

**EDUCATE  
MAINE**



# EDUCATION INDICATORS FOR MAINE ..... 2016

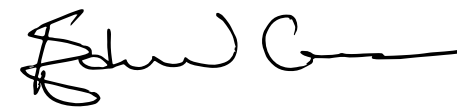
# WELCOME

Educate Maine is pleased to present the Education Indicators for Maine 2016 report. This is the fourth installment of this annual report developed to explore and understand Maine's entire education system beginning in early childhood and continuing throughout adulthood. This 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, they do provide the reader a view of what is working well and where we need to invest more time and resources.

We believe that education is the key to Maine people's success therefore starting early and providing multiple pathways to gain skills and experience throughout life will provide greater opportunities for individuals, communities, and the economy. Participation in high quality educational programs during early childhood 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 continue on to college and career. Identifying a plan after high school and sticking with it will lead to productive and civically engaged citizens. And in our rapidly evolving economy, engaging in the learning process throughout adulthood will drive personal and economic growth.

The intent of this report is to establish an accurate and common foundation of data to discuss Maine's education 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 helpful in advancing a constructive conversation about the future of Maine's education system and the well-being of all Maine people.

Cheers,



EDMUND CERVONE  
EXECUTIVE DIRECTOR  
EDUCATE MAINE

This report is available at [indicators.educatemaine.org](http://indicators.educatemaine.org).

## 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 2016: Educate Maine board members Duke Albanese, Paul Bolin, Cari Medd, and Laurie Lachance; Colleen Quint of the Alford Scholarship Foundation; Tony Cipollone of the John T. Gorman Foundation; Cherie Galyean of the Maine Community Foundation; and Dr. Flynn Ross of the University of Southern Maine. Lisa Plimpton of Plimpton Research conducted the research and analysis. Mariette Aborn, a Bowdoin College student wrote the narrative. Pica of Belfast, Maine was responsible for design and layout. Franklin Printing of Farmington, Maine was responsible for printing. This report is underwritten through the generous support of the John T. Gorman Foundation, the Maine Community Foundation, and the Nellie Mae Education Foundation.

# 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—in all its forms—that we seek to measure and celebrate.

## EDUCATE MAINE MISSION GOALS



**100%** OF STUDENTS  
IN MAINE WILL  
GRADUATE FROM  
HIGH SCHOOL PREPARED FOR  
SUCCESS IN POSTSECONDARY  
EDUCATION AND THE  
WORKPLACE

**44%** 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 2019.

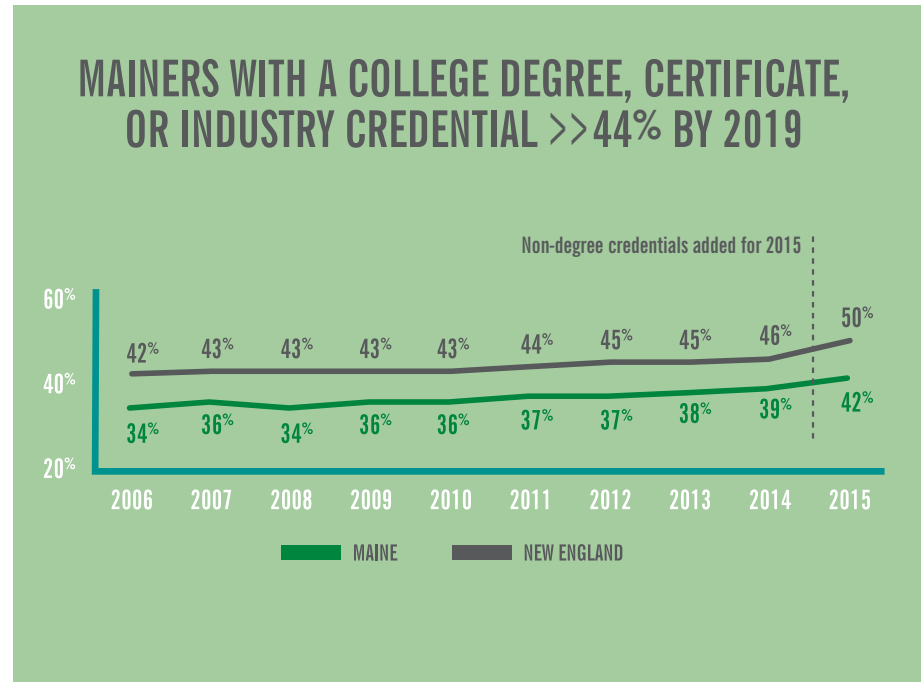
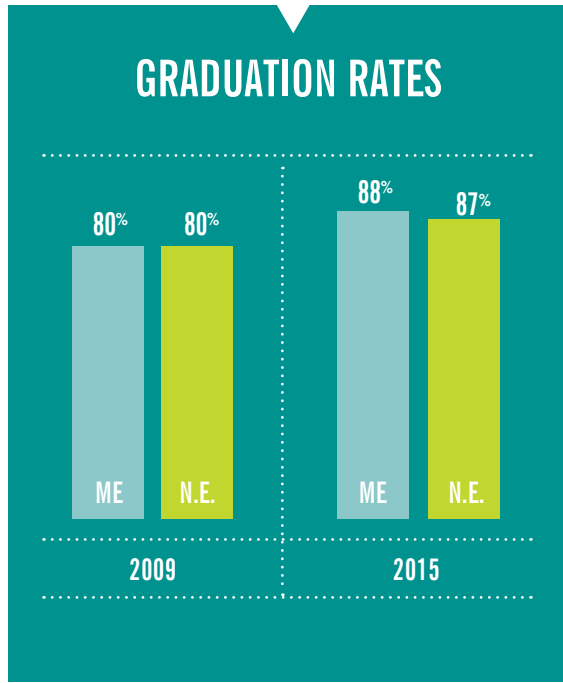
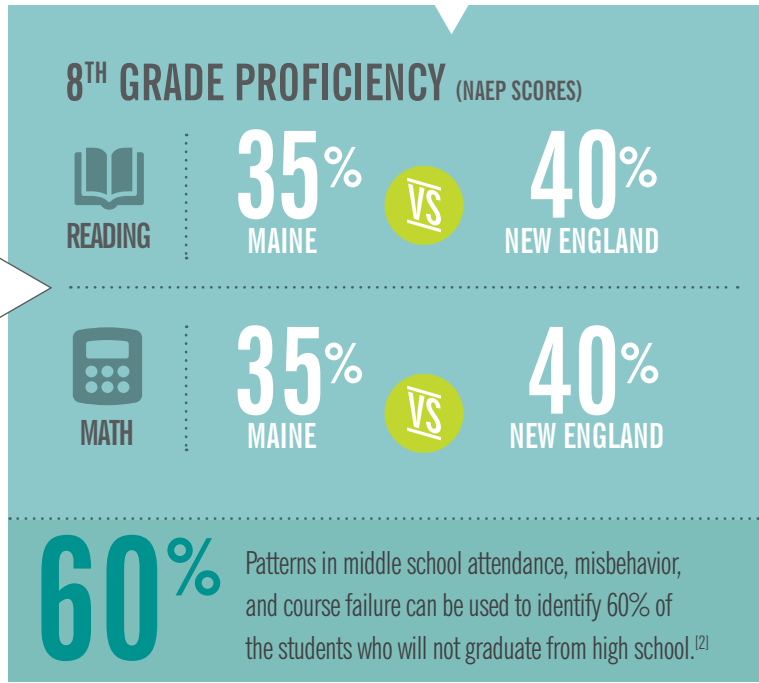
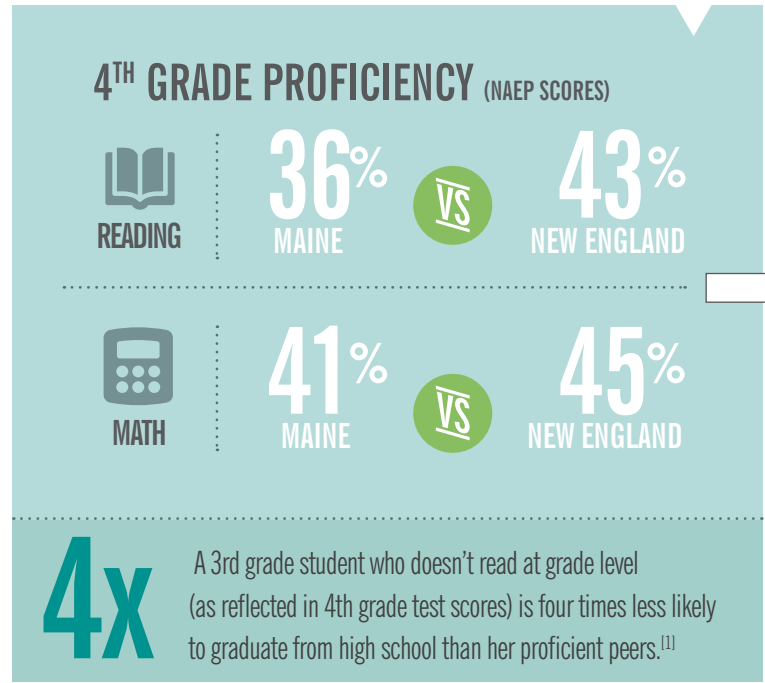
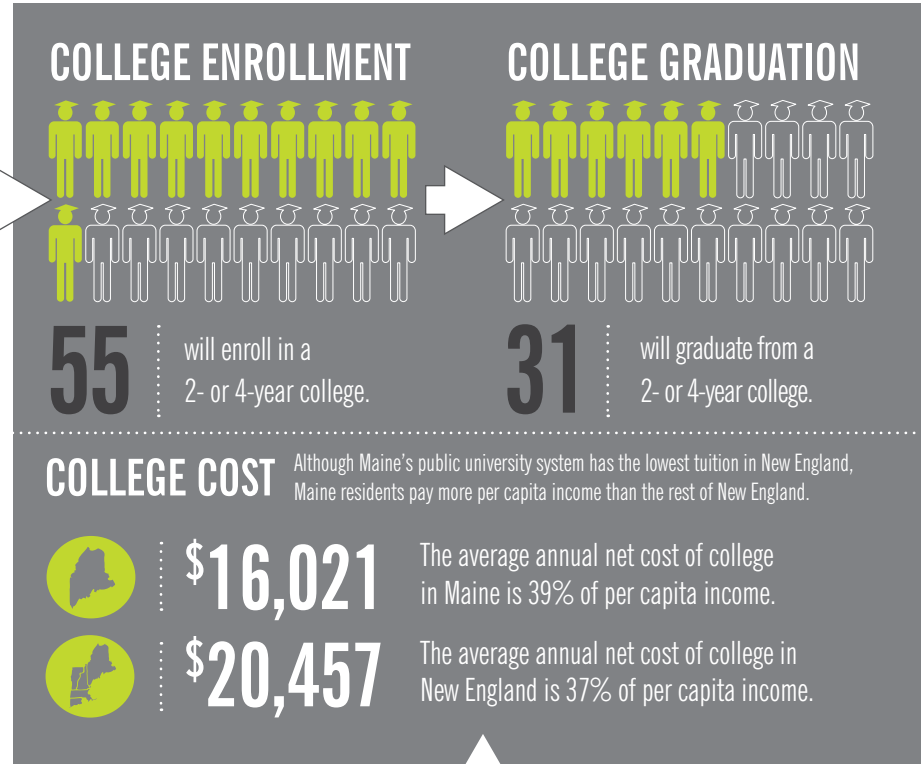
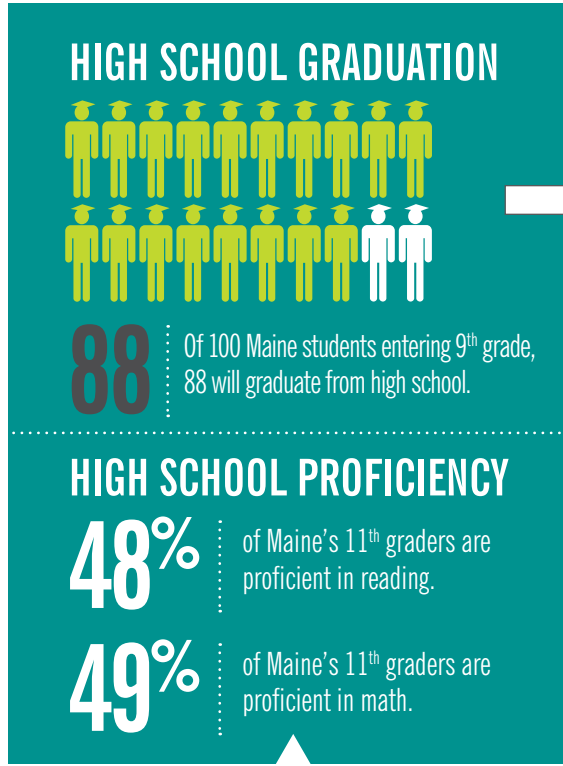
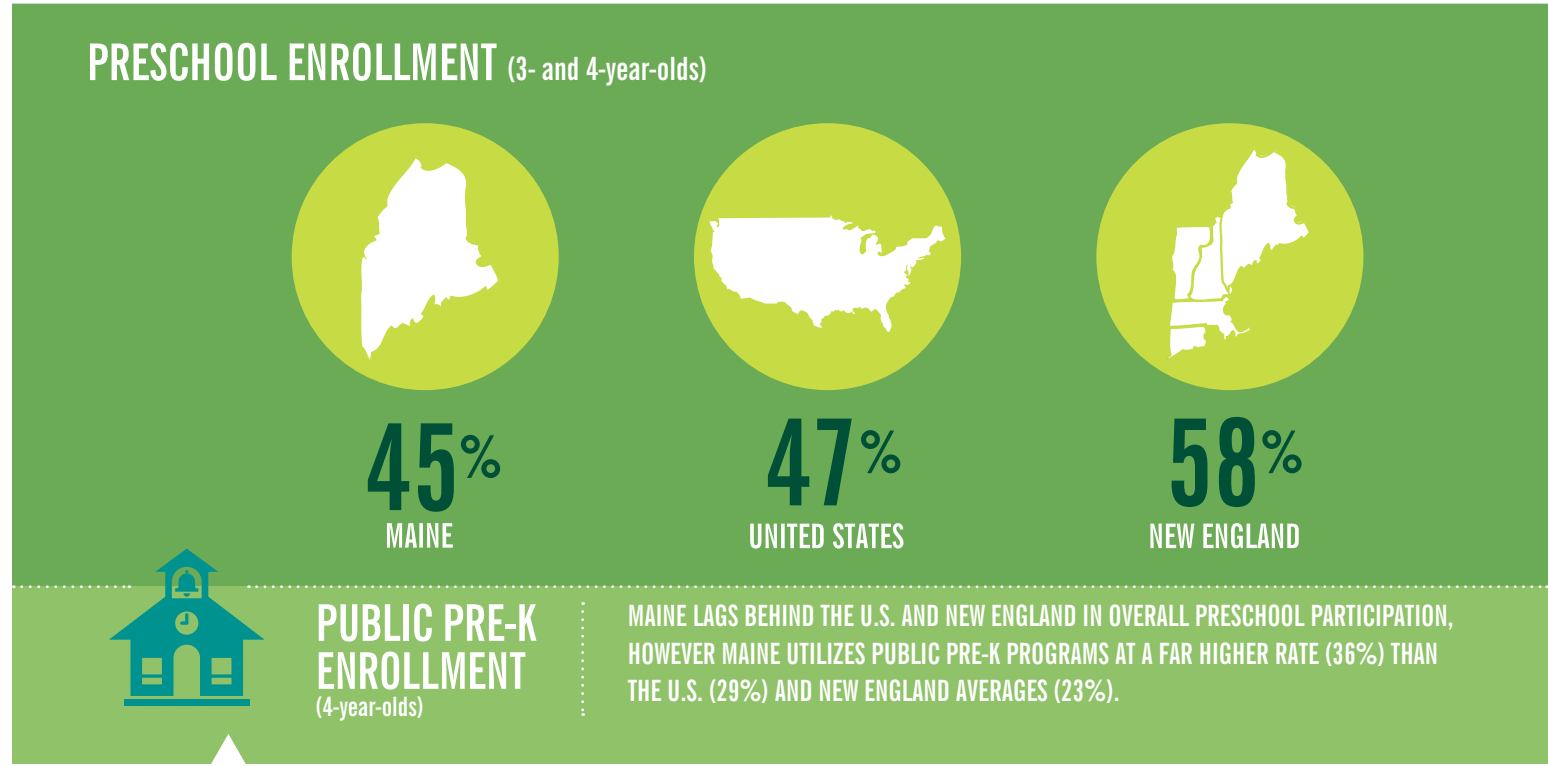
PAGE	INDICATOR	WHERE WE STARTED (2013)	WHERE WE STAND	2019 GOALS
8	PRESCHOOL PARTICIPATION	43% of 3- & 4-year-olds were enrolled in public or private preschool  32% of 4-year-olds were enrolled in public Pre-K	45% of 3- & 4-year-olds are enrolled in public or private preschool  36% of 4-year-olds are enrolled in public Pre-K	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 Pre-K
9	PRESCHOOL ACCESS	49% of Maine school districts offered public Pre-K	72% of Maine school districts offer public Pre-K	Maine will offer consistent and quality public Pre-K programming to 100% of Maine 4-year-olds
10	FULL-DAY KINDERGARTEN	87% of Maine school districts offered full-day kindergarten	92% of Maine school districts offer full-day kindergarten	100% of Maine school districts will offer full-day kindergarten
12	4TH GRADE ACHIEVEMENT	37% and 47% of 4th grade students were at or above proficiency in reading and math, respectively	36% and 41% of 4th grade students are at or above proficiency in reading and math, respectively	Maine students will increase their proficiency in reading to 44% and in math to 54%
14	8TH GRADE ACHIEVEMENT	38% and 40% of 8th grade students were at or above proficiency in reading and math, respectively	35% of 8th grade students are at or above proficiency in reading and math	Maine students will increase their proficiency in reading to 45% and in math to 47%
16	HIGH SCHOOL ACHIEVEMENT	48% of 11th grade students were at or above proficiency in reading and math  85% of Maine students graduated from high school	48% and 49% of 11th grade students are at or above proficiency in reading and math, respectively  88% of Maine students graduated from high school	70% of Maine students in grade eleven will be proficient in reading and math  90% of Maine students will graduate from high school
19	COLLEGE-GOING & PERSISTENCE	62% of Maine students enrolled in college within one year of graduating from high school  85% of Maine first-year students returned for a second year at a college institution	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 a college institution	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
20	COLLEGE COMPLETION	50% of Maine students graduate college on-time. 8 point gap	47% of Maine students graduate college on-time, compared to 57% across New England. 10 point gap	Close the college completion gap with New England
21	COLLEGE COST & DEBT	The average net cost of college for Maine students was higher as a percent of per capita income than New England: 40% vs 38%  Maine students had a higher annual debt burden as a percent of per capita income than New England: 17% vs 14%	The average net cost of college for Maine students is higher as a percent of per capita income than New England: 39% vs 37%.  Maine students have a higher annual debt burden as a percent of per capita income than New England: 17% vs 13%	Maine students will pay annually the same per capita income for college as the New England average  Maine annual student debt burden will be the same as the New England average
22	MAINERS WITH COLLEGE DEGREES & CREDENTIALS	37% of Maine students had an associate degree or higher	42% of Maine students have a college degree or credential	44% of Mainers will hold a college degree, certificate, or industry credential



# MAINE'S EDUCATION PIPELINE

## A SNAPSHOT OF EDUCATION IN MAINE

Maine's future prosperity depends on how well we prepare our people for the jobs of the future. 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.





# MAINE'S ACHIEVEMENT GAP

Maine public school enrollment has shrunk by almost 10% over the last nine years—a decrease of about 20,000 students. Even as the overall number of students has declined, the proportion of economically disadvantaged students in Maine's classrooms has risen steadily in recent years. For the 2015-2016 school year, almost one in two public school students was economically disadvantaged, compared to about one in three only a decade ago. Economically disadvantaged is defined using the eligibility criteria for the National School Lunch Program, which provides free and reduced-price school meals to children living in households with income at or below 185% of the poverty level. In dollar terms for Maine families, this is \$44,955 for a household of four.

The statewide figures indicate a broad trend, but the proportion of economically disadvantaged students also varies significantly by region. Ten years ago, only two Maine counties—Piscataquis and Washington—had more than one-half of public school students eligible for subsidized meals. Today, eight counties have eligibility rates above 50%, and six counties are above 60%. Cumberland County's rate of 35% is the lowest, and Somerset's rate of 70% of students eligible for free and reduced-price lunch is the highest.

The achievement gap refers to the difference in outcomes for economically disadvantaged students and their higher income peers. Family socioeconomic status continues to be one of the strongest predictors of student academic success. Financial hardship, developmental delays, and other factors can pose negative effects on the educational outcomes of economically disadvantaged students. This gap can form early in life and, left unaddressed, can widen and follow a child throughout schooling. As the data in this report demonstrates, the achievement gap manifests itself across Maine's education pipeline, in preschool enrollment, standardized test scores, graduation rates, college enrollment, and completion.

THE ACHIEVEMENT GAP BETWEEN ECONOMICALLY DISADVANTAGED STUDENTS AND THEIR PEERS IS ROUGHLY

# 40%

LARGER AMONG STUDENTS BORN IN 2001 THAN THOSE BORN 25 YEARS EARLIER.<sup>[3]</sup>

# EARLY CHILDHOOD

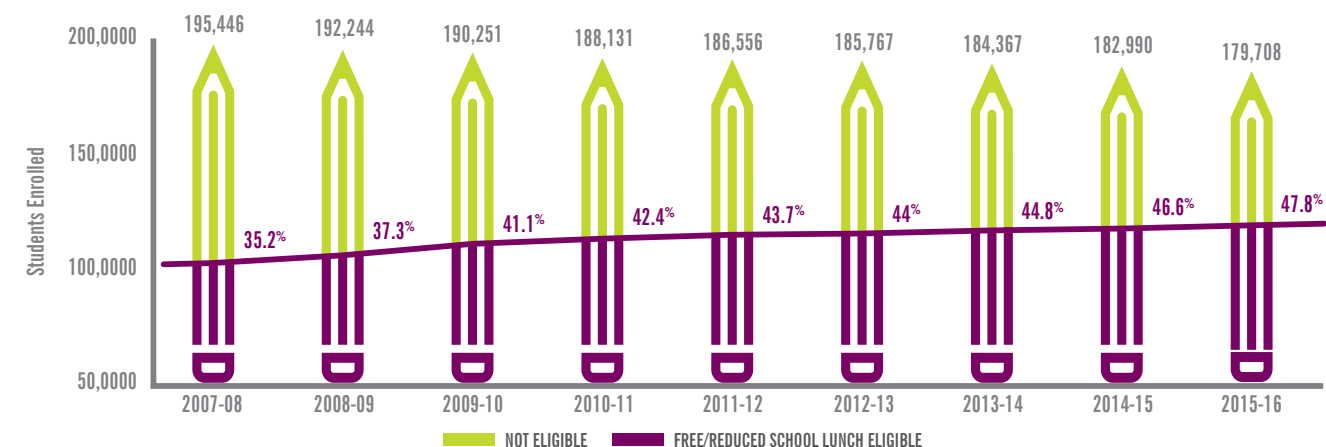
High quality early childhood education lays the foundation for future success and is a powerful and proven economic investment. Research indicates that for every \$1 spent, early learning initiatives provide benefits to society of roughly \$8.60.<sup>[4]</sup> Children who attend high quality preschool are more likely to succeed 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, we need to commit to providing high quality early childhood education to all Maine children.

This report measures preschool participation and access as indicators of the state of early childhood education in Maine. The data shows that Maine needs to increase the number of children participating in high quality programs that prepare them to succeed in first grade and beyond. In order for this to happen, we need affordable, accessible preschool options in all Maine communities. This is best achieved through the public school system. Progress has been made in increasing access through a law requiring universal public Pre-K by the 2017/18 school year (Public Law Chapter 581, 126th Legislature). We now must focus on securing and maintaining funding to support this critical expansion.

Increasing access is the first step in a commitment to early childhood education, but the positive effects of early learning initiatives depend on their quality and attendance. Quality preschool programs provide a safe and nurturing environment while promoting the physical, social, emotional, and intellectual development of young children. We need to ensure preschool teachers and programs have the support and resources necessary to succeed in this pursuit. We also need to increase outreach to families, so that they understand the importance of education in these early years.

## TOTAL PUBLIC SCHOOL ENROLLMENT VS PERCENT ELIGIBLE FOR FREE/REDUCED SCHOOL LUNCH

Although Maine public school enrollment has shrunk by almost 10% over the last nine years, the share of economically disadvantaged students has steadily increased.



NOTE: In this report, Maine's achievement gap is presented with economically disadvantaged student data shown in maroon and non-disadvantaged student data shown in bright green.

SOURCE: Maine Department of Education Data Warehouse and Neo Dashboard



# PRESCHOOL PARTICIPATION

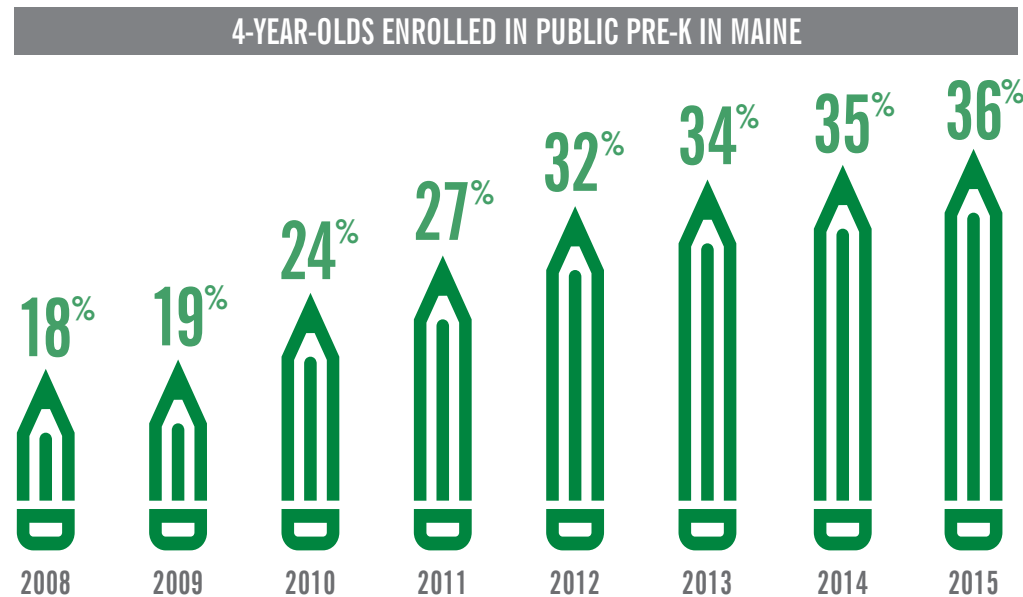
More than two out of every five Maine Children (45%) ages 3 and 4 are enrolled in either a public or private preschool program. This is just below the U.S. average (47%) and is 13 points lower than the New England average (58%). Maine 3- and 4-year-olds attend preschool at a rate 6 percentage points higher than 10 years ago. Over the same period, the rate of preschool participation in New England increased by 3 percentage points and nationwide by only 1 point.

In 2015, 36% of Maine 4-year-olds enrolled in public Pre-K. This represents significant progress. Less than 10 years ago only 16% of Maine 4-year-olds enrolled in these public programs. Maine 4-year-olds attend public Pre-K at a greater rate than New England (23%) and the Nation (29%).

Preschool participation rates across family income levels show that Maine's achievement gap starts early in life. Children living in a family earning less than 200% of the federal poverty level enroll in preschool at a rate 12 points lower than children from higher-income families. This is particularly troubling considering economically disadvantaged children benefit the most from early educational intervention.

Excluded from these statistics are children receiving "informal care" by friends, parents, or neighbors. Providing resources and training to these informal settings (serving an estimated 33-55% of children under age 5 with working parents) can improve the overall quality of early education.<sup>[5]</sup>

- WHERE WE ARE** 45% (3- AND 4-YEAR-OLDS ENROLLED IN PUBLIC OR PRIVATE PRESCHOOL)  
36% (4-YEAR-OLDS ENROLLED IN PUBLIC PRE-K)
- 2019 GOALS** 50% OF 3- & 4-YEAR-OLDS WILL BE ENROLLED IN A PUBLIC OR PRIVATE PRESCHOOL BY 2019  
64% OF 4-YEAR-OLDS WILL BE ENROLLED IN PUBLIC PRE-K BY 2019



SOURCE: National Institute for Early Education Research, <http://nieer.org/research/state-preschool-2015-state-profiles>



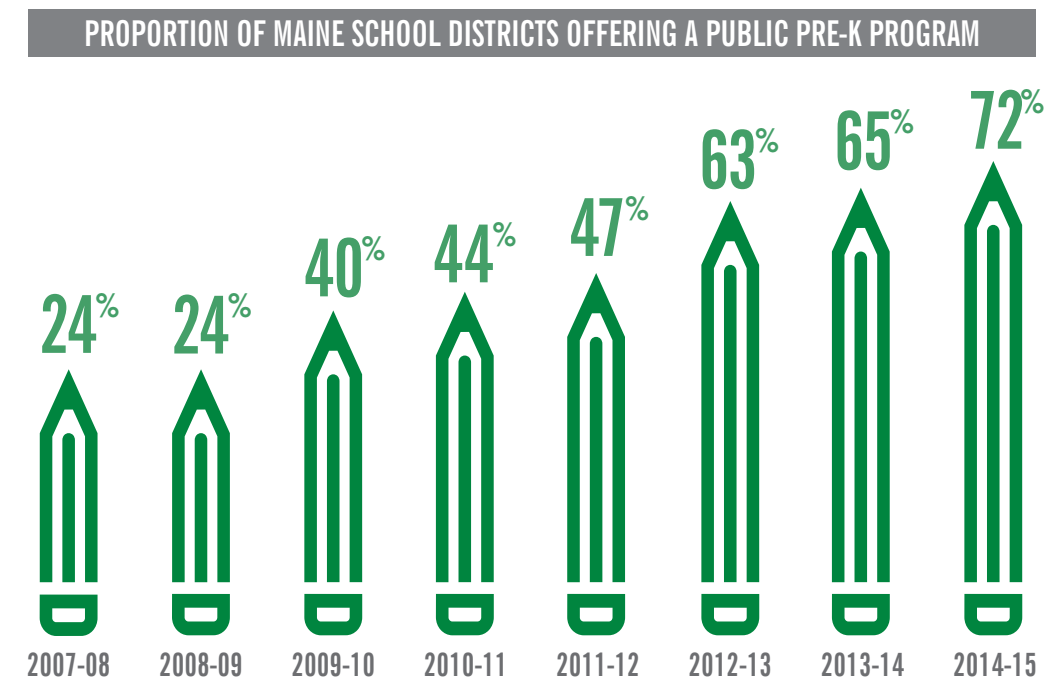
# PUBLIC PRESCHOOL ACCESS

Public Pre-K is currently available in 72% of Maine's school districts. By the 2017/18 school year, universal voluntary public Pre-K is required by law (Public Law Chapter 581, 126th Legislature). Maine is a geographically large and rural state with almost half of the children ages 3 and 4 from low-income backgrounds. High-quality public preschool is therefore a critical priority as we continue to address the achievement gap across the education pipeline. This law will move Maine closer to the goal of 100% Pre-K access in all school districts.

Despite this important legislation, funding challenges will hinder progress towards the expansion of public Pre-K. While state funding is available to support classrooms once they are up and running, start-up costs are not covered by the state. Start-up costs can be significant, as much as \$500,000 in larger districts. If we are serious about expanding access, we need to ensure that districts have the resources they need to open their doors to Pre-K students.

Improving access to early childhood education is critical to improving participation. We cannot expect participation to increase if access is limited due to available seats or cost. With expanded public access, we can expect that more families that utilize the public education system will enroll their children and participation will continue to increase.

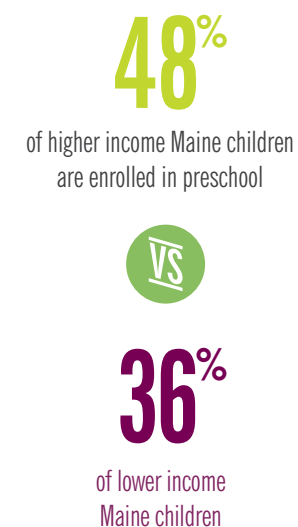
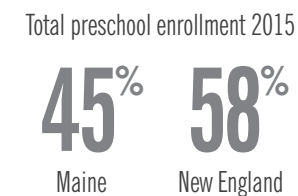
- WHERE WE ARE** 72% (DISTRICTS OFFERING PUBLIC PRE-K)
- 2019 GOALS** MAINE WILL OFFER CONSISTENT AND QUALITY PUBLIC PRE-K PROGRAMMING TO 100% OF MAINE 4-YEAR-OLDS BY 2019



SOURCE: Maine Department of Education

CHILDREN FROM ALL SOCIOECONOMIC BACKGROUNDS REAP THE LONG-TERM BENEFITS OF QUALITY PRESCHOOL.<sup>[6]</sup>

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



SOURCE: Kids Count Data Center, Annie E. Casey Foundation, <http://www.datacenter.kidscount.org>

FULL-TIME EARLY EDUCATION FROM BIRTH TO KINDERGARTEN WOULD INCREASE THE HIGH SCHOOL GRADUATION RATE FOR CHILDREN FROM LOW-INCOME FAMILIES TO<sup>[7]</sup>

# 90%



# FULL-DAY KINDERGARTEN

In Maine, 92% of school districts offer full-day kindergarten. While this figure represents a significant increase from 51% in 2002, Maine currently trails full-day kindergarten rates across New England (96%).

The transition to full-day kindergarten is an important evolution in our educational system as it seeks to anticipate the needs of our modern workforce. All students in kindergarten—regardless if they are in a half- or full-day program—are expected to master the same standards. We cannot hold students to high standards if we do not provide them an equitable start.

Full-day kindergarten is a critical component of the early childhood continuum as it allows students to build upon the foundation provided by high quality early learning programs and to better prepare for elementary school. Children who attend full-day kindergarten have greater reading and mathematics achievement gains than those in half-day classes. Kindergarten is also a critical time to identify and address learning challenges—saving resources in the long-term and increasing the odds that children will be successful in school.

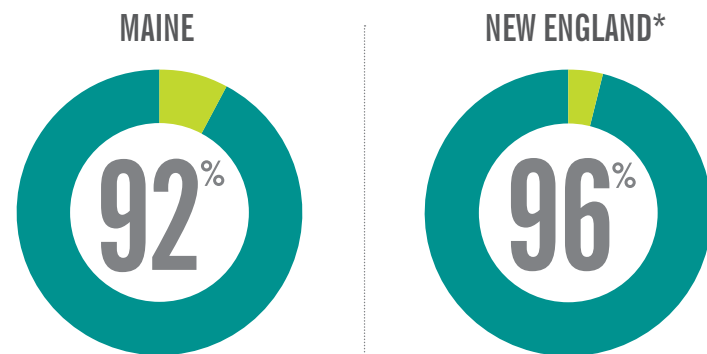
Together, quality preschool programs and full-day kindergarten increase academic achievement and work to close Maine’s enduring achievement gap.

**WHERE WE ARE** 92% OF DISTRICTS

**2019 GOALS** 100% OF MAINE SCHOOL DISTRICTS WILL OFFER FULL-DAY KINDERGARTEN BY 2019

## FULL-DAY KINDERGARTEN IN MAINE VS NEW ENGLAND (2015)

92% of Maine School districts offered full-day kindergarten in 2015. This is an increase from just 51% in 2002.



■ DISTRICTS WITH FULL-DAY KINDERGARTEN ■ DISTRICTS WITHOUT FULL-DAY KINDERGARTEN

\* not including Connecticut  
SOURCE: State Department of Education websites

BY AGE 5, A TYPICAL MIDDLE CLASS CHILD RECOGNIZES

22

LETTERS OF THE ALPHABET, COMPARED TO

9

FOR A CHILD FROM A LOW-INCOME FAMILY.<sup>(8)</sup>

# 1ST–12TH GRADE

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 participate in high quality early education settings and experience 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 economically disadvantaged 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 higher-income families.



# 4TH GRADE ACHIEVEMENT

Fourth grade testing provides the first quantitative measure of how well we are preparing our students for academic and vocational 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.<sup>[9]</sup>

The 4th and 8th grade achievement indicators are based on National Assessment of Educational Progress (NAEP) data. Thirty-six percent of Maine students in 4th grade were reading at a proficient or better level in 2015. This marks no movement in this statistic since 2007. In 2007 Maine trailed the New England average by five points, but the gap has since grown to seven points.

Forty-one percent of Maine students in 4th grade tested proficient or better in math. This represents a break in the upward momentum of the past 10 years, and is four points below the New England average of 45% (which also fell).

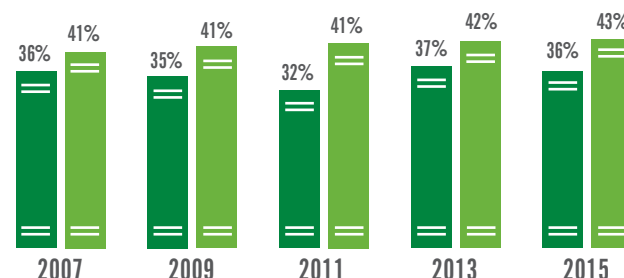
**WHERE WE ARE** 36% (READING) 41% (MATH)

**2019 GOALS** 44% OF MAINE 4TH GRADERS WILL DEMONSTRATE READING PROFICIENCY AND 54% WILL DEMONSTRATE MATH PROFICIENCY BY 2019

4TH GRADE READING PROFICIENCY (NAEP SCORES)

# 36%

## READING



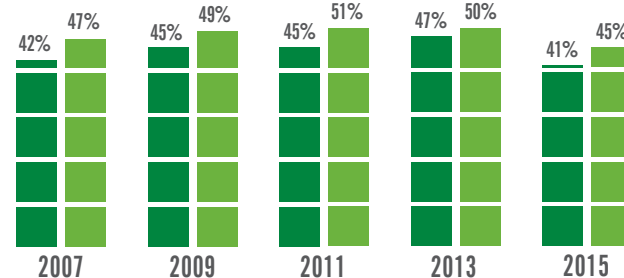
36% of Maine students were at or above proficiency in reading in 2015

MAINE NEW ENGLAND

4TH GRADE MATH PROFICIENCY (NAEP SCORES)

# 41%

## MATH



41% of Maine students were at or above proficiency in math in 2015

MAINE NEW ENGLAND

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

ONE IN SIX CHILDREN WHO ARE NOT READING PROFICIENTLY IN THIRD GRADE FAIL TO GRADUATE FROM HIGH SCHOOL ON TIME AT

# 4X

THE RATE OF THEIR PROFICIENT PEERS.<sup>[10]</sup>



# 4TH GRADE (ACHIEVEMENT GAP)

Economically disadvantaged students are less likely to demonstrate academic proficiency than their higher income peers. In 4th grade, this achievement gap is 25 points in reading and 28 points in math. Put another way, approximately half of the students from higher income backgrounds are proficient in reading and in math, compared to only a quarter of economically disadvantaged students. These are large achievement gaps that have not improved since 2007.

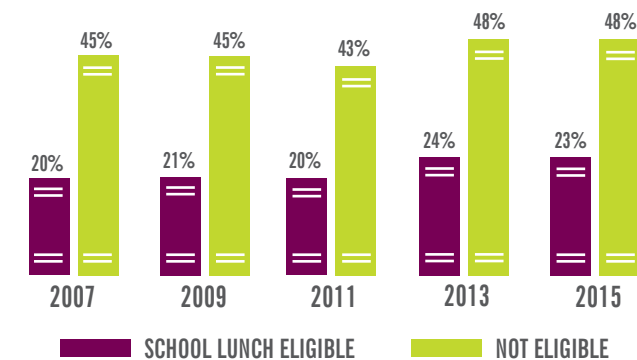
Improving proficiency for all students while also addressing the achievement gap needs to be a focus across the education pipeline. Interventions in early childhood and in the early elementary grades will set all students up for success in 4th grade and beyond and work to close the achievement gap.

4TH GRADE READING ACHIEVEMENT GAP (NAEP SCORES)

# 25

POINTS

## READING ACHIEVEMENT GAP



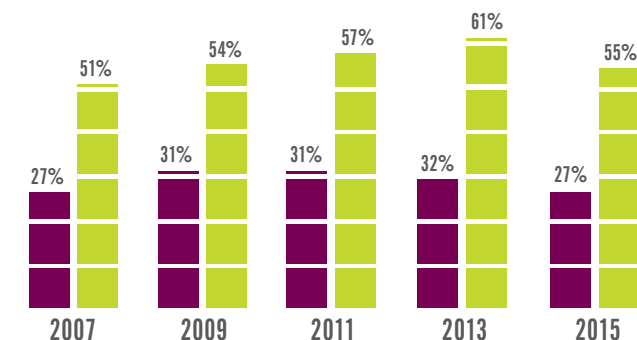
SCHOOL LUNCH ELIGIBLE NOT ELIGIBLE

4TH GRADE MATH ACHIEVEMENT GAP (NAEP SCORES)

# 28

POINTS

## MATH ACHIEVEMENT GAP



SCHOOL LUNCH ELIGIBLE NOT ELIGIBLE

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

SINCE 2007 MAINE'S 4TH GRADE READING ACHIEVEMENT GAP HAS REMAINED THE SAME AT 25 POINTS AND THE 4TH GRADE MATH ACHIEVEMENT GAP HAS GROWN FROM 24 POINTS TO

# 28

POINTS.





# 8TH GRADE ACHIEVEMENT

Middle school marks an important transition in our education system. Performance through 8th grade is a strong indicator of how a student will perform in high school and beyond.

Across Maine, 35% of 8th graders scored proficient or higher in reading and in math in 2015. Forty percent of 8th graders in New England scored proficient or better in reading and math. Maine's 2015 8th grade NAEP scores reversed the trend of stable reading proficiency and increasing math proficiency over the last 10 years. This downturn is a concern, and the performance of our 8th graders needs to improve.

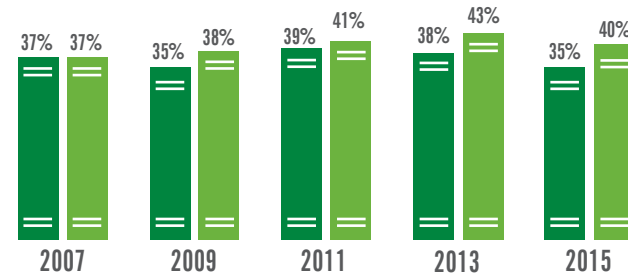
**WHERE WE ARE** 35% (READING) 35% (MATH)

**2019 GOALS** 45% OF MAINE 8TH GRADERS WILL DEMONSTRATE READING PROFICIENCY AND 47% WILL DEMONSTRATE MATH PROFICIENCY BY 2019

## 8TH GRADE READING PROFICIENCY (NAEP SCORES)

# 35%

## READING



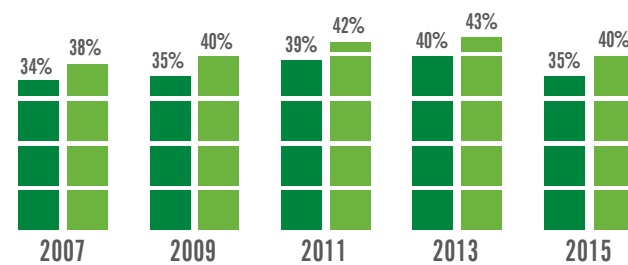
35% of Maine students were at or above proficiency in reading in 2015

MAINE NEW ENGLAND

## 8TH GRADE MATH PROFICIENCY (NAEP SCORES)

# 35%

## MATH



35% of Maine students were at or above proficiency in math in 2015

MAINE NEW ENGLAND

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

RESEARCH INDICATES THAT 8TH GRADE ACHIEVEMENT IS ONE OF THE STRONGEST PREDICTORS OF COLLEGE- AND WORK-READINESS.<sup>(11)</sup>



# 8TH GRADE (ACHIEVEMENT GAP)

Focusing on statewide achievement alone masks the stark achievement gap between economically disadvantaged students and their higher income peers. While 35% of Maine 8th graders are proficient in reading and 35% in math, only 24% (Reading) and 23% (Math) of economically disadvantaged students scored proficient or better. In contrast, their higher income peers almost met the indicator goal, with 44% (Reading) and 45% (Math) scoring proficient or better.

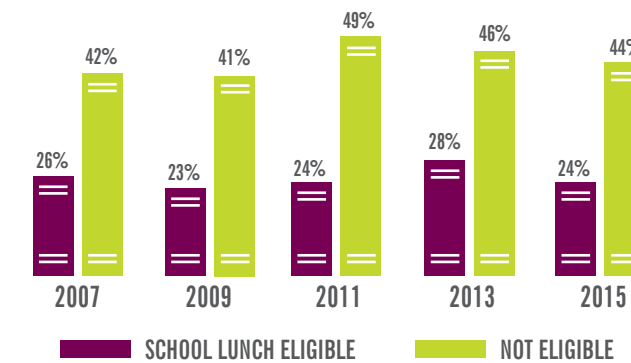
Comparing 4th to 8th grade, the achievement gaps decrease slightly by 8th grade, from 25 to 20 points in reading and 28 to 22 points in math. Still, a wide margin endures that will carry into high school.

## 8TH GRADE READING ACHIEVEMENT GAP (NAEP SCORES)

# 20

POINTS

## READING ACHIEVEMENT GAP



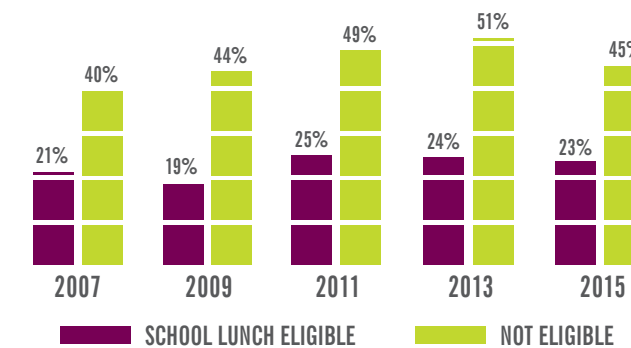
SCHOOL LUNCH ELIGIBLE NOT ELIGIBLE

## 8TH GRADE MATH ACHIEVEMENT GAP (NAEP SCORES)

# 22

POINTS

## MATH ACHIEVEMENT GAP



SCHOOL LUNCH ELIGIBLE NOT ELIGIBLE

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

SINCE 2007, MAINE'S 8TH GRADE READING AND MATH ACHIEVEMENT GAPS HAVE GROWN. THE READING ACHIEVEMENT GAP INCREASED BY 4 POINTS, AND THE MATH ACHIEVEMENT GAP BY

# 3

POINTS.



# HIGH SCHOOL ACHIEVEMENT

Eighty-eight percent of Maine high school seniors graduated in 2015. Economically disadvantaged students are graduating at a lower rate than their higher income peers. This is an improvement from 85% in 2012. Maine graduation rates top the New England average (87%).<sup>[12]</sup>

Over the last two years, Maine's state assessment program moved from the New England Common Assessment Program (NECAP) for Grades 3-8 and the SAT for high school to a new assessment, Smarter Balance. In the spring of 2016, Maine changed its statewide testing once again, reinstating the SAT and designing and administering a new Maine Educational Assessment (MEA). These changes cause a break in the analysis of trends in student performance. In essence, with these changes at the state level, Educate Maine and its Indicators Report will be starting a new baseline of performance once the new MEA scores are available.

Maine continues to have a strong high school graduation rate when compared to its New England and national counterparts. As the state transitions to awarding proficiency-based diplomas across eight content areas, student preparation for postsecondary learning and work will rise and the achievement gap will decrease.

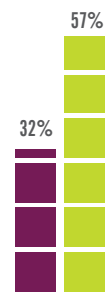
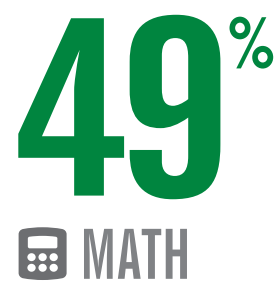
## WHERE WE ARE

88% GRADUATE FROM HIGH SCHOOL, 48% PROFICIENT IN READING, 49% PROFICIENT IN MATH

## 2019 GOALS

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

## 11TH GRADE PROFICIENCY IN MAINE, 2014 (% OF STUDENTS AT OR ABOVE PROFICIENT)



MAINE SCHOOL LUNCH ELIGIBLE NOT ELIGIBLE

INCREASING MAINE'S HIGH SCHOOL GRADUATION RATE TO

# 90%

WOULD RESULT IN \$15 MILLION MORE IN ANNUAL EARNINGS AND

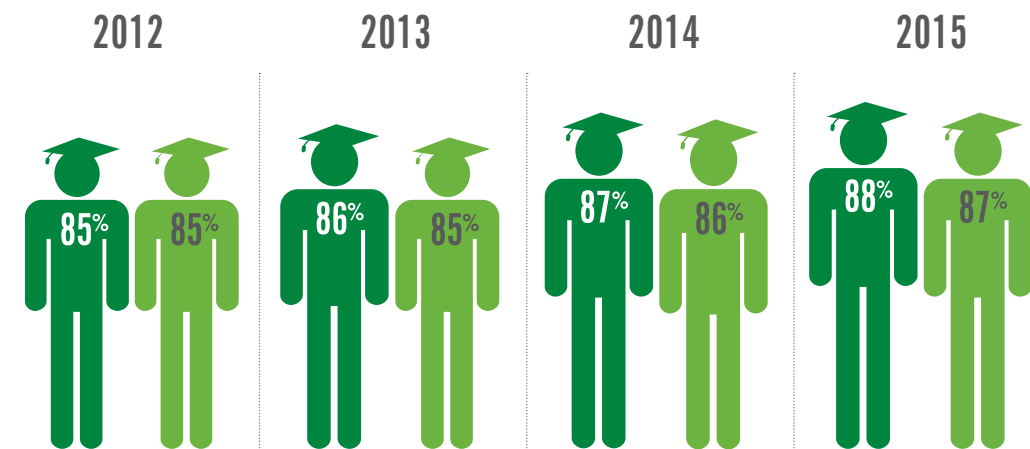
# \$2.5

MILLION MORE IN STATE AND LOCAL TAX REVENUES.<sup>[13]</sup>

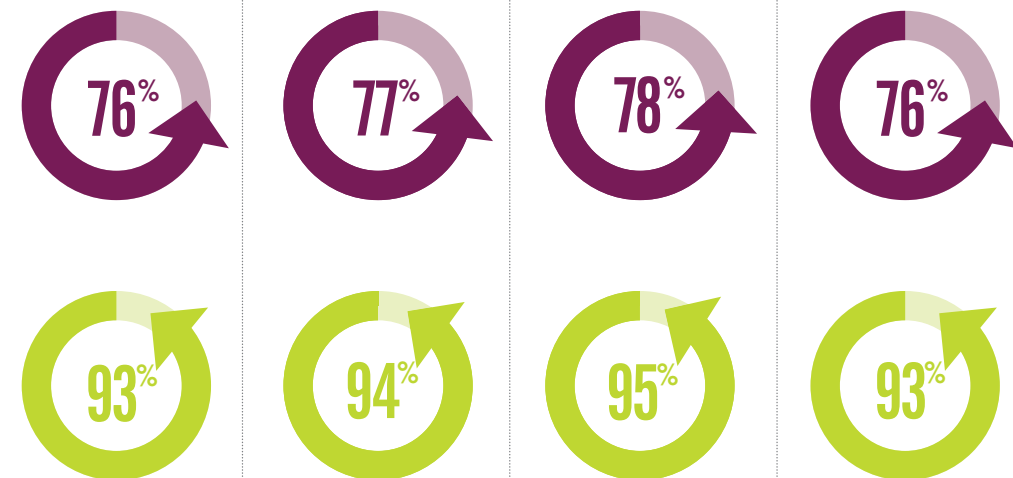


# HIGH SCHOOL ACHIEVEMENT

## HIGH SCHOOL GRADUATION RATES



## MAINE'S ACHIEVEMENT GAP



MAINE NEW ENGLAND SCHOOL LUNCH ELIGIBLE NOT ELIGIBLE

SOURCE: Maine Department of Education Data Warehouse

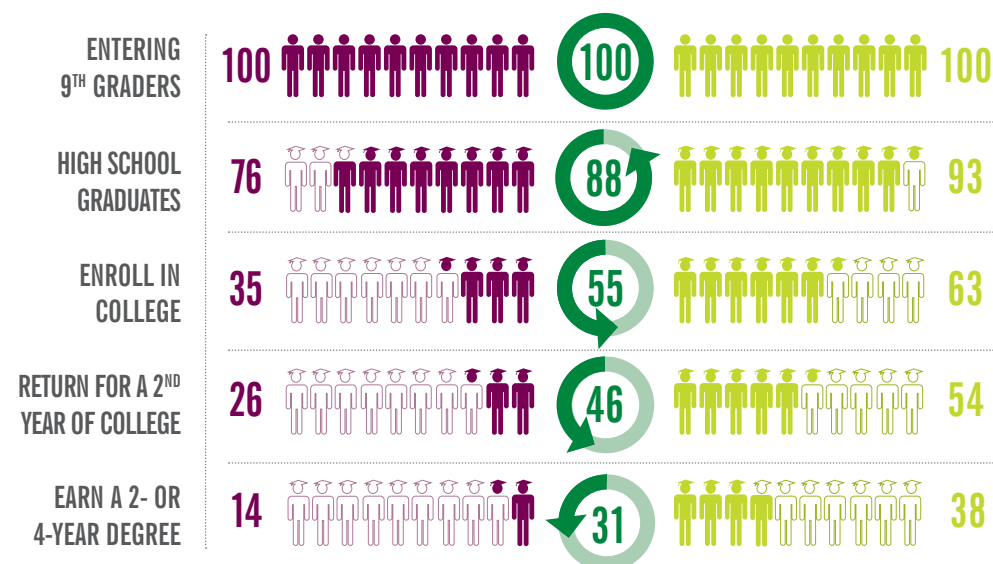
# POSTSECONDARY

By 2018, the demand for college-educated workers in Maine is projected to be seven times greater than for high school graduates.<sup>[14]</sup> Moreover, the overwhelming majority of high-growth jobs will require education beyond high school.<sup>[15]</sup> 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.<sup>[16]</sup>

Maine's population is aging. As a large segment of the workforce reaches retirement age, Maine does not have enough people to fill those employment gaps or meet new needs. This is a concern across industries and can stand in the way of economic growth. We need to look to traditional college-age students as well as adults already in the workforce to reverse this trend. Through the increased completion of college degrees and acquisition of professional credentials Maine's workforce can meet the needs of our state's economy.

Mainers experience a "funnel effect" in secondary and postsecondary education, with students lost at each successive level, from graduating high school through completing a college degree. For every 100 ninth graders entering a Maine high school, at current rates 88 complete high school in four years, 55 will enroll in college, 46 will continue to the second year of college, and 31 will earn a college degree within six years after high school graduation. Among economically disadvantaged students, the funnel is much steeper, and only 14 entering 9th graders will complete a college degree within ten years, compared with 38 of their higher income peers.

## THE MAINE EDUCATION FUNNEL EFFECT AND ACHIEVEMENT GAPS



The following sections look at measures of aspiration, persistence, access, and completion. This is where all prior educational investments come to bear.

■ SCHOOL LUNCH ELIGIBLE  
■ NOT ELIGIBLE  
■ ALL MAINE STUDENTS

SOURCE: Maine Department of Education; National Student Clearinghouse



## COLLEGE-GOING & PERSISTENCE

College-going and persistence rates have been relatively stable over the past 10 years and continue to fall short of our goals. Across college-going and persistence rates the achievement gap endures, further underlining the importance of supporting economically disadvantaged students throughout the education pipeline.

Approximately 6 out of 10 Maine students enter college in the fall immediately following high school graduation. This shows little improvement from 2009 when only 57% of students enrolled directly in college. Only 46% of economically disadvantaged students enroll in college in the year after high school, compared to 68% of their higher income peers.

After their first year, 83% of Maine students persist towards a college degree. Economically disadvantaged students persist at a rate of 74% and higher income students at a rate of 88%. Postsecondary education is a considerable financial investment. Ensuring that students persist through college to realize this investment is a critical priority, especially for economically disadvantaged students.

### WHERE WE ARE

COLLEGE-GOING 62%, COLLEGE PERSISTENCE 83%

### 2019 GOALS

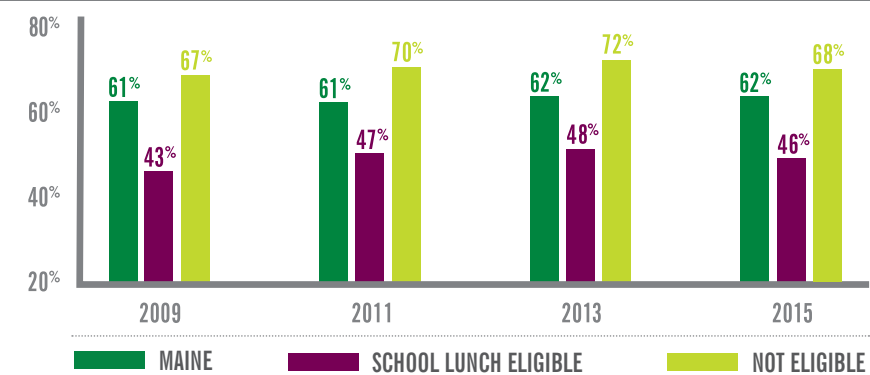
66% OF MAINE STUDENTS WILL ENROLL IN COLLEGE WITHIN ONE YEAR OF GRADUATING FROM HIGH SCHOOL BY 2019, 88% OF MAINE FIRST-YEAR STUDENTS WILL RETURN FOR A SECOND YEAR OF COLLEGE BY 2019

THE NUMBER OF ECONOMICALLY DISADVANTAGED MAINE HIGH SCHOOL GRADUATES ENROLLING IN COLLEGE NEARLY DOUBLED BETWEEN 2008 AND 2014, FROM 1,385 TO

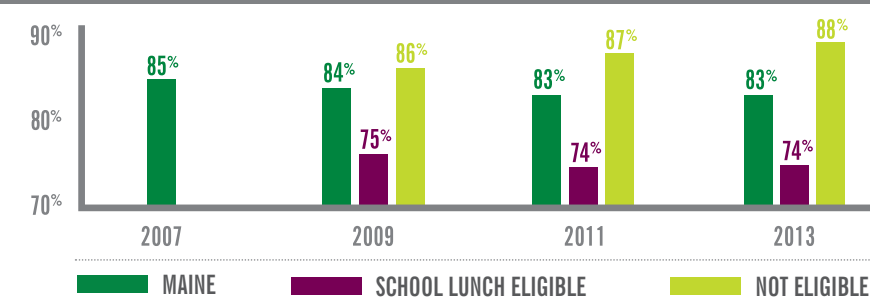
# 2,748

STUDENTS.<sup>[17]</sup>

### MAINE: COLLEGE ENROLLMENT IN THE FALL AFTER HIGH SCHOOL GRADUATION



### MAINE: FIRST TO SECOND YEAR COLLEGE PERSISTENCE





# COLLEGE COMPLETION

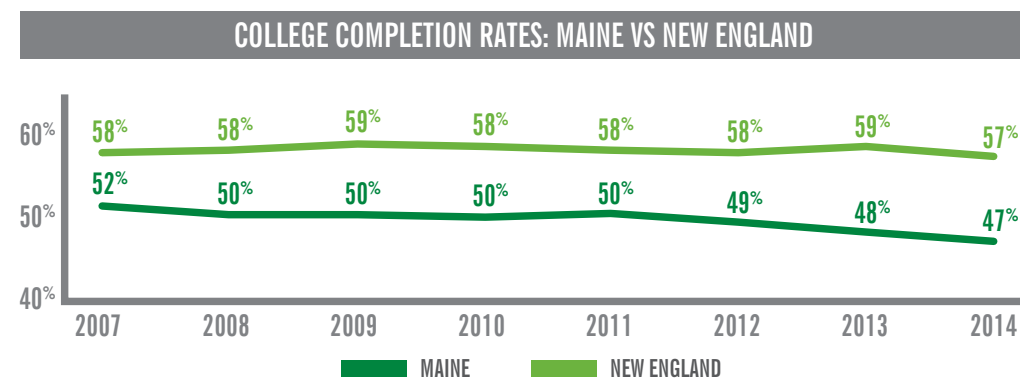
Just under half (47%) of first-time Maine college students will graduate (in 150% of normal time from the same institution). Maine college completion rates have been decreasing—from 52% in 2007 to 47% in 2014. New England rates remain relatively stable around 57%.

College completion rates at Maine's community colleges are decreasing—from 29% in 2007 to 22% in 2014—yet remain well above the New England average of 17%. Maine's public university completion rate (48%) trails New England's significantly (65%). Private college completion in Maine is 70%, compared to 74% across New England.

Maine's achievement gap continues into college. Among Mainers entering four-year colleges and universities, there is a completion gap of 16 points—higher than the national gap of 14 points—among students who receive Pell grants, federal grants for economically disadvantaged students, and those who do not qualify. Thirty-six percent of Pell students who started at a Maine institution in 2007 earned a degree by 2013, compared with 52% of students with higher incomes.<sup>[18]</sup>

**WHERE WE ARE** MAINE 47%, NEW ENGLAND 57%

**2019 GOALS** CLOSE THE COLLEGE COMPLETION GAP WITH NEW ENGLAND BY 2019



SOURCE: Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics

STUDENTS WHO DO NOT GRADUATE FROM COLLEGE ARE THREE TIMES AS LIKELY TO DEFAULT ON THEIR LOANS.<sup>[19]</sup>



# COLLEGE COST & DEBT

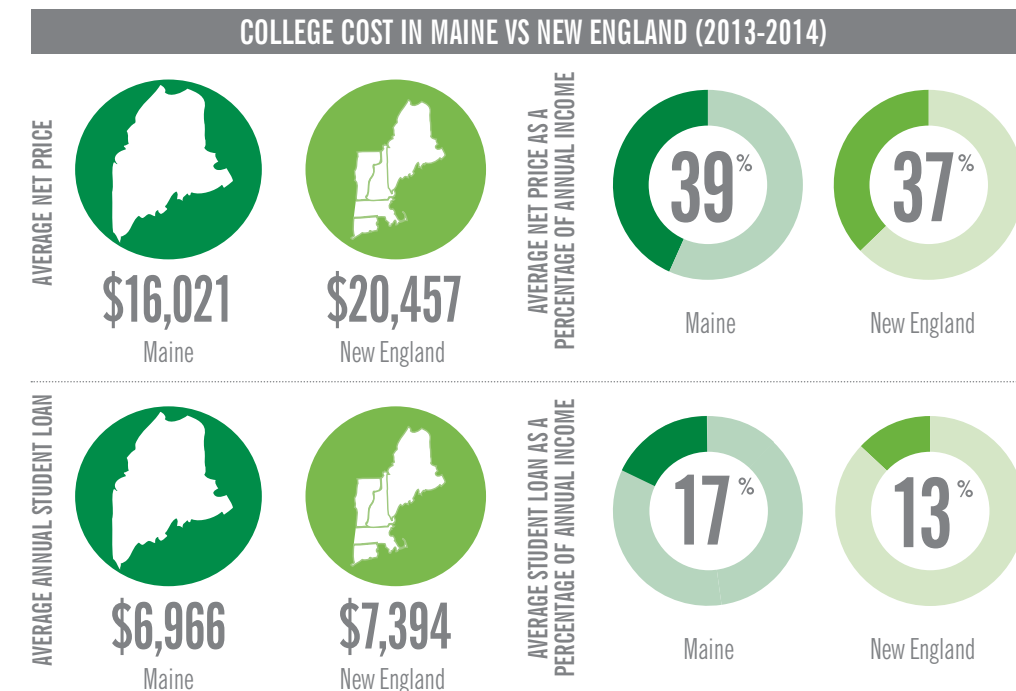
The actual cost of college to families (the net price) is the most important measure of college cost and affordability, but it requires context. Although the average net cost at two- and four-year-degree granting colleges and universities in Maine is \$4,000 less than the New England average, it is higher as a share of income. In 2013-14 the average net cost of college was 39% of Maine per capita income, compared to 37% across New England. While this gap has decreased, we need to ensure that college is just as affordable for Maine students as it is for our New England neighbors.

Most students and families need to borrow money to pay for college. Again, the average debt burden of a Maine student needs to be placed in context of annual income. Maine students on average borrow \$400 less per year than the New England average, but this represents a greater share of per-capita income for Maine students (17%) than New England students (13%). This gap has persisted for several 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.

**WHERE WE ARE** MAINERS SPEND 2 PERCENTAGE POINTS MORE OF THEIR PER CAPITA INCOME FOR COLLEGE THAN THE NEW ENGLAND AVERAGE. MAINE ANNUAL STUDENT DEBT BURDEN IS 4 PERCENTAGE POINTS HIGHER THAN THE NEW ENGLAND AVERAGE.

**2019 GOALS** MAINE STUDENTS WILL PAY ANNUALLY THE SAME SHARE OF 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.



SOURCE: Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics<sup>[20]</sup>

MAINE RANKS

# 6TH

HIGHEST IN THE NATION IN AVERAGE STUDENT DEBT (\$30,908) AND 8TH HIGHEST IN PROPORTION OF GRADUATES WITH DEBT (68%) AMONG STATE RESIDENTS WHO COMPLETED BACHELOR'S DEGREES IN 2015.<sup>[21]</sup>



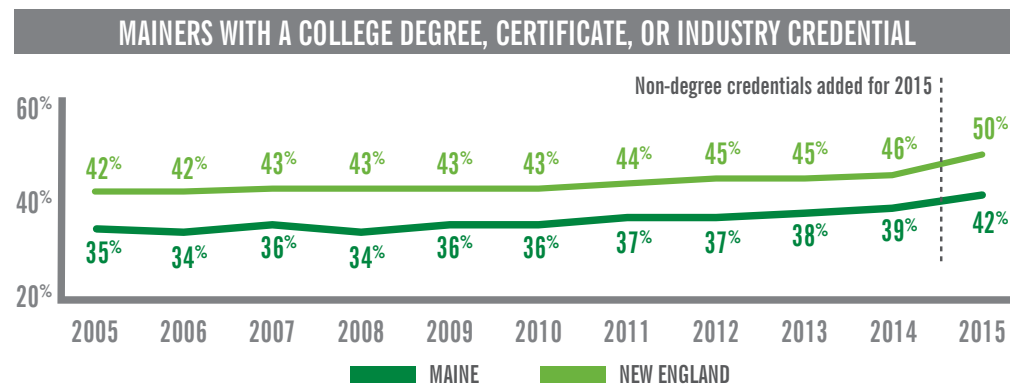
# MAINERS WITH COLLEGE DEGREES & CREDENTIALS

Educate Maine's principal goal is that 44% of Mainers age 25 or older will possess a college degree, certificate or industry credential by 2019. To meet current and future workforce needs, most Mainers will need to complete some form of postsecondary training - whether two-year, four-year, or advanced college degrees, or professional credentials and certificates that can be earned in educational settings and on the job and hold value in the labor market.

While annual state-level estimates from the U.S. Census track adults with college degrees, they do not tell us about professional credentials or certificates. Estimates published in 2016 suggest that 2% of working-age Mainers hold a high-quality certificate as their highest earned credential. Maine falls below the New England average of 3.3% and the national average of 4.9%.<sup>[22]</sup> The percentage of Mainers holding college degrees alone has increased from 35% in 2005 to 40% in 2015. Maine is below the 2015 average of 46% in New England, but is just above the 39% U.S. average. College degree attainment has grown slightly faster in Maine than in New England and the nation over the past decade.<sup>[23]</sup> Adding the 2% of Mainers with a certificate but no degree brings us to 42% of adults holding a high-quality certificate or degree in 2015. With the continued support of these credential-granting institutions and learners of all ages, Maine is on track to meet our 44% goal by 2019.

**WHERE WE ARE** MAINERS WITH COLLEGE DEGREES AND CREDENTIALS: MAINE (42%), NEW ENGLAND (50%)

**2019 GOALS** 44% OF MAINERS WILL HOLD A COLLEGE DEGREE, CERTIFICATE, OR INDUSTRY CREDENTIAL BY 2019



\* Adults ages 25 and older  
SOURCES: U.S. Census Bureau, American Community Survey 1-Year Estimates; Lumina Foundation

BY 2020,  
TWO-THIRDS

66%

OF THE 237,000 PROJECTED JOB OPENINGS IN MAINE WILL REQUIRE POSTSECONDARY EDUCATION BEYOND HIGH SCHOOL.<sup>[24]</sup>

# 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

- ✓ 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.

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For more information visit [indicators.educatemaine.org](http://indicators.educatemaine.org)

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