Study of Studies

July 2002

in collaboration with

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<td>Postsecondary Access: student-to-counselor ratio, AP availability and participation rates, barriers for adults in pursuing a postsecondary education, tuition and state support for higher education, public higher education enrollment and capacity, public university competitiveness, suggested interventions</td>
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</table>
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**

- What is the landscape being considered? What are its boundaries?

**Options for Impact**

- What are the needs?
- What is being done or is under consideration?
- What is the range of possible interventions?
- What is effective?

**Other Funders**

- How do (or would) interventions by the foundation fit into the landscape?
  - Relative scale of resources
  - Opportunities for leverage
  - Complications

**Action Steps**

- 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
  - Understand potential competing or complementary approaches
  - Understand best demonstrated practices of peers

**Output**

- 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

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

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

<table>
<thead>
<tr>
<th>Success Factors</th>
<th>Elementary</th>
<th>Middle School</th>
<th>High School</th>
<th>Traditional Post Secondary</th>
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<th>Adult Post-Secondary</th>
<th>Job Training</th>
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<tr>
<td>Aspirations</td>
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<td>Want to achieve educational success?</td>
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<td>Have the resources and opportunities to achieve educational success?</td>
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<td>Achievement</td>
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Synthesis of external research will reveal areas where there are significant unmet needs and timely opportunities
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

<table>
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<td>Achievement</td>
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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

Trends in Maine’s National Ranking for Degree Attainment of Population 25 and Over

Source: US Census Data, FSG Analysis

Bachelor’s degree attainment has improved since 1998, narrowing the gap from its widest point
Maine Exceeds National Rates for High School Graduation and College Persistence, but Lags on Aspirations and Enrollment

Percent of Students Passing Through Each Hurdle to College Graduation
Rates for Maine Students vs. Rates for the National Student Population

- Students who will graduate from high school: 85% (Maine), 77% (National)
- Students who plan to attend college or university: 65% (Maine), 73% (National)
- Students who actually enroll in a college or university: 84% (Maine), 93% (National)
- Students who will earn a college degree: 65% (Maine), 62% (National)

Maine Has...
- Higher high school graduation rates
- Lower college aspiration rates
- Lower college enrollment rates
- Higher college 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**

- **Number of 9th graders in 2000-01**: 18,410
- **Students who will graduate from high school**: 15,685 (85%)
- **Students who plan to attend college or university**: 10,195 (65%)
- **Students who actually enroll in a college or university**: 8,564 (47%)
- **Students who will earn a college degree**: 5,567 (30%)

Percent of total students:
- 100%
- 85%
- 55%
- 47%
- 30%

*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

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Maine Rates</th>
<th>National Rates</th>
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<tr>
<td>Number of 9th graders in 2000-01</td>
<td>18,410</td>
<td>18,410</td>
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<tr>
<td>Students who will graduate from high school</td>
<td>15,685</td>
<td>14,139</td>
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<tr>
<td>Students who plan to attend college or university</td>
<td>10,195</td>
<td>10,310</td>
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<tr>
<td>Students who actually enroll in a college or university</td>
<td>8,564</td>
<td>9,573</td>
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<tr>
<td>Students who will earn a college degree</td>
<td>5,567</td>
<td>5,891</td>
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</table>

Aspirations Gap

Enrollment Gap

Percent of total students

At Maine Rates: 100%

At National Rates: 100%

Aspirations:
- Maine: 85%
- National: 77%

Enrollment:
- Maine: 55%
- National: 56%

College Degree:
- Maine: 47%
- National: 52%

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

<table>
<thead>
<tr>
<th></th>
<th>Drop out of HS</th>
<th>Don't intend to go to college</th>
<th>Don't enroll in college</th>
<th>Don't attain a degree</th>
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</thead>
<tbody>
<tr>
<td>Maine 9th graders in 2000-2001</td>
<td>18,410</td>
<td>5,490</td>
<td>2,725</td>
<td>2,997</td>
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<tr>
<td>Gap Greater than National Average</td>
<td>1,631</td>
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Comparison to National Expectations
Rates for the National Student Population

<table>
<thead>
<tr>
<th></th>
<th>Drop out of HS</th>
<th>Don't intend to go to college</th>
<th>Don't enroll in college</th>
<th>Don't attain a degree</th>
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<td>Maine 9th graders in 2000-2001</td>
<td>18,410</td>
<td>4,271</td>
<td>3,829</td>
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<tr>
<td></td>
<td>0</td>
<td>5,000</td>
<td>10,000</td>
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</tbody>
</table>

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

**Status Quo**
Rates for Maine Students

- **Gap Greater than National Average**
  - 18,410 9th graders in 2000-2001
  - 65% intend to enroll
  - 84% enroll
  - 5,567 attain a degree
  - 2,725 Drop out of HS
  - 5,490 Don't intend to go to college
  - 1,631 Don't enroll in college
  - 2,997 Don't attain a degree

**Improvement to National Rates**
Higher Maine Rates for Intentions and Enrollment

- **Gap Improved to National Average**
  - 18,410 9th graders in 2000-2001
  - 73% intend to enroll
  - 93% enroll
  - 6,922 attain a degree
  - 2,725 Drop out of HS
  - 4,235 Don't intend to go to college
  - 801 Don't enroll in college
  - 3,727 Don't attain a degree

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

If a 30 Year Old HS Graduate\(^1\) Gets Some Higher Education...

If a 30 Year Old HS Graduate\(^1\) Gets a College Degree...

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 income\(^2\)

\(^1\)Statistics for Non-Hispanic White Population

\(^2\)Calculations 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

- Doctoral Degree: $3.4
- Professional Degree: $4.4
- Master's Degree: $2.5
- Bachelor's Degree: $2.1
- Associate's Degree: $1.6
- Some College: $1.5
- High School Graduate: $1.2
- Non High School Graduate: $1.0

Agenda

I. Introduction

II. Key Statewide Issues Raised by Studies
   A. K-12 Education
   B. Post Secondary Education

III. Regional Differences
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.
Why Has Maine Achieved So Much Relative Success in K-12 Education?
(significantly higher test scores and graduation rates than the national average)

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

- **Aspirations**
  - Students Think Succeeding at School Is Important?
    - Over 90% of students agree parents think success in school is important, though parent-teacher interaction is low
  - K-12 parental involvement appears high

- **Access**
  - Public Schools Are Sufficiently Well Financed?
    - Expenditures per pupil are above US average
  - Sufficient Dedicated Teaching Resources?
    - Relatively low student-to-teacher ratio
    - Anticipated teacher shortage, mirroring national averages – current shortages in foreign language, math, and science
    - Increased recruiting of teachers from within Maine
    - Low teacher salaries

- **Achievement**
  - Students Have Basic Academic Skills?
    - Consistently outperforms the nation and Northeast region in academic performance across all tested subjects – Grades 4 and 8
  - High percentages of students taking challenging college prep coursework
  - Public schools at all levels increasing performance
  - Very high HS graduation rates
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
Aspirations – Parents and Teachers

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

Male: 90%
Female: 93%

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

Male: 35%
Female: 29%

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

Parents’ Level of Educational Attainment

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

Current Expenditures Per Pupil for Public Elementary and Secondary Schools, 1998-99

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

Students Per Teacher Ratio, Fall 1999

- Maine: 13.5
- Vermont: 12.3
- New Hampshire: 14.7
- United States: 16.1

Maine’s Potential for Future Teacher Shortages Mirrors National Figures

Ages of Maine Teachers, 1999-00

- 37.5%
- 28.1%
- 11.5%
- 2.1%

Ages of All US Teachers, 1998

- 47.8%
- 26.7%
- 25.5%
- 20.8%

Maine could face a teacher shortage as many approach retirement

## 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

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

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

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

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Maine</th>
<th>US Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Teacher Salary</td>
<td>$24,962</td>
<td>$26,639</td>
</tr>
<tr>
<td>Average Teacher Salary</td>
<td>$34,906</td>
<td>$40,574</td>
</tr>
<tr>
<td>Cost of Living Adjusted</td>
<td>$36,010</td>
<td>$40,574</td>
</tr>
</tbody>
</table>

Comparison of Education Spending on Teacher Salaries, 1998-99

<table>
<thead>
<tr>
<th>Category</th>
<th>Maine</th>
<th>US Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>40%</td>
<td>38%</td>
</tr>
</tbody>
</table>

Maine Rank: 28th, 33rd, 37th

Initial Definition of Success Factors

<table>
<thead>
<tr>
<th>Aspirations</th>
<th>Access</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students want to get past barriers and to achieve educational success</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Students have resources and opportunities necessary to achieve educational success</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Students have the skills and preparation necessary to achieve educational success</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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


© MELMAC Education Foundation
Maine Students’ Science and Writing Scores Also Exceed National Averages

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

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

- Maine: 75%
- Massachusetts: 82%
- Connecticut: 67%
- Vermont: 57%
- United States: 63%

Percent of High School Students Taking Chemistry by Graduation

- Maine: 76%
- Massachusetts: 71%
- Connecticut: 64%
- Vermont: 54%
- United States: 54%

Source: A Decade of Progress and Some Lessons Learned, David Silvermail at USM; Maine Education Symposium August 9, 2001
Achievement – High Performing Public Schools

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

<table>
<thead>
<tr>
<th>School Type</th>
<th>‘91-’92</th>
<th>‘97-’98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Schools</td>
<td>37%</td>
<td>59%</td>
</tr>
<tr>
<td>Middle Schools</td>
<td>37%</td>
<td>55%</td>
</tr>
<tr>
<td>High Schools</td>
<td>33%</td>
<td>54%</td>
</tr>
</tbody>
</table>

Source: A Decade of Progress and Some Lessons Learned, David Silvernail at USM; Maine Education Symposium August 9, 2001
Maine’s Recent High School Degree Attainment Eclipses All Other New England States and the US


- Maine: 95%
- Connecticut: 92%
- Massachusetts: 91%
- Vermont: 91%
- Rhode Island: 88%
- New Hampshire: 85%
- United States: 87%

I. Introduction

II. Key Statewide Issues Raised by Studies
   A. K-12 Education
   B. Post Secondary Education

III. Regional Differences
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
- Low College Aspirations of Recent HS Graduates?
  - Intentions to pursue post-secondary education steadily increasing among HS graduates to ~65% but lower than national averages
  - Aspirations for graduate degrees below average
  - Over 85% of students agree parents think college is important
  - 27% of male students think they don’t need college

### Access
- Limited Options and Affordability of Post Secondary Opportunities?
  - AP availability is above average but participation is below
  - Very high HS graduation rates

### Achievement
- Low HS Achievement or Graduation Rates?
  - AP scores of Maine students are at or slightly above the national average, but below NH and VT
  - SAT scores of Maine students are at or slightly below the national average, and below NH and VT

- Low College Enrollment or Attainment of Recent HS Graduates?
  - Maine’s recent HS graduates enroll in college at rates below New England and US average but similar to NH and VT
  - College persistence rates are at or above national averages

- Low Enrollment or Attainment of Non-Traditional Students?
  - The majority of students enrolled in the University of Maine system are 23 years old or older

### Other
- Declining Youth Population or other Demographic Changes?
  - Steadily declining population of residents age 15-29 and declining school enrollments in all but 2 counties
  - Out-migration for college: Maine is the 6th highest exporter of college freshmen in the nation

- Other Aspirations for graduate degrees below average
- Over 85% of students agree parents think college is important
- 27% of male students think they don’t need college

- AP availability is above average but participation is below
- Very high HS graduation rates

- AP scores of Maine students are at or slightly above the national average, but below NH and VT
- SAT scores of Maine students are at or slightly below the national average, and below NH and VT

- Maine’s recent HS graduates enroll in college at rates below New England and US average but similar to NH and VT
- College persistence rates are at or above national averages

- The majority of students enrolled in the University of Maine system are 23 years old or older

- Steadily declining population of residents age 15-29 and declining school enrollments in all but 2 counties
- Out-migration for college: Maine is the 6th highest exporter of college freshmen in the nation

- 32% of Maine children in all regions agree ‘to be successful I need to move out of state’
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
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.”

Source: Barriers to College In Maine: Exploratory Discussion Groups of Maine High School Students, Mitchell Institute, Critical Insights August 2001

Study of Studies
Aspirations – Intention to Attend College Among High School Graduates

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>59%</td>
<td>62%</td>
<td>60%</td>
<td>61%</td>
<td>65%</td>
<td>65%</td>
<td>73%</td>
</tr>
</tbody>
</table>

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

Aspirations – Importance of College

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

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>86%</td>
<td>91%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>27%</td>
<td>15%</td>
</tr>
</tbody>
</table>

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

Aspirations – Interest Among Adults

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

Are You Interested In Pursuing a College Degree?

- Yes: 38%
- No: 47%
- Maybe: 15%
- Somewhat: 53%
- Very much: 47%

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
Aspirations

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
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
Study of Studies

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

• 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.

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

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

Significant Barriers to Pursuing a College Degree

- Ability to pay for college
- Cost of college
- Time needed to go to college
- Being unsure of career plans
- Child care
- Comfort level using a computer
- Belief that coursework will be too difficult
- Comfort level with being on a college campus

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

Average Annual Tuition at Public Institutions

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

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 Attainment\(^1\), Maine Is Behind in Affordability and State Contributions

**Percent of State Budget Allocated to Higher Education - 1998**

![Graph showing percent of state budget allocated to higher education for different states.](image)

**Rate of Contribution Ranks 2nd Lowest in the Nation, Behind Only Vermont**

**Percent that Poorest Families Pay for Lowest Price Higher Education**

![Graph showing percentage of poorest families paying for lowest price higher education for different states.](image)

**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
Access – State Contributions

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


© MELMAC Education Foundation
Access – State Contributions

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

General Fund Appropriations 2002-2003 Budget Year

- Department of Education: 35.7%
- Human Services: 22.0%
- Behavioral and Developmental Services: 9.2%
- Administrative and Financial Services: 7.1%
- Higher Education: 5.8%
- University of Maine System: 1.6%
- Other Higher Ed: 0.5%
- Technical College System: 0.3%

Total Higher Education: 8.6%

Source: Maine State Office of Fiscal and Program Review, 7/2/02
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.
Since 1990, Maine’s Technical College System Has Expanded Enrollment, But Also Turned Away Students Due to Capacity Limitations

Access – Enrollment Trends and Capacity

Increasing Enrollment in Maine’s Technical College System

- **Enrollment of Non-Degree Seekers**
  - 1990: 3,836
  - 2000: 2,306
  - 44% of Total

- **Enrollment of Degree Seekers**
  - 1990: 3,054
  - 2000: 5,738
  - 56% of Total

- **Total Enrollment**
  - 1990: 6,890
  - 2000: 8,044

Relatively Small Share of Enrolled Students as a Percentage of Applications

- **Enrolled Students**: 51%
- **Declined, Wait Listed, or Duplicates**: 49%

- “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.

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

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

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

*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)
Access – High School Graduates Continuing to Public Institutions

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

Access

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

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


Maine: 95%
Connecticut: 92%
Massachusetts: 91%
Vermont: 91%
Rhode Island: 88%
New Hampshire: 85%
United States: 87%

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

Percent of AP Examination Results that Qualify for College Credit

- Maine: 64%
- New Hampshire: 68%
- Vermont: 69%
- US Average: 61%

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

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

- Public 4 Year: 59% of degrees awarded by 4 Year institutions
- Private 4 Year: 41% of degrees awarded by 4 Year institutions

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.

Source: A Fresh Look at College-Going Rates in Maine, December 2000, FAME
Similarly, Approximately Half of Students Attending Technical Colleges Graduate in 3 Years

Three-Year Graduation Rates at Maine Technical Colleges, 1997

<table>
<thead>
<tr>
<th>Technical College</th>
<th>3-Year Graduation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Colleges</td>
<td>48%</td>
</tr>
<tr>
<td>Southern Maine Technical College</td>
<td>41%</td>
</tr>
<tr>
<td>Northern Maine Technical College</td>
<td>49%</td>
</tr>
<tr>
<td>Eastern Maine Technical College</td>
<td>49%</td>
</tr>
<tr>
<td>Washington County Technical College</td>
<td>64%</td>
</tr>
</tbody>
</table>

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

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

- 31 or older: 34%
- 22 or younger: 41%
- 23 to 30: 25%

Achievement

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

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

- Attending 4-Year Institutions: 96%
- Other – Out-migration: 4%

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

- Maine: 77%
- Connecticut: 75%
- Massachusetts: 74%
- Rhode Island: 73%
- New Hampshire: 72%
- Vermont: 71%

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 Polity Research Institute, USM
Maine is a Net Exporter of College Freshman to Other States

Net Migration of First Time Freshmen Enrolled at Four Year Institutions, 1998

% of State Residents Enrolled as First Time Freshmen: In-Migrants less Out-Migrants

-18% - 69% - 41% - 22% - 8% - 0% - 10% - 20% - 30% - 40% - 50% - 60% - 70% - 80%

Maine is 47th, Rhode Island is 2nd, Vermont is 3rd, Massachusetts is 7th, New Hampshire is 21st, Connecticut is 48th.

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

Source: Comparisons to 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

- 32% Agree or Strongly Agree
- 68% Disagree or Strongly Disagree

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
I. Introduction

II. Key Statewide Issues Raised by Studies
   A. K-12 Education
   B. Post Secondary Education

III. 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.
Regional Differences

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

<table>
<thead>
<tr>
<th>Median Household Income</th>
<th>Public High School Completion Rates¹, Class of 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>$41,393</td>
<td>Cumberland</td>
</tr>
<tr>
<td>$39,991</td>
<td>Sagahadoc</td>
</tr>
<tr>
<td>$39,288</td>
<td>York</td>
</tr>
<tr>
<td>$35,696</td>
<td>Lincoln</td>
</tr>
<tr>
<td>$35,559</td>
<td>Kennebec</td>
</tr>
<tr>
<td>$34,242</td>
<td>Androscoggin</td>
</tr>
<tr>
<td>$33,574</td>
<td>Penobscot</td>
</tr>
<tr>
<td>$33,478</td>
<td>Knox</td>
</tr>
<tr>
<td>$33,397</td>
<td>Hancock</td>
</tr>
<tr>
<td>$30,712</td>
<td>Franklin</td>
</tr>
<tr>
<td>$30,688</td>
<td>Oxford</td>
</tr>
<tr>
<td>$29,812</td>
<td>Waldo</td>
</tr>
<tr>
<td>$29,124</td>
<td>Aroostook</td>
</tr>
<tr>
<td>$28,599</td>
<td>Piscataquis</td>
</tr>
<tr>
<td>$28,300</td>
<td>Somerset</td>
</tr>
<tr>
<td>$25,673</td>
<td>Washington</td>
</tr>
</tbody>
</table>

0% 20% 40% 60% 80% 100%

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

Study of Studies
### Regional Differences

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

<table>
<thead>
<tr>
<th>County</th>
<th>Median Household Income</th>
<th>Percentage of High School Graduates Intending to Enroll in a Post Secondary Program, Class of 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumberland</td>
<td>$41,393</td>
<td>72%</td>
</tr>
<tr>
<td>Sagahadoc</td>
<td>$39,991</td>
<td>58%</td>
</tr>
<tr>
<td>York</td>
<td>$39,288</td>
<td>62%</td>
</tr>
<tr>
<td>Lincoln</td>
<td>$35,696</td>
<td>61%</td>
</tr>
<tr>
<td>Kennebec</td>
<td>$35,559</td>
<td>70%</td>
</tr>
<tr>
<td>Androscoggin</td>
<td>$34,242</td>
<td>58%</td>
</tr>
<tr>
<td>Penobscot</td>
<td>$33,574</td>
<td>67%</td>
</tr>
<tr>
<td>Knox</td>
<td>$33,478</td>
<td>56%</td>
</tr>
<tr>
<td>Hancock</td>
<td>$33,397</td>
<td>56%</td>
</tr>
<tr>
<td>Franklin</td>
<td>$30,712</td>
<td>74%</td>
</tr>
<tr>
<td>Oxford</td>
<td>$30,688</td>
<td>58%</td>
</tr>
<tr>
<td>Waldo</td>
<td>$29,812</td>
<td>70%</td>
</tr>
<tr>
<td>Aroostook</td>
<td>$29,124</td>
<td>69%</td>
</tr>
<tr>
<td>Piscataquis</td>
<td>$28,599</td>
<td>55%</td>
</tr>
<tr>
<td>Somerset</td>
<td>$28,300</td>
<td>56%</td>
</tr>
<tr>
<td>Washington</td>
<td>$25,673</td>
<td>60%</td>
</tr>
</tbody>
</table>

Source: Maine DOE data, US Census
Many of the Counties Where Students Have High Postsecondary Aspirations Also Have Local Public Campuses

<table>
<thead>
<tr>
<th>Counties with Enrollment Intentions Above Expectations</th>
<th>University of Maine System Campus</th>
<th>Maine Technical College System Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aroostook</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Cumberland</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Franklin</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Kennebec</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Penobscot</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Waldo</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: [www.maine.edu](http://www.maine.edu) and [www.mtcs.net](http://www.mtcs.net)

Study of Studies
Regional Differences

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

<table>
<thead>
<tr>
<th>Median Household Income</th>
<th>Percentage of Current Residents 25 Years and Older With a Bachelor’s Degree, 2000 Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>$41,393</td>
<td>Cumberland 34%</td>
</tr>
<tr>
<td>$39,991</td>
<td>Sagahadoc 25%</td>
</tr>
<tr>
<td>$39,288</td>
<td>York 23%</td>
</tr>
<tr>
<td>$35,696</td>
<td>Lincoln 27%</td>
</tr>
<tr>
<td>$35,559</td>
<td>Kennebec 21%</td>
</tr>
<tr>
<td>$34,242</td>
<td>Androscoggin 14%</td>
</tr>
<tr>
<td>$33,574</td>
<td>Penobscot 20%</td>
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<tr>
<td>$33,478</td>
<td>Knox 26%</td>
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<tr>
<td>$33,397</td>
<td>Hancock 27%</td>
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<tr>
<td>$30,712</td>
<td>Franklin 21%</td>
</tr>
<tr>
<td>$30,688</td>
<td>Oxford 16%</td>
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<tr>
<td>$29,812</td>
<td>Waldo 22%</td>
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<tr>
<td>$29,124</td>
<td>Aroostook 15%</td>
</tr>
<tr>
<td>$28,599</td>
<td>Piscataquis 13%</td>
</tr>
<tr>
<td>$28,300</td>
<td>Somerset 12%</td>
</tr>
<tr>
<td>$25,673</td>
<td>Washington 15%</td>
</tr>
</tbody>
</table>

Regional Differences

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

<table>
<thead>
<tr>
<th>Median Household Income</th>
<th>Cumberland</th>
<th>Sagadoc</th>
<th>York</th>
<th>Lincoln</th>
<th>Kennebec</th>
<th>Androscoggin</th>
<th>Penobscot</th>
<th>Knox</th>
<th>Hancock</th>
<th>Franklin</th>
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<th>Waldo</th>
<th>Aroostook</th>
<th>Piscataquis</th>
<th>Somerset</th>
<th>Washington</th>
</tr>
</thead>
</table>

Source: Maine Education Policy Research Institute