MISSION AND ACKNOWLEDGEMENTS

Educate Maine is a business-led education advocacy organization championing college and career readiness, and increased education attainment. Educate Maine believes that education is the catalyst and foundation for individual success, engaged citizenship, and sustainable economic growth; and that all Maine people should have equal access to high quality educational opportunities.

We would like to thank the following individuals, organizations, and businesses who have helped guide the development of Education Indicators for Maine 2015: Educate Maine board members Tim Hussey, Duke Albanese, Cari Medd, and Laurie Lachance; Colleen Quint of the Alfond Scholarship Foundation; Tony Cipollone of the John T. Gorman Foundation; and Cherie Galyean of the Maine Community Foundation. Lisa Plimpton of Plimpton Research conducted the research and analysis. Pica of Belfast, Maine was responsible for design and layout. Franklin Printing of Farmington, Maine was responsible for printing. Shannon Parker edited the report. This report is underwritten through the generous support of the Davis Family Foundation, the John T. Gorman Foundation, and the Nellie Mae Education Foundation.

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Educate Maine is pleased to present the Education Indicators Report for Maine 2015, the third installment of an annual report developed to explore and understand Maine’s entire educational system beginning in early childhood and continuing throughout adulthood. This report is a snapshot of that system presented through critical indicators that measure access, participation, and performance across the system. The health of the whole system is our priority. In keeping with this, no one indicator tells a complete story. Taken together, the indicators do provide the reader a view of what is working well and where Maine needs to invest more time and resources.

We believe that education is the most important investment that can be made in people, in communities, and in the economy. We also believe that Maine has one of the best educational systems in the nation and it is our collective responsibility to see that it continues to improve. Educational success necessitates starting this investment early and providing multiple pathways for students to gain skills and experience throughout life. Participation in high quality early childhood education will lay the foundation on which all future success depends. Gaining skills through a variety of experiences and demonstrating proficiency in meeting rigorous and relevant standards will prepare students to meet with success in college and career pursuits. Creating a plan for postsecondary achievement and sticking with that plan will allow Maine’s youth to become productive and civically engaged citizens. This has never been more important than in the climate of our rapidly evolving economy. Students must be engaged in the learning process, even into and throughout adulthood. Engaging our students to become lifelong learners will continue to drive personal and economic growth.

The intent of this report is to establish an accurate and common foundation of data to discuss Maine’s educational system. This report’s audience includes all education stakeholders: educators, families, students, employers, policy leaders, and advocacy groups. We hope that you find this information useful for advancing a constructive conversation about the future of Maine’s educational system and the wellbeing of all Maine people.

Cheers,

EDMUND CERVONE
EXECUTIVE DIRECTOR
EDUCATE MAINE

This report is available at indicators.educatemaine.org.
## TEN INDICATORS

These ten indicators follow the path of Maine children as they grow and learn. We look at participation in educational programs in early childhood because those experiences lay the foundation on which all future education is based. We examine performance from first grade through high school because we understand the importance of demonstrating proficiency at one level in order to be ready to achieve at the next level. Finally, we study postsecondary outcomes because, ultimately, it is educational attainment that we seek to measure and celebrate.

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<th>WHERE WE STAND</th>
</tr>
</thead>
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<td>PRESCHOOL PARTICIPATION</td>
<td>42% of 3- &amp; 4-year-olds are enrolled in public or private preschool</td>
</tr>
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<td>9</td>
<td>PRESCHOOL ACCESS</td>
<td>35% of 4-year-olds are enrolled in public preschool 64% of Maine school districts offer public preschool</td>
</tr>
<tr>
<td>10</td>
<td>FULL-DAY KINDERGARTEN</td>
<td>88% of Maine school districts offer full-day kindergarten</td>
</tr>
<tr>
<td>12</td>
<td>4TH GRADE ACHIEVEMENT</td>
<td>Percentage of Maine students who are at or above proficiency in 4th grade: reading (37%), math (47%)</td>
</tr>
<tr>
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<td>8TH GRADE ACHIEVEMENT</td>
<td>Percentage of Maine students who are at or above proficiency in 8th grade: reading (38%), math (40%)</td>
</tr>
<tr>
<td>16</td>
<td>HIGH SCHOOL ACHIEVEMENT</td>
<td>87% of Maine students graduated from high school 49% of Maine students in grade eleven are proficient in reading and math</td>
</tr>
<tr>
<td>18</td>
<td>COLLEGE-GOING</td>
<td>62% of Maine students enrolled in college within one year of graduating from high school 83% of Maine first-year students returned for a second year at their college institution</td>
</tr>
<tr>
<td>20</td>
<td>COLLEGE COMPLETION</td>
<td>48% on-time graduation rate (11 percentage point gap with New England)</td>
</tr>
<tr>
<td>21</td>
<td>COLLEGE COST &amp; STUDENT DEBT</td>
<td>The average net cost of college for Maine students is higher as a percent of per capita income than New England: 54% vs. 48% Maine students have a higher annual debt burden as a percent of per capita income than New England: 17% vs. 14%</td>
</tr>
<tr>
<td>22</td>
<td>MAINERS WITH COLLEGE DEGREES</td>
<td>39.1% of Maine students have an associate degree or higher</td>
</tr>
</tbody>
</table>
GOALS FOR 2019

50% of 3- & 4-year-olds will be enrolled in a public or private preschool
64% of 4-year-olds will be enrolled in public preschool
Maine will offer consistent and quality public preschool programming to 100% of Maine 4-year-olds
100% of Maine school districts will offer full-day kindergarten
Maine students will increase their proficiency in reading to 44% and in math to 54%
Maine students will increase their proficiency in reading to 45% and in math to 47%
90% of Maine students will graduate from high school
70% of Maine students in grade eleven will be proficient in reading and math
66% of Maine students will enroll in college within one year of graduating from high school
88% of Maine first-year students will return for a second year of college
Close the college completion gap with New England
Maine students will pay annually the same per capita income for college as New England
Maine annual student debt burden will be the same as the New England average

EDUCATE MAINE MISSION GOALS

100% of students in Maine will graduate from high school prepared for success in postsecondary education and the workplace.
50% of Mainers who are 25 years and older will possess a college degree, certificate or industry credential, attaining or surpassing the New England average by 2023.
A 3rd grade student who doesn’t read at grade level (as reflected in 4th grade test scores) is four times less likely to graduate from high school than her proficient peers.

By the end of 8th grade, U.S. students are two years behind in math compared to their peers in other countries.
Maine’s future prosperity depends on how well we prepare our people for the 21st-century. Participation in high-quality early childhood programs, raising proficiency in 1st - 12th grade, graduating high school seniors who are prepared for college and career, and increasing the number of Mainers with postsecondary degrees and credentials are all crucial elements to moving Maine forward. Together we can educate Maine.
Maine public school enrollment has shrunk by 8% over the last eight years. As student numbers decreased, the share of low-income students increased. Low-income is defined using the eligibility criteria for the USDA’s free and reduced lunch program. Children are eligible for subsidized food in public schools if they are living in households earning 185% of the poverty level or less. In dollar terms, this is $44,863 for a household of four. During the 2014/2015 school year, almost one out of every two students attending public school was eligible for this program and considered low-income. This number has steadily increased over the last decade. It is important to note that these are statewide averages. There are rural and urban schools across Maine where the rates are much higher.

Living in low-income households poses potential hurdles for children ranging from financial hardship to developmental delays. These and other factors can have negative effects on educational outcomes. Research shows that low-income children often trail their higher income peers in terms of performance. The data presented in this report supports that.

Income data reveals a gap in outcomes for low-income Maine students and their higher income peers. This is referred to as the achievement gap. This gap can form early in life and, left unaddressed, can widen and follow a child throughout school negatively affecting their performance and limiting their opportunities.

If we are to address the very real achievement gaps that exist in our communities and in our schools, we will need to commit to making substantive changes in our systems in order to ensure that all students can achieve.

This year’s report highlights the effects of an achievement gap on outcomes.

**MAINE’S ACHIEVEMENT GAP**

Although Maine public school enrollment has shrunk by 8% over the last eight years, the share of low-income students has steadily increased.
High quality early childhood education lays the foundation for future success and is a powerful and proven economic development investment. Research in Maine and nationwide shows that children who attend quality preschool programs are more likely to achieve in school and, in years to come, be gainfully employed and earn more money. They are less likely to need remediation, to enter the criminal justice system, or to need public assistance. If we are serious about achieving the ambitious goals in this report – closing the achievement gap, and turning around the effects of poverty – a commitment to providing high quality early childhood education to all Maine children is a must.

This report measures two important aspects of those early years: participation and access. We need more children to participate in a high quality program that prepares them to succeed when they enter the first grade. In order for this to happen, there needs to be better access in terms of geography and cost. This is best achieved through the public school system. Great progress has been made in creating the access through a law requiring universal voluntary public preschool by the 2017/18 school year (Public Law Chapter 581, 126th Legislature). The next step is to ensure that funding is secured to support this critical systemic expansion. And throughout all of these changes we must continue to speak to families about the importance of education in these early years.
PRESCHOOL PARTICIPATION

Two out of five Maine children (42%) ages 3 and 4 are enrolled in either a public or private preschool program. This is slightly less than the U.S. average (46%) and lags New England (56%). If the child lives in a family earning less than 200% of the poverty rate, participation dips to 36%, compared to a 48% participation rate of their classmates in higher income homes.

Participation in high quality settings is important. High quality preschool programs offer children a chance to build a strong foundation that will put them on the path to success throughout their educational career. High quality programs use research-based curriculum, integrate social, emotional and physical development throughout the day, and provide teacher training and classroom support.

Left out of this data are those children in informal care, referred to as “family, friend, and neighbor” care. National participation estimates for informal care range from 33% to 53% of children under age 5 with working parents. These are informal settings, often in homes, that provide parents a comfortable, convenient, and affordable option for their child’s care. Resources and training can be provided to these informal settings to improve the overall quality of education for the children.

The research is very clear here. We will not realize our goal of all Maine students graduating high school ready for college and career unless we are serious about starting them in high quality educational settings early in life. This is particularly true for children in low-income families. The key to closing the achievement gap is investment early in life as it becomes more difficult and costly to address as a child progresses through the system.

GOAL >>> 50% OF 3- & 4-YEAR-OLDS WILL BE ENROLLED IN A PUBLIC OR PRIVATE PRESCHOOL BY 2019

CHILDREN WHO ATTEND PRESCHOOL HAVE BETTER SCHOOL ATTENDANCE IN KINDERGARTEN. [2]

PRESCHOOL ENROLLMENT 3- AND 4-YEAR-OLDS, PUBLIC AND PRIVATE

<table>
<thead>
<tr>
<th>TOTAL PRESCHOOL ENROLLMENT</th>
<th>48% of children are enrolled in preschool if the family’s income is at or above 200% of the poverty level</th>
</tr>
</thead>
<tbody>
<tr>
<td>42%</td>
<td>Maine</td>
</tr>
<tr>
<td>56%</td>
<td>New England</td>
</tr>
<tr>
<td>36%</td>
<td>of children are enrolled in preschool if the family’s income is below 200% of the poverty level</td>
</tr>
</tbody>
</table>

PRESCHOOL ACCESS

Public preschool is available in 64% of Maine’s school districts. Just over one third of Maine 4-year-olds attend one of these public programs.

Participation in quality preschool settings is important but we cannot expect participation numbers to improve if access is limited due to available seats or cost. Making preschool available to the public, in all of Maine’s school districts, ensures access regardless of income or geography. In a geographically large rural state where almost half of the children ages 3 and 4 are living in families earning under 200% of the poverty level, access to consistent and high-quality public preschool is essential to closing the achievement gap.

Maine has addressed the access issue by passing a law requiring universal voluntary public preschool by the 2017/18 school year (Public Law Chapter 581, 126th Legislature). This will move Maine toward the goal of 100% preschool access in all school districts. With expanded public access we can expect that more families that utilize the public education system will enroll their children and participation will increase.

GOAL >>>

64% OF 4-YEAR-OLDS WILL BE ENROLLED IN PUBLIC PRESCHOOL BY 2019

MAINE WILL OFFER CONSISTENT AND QUALITY PUBLIC PRESCHOOL PROGRAMMING TO 100% OF MAINE 4-YEAR-OLDS BY 2019

4-YEAR-OLDS ENROLLED IN PUBLIC PRESCHOOL IN MAINE

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16%</td>
<td>18%</td>
<td>19%</td>
<td>24%</td>
<td>27%</td>
<td>32%</td>
<td>34%</td>
<td>35%</td>
</tr>
</tbody>
</table>

In Maine, 88% of school districts offer full-day kindergarten. Full-day kindergarten allows Maine kids to build upon the foundation provided by high quality early learning programs. Children who attend full-day kindergarten classes have greater reading and mathematics achievement gains than those in half-day classes. Full-day kindergarten programs are also effective in closing the achievement gap for low-income students and their peers. Maine is a leader in New England by this measure (just behind Massachusetts). Expanding access further will help raise proficiency rates and better prepare students for college and career.

In addition to expanding access, Maine is invested in improving outcomes. Kindergarten is a critical time to identify and address learning challenges. This saves money and resources over the long term and increases the probability of student success. Maine is part of a multi-state consortium designing a kindergarten readiness assessment that will provide educators with the needed information early in a child’s life that will help set them on the path to success.\(^4\)

**GOAL \>>> 100% OF MAINE SCHOOL DISTRICTS WILL OFFER FULL-DAY KINDERGARTEN BY 2019**

**FULL-DAY KINDERGARTEN IN MAINE VS NEW ENGLAND**

88% of Maine School districts offered full-day kindergarten in 2014. This is an increase from just 51% in 2002.

*not including New Hampshire

The years spent in 1st to 12th grade mark an important developmental time in students’ lives. Students begin to use the foundation they built in the early years to expand their learning. The third grade marks a time in life when students begin to transition from “learning to read” to “reading to learn”.

Those who participated in high quality early education settings and experienced regular, positive interaction with adults and other children, come better prepared than those who do not. They use these school years to build their knowledge in key content areas as well as in critical skills such as problem solving and teamwork that will prepare them to succeed in postsecondary educational pursuits and find a rewarding career.

Maine educators work hard to see that students graduate high school prepared to succeed in life. Maine has one of the highest high school graduation rates in the country – a point of pride – but too many of those students aren’t moving on to the next stage with all of the skills and knowledge necessary to succeed. This makes education and career pursuits difficult and limits opportunities.

Maine is committed to addressing this issue by ensuring that all children have an opportunity to gain the skills and experiences they need in life, regardless of where they live in the state. Maine has committed to moving to a proficiency-based learning system that uses rigorous standards and encourages educators to provide different learners with multiple pathways to demonstrate their competencies. All students (by law) will graduate with a diploma that demonstrates their proficiency and mastery of key standards and principles. This measurable, student-centered approach moves us toward a more equitable system where every Maine student can succeed.

The following sections measure student outcomes (proficiency) in reading and math and ultimately their ability to complete their secondary educational pursuits. Again, we see a difference in success for low-income students as the achievement gap follows students throughout their school years. On the pages that follow, the report will first address indicator status generally and then illustrate the achievement gaps that exist between our students from low- versus high-income families.
4TH GRADE ACHIEVEMENT

Fourth grade testing provides the first quantitative snapshot of how well we are preparing our students for academic and vocational success. This age marks a critical point in a child’s development and serves as a powerful indicator for future success. Students who do not read proficiently by the 3rd grade (reflected in 4th grade scores) are four times more likely to drop out than proficient readers. [6]

37% of Maine students in 4th grade were reading at a proficient or better level in 2013. This marks little movement in this statistic since 2007 (36%) and trails the New England average (42%).

47% of Maine students in 4th grade tested proficient or better in math. This is a marked improvement since 2007 (42%) but still trails the New England average (50%).

GOAL >>> MAINE STUDENTS WILL INCREASE THEIR PROFICIENCY IN READING TO 44% AND IN MATH TO 54% BY 2019

4TH GRADE READING PROFICIENCY (NAEP SCORES)

37%

READING

4TH GRADE MATH PROFICIENCY (NAEP SCORES)

47%

MATH

4X

THE RATE OF THEIR PROFICIENT PEERS. [6]

SOURCE: National Assessment of Educational Progress (NAEP), http://nces.ed.gov/nationsreportcard
4TH GRADE (ACHIEVEMENT GAP)

When this data is grouped by children who are eligible for free or reduced lunch (185% of the poverty level) and children who are not, a stark contrast emerges. Children in 4th grade who were eligible for free and reduced lunch were only 24% proficient in reading and 32% in math. This was much lower than their higher income peers who were 48% proficient in reading and 61% proficient in math. These are large achievement gaps that have widened since 2005.

If we are to improve proficiency we must start early in life. We can affect real change by concentrating efforts on closing the achievement gap. Addressing the educational needs of lower income children through interventions in early childhood and in the early elementary grades can close the achievement gap.

**4TH GRADE READING ACHIEVEMENT GAP (NAEP SCORES)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Reading Achievement Gap</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>22%</td>
<td>NOT ELIGIBLE</td>
</tr>
<tr>
<td>2007</td>
<td>20%</td>
<td>NOT ELIGIBLE</td>
</tr>
<tr>
<td>2009</td>
<td>21%</td>
<td>NOT ELIGIBLE</td>
</tr>
<tr>
<td>2011</td>
<td>20%</td>
<td>SCHOOL LUNCH ELIGIBLE</td>
</tr>
<tr>
<td>2013</td>
<td>24%</td>
<td>SCHOOL LUNCH ELIGIBLE</td>
</tr>
</tbody>
</table>

**4TH GRADE MATH ACHIEVEMENT GAP (NAEP SCORES)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Math Achievement Gap</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>25%</td>
<td>NOT ELIGIBLE</td>
</tr>
<tr>
<td>2007</td>
<td>27%</td>
<td>NOT ELIGIBLE</td>
</tr>
<tr>
<td>2009</td>
<td>31%</td>
<td>NOT ELIGIBLE</td>
</tr>
<tr>
<td>2011</td>
<td>31%</td>
<td>SCHOOL LUNCH ELIGIBLE</td>
</tr>
<tr>
<td>2013</td>
<td>32%</td>
<td>SCHOOL LUNCH ELIGIBLE</td>
</tr>
</tbody>
</table>

SOURCE: National Assessment of Educational Progress (NAEP), http://nces.ed.gov/nationsreportcard

SINCE 2005, MAINE’S 4TH GRADE READING ACHIEVEMENT GAP HAS GROWN FROM 20 TO 24 POINTS AND THE 4TH GRADE MATH ACHIEVEMENT GAP HAS GROWN FROM 20 POINTS TO 29 POINTS.
By 8th grade there are mixed results in proficiency scores for reading and math. Beginning in 2005, reading proficiency has remained essentially the same. Math proficiency, on the other hand, has improved over that same time by 10 percentage points.

Middle school marks an important transition in our education system. Students are preparing to enter high school and their performance through 8th grade is a good indicator of how they will perform in high school and beyond.

**GOAL >>> MAINE STUDENTS WILL INCREASE THEIR PROFICIENCY IN READING TO 45% AND IN MATH TO 47% BY 2019**

8TH GRADE ACHIEVEMENT

8TH GRADE READING PROFICIENCY (NAEP SCORES)

38%

<table>
<thead>
<tr>
<th>Year</th>
<th>Maine</th>
<th>New England</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>38%</td>
<td>37%</td>
</tr>
<tr>
<td>2007</td>
<td>37%</td>
<td>37%</td>
</tr>
<tr>
<td>2009</td>
<td>35%</td>
<td>38%</td>
</tr>
<tr>
<td>2011</td>
<td>39%</td>
<td>41%</td>
</tr>
<tr>
<td>2013</td>
<td>38%</td>
<td>43%</td>
</tr>
</tbody>
</table>

37% of Maine students were at or above proficiency in reading in 2013.

8TH GRADE MATH PROFICIENCY (NAEP SCORES)

40%

<table>
<thead>
<tr>
<th>Year</th>
<th>Maine</th>
<th>New England</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>30%</td>
<td>34%</td>
</tr>
<tr>
<td>2007</td>
<td>34%</td>
<td>38%</td>
</tr>
<tr>
<td>2009</td>
<td>35%</td>
<td>41%</td>
</tr>
<tr>
<td>2011</td>
<td>39%</td>
<td>42%</td>
</tr>
<tr>
<td>2013</td>
<td>40%</td>
<td>44%</td>
</tr>
</tbody>
</table>

47% of Maine students were at or above proficiency in math in 2013.

SOURCE: National Assessment of Educational Progress (NAEP), http://nces.ed.gov/nationsreportcard

22% OF MAINE 8TH GRADERS TESTED MISSED THREE OR MORE DAYS OF SCHOOL IN THE MONTH BEFORE TAKING NAEP. COMPARED WITH STUDENTS WITH NO ABSENCES, THEIR MATH SCORES WERE 16 POINTS LOWER AND THEIR READING SCORES WERE 13 POINTS LOWER—MORE THAN THE AVERAGE ONE-YEAR GAIN OF TEN POINTS.\(^7\)
8TH GRADE (ACHIEVEMENT GAP)

Although 38% and 40% of students are proficient in reading and math respectively, those eligible for free and reduced lunch (185% of the poverty level) are only 28% and 24% proficient. The achievement gap observed in 4th grade remains and will be carried into high school.

SINCE 2005, MAINE’S 8TH GRADE READING ACHIEVEMENT GAP HAS GROWN SLIGHTLY FROM 16 TO 18 POINTS, BUT THE 8TH GRADE MATH ACHIEVEMENT GAP HAS GROWN FROM 17 POINTS TO 27 POINTS.

SOURCE: National Assessment of Educational Progress (NAEP), http://nces.ed.gov/nationsreportcard
87% of Maine high school students graduated in 2014 making Maine a standout both regionally and nationally. There is still work to be done however, as only half of those graduates left school proficient in reading and math.

Graduation rates differ by income with a 78% graduation rate for lower income students versus 95% for their peers from higher income homes. Both of these rates show positive growth over the past decade. There remains a noticeable income related achievement gap as well, continuing a trend seen in 4th and 8th grade. Only one-third of graduates in low-income homes are proficient in reading and math compared to over half of their higher income peers.

As Maine continues its transition to a proficiency-based learning and diploma system, expectations are that rates should rise and achievement gaps should shrink.

**GOAL**

90% OF MAINE STUDENTS WILL GRADUATE FROM HIGH SCHOOL BY 2019

70% OF MAINE STUDENTS IN GRADE ELEVEN WILL BE PROFICIENT IN READING AND MATH BY 2019

HIGH SCHOOL GRADUATION RATE

<table>
<thead>
<tr>
<th>Year</th>
<th>MAINE</th>
<th>NEW ENGLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>83%</td>
<td>84%</td>
</tr>
<tr>
<td>2012</td>
<td>85%</td>
<td>84%</td>
</tr>
<tr>
<td>2013</td>
<td>86%</td>
<td>86%</td>
</tr>
<tr>
<td>2014</td>
<td>87%</td>
<td>86%</td>
</tr>
</tbody>
</table>

PROFICIENCY AND GRADUATION ACHIEVEMENT GAP IN MAINE

**MATH**

- Aggregate math proficiency rate = 49%
- Math proficient in 2015: 57% (MAINE) vs 32% (NEW ENGLAND)

**READING**

- Aggregate reading proficiency rate = 48%
- Reading proficient in 2015: 55% (MAINE) vs 32% (NEW ENGLAND)

**GRADUATION**

- Aggregate graduation rate = 87%
- Graduation rate in 2015: 95% (NOT ELIGIBLE) vs 78% (FREE/REDUCED SCHOOL LUNCH ELIGIBLE)

INCREASING MAINE’S HIGH SCHOOL GRADUATION RATE TO 90% WOULD RESULT IN $27 MILLION MORE IN ANNUAL EARNINGS AND $4.1 MILLION MORE IN STATE AND LOCAL TAX REVENUES.

By 2018, the demand for college-educated workers in Maine is projected to be seven times greater than for high school graduates. Moreover, the overwhelming majority of high-growth jobs will require education beyond high school.

A high school degree alone is not enough to succeed in the economy. We need people who have committed to and completed some postsecondary plan. This ranges from military service to technical training to a college degree. The Maine economy needs all of these options. Maine workers benefit as well. Every increase in educational attainment comes with higher lifetime earnings.

When thinking about how to get more people to pursue and complete a postsecondary plan, Maine demographics come into play. Like the nation, Maine is looking at a large segment of the workforce reaching retirement age. Unlike a lot of the nation, Maine does not have enough younger bodies to fill those gaps or to meet new needs. This is a concern across industry and can stand in the way of economic growth. Our approach must look at traditional college-aged students as well as adults already in the workforce. A large number have some college but never completed a degree. Some are employed, but with a professional credential could be more productive and advance through their industries.

The following sections look at measures of aspiration, persistence, access, and completion. This is where all prior educational investments come to bear.
Approximately 2 out of 3 Maine students enter college the fall immediately following high school graduation. This marks a slight increase in Maine’s college-going rate from 59% in 2007 to 62% in 2014 and is approaching the 2019 goal of 66%. When broken out by income, we continue to see an achievement gap. Students that are eligible for free and reduced lunch (185% of the poverty level) have a college-going rate of only 48% compared to 73% for their higher income peers.

**Maine’s College-Going Achievement Gap**

The economic return to a bachelor’s degree has held steady at around 15%, making it an excellent investment. [12]
COLLEGE-GOING

Once students get to college, 83% return to college for a second year; however, numbers begin to fall off after that. Reasons for dropping out are numerous and include financial hardship, family responsibilities, and cultural reasons to name just a few. This is referred to as the “Funnel Effect” whereby each step along the education “pipeline” results in a decrease in participation. Additionally, if a student leaving high school is underprepared to learn when they get to college, the cost of remediation, in terms of dollars and time, can also lead to them dropping out. If we are to improve these numbers and do away with the funnel, barriers must be removed that keep students from enrolling, persisting in, and graduating from college.

GOAL >>>

66% OF MAINE STUDENTS WILL ENROLL IN COLLEGE WITHIN ONE YEAR OF GRADUATING FROM HIGH SCHOOL BY 2019

88% OF MAINE FIRST-YEAR STUDENTS WILL RETURN FOR A SECOND YEAR OF COLLEGE BY 2019

THE MAINE EDUCATION FUNNEL EFFECT

OF 100 ENTERING 9TH GRADERS 100

87 WILL GRADUATE FROM HIGH SCHOOL

54 WILL ENROLL IN COLLEGE

45 WILL RETURN FOR A SECOND YEAR OF COLLEGE

30 WILL GRADUATE FROM A 2- OR 4-YEAR COLLEGE

THE NUMBER OF ECONOMICALLY DISADVANTAGED MAINE HIGH SCHOOL GRADUATES ENROLLING IN COLLEGE NEARLY DOUBLED BETWEEN 2008 AND 2014, FROM 1,385 TO 2,748 STUDENTS.[13]

Maine’s college completion rate (150% of normal time) was 48%, lower than the New England rate of 59%. This gap has increased by 5 percentage points from 2007 to 2013 and is moving away from the benchmark.

Maine community colleges are graduating a quarter of their students on time and outperforming New England. Our public universities graduate approximately half of their students on time, which trails the New England average. Maine’s private universities graduate two-thirds of its students on time, slightly trailing the New England average.

On-time college completion is important for the economy. We need more people to complete their postsecondary education and the market needs them sooner rather than later. From the student’s perspective, completing on time manages their costs and increases the probability of completion. The full benefit of postsecondary education is realized from completion of degree, program, certificate, etc. The longer it takes to complete the more likely it is that the student won’t finish, which limits their earning potential over their lifetime. Higher education institutions can help improve completion rates by encouraging students to take more credits each semester and by ensuring that there are ample options to do so.

12 CREDITS PER SEMESTER IS CONSIDERED FULL-TIME AT MOST MAINE INSTITUTIONS, BUT STUDENTS NEED 15 CREDITS PER SEMESTER IN ORDER TO COMPLETE A DEGREE ON TIME.\(^1\) \(^4\)

**GOAL >>> CLOSE THE COLLEGE COMPLETION GAP WITH NEW ENGLAND BY 2019**

<table>
<thead>
<tr>
<th>Year</th>
<th>Maine</th>
<th>New England</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>52%</td>
<td>50%</td>
</tr>
<tr>
<td>2008</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>2009</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>2010</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>2011</td>
<td>49%</td>
<td>48%</td>
</tr>
<tr>
<td>2012</td>
<td>58%</td>
<td>59%</td>
</tr>
<tr>
<td>2013</td>
<td>48%</td>
<td>59%</td>
</tr>
</tbody>
</table>

*Source: Integrated Postsecondary Education Data System (IPEDS), National Center for Education, U.S. Department of Education*
Although the average annual net cost at two- and four-year degree-granting colleges and universities in Maine is $4,000 less than in New England, it is higher as a share of income. In 2012/13 Maine’s average annual net cost of college was 54% of per-capita income, compared to 48% in New England. This gap has remained the same for the past several years.

Students and families borrow money to pay for college. Maine students on average borrow approximately $600 less per year of college than the average New England student. But the average annual debt as a share of per-capita income is 17% in Maine versus 14% across New England. This gap has also stayed relatively consistent in recent years.

If we want to increase college-going, persistence, and completion, we need to manage cost and debt burdens. It is not enough to keep tuition prices low; we also need to address the income side of the equation by supporting a labor market that provides comparable wages and income growth over time.

**GOAL >>>**

**MAINE STUDENTS WILL PAY ANNUALLY THE SAME PER CAPITA INCOME FOR COLLEGE AS NEW ENGLAND BY 2019**

**MAINE ANNUAL STUDENT DEBT BURDEN WILL BE THE SAME AS THE NEW ENGLAND AVERAGE BY 2019**

<table>
<thead>
<tr>
<th>COLLEGE COST IN MAINE VS NEW ENGLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AVERAGE COLLEGE COST</strong></td>
</tr>
<tr>
<td>New England: $25,534</td>
</tr>
<tr>
<td>Maine: $21,517</td>
</tr>
<tr>
<td><strong>AVERAGE COLLEGE COST AS A PERCENTAGE OF ANNUAL INCOME</strong></td>
</tr>
<tr>
<td>New England: 48%</td>
</tr>
<tr>
<td>Maine: 54%</td>
</tr>
<tr>
<td><strong>AVERAGE ANNUAL STUDENT LOAN</strong></td>
</tr>
<tr>
<td>New England: $7,320</td>
</tr>
<tr>
<td>Maine: $6,715</td>
</tr>
<tr>
<td><strong>AVERAGE STUDENT LOAN AS A PERCENTAGE OF ANNUAL INCOME</strong></td>
</tr>
<tr>
<td>New England: 14%</td>
</tr>
<tr>
<td>Maine: 17%</td>
</tr>
</tbody>
</table>

**SOURCE:** Integrated Postsecondary Education Data System (IPEDS), National Center for Education, U.S. Department of Education

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**MAINE RANKS**

7TH

HIGHEST IN THE NATION IN AVERAGE STUDENT DEBT ($29,934) AND 16TH HIGHEST IN PROPORTION OF GRADUATES WITH DEBT (64%) AMONG STATE RESIDENTS WHO COMPLETED BACHELOR’S DEGREES IN 2013. [15]
Just over 39% of Maine adults held an associate degree or higher in 2014. This represents approximately 375,000 people, 58,000 more Maine adults with college degrees than in 2006. Maine is slightly ahead of Rhode Island, but trails the other New England states in this measure. The regional average is 46%, 6.7 percentage points higher than Maine. All New England states have a higher share of adult college degree holders than the national average of 38.3%. From 2006 to 2014, Maine experienced 18% growth in the share of adults holding college degrees. We are beginning to close the gap with New England, where growth was 15.6% for the same time period.

Workforce educational attainment is an important measure for the Maine economy. It is an indicator of workforce quality that is a top concern of employers in Maine and the nation. To meet current and future workforce needs, most Mainers will need to complete some form of postsecondary training - whether 2-year, 4-year, and graduate college degrees, or professional credentials and certificates that can be earned in educational settings and on the job.

While annual state-level estimates track adults with college degrees, they do not tell us about professional credentials or certificates. Using national estimates, and assuming that Maine doesn’t differ much from the nation, we can hypothesize that roughly 10% of our adults who do not hold college degrees do have a professional credential or certificate. While factors such as access to credential and certificate programs may put Maine a bit below the national average, including these credentials gets us closer to our overall educational attainment goal.

44% of Mainers will hold a college degree, certificate, or industry credential by 2019

SINCE 2010 THE U.S. ECONOMY HAS PRODUCED 6.6 MILLION EMPLOYMENT OPPORTUNITIES, 2.9 MILLION OF WHICH ARE CONSIDERED GOOD JOBS. COLLEGE GRADUATES HOLD 2.8 MILLION—NEARLY 97% OF THE GOOD JOBS. [17]
TAKE ACTION!

WHAT YOU CAN DO:

We each have a role to play in improving Maine’s education pipeline. Together we can prepare Maine’s students and adult learners for success and positively impact Maine’s future prosperity.

Families
- Get your child to school on time every day, ready to learn.
- Know what it takes to help your child learn, understand academic requirements and help your child reach them.
- Make sure your child takes challenging courses in English, math and science.
- Support teacher professional development.
- If you believe your child needs extra help, ask for it.
- Get involved by communicating with teachers, participating in school events, and attending school board meetings.

Educators
- Commit to ongoing communication with students and parents about each student’s academic progress.
- Implement a variety of support systems and instructional practices that will ensure the success of students.
- Use data to inform instructional practices.
- Offer rigorous classes.
- Advocate for professional development.

Business
- Encourage your employees to get involved in their child’s education by attending parent teacher conferences, volunteering in schools, mentoring, etc.
- Encourage your employees to continue their education.
- Offer tuition reimbursement.
- Offer paid internships to students.
- Share your hiring criteria with students, parents and educators – explain what you are looking for in terms of knowledge, skills, and attitudes.
- Support professional development for educators.

Elected Officials
- Adopt our goal of 50% postsecondary degree attainment by 2023 and work with your colleagues to positively impact the ten indicators highlighted in this report.
- Visit a school and a classroom and find out what educators in your area need most in order to improve student performance.
- Support programs, rules and/or laws that increase participation in and make more accessible high quality early childhood programs.

Community
- Engender a culture of high academic expectations from your schools, district administration, faculty and students.
- Visit schools, talk with teachers and students, attend school board and town budget meetings.
- Become a student mentor.
- Be informed about what is needed for students and schools to be successful in today’s economy.
- Support professional development for educators.
EDUCATE MAINE is a business-led education advocacy organization championing college and career readiness, and increased education attainment. Educate Maine believes that education is the catalyst and foundation for individual success, engaged citizenship, and sustainable economic growth; and that all Maine people should have equal access to high quality educational opportunities.