

MISSION AND ACKNOWLEDGEMENTS

Educate Maine champions college and career readiness and strives to increase the educational attainment of the Maine workforce. All students should graduate high school prepared to succeed in postsecondary education and in the workplace, and the number of Maine people with a college degree, a postsecondary certificate or a professional credential must increase to meet the demands of the economy.

We would like to thank the following individuals, organizations, and businesses who have helped guide the development of Education Indicators for Maine 2017: Educate Maine board members Duke Albanese, Paul Bolin, Cari Medd, and Laurie Lachance; Colleen Quint of the Alfond 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. Abby Roy, 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.

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WELCOME

Educate Maine is pleased to present the Education Indicators for Maine 2017 Report. This is the fifth installment of this annual report that provides data snapshots of Maine's education system from early childhood through postsecondary. The data in the report measures access, participation, and performance across the system. 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.

Educate Maine is a proud member of MaineSpark, an initiative to get 60% of the Maine workforce to earn a credential of value by 2025. A credential of value includes everything from a skilled trade certificate to a college degree that connects a person to a good job and career in Maine. Educate Maine joins over 30 other education, philanthropic, and business organizations in pursuit of this ambitious goal. The indicators within this report represent critical benchmarks along the education pipeline. Moving these indicators toward their respective goals will allow us to achieve our goal of 60% by 2025.

We hope that you find this information useful in advancing a constructive conversation about the future of Maine's education system and the well-being of Maine's workforce and economy.

Cheers,

EXECUTIVE DIRECTOR

EDUCATE MAINE

This report is available at indicators.educatemaine.org.

TEN INDICATORS

PAGE	INDICATOR	WHERE WE STARTED (2013)
PAUL	INDIGATOR	WHERE WE STARTED (2013)
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
9	PRESCHOOL ACCESS	49% of Maine school districts offered public Pre-K
10	FULL-DAY KINDERGARTEN	87% of Maine school districts offered full-day kindergarten
12	4TH GRADE ACHIEVEMENT	37% and 47% of 4th grade students were at or above proficiency in reading and math, respectively
14	8TH GRADE ACHIEVEMENT	38% and 40% of 8th grade students were at or above proficiency in reading and math, respectively
16	HIGH SCHOOL ACHIEVEMENT	* of 11th grade students were at or above proficiency in reading and math
		85% of Maine students graduated high school in 4 years
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
20	COLLEGE COMPLETION	50% of Maine and 58% of New England students graduate college within 150% of normal program time
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% Maine vs 38% New England
		Maine students have a higher annual debt burden as a percent of per capita income than New England: 17% vs 14%
22	MAINERS WITH POSTSECONDARY	37% of Maine adults have a postsecondary credential of value

CREDENTIALS OF VALUE

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.

	WHERE WE STAND	2019 GOALS
	42% of 3- & 4-year-olds are enrolled in public or private preschool	50% of 3- & 4-year-olds will be enrolled in a public or private preschool
	40% of 4-year-olds are enrolled in public Pre-K	64% of 4-year-olds will be enrolled in public Pre-K
	71% 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
	93% of Maine school districts offer full-day kindergarten	100% of Maine school districts will offer full-day kindergarten
	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%
	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%
	60% and 35% of 11th grade students are at or above proficiency in reading and math, respectively	70% of Maine students in grade eleven will be proficient in reading and math
	87% of Maine students will graduate high school in 4 years	90% of Maine students will graduate high school in 4 years
	61% of Maine students enrolled in college within one year of graduating from high school	66% of Maine students will enroll 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	88% of Maine first-year students will return for a second year of college
	48% of Maine and 58% of New England students graduate college within 150% of normal program time	Close the college completion gap with New England
	The average net cost of college for Maine students is higher as a percent of per capita income than New England: 39% Maine vs 36% New England	Close the cost and debt gap with New England
	Maine students have a higher annual debt burden as a percent of per capita income than New England: 17% vs 13%	

44% of Maine adults have a postsecondary credential of value

43% of Maine adults have a postsecondary credential of value

^{*}Due to changes in Maine Educational Assessment tests and standards, we begin a new benchmark this year.

MAINE'S PUBLIC EDUCATION PIPELINE

ENROLLED

PROFICIENT

NOT PROFICIENT

MET THE MILESTONE

TOOK AN ALTERNATE PATH

APPLYING CURRENT DATA TO A HYPOTHETICAL CLASS—A POSSIBLE FUTURE

that a large share is disengaged—

ages 16 to 24 are not working

and not in school (2015).

Maine Kids Count: 14,000 Mainers

for success and long-

term employment

opportunities are limited.

Our goal at Educate Maine is to prepare all students for college and career. Reaching this goal is essential if we are to build a workforce to fuel our economy and maintain our communities. Work towards our goal starts early. Students enter the education pipeline when they enroll in high-quality early childhood programs and move ahead, achieving proficiency in 1st—12th grades. They graduate high school prepared for college and career and advance to postsecondary education or training. With a degree or certificate in hand, Mainers exit the pipeline ready to be a productive contributor to the economy.

The pipeline below represents the journey of a **hypothetical Maine class** that advances through the system using current participation, achievement, and transition rates found in this book. Unfortunately, there are leaks in the pipeline, not all children enter on time, nor do all achieve proficiency at the same rate. These "leakage points" represent areas to focus our efforts to build a workforce that meets the need of our economy. The data used to develop this graphic comes from the Education Indicators for Maine 2017 Report. The kindergarten attendance data is provided by the Maine Department of Education for the 2016 class.

less likely. Many will have debt

without the buying power of a degree.

Approximately 200,000 Maine workers

have some college but no credential.

makes it less likely. Many

are employed and will

have debt without the

buying power of a degree.



MAINE'S ACHIEVEMENT GAP

The proportion of economically disadvantaged students in Maine's classrooms has increased by almost ten percentage points since 2008-09. Meanwhile, public school enrollment has shrunk by 6% over a decade—a decrease of over 12,000 students. As the number of students in Maine schools has decreased, the share of economically disadvantaged students has increased. This is a concern because family socioeconomic status continues to be a strong predictor of student success.

In the 2016-17 school year, 45% of public school students were from economically disadvantaged families, 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, \$45,510 for a household of four. In the 2016-17 school year, more than 81,000 students met this criteria.

The achievement gap refers to the difference in educational outcomes for economically disadvantaged students and their higher income peers. Economically disadvantaged students face a number of disadvantages as they navigate the education pipeline, including less access to sometimes costly high quality early childhood education, developmental delays, and financial hardship throughout their school years.

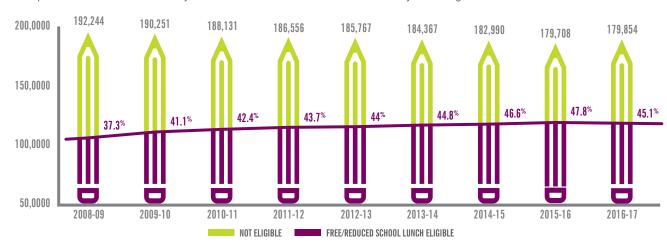
The achievement gap between economically disadvantaged families and families with higher incomes across the U.S. is roughly 40% larger among students born in 2001 than those born 25 years earlier. In Maine, the proportion of economically disadvantaged students varies significantly by region, ranging from 33% eligible for School Lunch in Cumberland County to 64% in Somerset County. 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%. Student need has grown significantly over the past decade in all the state's counties and regions.

CHILDREN WHO ARE POOR FOR HALF THEIR **CHILDHOODS** ARF

MORE LIKELY NOT TO COMPLETE HIGH SCHOOL, COMPARED TO CHILDREN WHO WERE NEVER POOR.[2]

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

Maine public school enrollment has shrunk by 6% over the last decade while the share of economically disadvantaged students has risen.



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

EARLY CHILDHOOD

hildren enter Maine's education pipeline as early as 3 years old. Between the ages of 3 and 5, they enroll in public and private preschool and Pre-K programs before progressing to kindergarten. Those who have access to and participate in high quality early childhood education begin to lay a foundation for future success throughout their school years and beyond. High quality early childhood education is also a proven economic investment: for every \$1 spent, early learning initiatives provide roughly \$8.60 in benefits to society.3

We begin this report by measuring participation in and access to preschool programs as indicators of the state of early childhood education in Maine. We measure the rate of preschool participation for 3- and 4- year-olds in public and private programs, then shift our focus to public Pre-K access. We conclude this phase of the education pipeline in kindergarten, measuring access to full-day kindergarten across the state.

The socioeconomic achievement gap begins at the earliest stage of the education pipeline. Early childhood education is critical to improving opportunities for economically disadvantaged students and closing the achievement gap. Economically disadvantaged students score substantially lower than higher income students in reading and math at kindergarten entry.4 The size of the achievement gap at the early childhood level is critical. The achievement gap narrows little as students progress through the education pipeline. Early childhood educational experiences have a large impact on students' achievement levels through high school and beyond.

To prepare students for lifelong success, Maine needs to ensure that all children have access to public, high quality early childhood programs. As early childhood education programs expand across Maine, our focus should turn to quality and dosage. By ensuring that all early childhood programs meet the standards adopted by the state, advocating for more rigorous standards, and pushing for programs that meet daily and work with parents' schedules, we can give our children the early childhood educational experiences they deserve.

Enrollment in formal education in Maine is not required until children reach age 6. The research, though, is clear. In order to meet our intermediate and long-term goals, more Maine children need to have access to and enroll in high quality early childhood education.



PRESCHOOL & PUBLIC PRE-K PARTICIPATION

In 2016, two out of every five Maine children (42%) ages 3 and 4 are enrolled in a public or private preschool program (preschool refers to any educational/care programming available to 3- and 4-year-olds prior to kindergarten). This is a decrease from previous years (45%) and 5 percentage points below the U.S. average (47%). It significantly trails the New England average (57%). Total enrollment is 10,862 and is the lowest enrollment count Maine has had since 2005. It is indicative of the declining population of children and young people in Maine.

In 2015-16, 40% of all 4-year-olds (5,442) were enrolled in public Pre-K programs in Maine (Pre-K refers to public programming for 4-year-olds available the year before kindergarten). Maine 4-year-olds attend public Pre-K at a rate greater than New England (23%) and the U.S. (29%). This figure will rise, as school districts comply with Maine law that requires all districts to offer universal voluntary public preschool by 2018.5

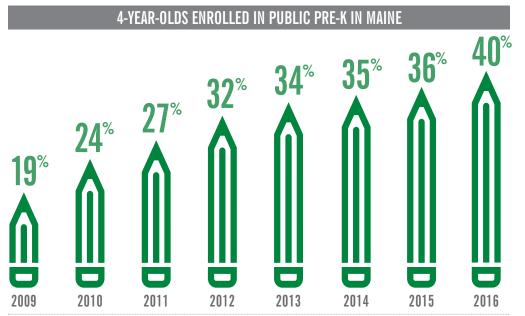
Preschool participation rates across family income levels vary considerably. Only 36% of economically disadvantaged 3- and 4-year-olds (families earning less than 200% of the federal poverty level) are enrolled in public or private preschool. Higher income children enroll at a greater rate (48% vs. 36%) and nearly reach our 2019 goal (50%). For many families across Maine, early childhood education is inaccessible. Lowering costs and providing greater options will help achieve greater equity.

WHERE WE ARE

42% (3- AND 4-YEAR-OLDS ENROLLED IN PUBLIC OR PRIVATE PRESCHOOL) 40% (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 64% OF 4-YEAR-OLDS WILL BE ENROLLED IN PUBLIC PRE-K



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

Total preschool enrollment 2016

New England

of higher income Maine children are enrolled in preschool



of lower income Maine children

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



PUBLIC PRE-K ACCESS

Almost three-quarters (71%) of Maine's school districts offer public Pre-K to students. Maine has shown significant growth in public Pre-K access over the past ten years; in 2008, only 24% of districts offered public Pre-K programs. As stated earlier, this figure will rise as districts comply with a state-mandated goal of universal voluntary Pre-K programming. This transition will be made easier by changes that the 128th Legislature made to the school funding formula that will allow districts to access state funds for start-up, removing some of the financial burden on local communities.

Some Maine families will continue to choose to enroll their children in a private Pre-K setting. With increased access to public Pre-K, though, more families will be able to afford high quality early childhood education. Increasing voluntary public Pre-K options provides greater access while maintaining family choice. Ensuring that economically disadvantaged students have access to public Pre-K will help to mitigate the achievement gap before students enter kindergarten.

Quality is critical to success and Maine's public Pre-K programs are on the right track. In 2015-16, Maine improved on four quality standards benchmarks, more than any other state in the U.S.6 With continued attention to access, quality, and attendance at public Pre-K programs, Maine's children will be on track for success as they move through the education pipeline and enter kindergarten.

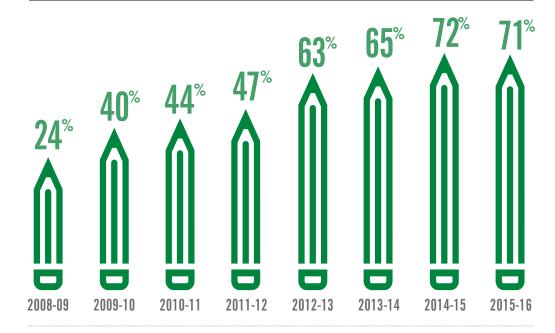
WHERE WE ARE

71% (DISTRICTS OFFERING PUBLIC PRE-K)

2019 GOALS

MAINE WILL OFFER CONSISTENT AND QUALITY PUBLIC PRE-K PROGRAMMING TO 100% OF MAINE 4-YEAR-OLDS

PROPORTION OF MAINE SCHOOL DISTRICTS OFFERING A PUBLIC PRE-K PROGRAM



IF ALL MAINE STUDENTS HAD **FULL-TIME EARLY EDUCATION** FROM BIRTH TO KINDERGARTEN. **OVFR**

MORE ECONOMICALLY DISADVANTAGED STUDENTS WOULD **GRADUATE FROM** HIGH SCHOOL.[7]

SOURCE: Maine Department of Education

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

FULL-DAY KINDERGARTEN

Full-day kindergarten allows students to build on the foundation provided by high quality preschool programs and better prepare for elementary school. 93% of school districts across Maine offered full-day kindergarten in 2016. This figure has risen steadily since 2013 (87%), but still trails the New England average of 96%. Children who attend full-day kindergarten have greater reading and mathematics achievement gains than those in half-day kindergarten. Full-day kindergarten improves the odds that all Maine students have a high quality early childhood educational experience before moving on to elementary school.

Maine funds kindergarten across the state at a flat rate, meaning that school districts receive the same amount of money for each student regardless of whether they offer full-day or half-day kindergarten. Maine does not permit school districts to charge families tuition for full-day kindergarten, so school districts have few options to fund the extra hours that full-day kindergarten offers.8 School districts with a high population of economically disadvantaged families may be less likely to offer full-day kindergarten due to funding restrictions. Many students enter the education pipeline here, so our attention to access to full-day kindergarten is critical to narrowing the achievement gap early.

All kindergarteners in Maine are expected to master the same rigorous standards, regardless of whether they attend half-day or full-day kindergarten. Offering full-day kindergarten across Maine will help all of Maine's students to stay on track through the education pipeline. Expanding funding may lead more school districts to offer full-day kindergarten but should not come at the expense of other early childhood education initiatives. Together, high quality public Pre-K and full-day kindergarten increase academic achievement and work to close Maine's enduring achievement gap.

WHERE WE ARE

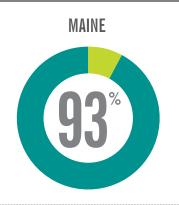
93% OF DISTRICTS

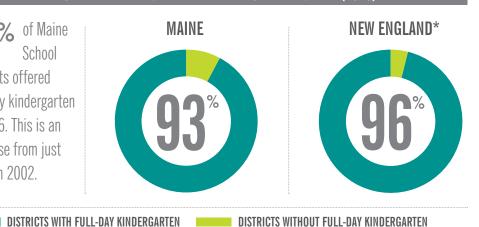
2019 GOALS

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

FULL-DAY KINDERGARTEN IN MAINE VS NEW ENGLAND (2016)

districts offered full-day kindergarten in 2016. This is an increase from just 51% in 2002.





BY THE TIME VERY **ECONOMICALLY** DISADVANTAGED CHILDREN ENTER KINDERGARTEN, THEY ARE

MONTHS BEHIND IN LANGUAGE AND PRE-READING SKILLS, COMPARED WITH THEIR HIGHER-INCOME PEERS.[9]

1ST-12TH GRADE

he years between elementary and high school build on high quality early education and lay the groundwork for successful postsecondary education and lifelong careers. From 1st through 12th grade, students seek to master skills and knowledge that prepare them for a prosperous future. During these years, we look to measures of student achievement to

This section looks at student achievement in elementary, middle, and high school. Every other year, a representative sample of 4th and 8th grade students in each state take NAEP assessments in math and reading. Student proficiency in 11th grade is based on results from the Maine High School Assessment, the same test as the College Board's SAT. Finally, we examine high school graduation rates to determine how successfully Maine's students complete this portion of the education pipeline.

Children who participated in high quality early childhood settings enter 1st grade more prepared than their peers who enter the education pipeline in 1st grade. As noted in the previous section, economically disadvantaged children are less likely than higher income peers to have been enrolled in preschool. The socioeconomic achievement gap grows throughout the elementary years and persists through middle and high school. In the end, fewer economically disadvantaged students graduate high school prepared for postsecondary education and a rewarding career.

Educators across Maine work hard to help students make progress throughout these years and 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 of life with all of the skills and knowledge necessary to succeed. This makes education and career pursuits difficult and limits opportunities.

Maine is committed to 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 or their socioeconomic status. Maine has committed to moving to a proficiency-based learning system that uses rigorous standards and encourages educators to provide learners with multiple pathways and opportunities to demonstrate their achievement of these standards. This measurable, student-centered approach seeks to patch existing leaks in the education pipeline by introducing more comprehensive measures of student achievement and moves us toward a more equitable system where every Maine student can succeed.

In the sections that follow, we look at students' outcomes as they move through the education pipeline. We first address each indicator generally and then discuss the achievement gaps that exist between economically disadvantaged students and their higherincome peers. Together, the indicators illustrate the degree to which the elementary, middle, and high school portions of Maine's education pipeline prepare students for postsecondary education and successful lifelong careers.



4TH GRADE ACHIEVEMENT

(Updated scores not available at time of publication) Fourth grade achievement is an early indication of students' long-term success. One in six students who are not reading proficiently in third grade fail to graduate high school on time. ¹⁰ Approximately one-third (36%) of Maine students in 4th grade were reading at a proficient or better level in 2015. This marks little movement since 2007 and trails New England by seven points. Four out of 10 (41%) students tested proficient or better in math in 2015. This trails the New England average by four points.

Important Note: Maine switched to the eMPowerME test in 2015. In 2015, 52% of 4th grade students scored proficient or better in reading, and 40% scored proficient or better in math. If Maine continues with this test it will provide a more comprehensive indicator of achievement than NAEP and will be included in this publication (it provides a more comprehensive indicator of achievement because all students participate vs. NAEP which is a sample).

WHERE WE ARE

36% (READING) 41% (MATH)

2019 GOALS

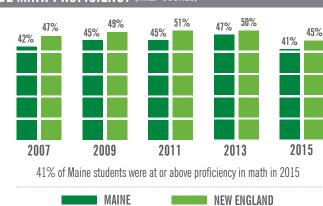
44% OF MAINE 4TH GRADERS WILL BE PROFICIENT IN READING AND 54% WILL BE PROFICIENT IN MATH

4TH GRADE READING PROFICIENCY (NAEP SCORES) 43% 36% of Maine students were at or above proficiency in reading in 2015

4TH GRADE MATH PROFICIENCY (NAEP SCORES)

MAINE

MREADING



NEW ENGLAND

STUDENTS WHO ARE NOT READING **PROFICIENTLY** BY THE END OF THIRD GRADE ARE

MORE LIKELY TO LEAVE HIGH SCHOOL WITHOUT A **DIPLOMA THAN PROFICIENT** READERS.[11]

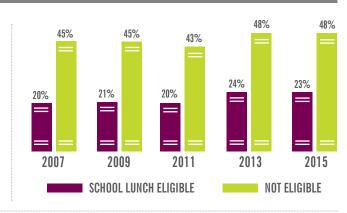
4TH GRADE (ACHIEVEMENT GAP)

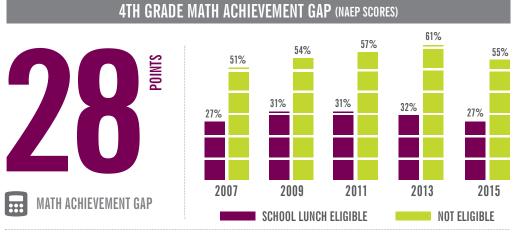
Since 2007, the 4th grade achievement gap has remained steady in reading and grown in math. Maine's 4th grade reading achievement gap was 25 percentage points in 2015, having remained consistent over the past 10 years. In math, Maine's 4th grade achievement gap has increased from 24 percentage points in 2007 to 28 percentage points in 2015. In spite of this, Maine has one of the lowest achievement gaps of the 50 states.

Students who do not achieve proficiency in 4th grade reading and math are disproportionately economically disadvantaged students. Approximately 1 in every 2 higher income 4th graders in Maine is proficient in reading and math, compared to only 1 in every 4 economically disadvantaged 4th graders. The growing achievement gap demonstrates that while many higher income 4th graders progress along the pipeline as expected, a majority of lower income students are left behind. These achievement levels have compounding effects as students move through the education pipeline. Addressing the 4th grade achievement gap will ensure that fewer students fall behind at this early stage.

4TH GRADE READING ACHIEVEMENT GAP (NAEP SCORES)







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

OF STUDENTS WHO FACE A DOUBLE JEOPARDY IN **ELEMENTARY** SCHOOL-FAILURE TO READ **PROFICIENTLY** AND BEING POOR FOR AT LEAST ONE YEAR-

FAIL TO **GRADUATE HIGH** SCHOOL. A RATE MORE THAN

THAT OF ALL **PROFICIENT** READERS.[12]



8TH GRADE ACHIEVEMENT

(Updated scores not available at time of publication) Eighth grade achievement is an indicator of students' progress through middle school and readiness for high school. Students who are not proficient are less likely to graduate on time. In 2015, 35% of Maine 8th grade students scored proficient or better in both reading and math. This marks little to no improvement over the last 8 years and lags New England for both subjects.

Important Note: Maine switched to the eMPowerME test in 2015. In 2015, 35% of 8th grade students scored proficient or better in math and 48% in reading. If Maine continues with this test, this report will switch to eMPowerME scores to track proficiency.

WHERE WE ARE

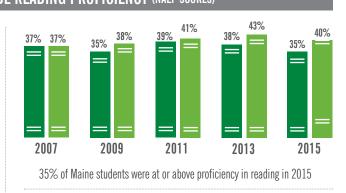
35% (READING) 35% (MATH)

2019 GOALS

45% OF MAINE 8TH GRADERS WILL DEMONSTRATE READING PROFICIENCY AND 47% WILL DEMONSTRATE MATH PROFICIENCY

8TH GRADE READING PROFICIENCY (NAEP SCORES)

35%
WREADING

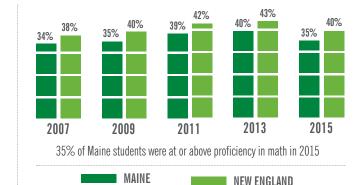


NEW ENGLAND

8TH GRADE MATH PROFICIENCY (NAEP SCORES)

MAINE

35%



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

8TH GRADE ACHIEVEMENT IN READING IS MORE THAN

6X

MORE
IMPORTANT
IN PREDICTING
COLLEGE
AND CAREER
READINESS
THAN HIGH
SCHOOL GPA. [14]

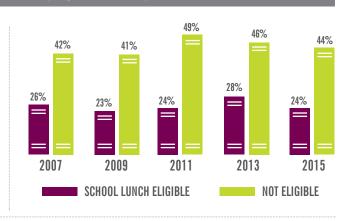
8TH GRADE (ACHIEVEMENT GAP)

Since 2007, Maine's 8th grade achievement gaps have grown in both reading and math. Maine's 2015 8th grade reading achievement gap was 20 percentage points, up from 16 percentage points in 2007. Over the same time period, Maine's 8th grade math achievement gap rose from 19 to 22 percentage points. Over nearly all years measured here, the achievement gap in both subjects is smaller in 8th grade than 4th grade.

Maine's economically disadvantaged students are less likely to achieve at an advanced level than higher income students. On the 2015 math NAEP test, 11% of higher income 8th graders scored "advanced," the category above proficient, compared to only 3% of economically disadvantaged students. At the other end of the spectrum, over one third (37%) of economically disadvantaged 8th graders scored "below basic," the lowest achievement category, compared to only 15% of higher income students. Economically disadvantaged students significantly trail higher income students as they approach the high school segment of the education pipeline. Students who enter high school lacking critical skills in reading in math rarely catch up. 15 If left unaddressed, the achievement gap will obstruct the high school success of economically disadvantaged students.

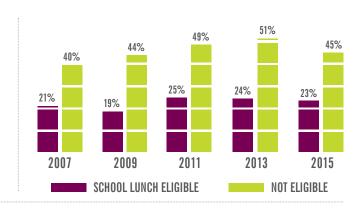
8TH GRADE READING ACHIEVEMENT GAP (NAEP SCORES)





8TH GRADE MATH ACHIEVEMENT GAP (NAEP SCORES)

MATH ACHIEVEMENT GAP



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

STUDENTS
FROM
ECONOMICALLY
DISADVANTAGED
BACKGROUNDS
LEAVE 8TH
GRADE AND
ENTER HIGH
SCHOOL WITH
LITERACY SKILLS

5 YEARS

BEHIND THEIR HIGH-INCOME PEERS.^[16]



HIGH SCHOOL ACHIEVEMENT

We measure achievement at two points in students' high school careers. In 11th grade, we report students' proficiency in reading and math. To determine how many Maine students complete the 1st—12th grade phase of the education pipeline on time, we measure high school completion rates.

Due to changes in Maine's educational assessment tests and standards in 2015 and 2016, this year there is a new baseline for high school academic proficiency. The Maine High School Assessment test is the College Board's SAT. In 2015-16, 60% of Maine 11th graders scored at or above the state's expectations in reading and 35% scored at or above the state's expectations in math. Even as students prepare to progress to the next phase of the education pipeline, many continue to fall short of our goals.

On the cusp of high school graduation, Maine's economically disadvantaged students continue to achieve at lower levels than their higher income peers. In 2015-16, the 11th grade reading achievement gap was 24 percentage points. In math, the achievement gap was 23 percentage points. Only one in five economically disadvantaged students (20%) scored at or above the state's expectations. These gaps remain comparable to the 8th grade achievement gap, suggesting that more needs to be done in the high school years to increase the achievement of economically disadvantaged students and narrow the achievement gap.

In 2016, Maine graduated 12,426 students for a completion rate of 87% and just short of our 2019 goal (90%). Maine's high school graduation rate was the same as the New England average in 2016.

Among economically disadvantaged students, high school completion rates are substantially lower. In 2016, just 76% of economically disadvantaged students completed high school, compared to 93% of higher income students. Changes to high school graduation requirements across the state will attempt to improve completion rates and close the achievement gap. Beginning in 2021, graduates will (by law) be awarded a diploma that demonstrates their proficiency and mastery of key standards and principles. Students will strive to meet required standards throughout their high school career and will have multiple opportunities to do so. Ideally, this will mean that students of all income levels will complete high school prepared to enter the next phase of the education pipeline.

WHERE WE ARE

60% (READING) 35% (MATH) 87% GRADUATE HIGH SCHOOL

2019 GOALS

70% OF MAINE STUDENTS IN GRADE ELEVEN WILL BE PROFICIENT IN READING AND MATH 90% OF MAINE STUDENTS WILL GRADUATE FROM HIGH SCHOOL

STUDENTS
WHO FAIL TO
COMPLETE
HIGH SCHOOL
BY AGE 20 ARE

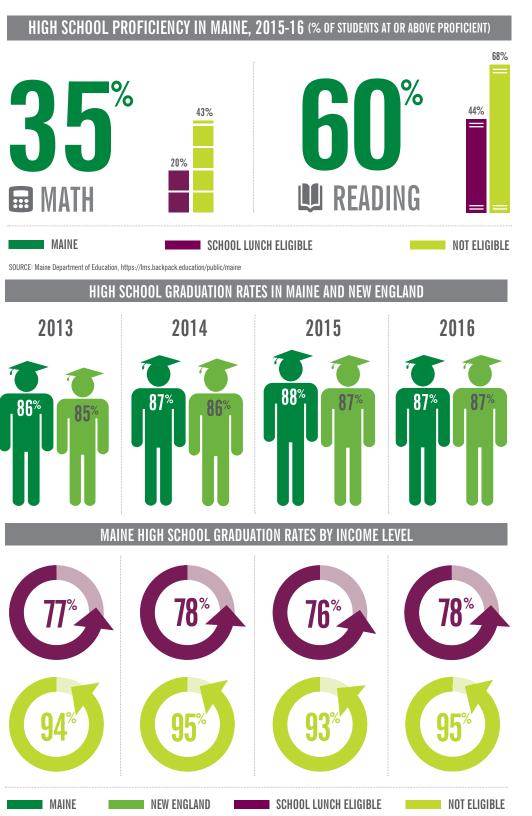
50%

MORE LIKELY TO HAVE SPORADIC EMPLOYMENT AND

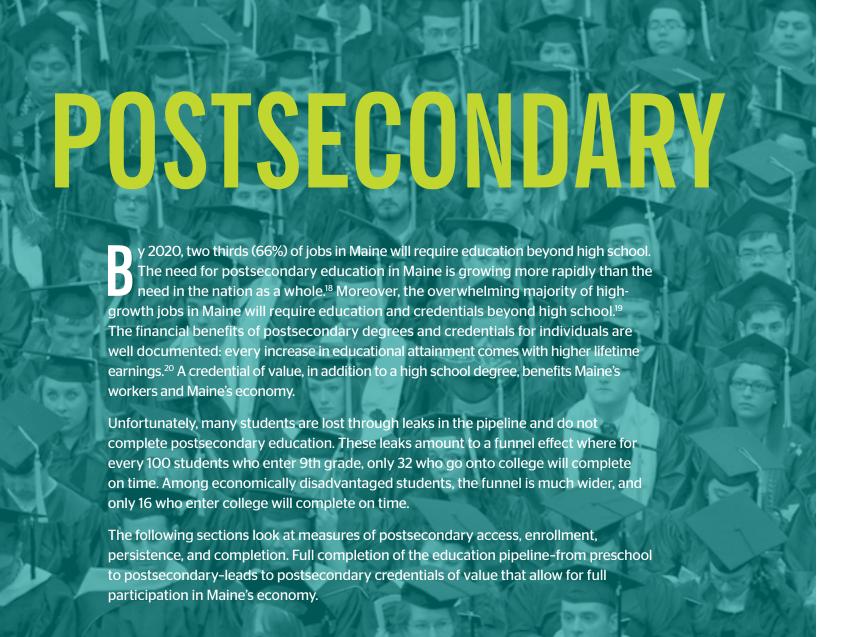
7X

MORE
LIKELY TO BE
PERSISTENTLY
POOR AS YOUNG
ADULTS.[17]

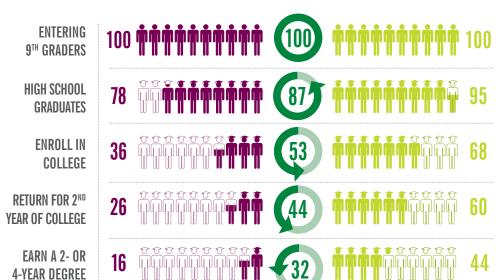
HIGH SCHOOL ACHIEVEMENT



SOURCE: Maine Department of Education Data Warehouse



THE MAINE EDUCATION FUNNEL EFFECT AND ACHIEVEMENT GAPS



SCHOOL LUNCH ELIGIBLE
NOT ELIGIBLE
ALL MAINE STUDENTS

SOURCE: Maine Department of Education National Student Clearinghouse

COLLEGE-GOING & PERSISTENCE

Approximately 6 out of 10 (61%) Maine students who graduate high school on time, enroll in college the following year. This is a modest improvement from 2006 (57%) but lower than the national average (64%).²¹ After one year of college, 83% of Maine students return for a second year. This is higher than the national average (72%).²²

College-going among economically disadvantaged students has remained the same (46%) since 2010, while their higher income peers have experienced an increase (68% to 72%). Persistence decreased for economically disadvantaged students (75% to 72%) and increased for their higher income peers (86% to 88%).

Not included in these statistics are adults who begin college one or more years after their high school graduation. Increasing college-going and persistence for this population is also a priority education and workforce development strategy for Maine.

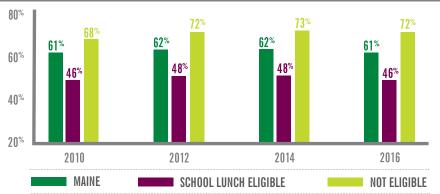
WHERE WE ARE

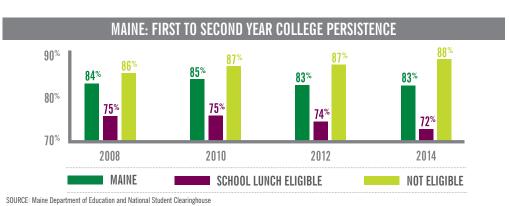
COLLEGE-GOING 61%, COLLEGE PERSISTENCE 83%

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







55%

OF MALE
STUDENTS
ENROLL IN
COLLEGE IN
THE FALL AFTER
HIGH SCHOOL,
COMPARED TO

67%

OF THEIR FEMALE PEERS.^[23]

18



COLLEGE COMPLETION

Just under half (48%) of first-time, full-time Maine college students complete the education pipeline and earn an associate's or a bachelor's degree within 150% of normal program time from the same institution. Maine's college completion rates have been decreasing-from 50% in 2008 to 48% in 2015. New England's rates remain stable at 58%.

Trends in completion rates vary by type of institution. College completion rates at Maine's community colleges are decreasing—from 29% in 2007 to 25% in 2015 yet remain well above the New England average of 19%. Maine's public university completion rate (45%) trails New England's rate of 62%. The private college completion rate in Maine is 67%, compared to 73% across New England.

The discrepancy in educational attainment by socioeconomic status continues through the end of the education pipeline. A recent Education Trust analysis of U.S. students entering four-year colleges and universities found a national completion gap of 14 points between students who receive Pell grants (federal grants for low-income students) and those who do not qualify. In Maine, the college completion gap was even higher, at 16 points. 36% of students who receive Pell grants and started at a Maine institution in 2007 earned a degree by 2013, compared with 52% of students with higher incomes.²⁴

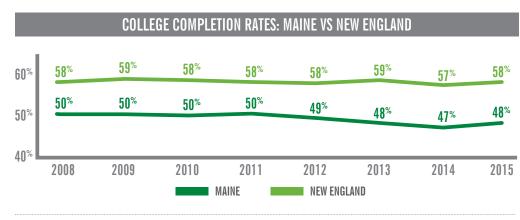
Over half of all Maine college students exit the education pipeline without earning a postsecondary degree or credential, joining the large portion of the adult population in the workforce with some college but no degree.

WHERE WE ARE

MAINE 48%. NEW ENGLAND 58%

2019 GOALS

CLOSE THE COLLEGE COMPLETION GAP WITH NEW ENGLAND



SOURCE: Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics2

STUDENTS WHO DO NOT COMPLETE **COLLEGE ARE**

MORE LIKELY THAN COLLEGE **GRADUATES TO DEFAULT ON** THEIR STUDENT LOANS.[25]

COLLEGE COST & DEBT

Maine students pay more and owe more as a share of per capita income than their New England peers. Although the average net price at two- and four-year-degree granting colleges and universities in Maine is almost \$5,000 less than the New England average, it is higher as a share of income. In 2014-15, the average net price of college for Maine students was 39% of per capita income, compared to 36% across New England.

Maine students borrow proportionally more to pay for college than their New England peers. In 2014-15, Maine students borrowed \$6,965 per year, a 17% share of per capita income in Maine and higher than the 13% New England average. Economically disadvantaged students in Maine shoulder an even greater burden.

College cost and debt influence who enrolls and whether they graduate. Decreasing the financial burden of college for Maine students will increase college-going, persistence, and completion rates and help Maine achieve its workforce development goals.

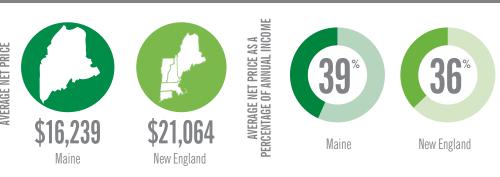
WHERE WE ARE

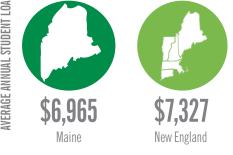
MAINE STUDENTS SPEND MORE AS A SHARE OF PER CAPITA INCOME FOR COLLEGE THAN THE NEW ENGLAND AVERAGE BY 3 PERCENTAGE POINTS. MAINE STUDENTS' ANNUAL STUDENT DEBT BURDEN AS A SHARE OF PER CAPITA INCOME IS 4 POINTS HIGHER THAN THE NEW ENGLAND AVERAGE.

2019 GOALS

CLOSE THE COST AND DEBT GAPS WITH NEW ENGLAND.

COLLEGE COST & DEBT IN MAINE VS NEW ENGLAND (2014-2015)







New England

SOURCE: Integrated Postsecondary Education Data System (IPEDS), National Center for Education Statistics [26]

MAINE RANKS

HIGHEST IN THE NATION IN AVERAGE STUDENT DEBT (\$29,644) AND

HIGHEST IN **PROPORTION** OF GRADUATES WITH DEBT (63%) AMONG STATE **RESIDENTS WHO COMPLETED** BACHELOR'S DFGRFFS IN 2015.[27]



MAINERS WITH POSTSECONDARY CREDENTIALS OF VALUE

Educate Maine set a goal 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 attain some postsecondary credential of value in addition to their high school degree. This includes a skilled trade credential, a professional certificate, or college degree that connects them to a good job and career in Maine.

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. The Lumina Foundation now publishes annual estimates of the proportion of adults in each state that hold a high-quality certificate as their highest earned credential. In Maine, 2% of working-age adults hold a certificate, which is below the New England average of 3.3% and the national average of 4.9%. With a college degree attainment level of 41%, the Maine workforce has a combined postsecondary credential of value attainment level of 43% and is on track to meet our 44% goal by 2019.

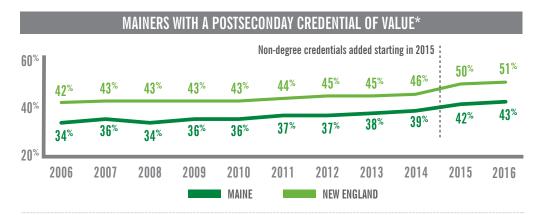
In 2017, the State of Maine adopted a longer-term attainment goal of 60% with a postsecondary credential of value by 2025. As a member of the MaineSpark 60% by 2025 effort, Educate Maine will support the state's efforts and this report will evolve to align with that goal.

WHERE WE ARE

MAINE (43%), NEW ENGLAND (51%)

2019 GOALS

44% OF MAINERS WILL HOLD A POSTSECONDARY CREDENTIAL OF VALUE



^{*} Adults ages 25 to 64 SOURCES: U.S. Census Bureau, American Community Survey 1-Year Estimate

66%

OF HIGH-WAGE, IN-DEMAND MAINE JOB OPENINGS FROM 2014-2024 WILL REQUIRE POSTSECONDARY EDUCATION BEYOND HIGH SCHOOL.^[29]

TAKE ACTION!

WHAT CAN WE DO TO REACH OUR GOALS?

Select Strategies from the Educate Maine Policy Brief Series

From "A Strong Foundation for Maine"

- Support ongoing professional development for early childhood professionals and teachers.
- Support state systems and investments to increase the quality of early childhood education and care providers.
- Support local strategies to address hunger among the state's youngest.

From "College and Career Readiness for Maine"

- Provide a greater number of affordable, high quality public and private Pre-K options for Maine families.
- Provide greater after-school and summer programming learning opportunities to help students close achievement gaps.
- Support and complete the State's shift to proficiency-based education.
- Provide quality early college and dual enrollment opportunities for all Maine students.

From "College Affordability for Maine"

- Provide consistent and adequate state support for public higher education.
- Provide incentives for students to stay on schedule and finish on time.
- · Improve financial literacy support for Maine students and their families.
- Increase tuition subsidies and debt forgiveness programs for Maine students.

From "Career and Technical Education (CTE): Increasing Student Success by 100%"

- Create more CTE experiences for Maine students beginning in middle school to raise awareness and aspirations.
- Recruit more Maine businesses to partner with CTE programs and provide experiential opportunities and jobs for students.
- Expand and adapt tested programs like Bridge Year and MELMAC's aspirations practices to engage more Maine students in CTE pathways.

To learn more about these and other strategies please go to: http://www.educatemaine.org/research-reports to read the complete policy brief series designed to provide action steps to achieve the goals set in this report.

EDUCATE MAINE champions college and career readiness and strives to increase the educational attainment of the Maine workforce. All students should graduate high school prepared to succeed in postsecondary education and in the workplace, and the number of Maine people with a college degree, a postsecondary certificate, or a professional credential must increase to meet the demands of the economy.

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