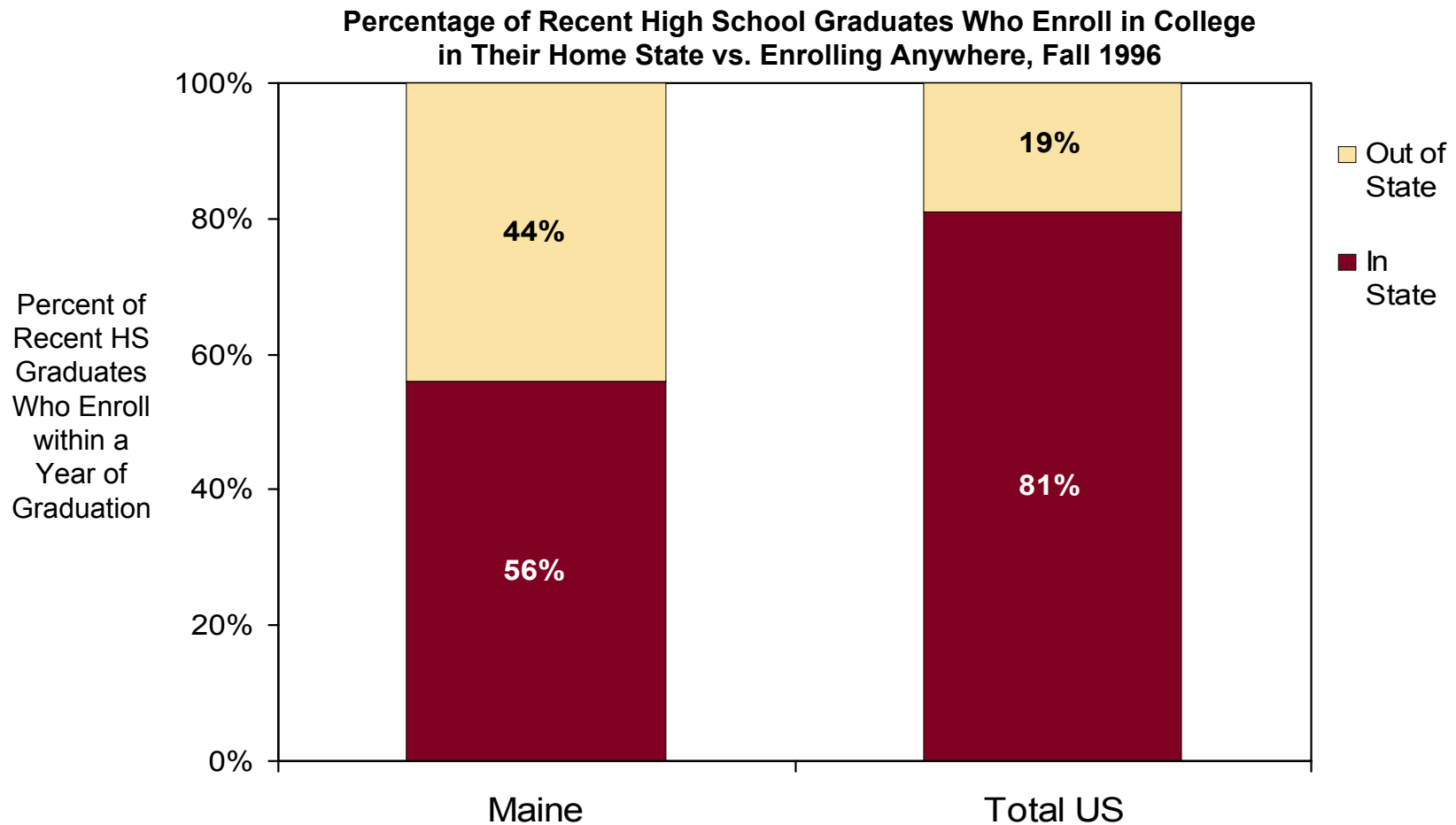
- Connect Learning Results to college admissions standards
 - Higher Education Achievement in Maine, Maine Development Foundation
- Improve Postsecondary Core Curriculum
 - Hold a series of forums between employers and teaching faculty to define employer needs and inform the design of the core curriculum of institutions
 - MDF Task Force on Higher Education Achievement, March 1998
 - Expand graduate degree programs at USM, particularly for advanced degrees in biosciences, information sciences and business
 - 30 and 1000: How to Build a Knowledge Based Economy in Maine and Raise Incomes to the National Average by 2010
- Improve college retention programs
 - MDF Task Force on Higher Education Achievement, March 1998
- Create a Governor’s Academy for Science and Mathematics Education
 - Target math and science teachers to initiate and sustain educational reform in math and science
 - 30 and 1000: How to Build a Knowledge Based Economy in Maine and Raise Incomes to the National Average by 2010

Maine's Youth Population Is Steadily Declining



Source: *Maine's Disappearing Youth: Implications of a Declining Youth Population*, Maine Leadership Consortium, May 2002

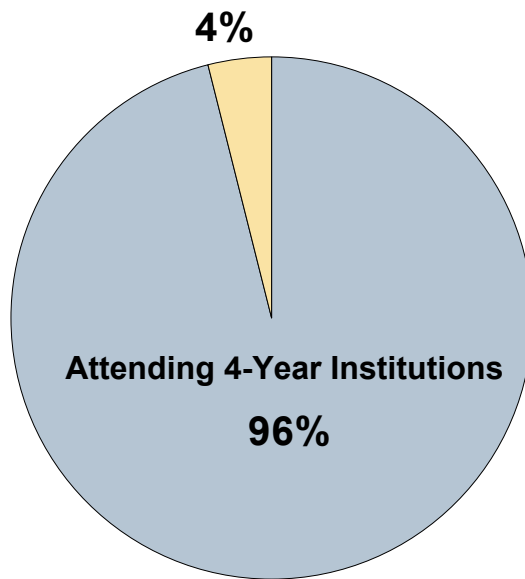
A Much Higher Proportion of Maine's Recent High School Graduates Leave the State to Attend College



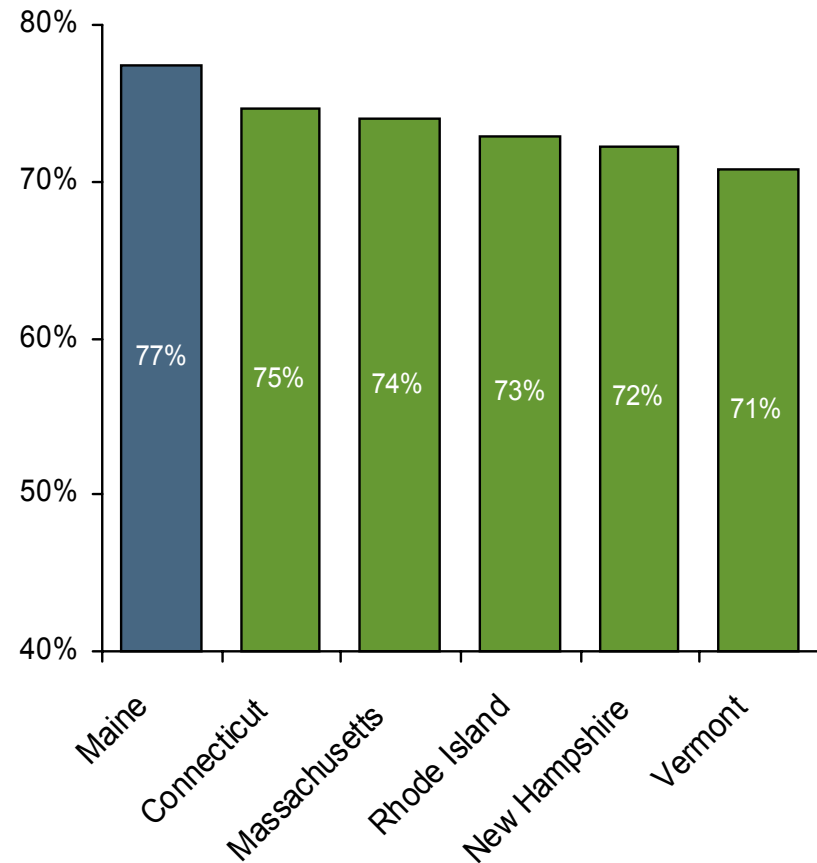
Source: *A Fresh Look at College-Going Rates in Maine*, December 2000, FAME – Data derived from NCES, Digest of Educational Statistics 1998, Table 205 p. 227

The Recent High School Graduates Leaving Maine for College Are Primarily Going to Private, 4-Year Institutions

Percent of Recent HS Graduates Who Leave the State and Enroll in 4 Year Institutions, 1996

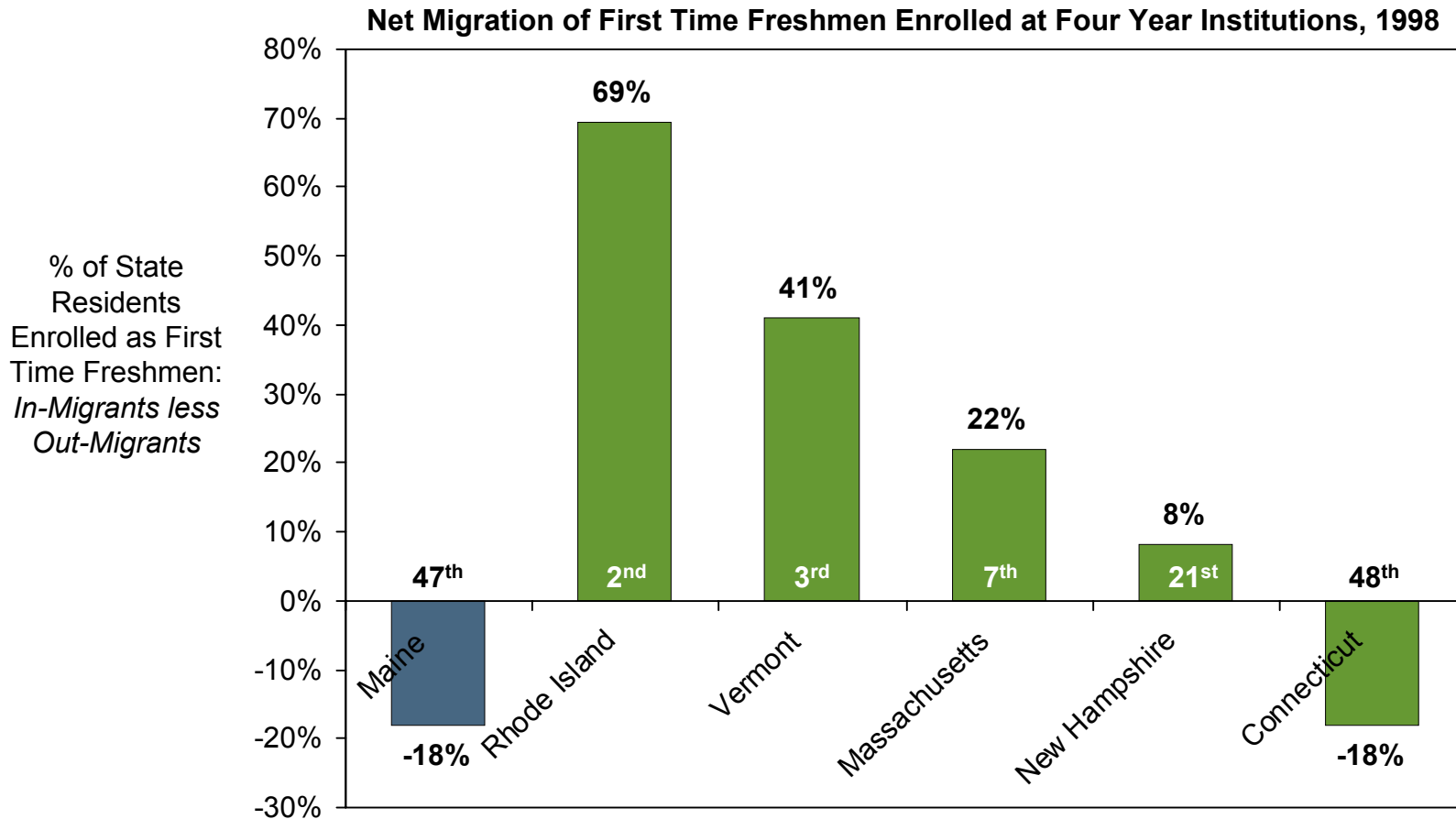


Percent of High School Graduates Who Leave the State and Enroll in Private Colleges, 1998



Source: *A Fresh Look at College-Going Rates in Maine*, December 2000, FAME ; *Comparisons of Higher Education Information for New England States*, October 2001, Maine Education Policy Research Institute, USM

Maine is a Net Exporter of College Freshman to Other States

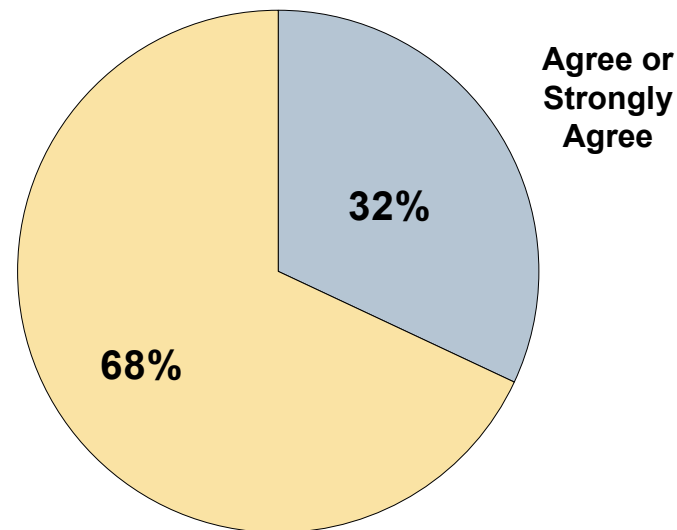


Only three states in the country have higher levels of net out-migration than Maine

Source: *Comparisons for Higher Education Information for New England States*, Maine Education Policy Research Institute, University of Southern Maine Office, October 2001; Source from Postsecondary Education OPPORTUNITY, January 2001

A Sizable Share of Maine Students Believe They Will Need to Leave Maine to Be Successful

“To Be Successful I Need to Move Out of State”
% Agree or Strongly Agree



Note: Survey questions did not define “successful” for students

Source: National Center for Student Aspirations survey – Data collected from over 60,000 students representing every county in Maine – 32% is average of male and female responses

Agenda

I. Introduction

II. Key Statewide Issues Raised by Studies

A. K-12 Education

B. Post Secondary Education

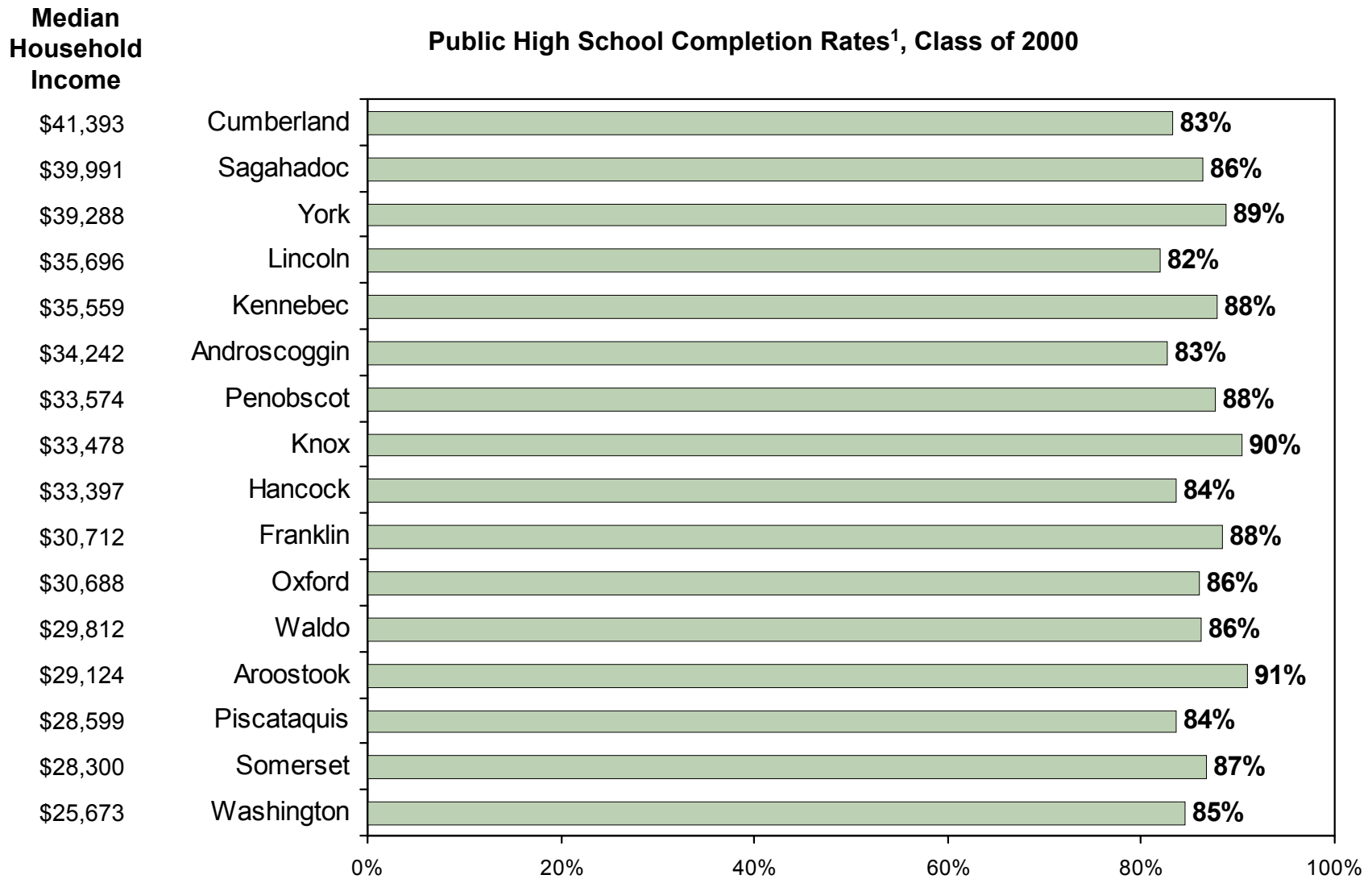
III. Regional Differences

Summary of Regional Differences

Regional income differences do not appear to be a factor influencing high school graduation rates or intentions to go to college. However, there does appear to be a correlation between the number of residents with bachelor's degrees and median income by county:

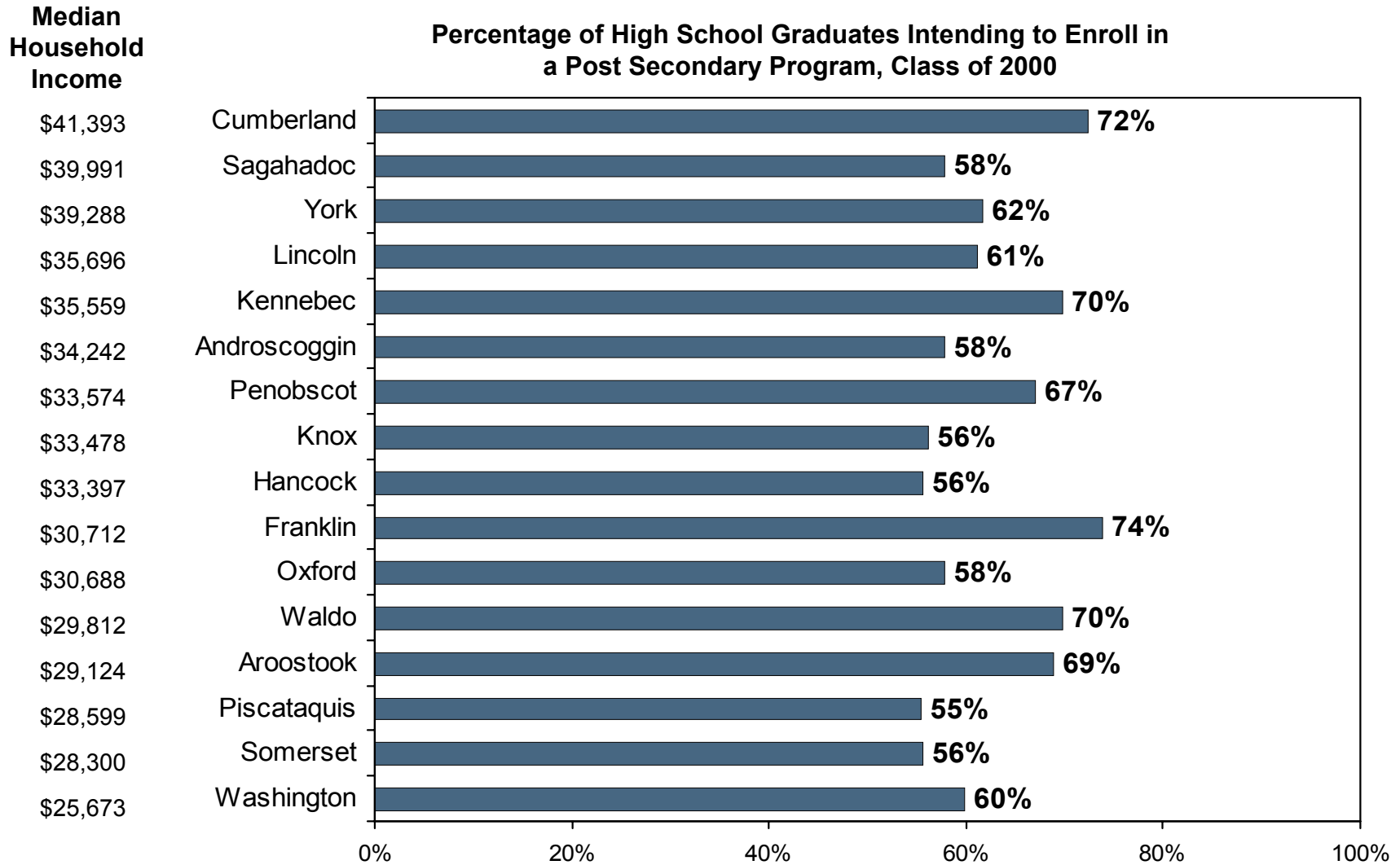
- High school graduation rates are consistently strong across the state, and do not appear to be related to median income by county.
- Intentions to go to college vary by county, but also appear to be relatively independent of median income. Many of the counties where students have high post-secondary aspirations also have local public college campuses.
- In contrast, the number of residents with bachelor's degrees does appear to be correlated to median income by county. More residents of higher-income counties have college degrees than those who live in poorer counties. These statistics may reflect low college attainment in the poorer counties, and/or the effect of demographic shifts as college-educated residents of poorer counties move to higher-income areas.
- Maine's youth population is steadily declining as the older population grows. This makes it difficult to statistically impact bachelor's degree attainment at the state level, assuming that Maine's younger residents are the group most likely to attain degrees. This demographic shift is most extreme in Maine's poorer counties, where public school enrollments have dropped dramatically.

At First Glance, Class of 2000 High School Completion Rates Do Not Appear Closely Correlated With Median Household Income



¹ Accounts for dropouts from 9th-12th grades
 Source: Maine DOE data, US Census

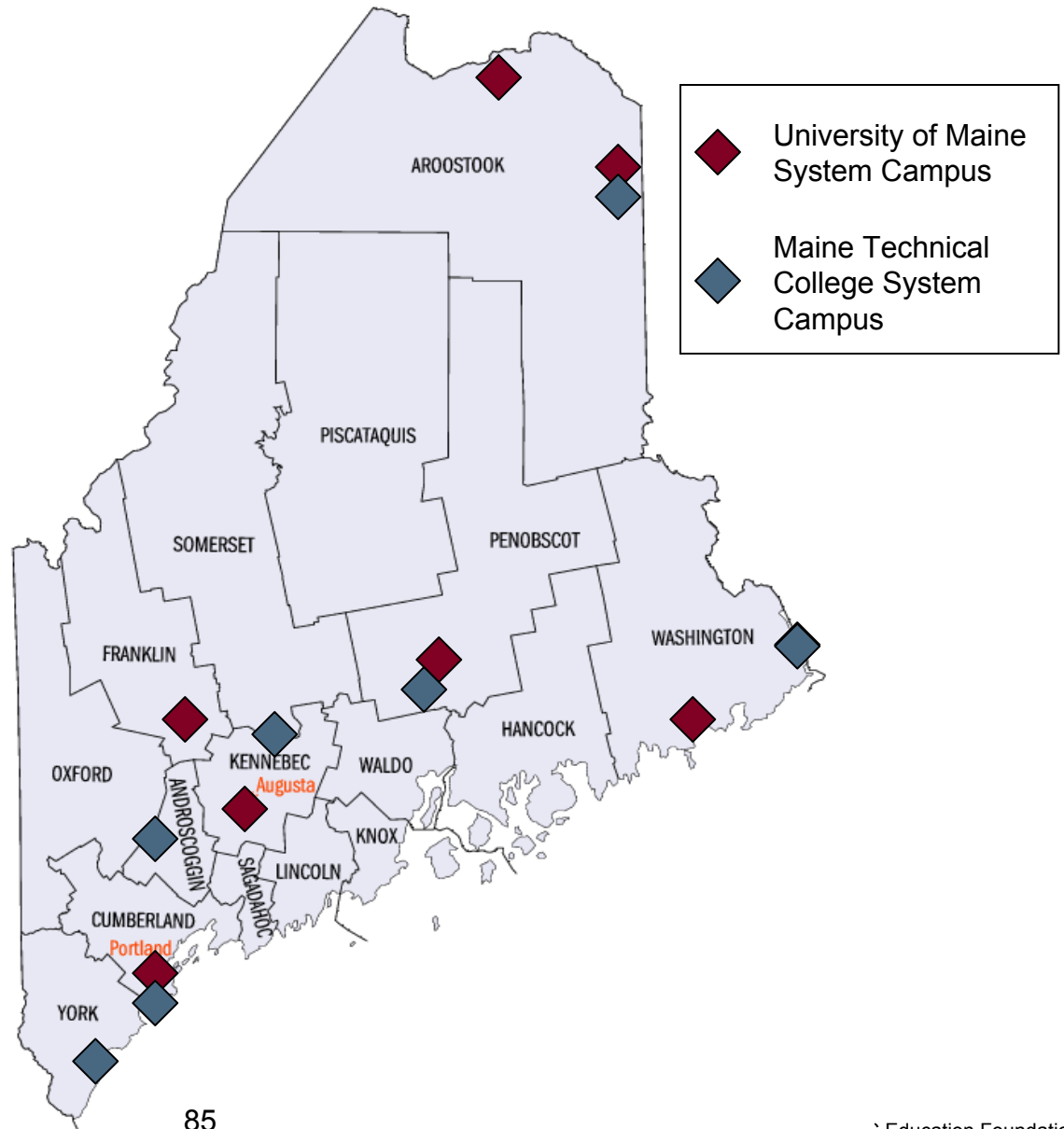
The Percentage of High School Graduates Intending to Continue Their Education Varies by County, But Not by Median Income



Source: Maine DOE data, US Census

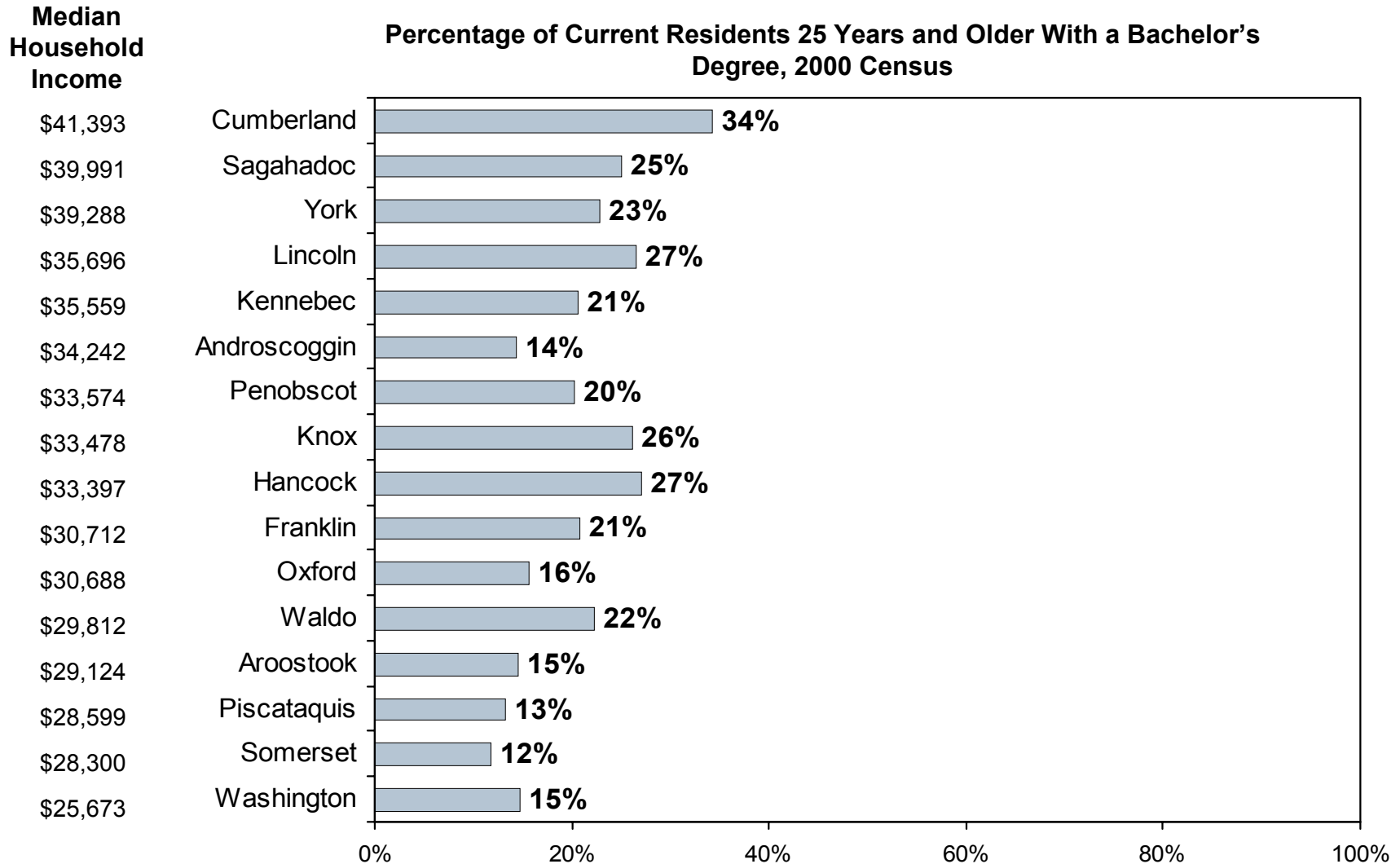
Many of the Counties Where Students Have High Postsecondary Aspirations Also Have Local Public Campuses

Counties with Enrollment Intentions Above Expectations	University of Maine System Campus	Maine Technical College System Campus
Aroostook	2	1
Cumberland	1	1
Franklin	1	0
Kennebec	1	1
Penobscot	1	1
Waldo	0	0



Source: www.maine.edu and www.mtcs.net

The Percentage of Residents with Bachelor's Degrees Tends to Decrease Moving from the Southern to the Northern Counties

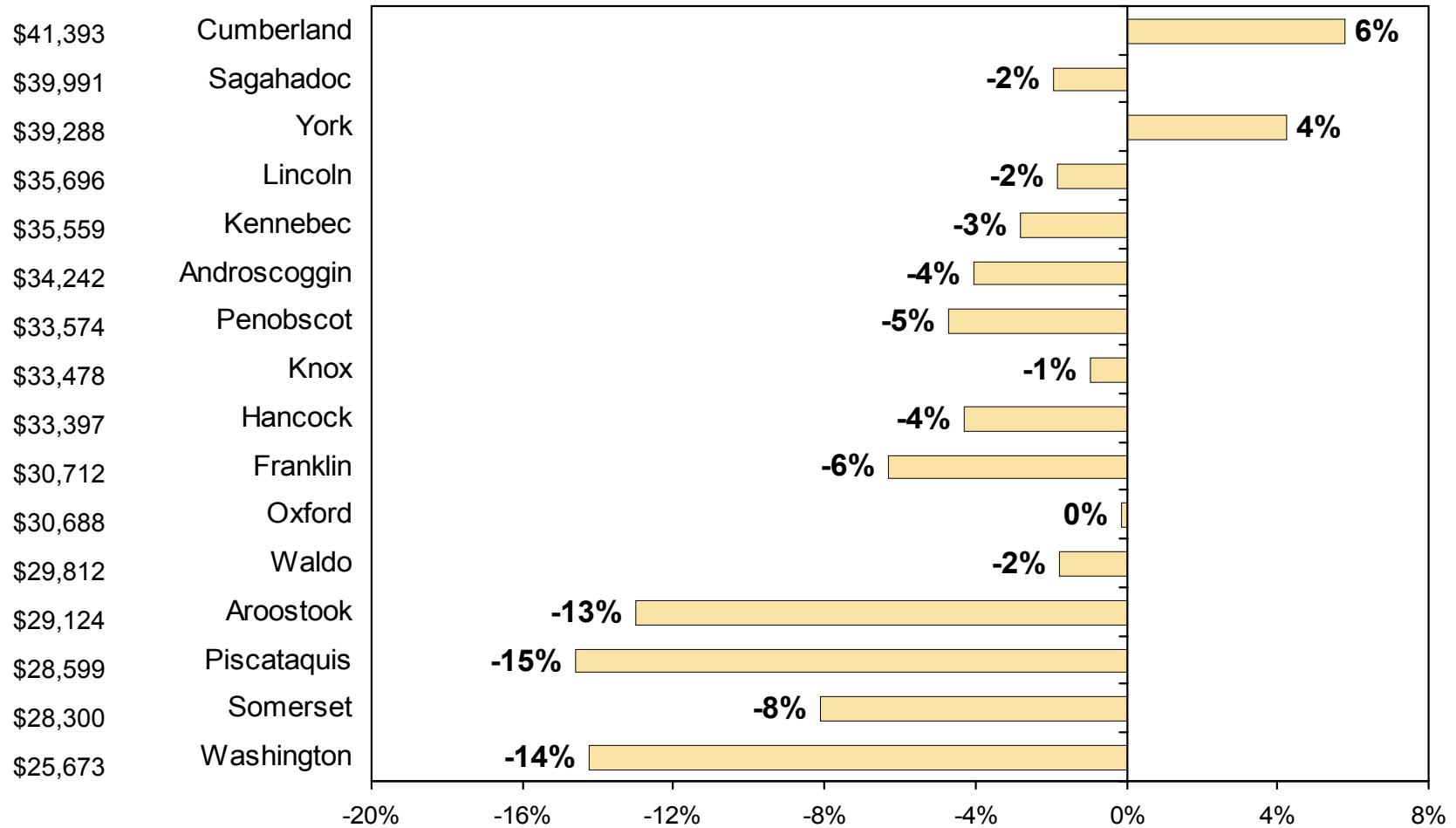


Source: Bangor Daily News, "Degree Recipients Older, Census Shows"; US Census

Declining School Enrollments Make It More More Difficult for Poorer Counties to Increase Bachelor's Attainment Rates

Median Household Income

Public School Enrollment Changes 1994-2000



Source: Maine Education Policy Research Institute

Study of Studies