



# 2017 Study of Gaps in College Access and Success Programming in Montana

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# Reach Higher Montana 2017 Study of Gaps in College Access and Success Programming in Montana

## Executive Summary

As part of its efforts to prepare for the future, Reach Higher Montana embarked to study the current state of college access and success in Montana. The result is this gap analysis report, which highlights areas of progress and areas of need if Montana wishes to provide higher education opportunities for all students. The data will help Reach Higher Montana's governing body – the Montana Higher Education Student Assistance Corporation (MHESAC) board – identify strategic priorities specifically for fiscal years 2019 through 2021.

The data analyzed generally falls into five broad categories: Academic Preparation, Access, Affordability, Awareness, and Aspirations. While not mutually exclusive, these broad categories provide context for the areas which help students succeed in higher education.

While the content of the report is far more extensive than the gaps identified, a list of the gaps includes the following:

### Academic Preparation:

- Differences between high school graduation requirements and college readiness coursework. Montana students are required to take four years of English, two years of math, two years of science, and two years of social studies. "Core or More" – the label given to rigorous coursework designed to prepare students for college – calls for four years of English, at least three years of math, at least three years of science, and at least three years of social studies. Students who take less than "Core" routinely score below benchmarks on the ACT, and below their peers who take rigorous coursework.
- **Academic achievement.** Low proficiency scores in writing and math on the ACT. Many students require remedial math and writing when they get to college.
- **Different levels of achievement for underserved students.** In particular, American Indian students drop out of high school at significantly higher rates than their white counterparts.

## Access:

- **Participation rates in dual enrollment opportunities.** While Montana has made great strides in the past few years by doubling the number of students who take dual enrollment courses, only 10 percent of juniors and seniors in the state take advantage of this opportunity.
- **Completion of Advanced Placement, International Baccalaureate (IB), and CLEP exams.** In Montana, nearly 2,000 AP tests are not taken by students who are enrolled in AP coursework. IB programs are costly to implement and are not offered by many schools, and the exams also have fees associated to earn college credit. CLEP exams also require payment, which may be one reason why students do not take these exams.
- **College enrollment rates immediately following high school graduation.** 62% of Montana high school graduates enroll in college the fall after high school graduation (49% in Montana; 13% out-of-state).
- **College enrollment rates among American Indian students.** While not entirely accurate, the available data suggests 28% American Indian students enroll in college immediately following high school graduation. This percentage does not reflect students who enroll in tribal colleges.
- **Enrollment in two-year colleges.** Montana ranks 42nd in the nation for percentage of undergraduates enrolling in two-year colleges.

## Affordability:

- **Need-based financial aid.** State funding for need-based aid has dropped from \$150 per undergraduate FTE in FY 2009, to just \$47 per undergraduate FTE in FY 2017.
- **FAFSA completion rates.** In 2016, Montana ranked 28th in the nation for FAFSA completion by priority deadlines, at 38% of high school seniors (by fall, however, 58% of students who graduated the previous spring completed the FAFSA). The top state, Tennessee, had a FAFSA completion rate of 62.3% by the early deadline. .
- **Pell Grant Usage.** While the total amount of Pell dollars in Montana has increased (due to increases in Pell award amounts), the number of students receiving Pell grants in Montana has decreased.
- **Increasing student debt levels.** Students who borrow to pursue higher education are borrowing increasing amounts
- **Expected family Contribution (EFC).** The federal financial aid formulas calculate a level of expected family contribution towards the cost of education. Little is known about how Montana families address the Expected Family Contribution for Montana students.

## Aspirations:

- **Availability of instructors for Career and Technical Education (CTE) courses.** CTE courses offered in high schools are dependent upon the teachers available in each school. Some high-wage, high-demand CTE classes are not available in all schools.
- **Limited opportunities for work-based learning.** Internships and other opportunities for students to learn on-the-job is not widely available.
- **Lack of awareness of opportunities in Montana.** Many of the jobs of the future require an industry certificate or a two-year degree, yet not enough students are choosing these programs.

## Awareness:

- **Earlier exposure to college and career readiness.** Students need to learn about college and career opportunities earlier in their K-12 experience.
- **Building supportive environments for students when they go to college.** A significant percentage of students leave college because of non-academic reasons.
- **Improved college and career advising in high school and college.** Advising needs to start earlier in high school, and colleges need to offer quality advising throughout a student's tenure, and be linked to workforce needs.
- **Inconsistency and lack of awareness in providing non-academic supports.** Students may be unaware of the supports that are available to help them succeed, and the same level of support is not available at every campus.





# Introduction

A good education is part of the American Dream. Each generation hopes their children will have more opportunities to thrive and succeed. In order for the dream to become reality, more and more of today's students will need an education beyond high school. As the economy changes throughout the nation and in Montana, more jobs will require some form of postsecondary education - an industry certificate, associate's degree, bachelor's degree, or higher. Additionally, Montana faces a shrinking workforce as the state's population ages. In 2016, the population sixty-five and older was 17.7 percent. By 2030, it's estimated this demographic will make up 26 percent of the population. Montana expects to have annual growth of about 5,500 jobs a year through 2025. It's estimated that there will be about 4,500 workers available to fill those jobs, leaving an annual gap of 1,000 workers. (Montana Labor Day Report, 2017)

While the economic benefits of education are important, there are also societal benefits. People who drop out of high school are much more likely to rely on public assistance, be incarcerated, and have fewer positive health indicators. (Brookings Institute) Montanans place a high value on education, 2016 data shows that 93 percent of the population ages 25 and older have a high school diploma. This is higher than our neighboring states and higher than the national average of 87 percent. (Lumina Foundation) However, approximately 15 percent of high school students drop out before graduation and nearly 40 percent of high school graduates do not go on to college. (Office of Public Instruction)

This gap analysis report highlights promising strategies and identifies gaps within the existing college access and success landscape in Montana with a particular focus on gaps in services within the context of Reach Higher Montana programs. The study is based on statistics from the Montana Office of Public Instruction, Montana University System, Montana Department of Labor, U.S. Census data, the Lumina Foundation, and the National Student Clearinghouse. In addition, ten interviews were conducted with staff from the following organizations and agencies:

- GEAR UP
- American Indian and Minority Achievement Council
- Complete College Montana
- TRIO
- Department of Labor/Office of the Commissioner of Higher Ed Apprenticeship
- Governor's office

- Jobs for Montana Graduates
- Reach Higher Montana – Foster Care Students
- Montana Career Pathways and Dual Enrollment

Education partners, government agencies and private businesses have focused energy and resources on college and career readiness to increase the number of students who will be prepared to meet the workforce demands today and into the future. Recent significant changes in education include:

- Revised academic standards in K-12
- Focused Montana Career Pathways
- Increased access to dual enrollment and Advanced Placement (AP) courses
- Integration of college application and Free Application for Federal Student Aid (FAFSA) activities at schools
- Increased engagement of school, community and industry in graduation rates
- Streamlined FAFSA process
- Innovative work-based learning and apprenticeship programs
- Data driven strategies to increase high school graduation rates and college retention rates

These changes and more have resulted in better coordination of services, increased flexibility in K-12 and higher education to adapt to the needs of a changing workforce and a commitment to increasing college going and completion rates. However, there are significant challenges in meeting Governor Bullock’s goal of 60 percent of the population earning a postsecondary certificate or degree by 2025. These challenges include:

- More than a third of all graduating high school seniors do not enroll in postsecondary education.
- The percentage of American Indian students and low-income students who attend college lags behind white and more affluent students.
- The cost of higher education is a barrier for some students.
- A significant percentage of students graduate from college with a B.A. in General Studies which does not adequately prepare them for the workforce.
- The budget crisis at the state level and uncertain funding at the national level may impact K-12 and higher education.
- Less than a quarter of students meet all four of the ACT proficiency scores in English, writing, math, and science

# Montana Demographics: Who we are and how we compare to the nation

Montana is the 4th largest state in the nation geographically, 43rd in the nation for total population, and 48th for population density with seven people per square mile. Nearly all of the state is classified as rural and 45 counties are designated as frontier, based on people per square mile. Montana ranks 47th in the country for average income and 22nd for percentage of families with children ages 5-17 living in poverty (16.8 percent and 19.5 percent respectively). The state ranks 17th for students eligible for free and reduced lunch with 43.6 percent of students qualifying (compared to 52.2 percent nationally). Montana's population is predominately white at 89 percent, and the largest minority population is American Indian at 6 percent. (US Census)

Thirty-one percent of adults hold a bachelor's degree or advanced degree. A total of 42.9 percent have an associate's degree or higher, and an additional 21 percent of Montanans have earned some college credits, but no degree. (Lumina Foundation)

## High school enrollment demographics

Montana has 819 public schools, including 171 high schools, spread across the state. Forty percent of the schools have fewer than 50 students. A little more than 25 percent of the schools make up nearly three-quarters of the enrollment. In 2016-17, nearly 42,000 students enrolled in public high schools which was a slight increase from the previous year. Eighty-one percent of the students are white and 10 percent are American Indian. Other races make up the remaining 9 percent. Thirty-five percent of the students are economically disadvantaged. (Office of Public Instruction Facts about Montana Education 2017)

The Western Interstate Commission for Higher Education (WICHE) estimates that Montana will produce approximately 10,000 high school graduates per year through 2032. The current class of high school graduates (2017-18) is expected to be the smallest since 2000, with an estimated 9,400 graduates. While estimates project slight increases in graduating classes moving forward, about 5 percent over the next 10 years, WICHE's estimates do not project that Montana will reach the level of high school graduates produced annually in the early 2000's (over 11,000 per year). (Bransberger & Michelau, 2016).

## College Demographics

Montana has six public 4-year colleges, eight 2-year and community colleges, seven tribal colleges, and three private colleges. For the purposes of this report, the data will primarily reflect the fourteen public colleges in the Montana University System (MUS). Comprehensive data is not available for tribal colleges, and private college enrollment is quite small, comparatively. In fiscal year 2017, MUS had 25,163 full-time equivalent (FTE) resident undergraduates. In the fall of 2016, the number of first-time, full-time, in-state freshmen was 3,950. The private colleges have a combined enrollment of just under 4,000 FTE students. 2013-14 data shows that tribal colleges serve 2,400 FTE students. An average of 87 percent of the tribal college student population is American Indian/Alaska Native.

Montana is 42nd in the nation for percentage of students who enroll in a 2-year college with only 27 percent enrolling in the fall of 2016, compared to 49 percent nationally.

- 20 percent of MUS students are 25 years or older.
- 28 percent of incoming freshmen students in 4-year colleges needed remediation in writing or math.
- 61 percent of students enrolling in 2-year colleges need remediation.
- 23 percent of students are enrolled in at least one online class. The percentage has doubled in the last ten years.
- 33 percent of all incoming undergraduates receive Pell grants.
- 28 percent of graduating American Indian students enroll in college the following fall. This data is likely artificially low because it does not include students who enroll in tribal colleges.

There are economic factors that impact postsecondary access and affordability. State and national funding affects the programs that provide services to students to assist them in going to college and also to the postsecondary institutions themselves. While many of the college access programs have been underfunded for some time, it remains unclear what the education priorities will be on the national level. The current federal administration has proposed a 10 percent cut to TRIO and a 30 percent cut to GEAR UP. For a bit of good news, Montana GEAR UP just received its federal grant of \$24 million for another seven years to serve 18 communities.

The state level funding for education is also uncertain. During the 2017 legislative session, the legislature passed a fiscal bill (SB 261) in an effort to maintain a balanced budget for the State of Montana. SB 261 forces spending cuts in the event that revenue estimates used during the state budgeting process did not materialize, and established four revenue levels and mandated reductions of appropriations for each level reached. For education funding (K-12), only level 2 (.4% shortfall) and level 4 (1.5% shortfall) affect appropriations. The reductions are additive, meaning that if the level 4 shortfall occurs, both level 2 and level 4 reductions will go into effect resulting in a reduction exceeding \$19 million over the 2018-2019 biennium. (School Administrators of Montana, 2017)

On August 30, 2017, the Governor's Budget Director, Dan Villa, informed agencies to plan for further cuts beyond those triggered by SB 261 as a result of the general fund balance falling below

statutory minimum levels. In general, Villa directed agencies to plan up to 10 percent in additional cuts. The OPI state level operations' budget and the Board of Regents have some protections from the full level of cuts, as they may not be reduced by more than the average reduction percentage required of all other executive branch agencies. Agencies were directed by Budget Director Villa to submit their plans by September 8, 2017. (Villa, 2017) It remains to be seen how the proposed cuts will impact education programs and services. Colleges in the MUS have had a freeze in the cost of tuition for much of the past 10 years. Because of budget shortfalls, tuition is increasing in 2017. One of the flagship universities, The University of Montana, is undergoing a program prioritization effort due to significant budget constraints and a declining enrollment over the past few years.

## Underserved populations

Low income, American Indian and students in foster care are among the underserved populations in postsecondary education. Some of these students may have dropped out of school as early as middle school, or they may live in families in which no one has previously attended college. They may feel they do not have the financial means to attend.

Nationally, one in four native people live in poverty. In 2014, the unemployment rate for native populations was 11 percent - nearly twice the national average of 6.2 percent. (US News and World Report December 2014) In Montana, American Indians are underrepresented in high school graduation rates and in college going, retention, and completion rates. The unemployment rate on the seven Indian reservations ranges from 5 percent to 13 percent compared to 3.8 percent for the state. Five of the seven reservations have double-digit unemployment. (Montana Labor Day Report, 2017) Many reservations communities experience "deep poverty" defined as poverty that is generational and concentrated with limited economic opportunities.

Through the federal School Improvement Grants (2009), the Office of Public Instruction developed Schools of Promise to work with the state's lowest performing schools. These schools were located on Montana's Indian reservations. Schools of Promise was an all-inclusive effort involving the school board, school administrators, teachers, MEA-MFT, students, and families. Both students and school staff received comprehensive supports to increase student learning. Schools of Promise gained national recognition as a model for transforming struggling schools. Transforming a school system takes time, but after four years, most schools saw marked improvement in student test scores. The students at or above proficiency increased in all the schools that were in the lowest 5 percent of performance. (Billings Gazette, May 18, 2014) Montana did not receive funding from the federal government in the 2015 grant cycle. The Office of Public Instruction website indicates two of the original six communities (Hays Lodge Pole and Heart Butte) are continuing to work on action plans in the 2017-18 academic year. It is unclear how these efforts are currently funded.

The American Indian and Minority Achievement program (AIMA) at the Office of the Commissioner of Higher Education, in partnership with K-12 schools, seeks to increase the number of minority students who go to college and succeed in college. The program works with middle and high schools and tribal colleges on all seven reservations and makes policy recommendations to the Montana Board of Regents for MUS campuses. The goals of the AIMA are to:

Grow the capacity of MUS administrators, faculty and staff to provide culturally responsive instruction, counsel, outreach and student support.

- Increase student access.
- Increase student retention.
- Increase student completion.
- Improve tribal college and MUS relations.
- Increase the availability of data.

## Foster Care

In August 2017, The Montana Department of Health and Human Services (DPHHS) published the findings of an Educational and Training Voucher (ETV) survey of foster care students, aged fourteen to twenty-one. The survey was conducted through the Montana Chafee Foster Care Independence Program (CFPIP). The survey had a 22 percent response rate. Even though participation in the ETV program continues to increase each year (administered by Reach Higher Montana through a contract with DPHHS), results show that young people in foster care are not aware of the resources available to them. The findings showed these students need comprehensive support, such as academic support, financial aid, transportation, and stable housing if they are to be successful. Therefore, CFCIP should focus their efforts toward creating greater awareness of the funding available to youth who are interested in obtaining higher education. From 2015 to 2017 Reach Higher awarded nearly \$430,000 in ETV funds for foster care students to attend college, spending the full amount contracted for this purpose.

### **Recommendations in the report include the suggestions to:**

- Create an ETV flyer to be distributed in Montana's post-secondary schools.
- Create awareness in foster parents and adoptive families about the ETV program.
- Engage the Montana CFCIP Youth Advisory Board in educating fellow youth in foster care about educational opportunities and financial aid resources.
- Engage Chafee providers, Transitional Living Specialists, CASA, and CPS throughout Montana in helping youth learn about ETVs.
- Partner with Reach Higher Montana to prepare for and implement the Check and Connect Program in pilot schools throughout Montana.

Since 2005, Reach Higher Montana has hosted an annual summit for up to fifty foster care students ages sixteen to twenty-one to help prepare them for higher education. The summit is held on a college campus over four days, and students whose goals include higher education receive a laptop computer to aid in their studies. Students who intend to enter the workforce receive stipends to purchase necessary tools, clothing, or supplies to help them reach their goals. At the summit, students stay in the dorms, attend mini-classes, learn about services available on campus to help them succeed, and complete the forms to receive Education and Training Voucher funds.

# Academic Preparation, Access, Affordability, Aspirations, and Awareness

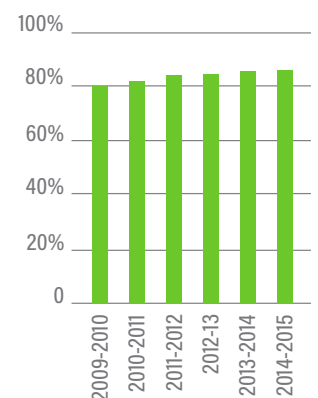
Success in postsecondary education can broadly be defined in five categories. Are students academically prepared to make the transition from high school to college? Do underserved populations have access to college through financial aid and other resources? Is postsecondary education affordable for most students? Do students know what they want to do with their futures? Are students aware of the services available to them to assist them prior to college and while they are there? The categories of academic preparation, access, affordability, aspirations, and awareness are not mutually exclusive, they are more like five legs of a bench; together they hold up the structure of postsecondary success.

## Academic Preparation

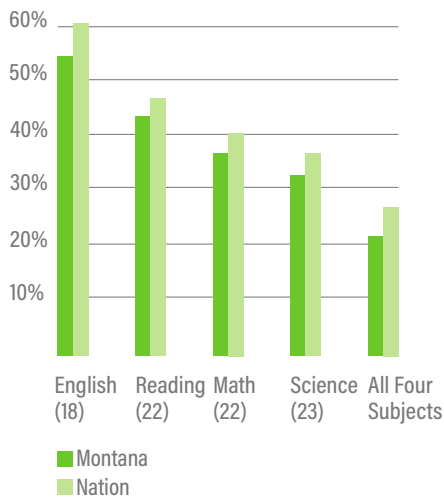
Montana has taken great strides in the past several years to increase high school graduation rates, build a stronger connection between K-12 and postsecondary education and increase the rigor of academic standards. Through the efforts of a statewide initiative, Graduation Matters Montana (GMM), Montana's high school graduation rate of 86 percent in 2015-16 was at an all-time high for the second year in a row. Economically disadvantaged students' graduation rate was 76 percent and American Indian graduation rate was 63 percent, more than 20 points lower than their white counterparts at 89 percent. However, it should be noted that the American Indian dropout rate had been reduced by one-third during the time of GMM. The success of this statewide initiative involved communities developing their own individual strategies to address their graduation rate. Communities took stock of their data, involved schools, community members, businesses and students in tackling and solving the problem.

The Dennis and Phyllis Washington Foundation provided financial support for communities to apply for grants up to \$10,000 to implement their local efforts. In 2016, a total of fifty-eight communities had participated in the initiative. Reach Higher Montana (as Student Assistance Foundation) was a partner in GMM activities and provided \$100,000 in support to communities and additional funding

Montana High School Graduation Rates



## Percent of 2017 ACT-Tested High School Graduates Meeting ACT College Readiness Benchmarks by Subject



to support local FAFSA completion efforts. While GMM was not continued by the current Superintendent of Public Instruction, it was recently announced that the Office of the Commissioner of Higher Education would house iGraduate, a program based on the principles of Graduation Matters Montana. (Billings Gazette)

Montana also changed the way students could receive their high school equivalency. Montana changed from the GED to HiSET. The test is more affordable, allows students to take one portion of the test at a time if they choose and to retake only the portion of the test they failed rather than the entire exam.

Thanks to a federal GEAR UP grant, all public high school juniors are able to take the ACT college admission test while they are in school, at no charge to the student’s family. Nearly 100 percent of juniors take the test. The Montana 2017 high school graduates had an average ACT score of 20.3. The national average is 21.0.

Twenty-two percent of these students met the proficiency standard in all four college readiness benchmarks of English, reading, math, and science. This compares to 27 percent nationally. Over one-third of the students, 36 percent, did not meet the proficiency standards in any of the four areas.

The ACT helps students who may not think they are college material see that with some additional work, they could succeed in college. Conversely, ACT scores also show students who think they are ready, specific academic areas where they need to pay more attention. Students have a year to improve their knowledge and skills in those areas before going on to college. Montana just received another seven years of GEAR UP funding so juniors will continue to take the ACT at their school, free of charge.

Perhaps it is hardly surprising that students who take more rigorous course work in high school perform better on standardized tests, such as the ACT. Students who took “Core or More” curriculum in high school earned average ACT scores that met or exceeded benchmarks in all areas tested – English, Math, Science, and Social Studies. The percentage of students who took less than “Core or More” and met benchmarks was significantly smaller. The difference was especially striking in math: 47percent of students who took “Core or More” met or exceeded the benchmark, compared to only 5 percent of those who took less than “Core or More”.

Core or More is defined as at least four English courses, at least three math courses, at least three science courses and at least three social science courses. Students who meet an ACT College Readiness Benchmark have a 50 percent chance of earning a B or better and approximately a 75% chance of earning a C or better in the corresponding college course or courses. (Montana ACT Council, 2017)

A gap exists, however, between “Core or More” and the minimum high school graduation requirements. Montana students are required to take four years of English, but only two years of math, two years of science, and two years of social studies. (Graduation Requirements, 2013) The gap

in preparation may explain, at least in part, why some Montana students need to take remedial coursework when they transition to higher education.

For the Montana high school graduating class of 2016,

- 28 percent of graduates entering the MUS required remedial coursework;
- 23 percent required math remediation; and
- 11 percent required writing remediation. (Office of Public Instruction, 2017)

Given that only one in ten students who take remedial math courses as a freshman in college end up graduating from college, MUS is making changes to support student retention and graduation. Instead of offering a remedial math course or having all students take advanced Algebra, MUS now enters students in Math 105, a math-for-life course and provides additional instruction for students who otherwise would have been in a remedial math course. Once students have completed the course, they have met their math requirements for college unless they are in a specific field that requires Algebra or additional math courses.

In the past five years, Montana has revised K-12 academic standards in math, English language arts, science, health, physical education and the arts. Some of these standards had not been revised in nearly twenty years. The new standards are aligned with national college and career readiness benchmarks in the subject areas and emphasize the development of students' critical thinking and problem-solving, two skill sets employers say are most needed in the 21st Century economy. It takes time for teachers and students to adapt to new standards. Hopefully, these more rigorous standards will translate into higher test scores and a smoother transition into college.

This fall, the Office of Public Instruction submitted its plan under the federal Every Student Succeeds Act (ESSA). The state plan uses the 2016-17 year as a baseline and has a goal to reduce the number of students that score as not proficient on state exams by 4 percent a year through the 2022-23 school year. Montana included college and career readiness as its optional indicator. College and career ready in the ESSA plan is the percentage of students who meet the following criteria:

- Achieve the college-ready benchmark on the ACT composite or
- Earn at least three credits in a Career or Technical Education pathway or
- Complete a dual enrollment course, AP or International Baccalaureate (IB) test with passing grades.

In summary, this data shows significant gaps in Academic Preparedness:

- Low proficiency scores in writing and math on the ACT
- High dropout rate for American Indian students
- Percentage of students who need remedial math and writing.

**Differences between high school graduation requirements and college readiness coursework.** Montana students are required to take four years of English, two years of math,

two years of science, and two years of social studies. "Core or More" – the label given to rigorous coursework designed to prepare students for college – calls for four years of English, at least three years of math, at least three years of science, and at least three years of social studies. Students who take less than "Core" routinely score below benchmarks on the ACT, and below their peers who take rigorous coursework.

## Access

Public colleges in Montana have always had an open enrollment policy for in-state residents. These students can enroll in the MUS 4-year colleges if they meet the following requirements:

- Earn at least a 2.5 high school GPA; or
- Rank in the top half of the school's graduating class; or
- Earn an ACT composite score of 22 or higher, or SAT total score of 1120 or higher (exception: MSU-Northern: ACT score of 20, SAT score of 1050).

The only requirement to enroll in an MUS 2-year college is that students have a high school diploma or have completed a high school equivalency assessment approved by the Board of Public Education (formerly the GED and currently the HiSET\*). These open enrollment policies allow for a broad range of students to access higher education.

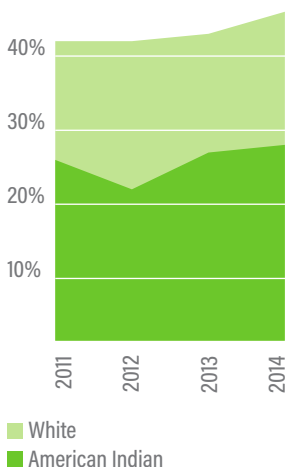
The percentage of Montana high school graduates immediately enrolling in college in the fall semester following graduation is roughly 55 percent. The Office of Public Instruction lists the percentage as 52 percent, but does not include private high school graduates. Most of these students enroll in Montana (49 percent in 2014), and the percentage enrolling out-of-state has remained relatively constant at about 13 percent. Among other western states, the college continuation rate of recent high school graduates is slightly higher than the average among WICHE states. (Montana Office of the Commissioner of Higher Education, 2015)

American Indian students have a 28 percent college enrollment rate. This percentage is not completely accurate because it doesn't capture students attending tribal colleges. However, given the enrollment numbers for Montana tribal colleges, this population is still underserved. Only one-third of students who qualify for free and reduced lunch in K-12 enrolled in college. Sixty percent of students whose family incomes were above free and reduced lunch qualification enrolled in college.

Important aspects of college success are retention and completion rates. Seventy-five percent of students who enrolled in MUS 4-year colleges in the fall of 2015 returned to college in the fall of 2016. The retention rate for American Indian students was 60 percent. Retention rates for the 4-year institutions haven't changed very little in the last ten years.

Two year campuses had a 59 percent retention rate with 39 percent of American Indian students returning for a second year. The retention rate for 2-year colleges has increased 4 percent in 10 years. The lower retention rates at 2-year colleges is

MUS College Capture Rates



in part because many students are enrolled in a short-term industry credential program rather than pursuit of an associate's degree. Pell students had a 63.6 percent retention rate and non-traditional students' rate was 66 percent. (MUS)

## Strategies to Increase Access

### Dual Enrollment

One way Montana hopes to bridge the gap of college readiness is making dual enrollment courses accessible to more students. National research has demonstrated that dual enrollment students have higher high school graduation rates, higher rates of college enrollment, higher rates of persistence to degree, better academic performance while in a postsecondary program, and markedly higher rates of degree attainment than their non-dual enrolled peers

(Adelman, 2006; Allen et. al., 2008; Karp et. al., 2007; Morrison, 2008; Swanson, 2008; Wang et. al., 2015; Zinth, 2014)

Furthermore, recent studies indicate that while the benefits of dual enrollment are present for all participants, they are most significant for first generation and low-socioeconomic students (An, 2013) Dual enrollment classes in Montana high schools give students early exposure to the content, rigor, intensity, and expectations of college. Montana dual enrollment students pay an average of \$50 per credit and take an average of four credits. MUS dual enrollment students outperform their peers in college in three key student success areas. On average, MUS dual enrollment students have 16 percent higher first year rate of retention, two tenths higher freshman GPAs, and attempt and complete more credits as first year students. These benefits are seen regardless of their high school GPA, and often "B" and "C" students make stronger gains in college than "A" students.

In Montana, dual enrollment is defined as a program that allows Montana high school students to take college courses through the Montana University System. The program is open to any Montana high school junior or senior, age sixteen and older. Students may take 100 and 200 level courses.

**The right information  
for the right student  
at the right time  
for the right results.**

– Amy Williams

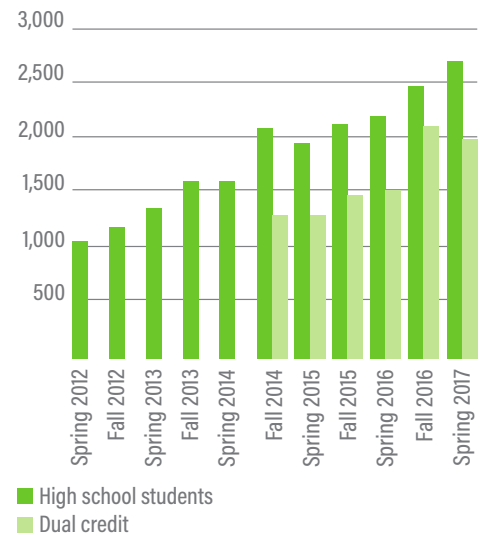
MONTANA CAREER PATHWAYS AND  
DUAL ENROLLMENT COORDINATOR

Dually enrolled students are enrolled in high school and college simultaneously. They may be earning college credit only, or both high school and college credit, depending on the qualifications of the person teaching the course and high school's policy for accepting college credit for high school credit.

(Williams, Dual Enrollment Basics, 2017) (Montana University System, 2010). Seventy-eight percent of students have access to dual enrollment classes taught in their high school.

Student participation in dual enrollment

**Dual Enrollment Headcount**  
Unduplicated count of high school students enrolled in at least one college course



has steadily increased. In 2014-15, 3,288 students earned over 14,000 college credits through dual enrollment, an average of 4.3 credits per students, saving an estimated \$2.9 million in tuition. In 2015-16, 3,431 students earned 19,821 college credits through dual enrollment, an average of 5.8 credits per student, saving over \$4.3 million in tuition costs. (Williams, Dual Enrollment Credits Earned by High School, 2014-2015)(Williams, 2015-2016) Number for 2016-17.

Some colleges offer financial assistance for dual enrollment students:

- **Flathead Valley Community College** offers Running Start, which allows high school students in Flathead and Lincoln Counties to take their first six credits free of charge and deeply discounts tuition after six credits, to \$60.35 per credit. (Flathead Valley Community College, 2017)
- **Miles Community College** waives tuition for dual enrollment, although students must still pay mandatory and course fees. This model saves residents of Custer County \$249 per course, and out-of-district students save \$354 per course. Fees range from \$73.50 per course to \$404 per course. (Miles Community College, 2017)
- **City College** is waiving tuition for the 2017-18 academic year for its dual enrollment courses taught through Billings Public Schools. Some courses require fees, which are not waived. (Montana State University - Billings, 2017)
- **Flathead Valley Community College** reported a 30+% increase in student enrollments in their dual enrollment program when they offered the first six credits tuition-free. City College and MCC both increased dual enrollment engagement by nearly 53% in a single year when they offered free tuition, indicating that cost is either a financial barrier, procedural/bureaucratic barrier, or both.



## Gaps in Dual Enrollment

- **Cost:** Even though tuition is deeply discounted, high school students do not qualify for federal student aid to pay for these courses. In addition, students may have to pay fees, and for additional textbooks. National studies on the effectiveness of dual enrollment state that cost is a barrier to low-income and first-generation students.
- **Course Availability:** Students may wish to take dual enrollment coursework in their high school (to earn both high school and college credits), but may not have teachers in their district who meet the qualifications to teach college-level course work in the student's area of interest. High school teachers must have a master's degree plus a minimum of nine credits in specific content area to teach general education courses or appropriate industry or other formal experience for Career and Technical Education (CTE) dual credit courses. (Montana University System, 2017) For a variety of reasons, high school teachers may not be willing to make the investment of time, money, and other resources to become qualified to teach dual enrollment courses. (Montana University System) The MUS and its Board have devoted significant effort for the past four years to increase the number of qualified teachers and options for becoming qualified, for example, Title II:A grants to develop low cost coursework, and the Credit for Credit program. (Montana University System)
- **Turnover of qualified instructors:** This is a particular challenge in rural areas for face-to-face dual enrollment opportunities within high schools. If a qualified instructor leaves their district, often the dual enrollment courses taught by that instructor also disappear.
- **Different procedures for high school and college:** High school students must register with a college to receive college credit, and some may think if they take a dual enrollment class at their high school that they have opted to take the course for college credit. Students may not be aware of timelines at colleges, which differ significantly from high school timelines (e.g., registration deadlines). To take full advantage of dual enrollment, students and parents must be savvy about both high school and college systems and know how all of the pieces fit together (or can be made to fit together). National studies indicate this is a significant barrier for first generation students.
- **Instructor licensure requirements:** In order for college faculty to teach dual enrollment courses that are eligible for both high school credit and college credit, they must apply for and receive Class 8 licensure from the Montana Board of Public Education, apply for endorsement in the subject area, and be employed by the high school awarding credits to the student. While the cost for licensure is not significant (\$36), the process is bureaucratic and may be a deterrent for some college professors to teach courses for dual credit. (Office of Public Instruction, 2017)
- **Participation rates:** While Montana has made great strides in the past few years by doubling the number of students who take dual enrollment, slightly more than 10 percent of juniors and seniors in the state take dual enrollment courses.

## Prior Learning Assessment

The Montana University System has implemented Prior Learning Assessment (PLA) policies to help students demonstrate their proficiency in lieu of taking certain classes. According to the PLA taskforce, the policies provide avenues for Montana students to access and engage higher education, while leveraging college-level learning that was gained through independent intellectual pursuits, workplace training and education programs, and learning outside the traditional classroom. Each unit of the MUS is responsible for determining how best to implement PLA within the context of its mission, culture, student needs, and academic programs. While there are exceptions for credits earned through AP, IB, CLEP, and a few other options, in general, there is a 25% cap on the number of credits students can apply toward their degree from PLA. (Montana Prior Learning Assessment Task Force, 2017)

PLA options are categorized as either Instructional-Based PLA, referring to formal classroom education, but not within a two-year or four year college setting; or Experiential Learning-Based PLA, for education received through a non-traditional setting. This second category is evaluated through performance or portfolio assessment review. (Montana Prior Learning Assessment Task Force, 2017) Common Instructional-Based PLA includes Advanced Placement, International Baccalaureate, CLEP, American Council on Education, National College Credit Recommendation Service credits, and other examinations. For purposes of this report, Advanced Placement, International Baccalaureate, and CLEP are reviewed due to their applicability with Reach Higher Montana's current target audience, high school students. Other forms of PLA, are more applicable to adult learners returning to higher education. (Montana Prior Learning Assessment Task Force, 2017)

Advanced Placement (AP) courses and International Baccalaureate programs offer students an opportunity to experience college-level study while still in high school. Both programs seek to help students develop college-level skills of inquiry and reasoning, statistically increasing students' success in postsecondary study. These programs foster student engagement, develop college/career ready students, and prepare students for success on nationally administered assessments. (Montana Office of Public Instruction, 2017)

Advanced Placement (AP) programs offer college-level curriculum to high school students. Many Montana high schools offer the courses and thirteen courses are offered through the Montana Digital Academy. 2016-17 was the highest year for AP exams, with 3,347 exams taken. Students take an average of three AP courses, which would mean that approximately 1,000 students took AP exams. English Literature, English Language Composition, and U.S. History, Government, Calculus and Biology are the top choices for AP courses. For the past two summers, teachers were able to get certified to teach AP courses in Montana; prior to that teachers had to travel out-of-state to become certified.

International Baccalaureate (IB) programs offer high school degree programs focused on developing the intellectual, personal, emotional, and social skills to live, learn, and work in a rapidly globalizing world. Currently, IB programs are offered through three public high schools – Flathead High, Missoula Hellgate, and Missoula Big Sky. (Montana Office of Public Instruction, 2017) Both schools and students pay fees to be part of the IB program. Students pay annual registration fees

of \$168 each, plus a subject fee of \$116 per subject. Schools applying to offer the IB program pay an application fee of \$4,000. If schools wish to add the Career-Related Program to their IB offering, the fee is \$8,500 if they already offer the degree program and \$9,500 if they do not offer the degree program. (International Baccalaureate, 2017)

College Level Examination Programs (CLEP). Students in the Montana University System and at private colleges have the option of taking a CLEP exam to demonstrate their proficiency in subject areas approved by each institution. While the MUS has a policy limiting credits earned toward prior learning assessment to 25 percent of the credits required for each degree or certificate, CLEP exams are exempt from the 25 percent cap. (Montana Prior Learning Assessment Task Force, 2017) Test fees are \$85 per exam. (College Board, 2017)

## Gaps in Prior Learning Assessment

- In Montana, nearly 2,000 AP tests are not taken. Students may be concerned that they will not score a three or better on the exam (to earn college credit) or if they get a good grade in the class, they may feel they don't need to take the exam.
- Students must pay test fees (and pass the test, of course) to earn college credit. Fees are \$90 per exam. This may be a barrier for some students. Congress eliminated the federally-funded low-income student test fee reduction program. The College Board is continuing with a fee reduction for qualifying students, reducing the test fee to \$53 for eligible students. In general, fee reductions are available to students eligible for the free/reduced lunch program; whose family income is less than 185% of the federal poverty level; are in foster care; are homeless or migrant; or live in a household receiving food stamps, TANF cash assistance, or food distribution on Indian Reservations benefits. (College Board, 2017)
- Teachers must be certified to teach AP classes. Until a couple of years ago, teachers had to travel out-of-state in order to take the training and receive the certification. In the summer of 2015 and 2016 the Office of Public Instruction hosted AP certification instruction. Given the fees, it's unlikely that any schools other than the AA's in the state would offer IB. Testing fees per student would present the same challenge and produce the same gap identified under Advanced Placement.
- Based on junior and senior enrollment numbers and a generous estimate of the number of AP students, only about 10 percent of students take AP courses.
- Just as students may struggle to pay test fees for AP and IB, the same holds true for CLEP. Providing financial assistance for students who cannot afford the test fee, but would benefit from taking a CLEP exam and reducing their tuition cost, may be an area of interest for Reach Higher Montana.

## Affordability

From FY08 to FY17, MUS two-year colleges froze tuition. The regional 4-year colleges did not raise tuition in eight of those years and the two flagship universities kept tuition constant for the last six of those years. While tuition rates have been frozen, the cost of tuition and fees at the two flagship universities has risen by 23 percent in the past 10 years.

The regional four-year college costs have gone up by 17 percent in that time period. The cost of 2-year colleges has remained fairly constant. (MUS)

Eighty-three percent of in-state, first-time, full-time freshman receive some type of financial aid to attend college. Forty percent of those students receive need-based aid and 43 percent receive non-need based aid from sources other than PELL or student loans. Need-based aid is calculated by subtracting the expected family contribution to college expenses from the cost of attendance. (COA – EFC = Need). MUS first-time full-time freshmen receive an average of \$4,300 in need-based aid and an additional \$2,200 in non-need based aid.

State funding for need-based financial aid has plummeted from a low level of \$150 per undergraduate FTE in FY 09, to an almost non-existent level of \$47 per undergraduate FTE in FY 17. Available aid from the State of Montana is limited to state work study (\$863,001 in FY 16), and state SEOG match (\$458,160). The Governor’s Postsecondary Scholarship totaled \$1.6 million in FY 16, and of that amount, \$279,000 (17%) was established as need-based aid. Montana ranks in the bottom of states with state-funded need-based aid. The U.S. average is \$539. (MUS)

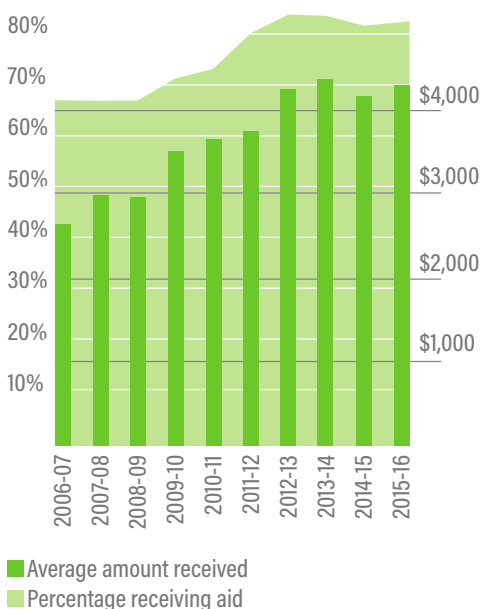
## Federal Financial Aid

By far, the largest source of funding to help students and families address the cost of college is the federal government, which provides assistance in the form of grants, loans, and work study funds. In order to determine eligibility for federally-funded programs, students must complete the Free Application for Federal Student Aid, or FAFSA. From information submitted on the FAFSA, the Expected Family Contribution (EFC) is calculated, which represents the amount of the cost of education that the family is expected to pay. The EFC is based on a complicated formula that considers family income, assets, number of college students in the family, and other items. For many families, the EFC can seem highly unrealistic as the calculation does not consider additional factors, such as other debts, that may inhibit families’ ability to contribute financially to their children’s postsecondary education.

In simplest terms, financial need is calculated by subtracting the EFC from the Cost of Attendance (COA); if COA exceeds EFC, the student has financial need. While COA may change based on the college the student attends, or the program the student pursues,

### Financial Aid Received

First time, full-time resident students  
All campuses, academic year



## Financial aid in Montana (AY 2015-16)

the EFC is constant (within a given year) regardless of institution or program. If eligible for need-based aid (such as Pell Grants), students may receive up to the amount of their financial need. For example, if COA = \$10,000, and EFC = \$5,000, if eligible, the student could receive up to \$5,000 in need-based aid, in the form of the Federal Pell Grant, Federal Supplemental Educational Opportunity

	Recipients	Amount	Average
Pell Grant	16,995	\$65,344,878	\$3,845
Work Study	1,959	\$2,964,794	\$1,513
Perkins Loan	2,907	\$6,601,925	\$2,271
Fed SEOG (Grant)	4,093	\$2,339,479	\$572
Direct Loan - Subsidized	17,684	\$64,650,462	\$3,656
Direct Loan - Unsubsidized - Undergrad	17,716	\$72,610,771	\$4,099
Direct Loan - Unsubsidized - Grad	1,923	\$28,659,833	\$14,904
Direct Loan - Parent PLUS	3,339	\$37,947,120	\$11,365
Direct Loan - Grad PLUS	485	\$7,061,583	\$14,560
MUS Tuition Waivers & Scholarships	3,600	\$48,000,000	\$13,333
Didn't apply/Pell eligible	1,846	\$6,999,554	\$3,792

Grant (FSEOG), Direct Subsidized Loan, Federal Perkins Loan, or Federal Work Study. In the 2015-16 academic year, students attending Montana colleges received a total of \$65.3 million in Federal Pell Grants; total FSEOG of \$2.3 million; Direct Subsidized Loans totaling \$64.6 million; Federal Perkins Loans totaling \$6.6 million; and Federal Work Study totaling \$2.9 million.

Non-need-based aid is financial aid that is NOT based on your EFC; rather, your ability to access non-need-based aid depends on your COA, less any other assistance received thus far (including need-based aid). For example, if COA = \$10,000 and the student is awarded \$2,000 in need-based aid, and \$2,000 in private scholarships, the student is eligible for non-need-based aid totaling \$6,000. Federal sources of non-need-based aid include the Direct Unsubsidized Loan, the Federal PLUS Loan, and the Teacher Education Access for College and Higher Education (TEACH) Grant.

Little is known about how Montana families actually satisfy EFC and COA, and how well Montana families are prepared to satisfy EFC and COA from college savings and other available liquid assets. The federal student loan program offers Parent PLUS loans and Unsubsidized Student Loans that are often used to satisfy EFC and COA. In 2015-16, Parent Plus borrowing at Montana schools totaled \$45 million and Unsubsidized Direct Student Loans totaled \$101.2 million.

The degree to which a family is able to realistically provide the calculated EFC may very likely impact decisions made by students to pursue or postpone postsecondary education, though tangible studies of such were not found for this report.

## FAFSA Completion

Students must fill out a Free Application for Federal Student Aid (FAFSA) in order to receive federal financial assistance including grants, loans and work study. Most states use FAFSA information to award state level grants and work study, and many institutions use the FAFSA to award grants and scholarships specific to their institutions. In 2016, Montana ranked 28th in the nation for FAFSA completion rates at 38 percent. Tennessee had the highest completion rate in the nation with 62.3 percent, and Utah was the lowest at 18.3 percent. Montana's rate was higher than its neighboring states. (Bellwether Education Partners) In 2016, nearly 10 percent of students nationally started a FAFSA

application but did not complete it. Changes have been made to the FAFSA form to make it more user-friendly and to allow families to use their previous year's tax returns as verification of income. Students and families may still be overwhelmed by the process and as a result, these students miss a most important opportunity to make going to college more affordable. Regional Reach Higher Montana staff provide FAFSA support in the communities they serve by hosting FAFSA nights at schools and coordinating with the College Application Week in the fall to assist students in filling out a college application and a FAFSA at the same event.

## Pell Grants

Pell grants are federally-funded and are the major source of need-based financial aid in Montana. Pell accounts for 93 percent of all federal aid, not including loans. In 2015-16, 40 percent of students at four-year colleges and 52 percent of 2-year college students received Pell grants. The current maximum Pell grant award is \$5,920 per year. (College Board)

## Student Loans

Average student loan debt among student borrowers in Montana was \$27,504 for the graduating class of 2016. The MUS estimates that 61% of students borrowed to pay for their education. The Project on Student Debt, an initiative of The Institute for College Access and Success, calculates average student debt for 2016 (including private colleges) at \$31,065 in Montana – the 11th highest in the U.S. This source cites 60% of students having debt, and ranks Montana 18th in the country using this metric.

Student loans are available from two sources: the Federal government, and the private sector. While data on federal student loan debt is fairly easy to obtain, private loan data is more difficult to find for Montana borrowers. By nature, private student loans are offered almost exclusively to students and families of means, as credit worthiness is a requirement.

Federal Direct Subsidized Student Loans are awarded to undergraduate students based on need. Students and families complete a FAFSA application to determine eligibility. Eligible students must take at least six credits per semester for the federal government to pay the interest on the loan for that time period. Students pay back the loan with a fixed interest rate at the end of the deferment period, up to six years for a four year degree. Federal Direct Unsubsidized Student Loans are not based on need. The loan has a fixed interest rate and students start accruing interest once the loan is received.

Montana ranks 17th lowest in the nation for student loan default rates, with a default rate of 9.88%; the state with the lowest default rate is Massachusetts (6.12%), followed closely by North Dakota (6.53%). New Mexico has the highest student loan default rate at 18.98%. This reflects borrowers who entered repayment in 2013, which is the most current dataset available from the US Department of Education. (The Student Loan Report, 2017)

The Consumer Financial Protection Bureau states that over 12,500 Montanans over age sixty had student loan debt in 2017 – an increase of 43% from five years earlier. The average amount owed

by these borrowers is just over \$10,500, and in total, this segment of the population owes in excess of \$346 million in student loans. The report does not indicate the source of these debts (e.g., PLUS loans or loans taken for the benefit of the borrower).

## Scholarships

Scholarships offer students the opportunity to pay for college and minimize borrowing, in exchange for the investment of time and energy to search and apply for scholarship opportunities. Scholarships are available from a variety of sources, including Reach Higher Montana.

The Reach Higher Montana Scholarship is valued at \$1,000, and is awarded to graduates of Montana high schools pursuing college in Montana. The award criteria requires at least a 2.5 GPA, and at least half-time attendance. Currently, Reach Higher Montana awards seventy-five \$1,000 scholarships; twenty-five awards are made to graduating high school students, and the remaining fifty awards are made to students who have completed at least one year of college.

In addition, Reach Higher Montana partners with the Governor's Office of Community Service to fund half of the Youth Serve Montana Scholarships. These awards are made to students throughout Montana who have completed at least 100 hours of community service. Reach Higher Montana funds \$500 per award, and the institutions attended by the students provide the remaining \$500 per award. One hundred scholarships are awarded annually.

Reach Higher Montana also partners with the MUS and the Gianforte Foundation, serving as the grantee for the Gianforte Manufacturing Scholarships. These awards vary in value and are awarded through the MUS; Reach Higher Montana's role is to provide a nonprofit vehicle for the funds to transfer from the Gianforte Foundation to the units of the MUS attended by eligible students.

Reach Higher Montana funds access to Scholly, a scholarship search app that helps students identify potential scholarships.

Beyond Reach Higher Montana, there are numerous funders of scholarships throughout Montana, including the foundations affiliated with the units of the MUS. The Montana Community Foundation funds approximately \$350,000 in scholarships annually.



## Financial Literacy

Achieving financial independence is the new mark of adulthood, rather than achieving a particular age benchmark (e.g., 18 years old), according to research conducted by Bank of America and USA Today Better Money Habits report. Among the findings of the commissioned survey of 18-26 year olds, when asked to define adulthood in their own words, financial independence was the number one answer, and 62 percent did not feel that they were adults when they turned 18. (Bank of America, 2017) Financial literacy programs in Montana include:

- EverFi – online curriculum delivered to 4,609 students in 121 schools, sponsored by Glacier Bancorp, Mass Mutual, Glacier Bank, and First Security Bank – Missoula. (EverFi, 2017)
- Montana University System, MUS FinLit You Tube Channel, with 13 subscribers (Montana University System, 2017)
- Montana University System workbook, Dollars and Sense. (Montana University System, 2017)
- Montana State University Extension Economics (Montana State University, 2017)

The Montana Financial Education Coalition has also developed a database of financial resources, FREDMontana – Financial Resource Education Database. (Montana Financial Education Coalition, 2017)

There is certainly not a gap in the availability of financial education material. In fact, there are so many sources of financial education that the National Jump\$tart Coalition for Personal Financial Literacy has created a clearinghouse to help resource providers connect with teachers, parents, and students. A quick search for “employer sponsored savings plan” returned 67 results, comprising text books, online programs, and references to more resources – one of which boasts an online library of 1500+ personal finance resources. (Jumpstart Coalition for Personal Financial Literacy, 2017)

Yet students continue to lack knowledge of basic financial concepts and awareness. The Global Financial Literacy Excellence Center at George Washington University studied the personal finances of Millennials using data from the 2012 National Financial Capability Study. (George



Washington Global Financial Literacy Excellence Center, 2015) The study found that only 24 percent of Millennials demonstrated basic financial knowledge, and only 8% demonstrated high financial literacy; Over half are concerned about their ability to repay their student loan debt; over 60 percent of all Millennials and 80 percent of college-educated Millennials carry at least one source of outstanding long-term debt; and yet, only 12 percent sought

professional advice on debt management. (George Washington Global Financial Literacy Excellence Center, 2015)

Only seventeen states require students to take high school course in personal finance and Montana is not one of them. (Council for Economic Education, 2017) The national Jump\$tart Coalition for Personal Finance surveyed high school seniors about their financial literacy knowledge from 1997 through 2008. The 2008 survey was the largest sample of 12th graders and they received the lowest average score on the test with 48 percent. The average score was 58 percent in 1997-98. Scores dropped by 10 percent in 10 years. High school students, who scored 27 and above on their ACT college entrance exam correctly answered 59 percent of the questions, while seniors with ACT scores of 20 correctly responded to just 43 percent of the questions. In 2008, college students were also given the survey. Their average score was 59.1.

A sample of the high school responses to the survey:

- Forty eight percent correctly said that a credit card holder who only pays the minimum amount on monthly card balances will pay more in annual finance charges than a card holder who pays their balance in full;
- Seventeen percent correctly answered that stocks are likely to yield higher returns than savings bonds, savings accounts and checking accounts over the next 18 years even though there has never been an 18-year period where this wasn't true; and
- Forty percent correctly answered that they could lose their health insurance if their parents become unemployed.
- Thirty six percent think a house financed with a fixed-rate mortgage is a good hedge against a sudden increase in inflation, compared with 45 percent in 2006. (Jump\$tart 2008 survey results )

## Gaps in Affordability

- FAFSA completion rates haven't risen significantly in the last several years, despite increased focus. Students and parents need to be aware of the importance of FAFSA earlier in a student's career.
- When economically disadvantaged students don't complete their FAFSA and therefore can't get PELL grants or work-study, it likely means they are not going to college.
- The PELL dollars in the state have increased, but the number of students receiving PELL has decreased.
- Navigating all the costs associated with attending college including room and board and the addressing strategies for meeting those costs can be overwhelming for students and families with low financial literacy.

## Aspirations: Linking Education with Careers

An important part of education is relevance. Students need to see the connection between what they're learning and how it applies to their life. Not only do students identify relevance as critical to their learning, but research in brain development bears it out as well. Brain neuropathways link information and relevance. The more relevant, the more likely the brain will retain the information. (Edutopia, December 2011). Career and Technical Education (CTE), work-based learning and apprenticeships are key components to answering the age-old student question, "Why am I learning this and how does it relate to my life?"

### Montana Career Pathways

Montana Career Pathways is the partnership between the Career and Technical Education Division at the Office of Public Instruction and the MUS. Prior to 2017, it was known as Big Sky Pathways. Not only did the program change its name, it also streamlined its processes to better serve students and schools. Before 2017, each high school had an individual contract with each college for every pathway. Now, Montana has statewide pathways that are scalable to all high schools and connected to all MUS colleges. This new approach helps students identify broad areas of interest (e.g., Health Professions) comprising a variety of occupations and provides students with current and relevant labor market information (e.g., average entry level salary; average salary; growth projections; and occupations by level of education) so they can create a plan to achieve their goals in high school, college, and career.

### Career and Technical Education

A requirement for high school graduation is that every student completes one Career and Technical Education (CTE) course. Students who take three or more courses in a particular pathway are called "career concentrators". The Montana CTE program has made some programmatic changes and is focusing its attention and funding to support high-skill high-demand pathways.

Montana has 473 approved Career and Technical Education programs and 648 certified teachers in Agriculture, Business, Marketing, Family and Consumer Sciences, Industrial, Trades and Technology, and Health Science. More than 150 Montana high schools participate in the federal Carl D. Perkins and state Career and Technical Education grant programs. The following is 2016-17 data from the Office of Public Instruction:

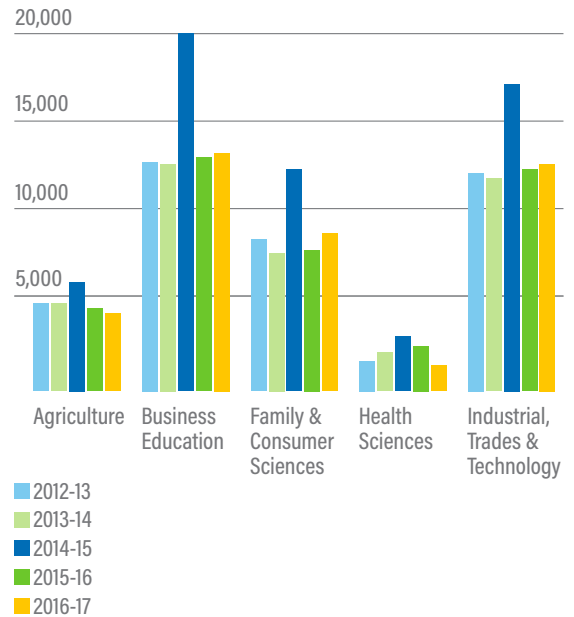
### Agriculture Education

- Agriculture Education provides learning opportunities for students in Ag Business, Ag Research, Animal Science, Aquaculture, Forestry, Horticulture, Leadership, Mechanics, Natural Resources, Plant Science, Wildlife Management and other related areas.
- Montana agricultural education had 83 approved programs with 6,584 enrolled students. These programs include co-curricular FFA chapters with 4,806 enrolled members.

## Business Education

- 149 of Montana’s public high schools had approved Business Education programs making it the most-offered CTE program in the state. These programs served 22,139 students in grades 9-12.
- Montana has two Career and Technical Student Organizations for Business Education programs: Business Professionals of America (BPA) and DECA. These 102 Montana BPA/DECA chapters provided additional business and marketing experience for 2,322 students.

Career and Technical Education Student Enrollment



## Health Science

- There are 27 approved programs and they served 3,567 students around the state.
- The student organization associated with Health Sciences is HOSA, Future Health Professionals. There are 23 HOSA chapters with 471 student members.

## Family and Consumer Sciences Education

- There are 98 approved FCS programs serving 12,232 students.
- FCS curriculum areas include Consumer Services & Family Resources; Education & Early Childhood; Family & Community Services; Hospitality, Tourism & Recreation; Culinary Arts; Housing & Interiors; Human Development; Nutrition & Wellness; Parenting; and Textiles, Fashion & Apparel.
- Montana has 67 affiliated FCCLA chapters with over 973 members.

## Industrial, Trades and Technology Education

- With 116 programs and 17,608 students, Industrial, Trades and Technology Education is the second largest CTE program area in Montana.
- Industrial Technology occupations are some of the highest paying, most highly technical occupations in Montana. Studies have shown that many “how-to” manuals for entry-level industrial technology occupations have a higher readability level than most college text books.
- Montana has two Career and Technical Student Organizations for the Industrial, Trades and Technology area. SkillsUSA and the Technology Student Association (TSA) combined have 963 secondary members in 48 chapters. Some of the Colleges of Technology and MSU-Northern have post-secondary chapters.

## Work-based learning and Apprenticeships

In the past few years, Montana has made a significant investment in expanding work-based learning and apprenticeship opportunities for students. The state received several large grants to support this effort by focusing on occupations with potential for growth, expanding partnerships with tribal colleges to provide access for underserved populations, and to develop best practices for success.

Apprenticeship programs have been a part of the Trades occupations but are now expanding into health care, information technology and manufacturing. Two years ago, there were no apprenticeship programs in health care; now there are 17 health occupations with apprenticeships and over forty participating employers. Three of the seven tribal colleges piloted apprenticeship program last year. This year, six of the seven will participate.

Montana developed a work-based learning continuum to outline the different areas of awareness to actual hands-on experience. An example of an innovative program in Polson shows the value of work-based learning in high school. Providence St. Joseph's Medical Center is in partnership with Polson high school to provide a year-long program for twelve seniors each year to learn about every department of the hospital. The program is in its fourth year.

### Current Employment and Projected Growth by Industry

Industry	Employment 2016	Projected Annual Growth Rate	Projected Annual Job Gain
Healthcare	69,751	1.5%	1,100
Construction	29,091	2.7%	815
Accommodation & Food Service	52,720	1.2%	626
Retail Trade	59,582	1.0%	585
Professional & Technical Services	21,671	2.1%	486
Admin & Waste	17,146	1.9%	362
Public Administration	37,446	0.6%	274
Arts, Entertainment & Recreation	12,421	1.8%	226
Other Services	17,534	1.1%	191
Finance	15,352	1.1%	168
Transportation	14,672	1.0%	154
Wholesale Trade	17,464	0.7%	129
Educational Services	40,042	0.3%	113
Mining	6,609	1.4%	112
Agriculture	5,528	1.5%	85
Manufacturing	19,520	0.4%	74
Real Estate	5,850	1.1%	65
Management of Companies	2,082	1.6%	34
Information	6,431	(0.3%)	(16)
Utilities	3,411	(0.8%)	(22)

## Gaps in Linking Education with Careers

- CTE courses offered in high schools are dependent on the teachers available in each school. Some of the high-wage high-demand CTE classes are not available in all schools.
- Work-based learning is a significant commitment on the part of the employer. It's important to see this as a long-range recruiting effort, worthy of investment.
- Currently, work-based learning for high school students is limited.

## Workforce Needs in a Changing Economy

One of the main reasons that students want to go to college and that their parents want them to go is to gain the knowledge and skills to get a good job that will provide them with economic security. While people no longer expect to stay at one company or even at one career for their work life, they still believe that education is key to their economic success. With the rising cost of education, it's even more important that students have accurate information about what types of jobs are available, and what salaries they can expect to earn from their investment in postsecondary education.

The Montana Department of Labor and Industry (DLI) estimates 17,400 job openings annually through 2025, due to retirement, turnover, and growth. Openings due to growth are estimated to be 5,500 new jobs each year, or roughly one third of all future job openings. In a special report designed to measure the impact of Montana's higher education system on the talent pipeline, researchers with the DLI evaluated worker supply and demand by industry, by program of study, by occupation, and a fourth analysis of employment and wage outcomes. The primary research questions addressed by the study were:

- Do colleges produce enough graduates in the right programs to fill the jobs required by Montana employers?
- Do graduates find jobs in Montana, thus helping to meet statewide worker demand?
- Does the geographical distribution of graduates match the distribution of worker demand in Montana? (Watson, Wagner, Lacy, & Rose, 2017)

While there are limitations to available data cited by the authors, the conclusions of the study include:

- Nearly 75% of graduates from Montana colleges stay in Montana for work, and work in every county;
- Graduates earn above median wages within three years;
- More education leads to higher incomes, but advanced degree graduates are less likely to work in Montana after graduation;

- Median earnings are similar between those with bachelor's degree and an associate degree;
- Graduates work in their field of study;
- Montana colleges meet demand for most occupations, but retention and geographic distribution create shortages;
- General studies is the largest bachelor's degree program and is oversupplied with below-average outcomes;
- The supply of registered nurses meets demand, but geographic distribution and retention may still cause hiring difficulties; and (Watson, Wagner, Lacy, & Rose, 2017)

Registered nurses have the highest income and retention rates of any bachelor's degree program in Montana, with 80 percent of graduates from the registered nursing program staying in Montana and earning \$46,000 annually within the first year of working. Other bachelor's degree programs with high retention rates after graduation, but lower income levels, include computer and information science, education programs, and animal science. (Watson, Wagner, Lacy, & Rose, 2017)

Graduates with bachelor's degrees in liberal arts, social science, communication, architecture, or physical science earned low median wages within one year of graduation – for most, less than \$20,000. One reason for this may be that higher levels in these occupations require a graduate degree and then the earnings are significantly higher. The same report cites graduate degree earners in programs such as physical therapy, engineering, computer science, education administration, and law to have the highest incomes. (Watson, Wagner, Lacy, & Rose, 2017)

Among high demand occupations, the supply and demand analysis in the DLI report shows that Montana colleges are meeting demand for 5 percent of those requiring a postsecondary degree, and over supplying 63 percent of the occupations. Another 10 percent are undersupplied, and 21 percent are not associated with any programs currently available at Montana colleges. (Watson, Wagner, Lacy, & Rose, 2017)



Oversupply of graduates occurs in over half of Montana's college programs, the largest number occurring in the General Studies program. Graduates with general studies degrees are not qualified for many occupations, and those occupations tied to general studies programs have slow projected growth. Yet, Montana colleges produced an average of 865 general studies graduates over the last three years, making general studies graduates the

highest single area of graduates at Montana schools. (Watson, Wagner, Lacy, & Rose, 2017) It may be that many of the graduates with degrees in general studies will pursue advanced degrees with a defined focus, and if successful, better workforce outcomes. Students whose highest degree is general studies, though, will have limited workforce options.



Workforce challenges were identified as a significant issue for Montana businesses, leading to a specific objective within the Montana Chamber of Commerce's Envision 2026 ten year plan to promote and support strategies to provide a qualified workforce. The strategies include:

- Facilitating dialogue between Montana's business and education communities;
- Seek to maximize the flexibility and responsiveness of K-12, two-year, and four-year educational institutions to meet local training needs and demands;
- Conduct an annual workforce development study to determine strengths and weaknesses in Montana's talent pipeline; and
- Promote public policy solutions designed to underscore the strengths and resolve weaknesses in the state's workforce development system. (Montana Chamber of Commerce, 2016)

## Gaps in Workforce Awareness

- Representatives interviewed stated the importance of students having knowledge about what jobs are in high demand, and an understanding of the required level of knowledge and skills to be successful.
- High school counselors and college advisors may lack the labor market information they need to help students make informed choices about their program of study and career path.
- Many of the jobs for the future require an industry certificate or 2-year degree, yet not many students are choosing those fields.
- There is a need to identify why so many students choose general studies for their degree. Is it a conscious choice or do they not know what else to do?

## Awareness

Building an awareness of the importance of college is particularly important for underrepresented populations of American Indian and low-income students. Ten representatives from college access programs (CAP) were asked the following questions:

- What program successes have you had in the last 3 years?
- What are the three most important things that could be done to improve college-going and completion rates?
- What are the biggest challenges in achieving those goals?
- What are the strengths and weaknesses of Reach Higher Montana?
- Are CAP services complementary or duplicative?

In terms of successes, interviewees stated Montana is doing a good job of engaging all the partners from K-12, higher education, business and labor in the efforts to increase college access. The apprenticeship program has been re-designed to include health care, information technology, finance, manufacturing and construction. The state is getting better at data collection and analysis to better assess developing trends.

The following is a summary of answers to the question, "What are the most important things that could be done to improve college-going and completion rates?":

- Provide more campus visits for students
- Embed the importance of college and career starting in the early grades of K-12, get college students to volunteer in K-12 schools.
- Increase access to financial aid – 40 percent of students who didn't go to college or didn't succeed in college say finances were a factor.
- Build a supportive environment at 4-year and 2-year schools. A significant percentage of students leave college for non-academic reasons.
- Focus on increasing math skills. Students don't retain enough math skills with only 2-years of math in high school.
- Provide targeted support for low-income, minority, and first generation college students. GEAR UP will now be able to provide services to freshmen in college.
- Improve college and career advising in high school and college – Advising needs to start earlier in high school and not wait until the senior year. Colleges need to offer advising throughout a student's tenure.
- Link current and future workforce needs with college and career advising

When asked about duplication of effort, interviewees acknowledged there is some duplication of service among the CAP's. For example, one person interviewed stated that in one small high school, there were four programs that had funding to provide an afterschool mentoring program. It

would be helpful to have the programs convene a summit of high-level staff with the authority to make decisions to map out the state, identify who is doing what, what's the unmet need and how can the programs address it. There is the Montana College Access Network and the Postsecondary Education Opportunities Council, which work together, but affecting programmatic change at the community level – especially tied to funding – is a role neither group has embraced.

It's not clear what percentage of the targeted students are reached by all the groups and in what ways. There are areas that could be over-served and some areas where no services are provided.



## Reach Higher Montana's Goals and Objectives

Before the formation of Reach Higher Montana in 2016, the programs and services were funded, governed, staffed, and managed by Student Assistance Foundation (SAF). As part of an organizational restructuring effort, the boards of directors for Student Assistance Foundation and MHESAC reached the decision to transfer the public benefit activity that had been at SAF, to MHESAC. At this point, the Reach Higher Montana brand was developed and assigned to the public benefit programs transferred from SAF.

This transfer of public benefit activities provided stability in funding for existing efforts, and the opportunity to undergo significant research, evaluation, analysis, and feedback to determine the long-term priorities, goals, and objectives for Reach Higher Montana. The MHESAC board committed to level-funding of the programs for FY 17 and FY 18, of at least \$1.3 million annually, plus additional funding for administrative services that SAF would continue to provide (approximately \$300,000 annually). This funding, plus contract funding through the Department of Public Health and Human Services, provided approximately \$2 million per year for FY 17 and FY 18 for public benefit activity.

Current programming is largely a continuation of legacy programs that transferred from SAF, and focuses on two key objectives:

- **Objective 1 (long-term impact):** Increased participation in postsecondary education by Montana resident students.

- **Objective 2 (near term, ongoing):** Reduced financial barriers to postsecondary education for Montana resident students.

Supporting the objectives – Awareness & Aspirations; Affordability & Financial Access – are the goals which the public benefit programs have contributed for many years. Reach Higher Montana is not the sole contributor toward the achievement of these goals; rather, these goals further define the impact we are aiming to achieve.

**Objective 1 - Awareness & Aspirations:** Increased participation in postsecondary education by Montana resident students.

**Goals:**

- **Goal 1.1:** Increase the percentage of Montana high school seniors who enroll in college in the fall after high school graduation, specific to the schools and students with whom we interact.
- **Goal 1.2:** Increase the percentage of first-time, full-time, freshman college students who earn their degree/credential within six years, specific to the schools and students with whom we interact.

**Objective 2 - Affordability & Financial Access:** Reduced financial barriers to postsecondary education for Montana resident students.

**Goals:**

- **Goal 2.1:** Deliver need-based grant and scholarship aid for Montana resident students.
- **Goal 2.2:** Increase the percentage of Montana’s high school seniors who complete and submit the Free Application for Federal Student Aid (FAFSA) by the early application deadline (December 1).
- **Goal 2.3:** Develop strategies to address gaps in funding for Montana students.

**The current strategies to reach these goals are:**

- **Reach Higher Montana College Goal** – Focused on FAFSA completion, this program provides support for local high schools who wish to host FAFSA completion events in their communities. RHM advisors and partners from the community (e.g., financial aid directors, school counselors) provide one-on-one assistance for families to complete the FAFSA ahead of the December 1 priority deadline.
- **Programming to Support Youth in Foster Care** - RHM’s efforts to assist foster youth with the successful transition to postsecondary education are two-fold:
- **Reach Higher Montana Summit for Youth in Foster Care** - The summit provides an on-campus college experience for youth who have recently graduated from high school, and students entering either their junior or senior year of high school. Previous attendees have the option to return as team leads and receive leadership training. Youth planning to pursue postsecondary education receive a laptop computer; youth planning to enter the

workforce receive a life-skills package, which allows them to acquire necessary clothing, tools, or supplies needed to succeed in the workforce.

- **Foster Care Education and Training Vouchers** - Through a contract with the Montana Department of Public Health and Human Services (DPHHS), RHM administers Chaffee Act funds to help eligible youth with experience in the foster care system pay for postsecondary education. Eligible youth can receive up to \$5,000 per year for educational expenses.
- **Reach Higher Montana Scholarship** - The scholarship provides \$1,000 for students attending college in Montana, and seventy-five awards are made annually. Students can re-apply each year, and often students receive funding multiple years. The distribution of awards for the last few years has been fifty awards for students to use in their second, third, or fourth year of college; and twenty-five awards for graduating high school seniors. Last year, over 600 applications were received, and with significantly more applications from high school seniors than continuing college students. Management will work with the Programs Committee to determine if the same levels of funding will continue for FY 18.
- **Outreach to students, parents, and educators** - RHM's advisors located in Billings, Bozeman, Missoula, Butte, Great Falls, Helena, and Bigfork work throughout the school-year to help high-school students gain awareness of postsecondary education opportunities, and successfully transition to postsecondary education. Working in partnership with high school counselors, the advisors coordinate and present information at Parent Nights for parents of juniors and seniors; they assist with FAFSA completion through Reach Higher Montana College Goal and continue to assist with FAFSA completion after the priority deadline; they help families resolve errors flagged on their FAFSA submissions; they assist students with college searches and applications; they provide financial education workshops for students; they help students find and apply for scholarships; and they participate in local efforts to improve college access and success. The advisors provide transport for youth attending the RHM Summit for Youth in Foster Care, and serve as chaperones during the week of the Summit.
- **Partnerships** - In the coming year we plan to build upon our current partnerships with programs like GEAR UP and TRI0; collaborate with groups like the Montana College Access Network and the Montana Postsecondary Educational Opportunities Council, and more. We will continue our efforts in community and government relations so that we are abreast of current and emerging issues and trends related to postsecondary education.



## Gaps in Reach Higher Montana Programming:

- **FAFSA Completion:** Annual FAFSA completion rates by priority deadline continue to lag, despite significant efforts to encourage early FAFSA completion.
- **Scholarships:** The current funding level for the Reach Higher Montana scholarship may not be enough to have a significant impact on a recipient's ability to better afford college. Is \$1,000 per award enough to make the impact we hope to achieve?
- **Outreach:** Reach Higher Montana's seven outreach advisors cover large geographic areas in Western and Central Montana. Our ability to serve Eastern Montana in a meaningful way is extremely limited. The demands on certain outreach areas – in particular North Central Montana and South Central Montana – are nearly impossible to achieve with a single staff person in each area. Having two outreach advisors who also have supervisory responsibilities further limits their abilities to serve the students in their area. And, providing outreach services in addition to supervisory responsibilities makes it difficult to adequately lead and support their staff.
- **Awareness:** The Reach Higher Montana rebranding provided a great opportunity to promote the work being done by the organization to help more Montana students pursue higher education. We've gotten better at telling our story and promoting our work, yet we constantly hear that people are not aware of the organization and the services we provide.



# College Readiness: The Sum is more than the Whole of Its Parts

Success in college requires significant effort and energy from students. They need to be academically prepared, make decisions about a potential career path and have the skills to navigate the obstacles that come up along the way. All of this takes place when a student may be leaving home for the first time. In order to ensure that more students succeed, it's important to build a college-going culture among Montanans at early ages and to provide the supports necessary for students to move successfully through college.

The Bill and Melinda Gates Foundation funded a study conducted by the Bridge Span Group to look at what types of supports low-income students need to succeed. The research found that the most important link to students pursuing postsecondary education was the understanding of how education was connected to their career aspirations. This study also showed that a significant factor in a student's success was the expectation that they would go to college. If they expected to go to college by 9th grade, they were likely to go. The study shows the need for developing a college-going expectation early on in K-12 schools. While it's important that schools focus on graduating students from high school, their primary goal needs to be preparing students for college. (Bridge Span Group, 2006)

The ACT is also addressing the issue by developing a framework to assess education and career knowledge and skills needed to successfully navigate educational and career paths. They include:

- Knowledge of one's own abilities and values;
- Knowledge of the links between majors and careers; and
- Ability to plan and make decisions. (Broadening the Definition of College and Career Readiness: A Holistic Approach, 2015)

## Support

### Most important

- understanding the link between education and career aspirations
- cohort of peers planning for college together
- expecting a college-preparatory curriculum
- taking steps to make college affordable

### Important

- general expectations of college-going among student and influential adults
- parent involvement that makes college real to the student

### Less important

- procedural assistance alone
- parent involvement absent a clear college link

## Nonacademic Support Mechanisms

### Create Social Relationships

- with peers
- with instructors

### Clarify Aspirations

- academic goals
- career goals

### Develop College Know-How

- time management skills
- access college services

### Make College Life Feasible

- support services can help overcome obstacles

### Academic and Technical Knowledge and Skills

A college and career ready student is prepared to complete a freshman level postsecondary course of study without remediation as demonstrated by:

- Completion of a rigorous high school curriculum;
- Participation in college preparation and college level courses;
- Participation in career preparation programs; and
- An understanding of college and career planning and the admissions and financial aid process.

### Employability Knowledge and Skills

A college and career ready student is prepared to connect their education to employment opportunities, as demonstrated by:

- Goal setting and planning;
- Clear and effective communication skills;
- Critical thinking and problem solving skills;
- Working independently and in teams;
- Effective knowledge and use of technology; and
- Managing and adapting to transitions from school to work.

In 2016, the Montana College and Career Readiness Standards Commission developed a definition of what is meant by “college and career readiness” and how to measure it. The commission involved business leaders, teachers, administrators, and higher education and education agency partners. Now parents, students, schools, and businesses have a common understanding of what it means to be ready to enter college and the workplace.

A study done by the Community College Research Center looked at the barriers students face in completing a degree. Of course there are the academic barriers, but there are also issues of transportation, childcare, and financial struggles - particularly for lower-income students. There are also the intangible obstacles, like how to navigate the college system, where and when to ask for help, and feelings of isolation among others. The study identifies four central functions that promote success: creating social relationships, clarifying aspirations and enhancing commitment, developing college know-how and making college life feasible. (CCRC. Teachers College Columbia University)

The research also shows that rather than short-term supports, students need support that is:

- **Sustained** – students need support throughout their college experience;
- **Strategic** – colleges must offer well-designed advising;
- **Intrusive and integrated** – students may not be aware of the help they need or aware of help that is available. Supports include mandatory orientation and success courses, regular advising, and early warning systems that alert college staff when a student is having difficulty in a class. Colleges can assign advisors to specific majors or programs of study.
- **Personalized** – Colleges can use an online tracking system that lets advisors know when students are at key junctures in their college career.

### Gaps in College Readiness

- There is no consistent approach to providing non-academic support for students
- Students may not know how to access existing supports
- 2-year colleges lack some of the support services available at 4-year colleges. It's more difficult to create a sense of belonging.

# Conclusion

“Here’s a sobering statistic that should concern us all: Based on the latest college completion trends, only about half of all those students (54.8 percent) will leave college with a diploma. The rest—most of them low-income, first-generation, and minority students—will not finish a degree. They’ll drop out.” Bill Gates, Bill and Melinda Gates Foundation

With Montana facing a workforce shortage and with the money and time students and their families invest in college, Montana can’t afford to have less than 50 percent of its college students complete their bachelor’s degree in six years. It can’t afford to have nearly 40 percent of high school students make the decision not to attend college.

There is a concerted effort across the state to increase college-going rates and there is no limit to the information and data available on the state level and nationally. College access programs are doing their best to address student needs with limited staff and resources. Some areas are covered by multiple programs and yet the central and eastern part of the state are not well served. It’s important to note that many of these schools have few students and cover a large geographic area. It may not be feasible for a regional staff person to adequately meet the need.

Yet, there is good news - the percentage of students graduating from high school is increasing. The percentage of students enrolling in college is also increasing. Still, there is a huge gap in meeting the needs of underserved populations. American Indian students and low-income students are significantly underrepresented in higher education.

The partnerships across K-12, higher education, labor and industry have never been better. It’s time to make strategic decisions about the investment of resources and identify clear goals that reach across programs and institutions and develop student-centered strategies that increase college going and completion rates.



## Concluding Recommendations

Reach Higher Montana's current model of providing college access and success services has many strengths, and while there is definitely room for improvement, the current structure is not broken. With additional capacity, Reach Higher Montana could expand its current programmatic offerings to more students and fund additional scholarships (or increase the amount of current scholarship awards on an individual basis).

If the desire is to take a fresh look at the services provided through Reach Higher Montana, the gaps identified in this report indicate that Reach Higher Montana could address significant needs by:

- Establishing support for alternative means of earning college credit - funding for dual enrollment tuition, AP, IB, and CLEP exams.
- Developing tools to help schools foster college aspirations at all grade levels.
- Developing a cadre of contract workers to serve areas Reach Higher Montana is not able to reach.



# Infographics

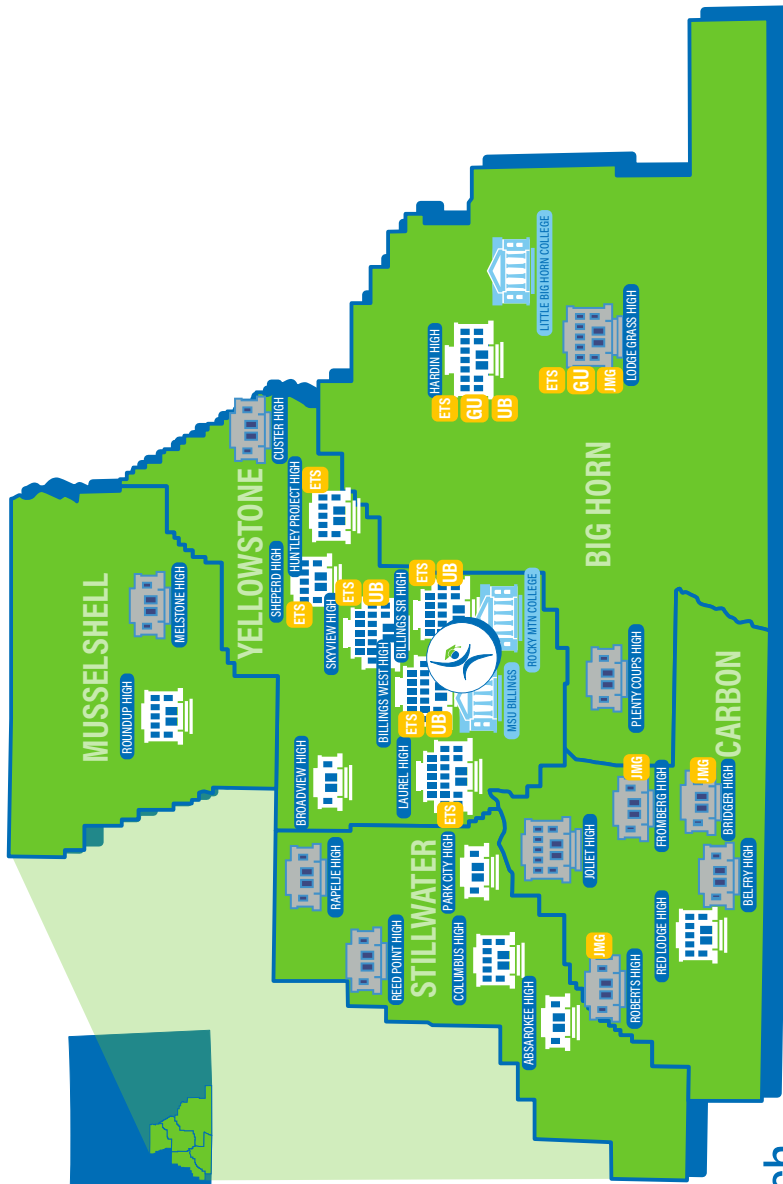
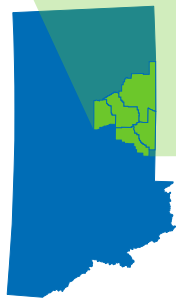
The infographics on the following pages were created for the Reach Higher Montana Advisory Council to describe the regions served by RHM Advisors from offices located in Bigfork, Butte, Missoula, Helena, Great Falls, Billings, and Bozeman.

These regions vary greatly in geographic size, population, number of schools and colleges, economies, and the presence of college access programs. Each region is staffed with one RHM Advisor, and the ability to serve all students within the region is directly impacted by the variables of geography and population. In large regions with many schools, the RHM advisor spends most of their time with three to five schools, and minimal amounts of time with other schools in the region. Some regions have schools with very small enrollment – so small that data about the students in these schools is masked to protect their privacy. When you see \* in a category, this is the indication that the data has been masked.

Within the pages for each region, infographics describe the number of students in grades nine through twelve; participation in dual enrollment, and the estimated tuition saved by students taking advantage of dual enrollment opportunities; a three-year look at funds delivered through Reach Higher Montana for students (Reach Higher Montana scholarships, foster care education and training vouchers, Youth Serve Montana Scholarships, and High School Business Challenge Scholarships); the number of MUS Honors Scholarships Awarded over a three-period; and the number of students enrolled in Montana State University's new Hilleman Scholars Program.

The final pages of infographics describe the vast area of Eastern Montana that is not served by Reach Higher Montana advisors. With 5,634 students in grades nine through twelve, the population is similar to the areas Reach Higher Montana does serve in Western and Central Montana. However, they are spread among incredibly large spaces, and most attend schools with very small enrollment. These students receive financial support through Reach Higher Montana's scholarship programs, and they benefit from dual enrollment opportunities, MUS Honors Scholarships, and the Hilleman Scholars Program.

# Billings area outreach



## Map Key



OUTREACH OFFICE



AA HIGH SCHOOL



A HIGH SCHOOL



B HIGH SCHOOL



C HIGH SCHOOL



SCHOOL NOT SERVED



COLLEGE OR UNIVERSITY

GU

GEAR UP

JMG

JOBS FOR MONTANA GRADUATES

UB

TRIO UPWARD BOUND

ETS

TRIO EDUCATIONAL TALENT SEARCH

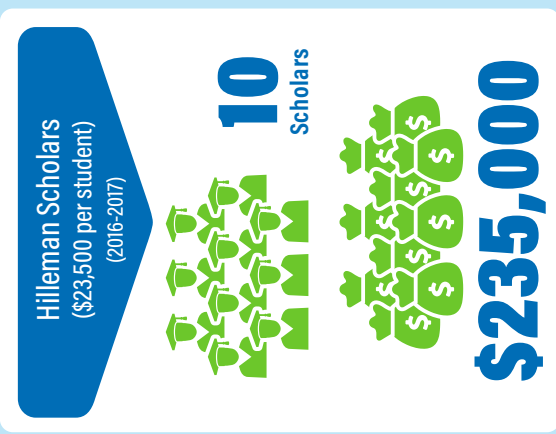
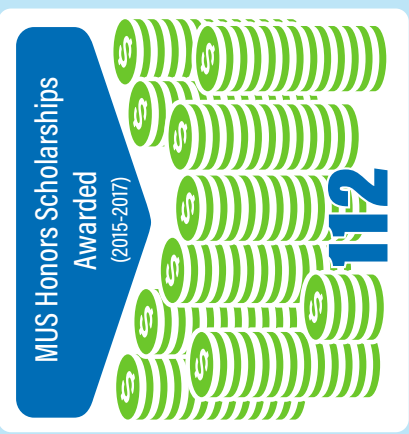
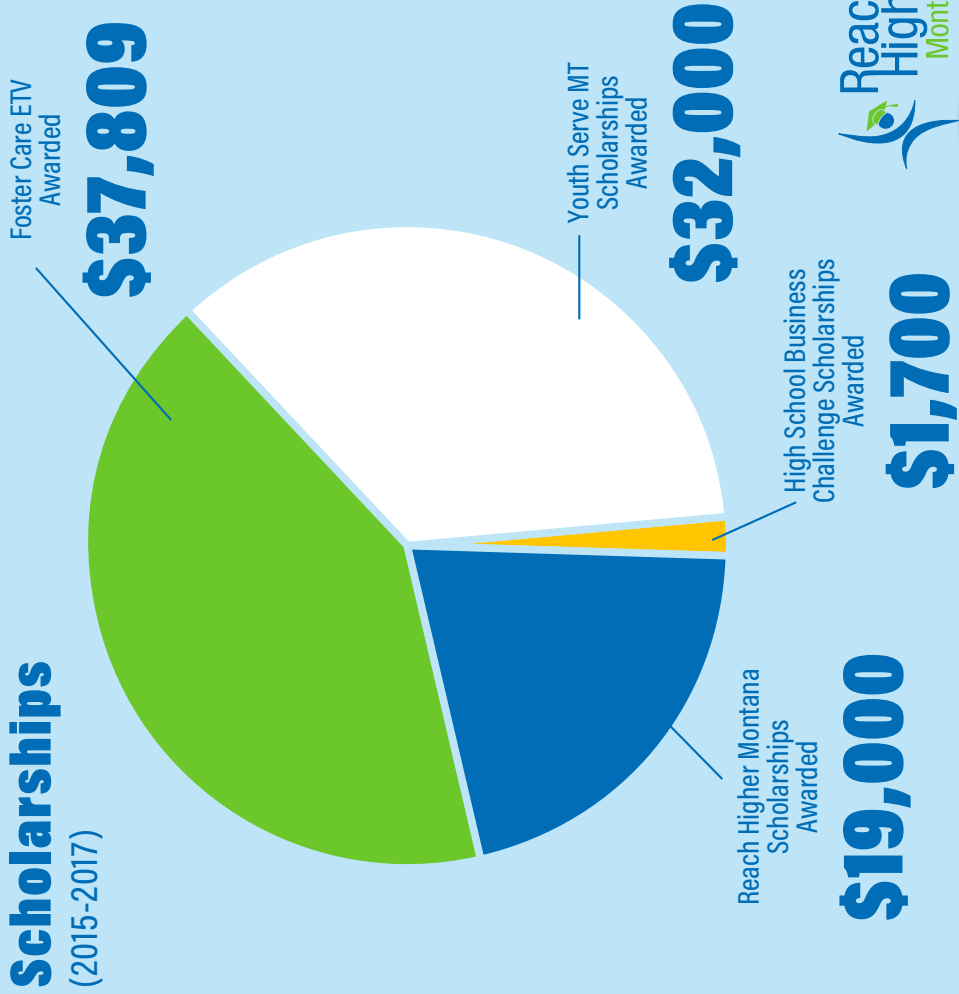
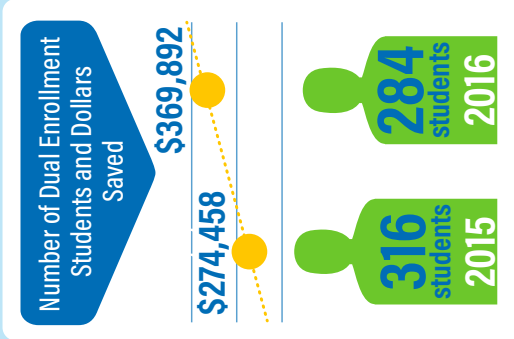


# Billings area outreach

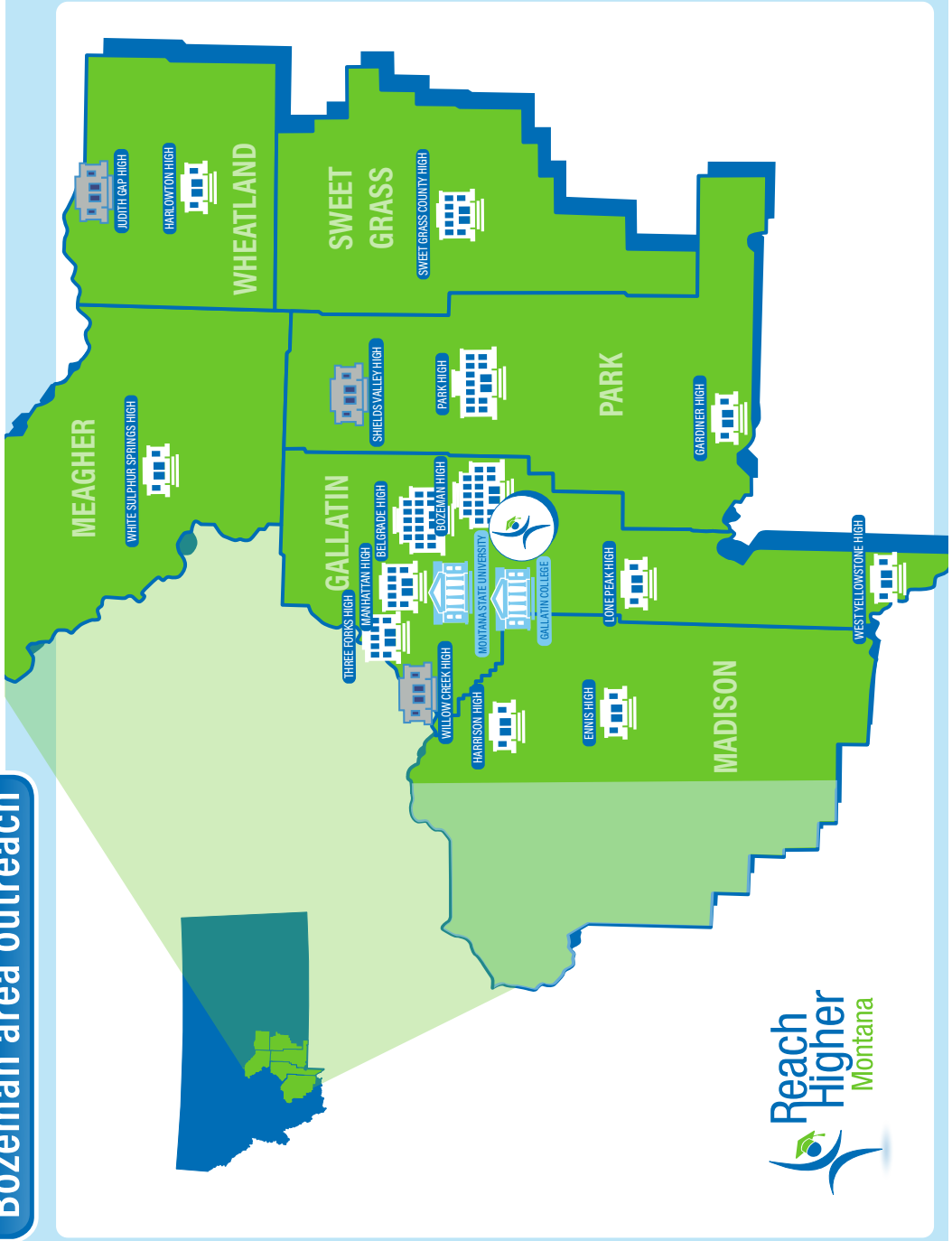
Time Spent at each School (%)	BILLINGS CAREER CENTER	HARDIN HIGH	SKYVIEW HIGH	BILLINGS WEST HIGH	LAUREL HIGH	BILLINGS SENIOR HIGH	HUNTLEY PROJECT HIGH	RED LODGE HIGH	ROUNDUP HIGH	ABSAROOKEE HIGH	BILLINGS CENTRAL HIGH	BROADVIEW HIGH	COLUMBUS HIGH	FROMBERG HIGH
High School Graduation Rate (2016)	* 74%	91%	85%	85%	90%	82%	90%	97%	96%	86%	*	92%	84%	100%
MUS Capture rate (2016)	* 24%	38%	36%	41%	37%	37%	42%	45%	38%	*	*	*	25%	*
FAFSA Completion Rate (2016) (by priority deadline)	* 31%	30%	28%	28%	33%	33%	33%	44%	55%	45%	*	45%	38%	*
Remediation Rate (2016)	* 57%	50%	43%	30%	38%	45%	*	*	*	*	*	*	*	*
Free/Reduced Lunch Eligibility (2016-17)	* 90%	32%	29%	26%	40%	46%	24%	24%	44%	*	*	40%	20%	69%

\* data is masked when fewer than 10 students or all students were reported in a single category or not available

## Billings area outreach



# Bozeman area outreach

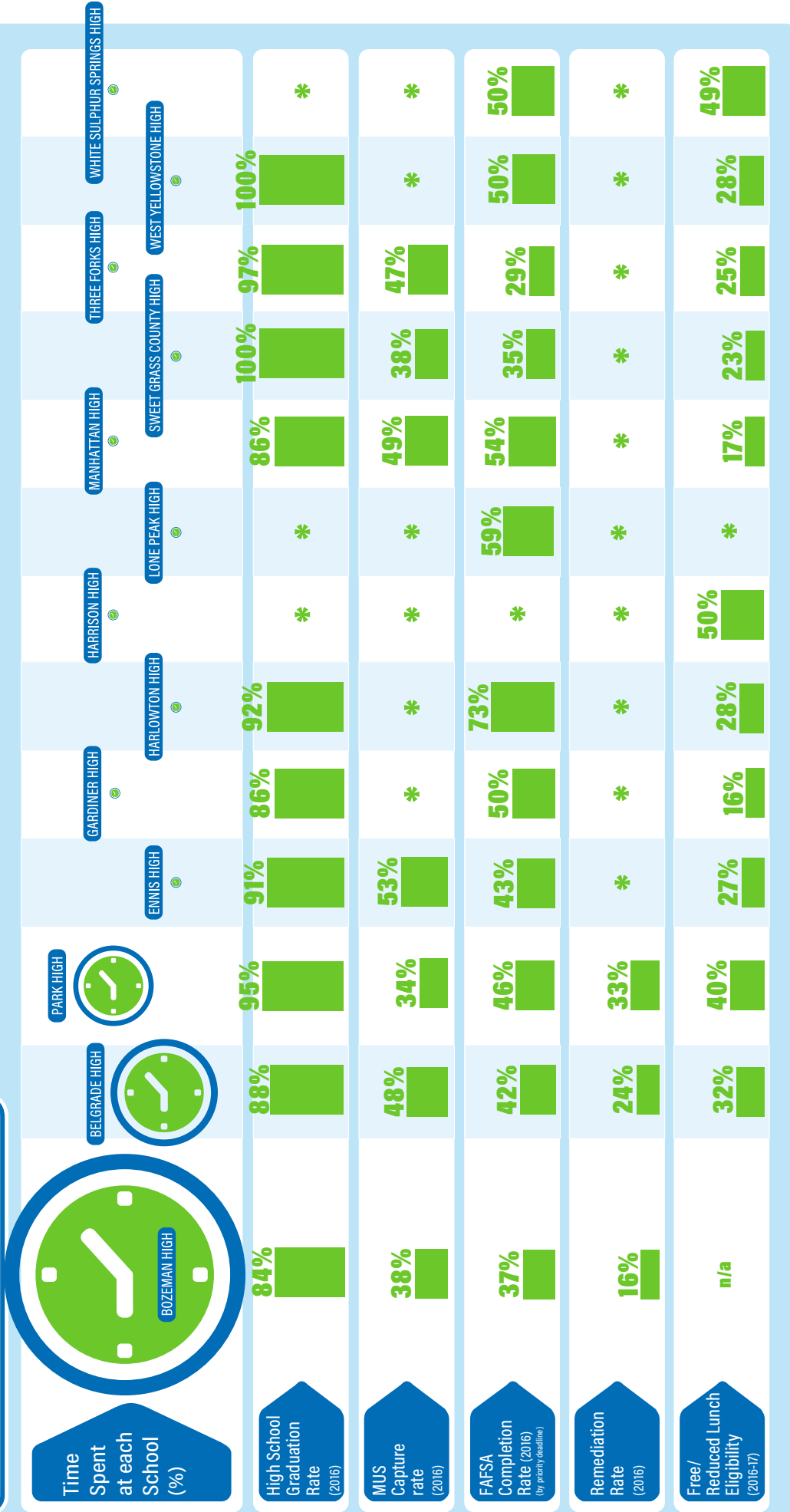


**Map Key**

- OUTREACH OFFICE
- AA HIGH SCHOOL
- A HIGH SCHOOL
- B HIGH SCHOOL
- C HIGH SCHOOL
- SCHOOL NOT SERVED
- COLLEGE OR UNIVERSITY
- GU GEAR UP
- JMG JOBS FOR MONTANA GRADUATES
- UB TRIO UPWARD BOUND
- ETS TRIO EDUCATIONAL TALENT SEARCH




## Bozeman area outreach



\* data is masked when fewer than 10 students or all students were reported in a single category or not available


## Bozeman area outreach

Current Enrollment  
Grades 9-12  
(2016)




**4,500**


Number of Dual Enrollment  
Students and Dollars  
Saved



\$155,970 (2015)      \$210,899 (2016)



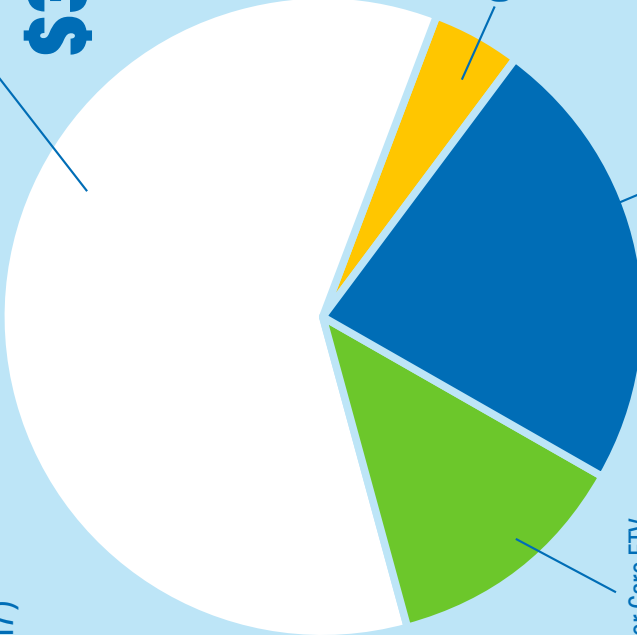
**253** students  
2015



**257** students  
2016

## Scholarships (2015-2017)

Youth Serve MT  
Scholarships  
Awarded  
**\$36,000**



High School Business  
Challenge Scholarships  
Awarded  
**\$2,650**

Reach Higher Montana  
Scholarships  
Awarded  
**\$14,000**

Foster Care ETV  
Awarded  
**\$7,577**




MUS Honors Scholarships  
Awarded  
(2015-2017)




**112**

Hilleman Scholars  
(\$23,500 per student)  
(2016-2017)

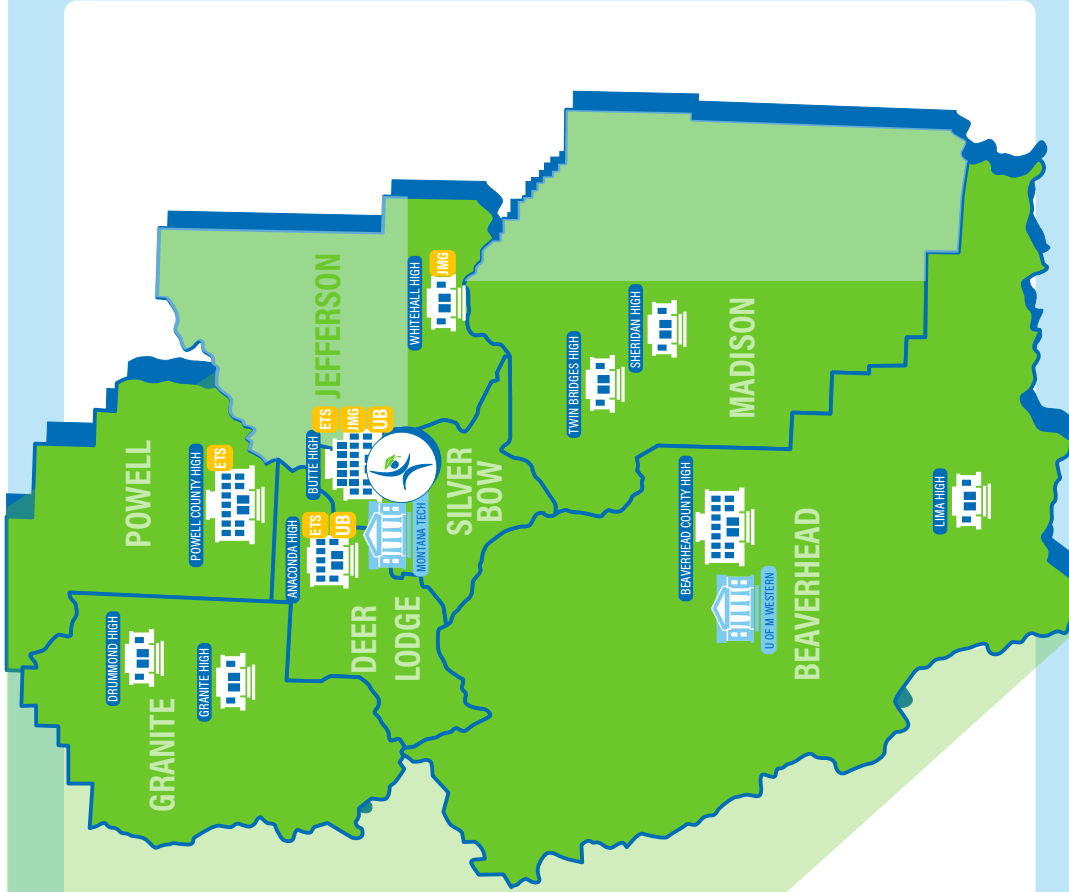


**20** Scholars



**\$470,000**

# Butte area outreach



## Map Key



OUTREACH OFFICE



AA HIGH SCHOOL



A HIGH SCHOOL



B HIGH SCHOOL



C HIGH SCHOOL



SCHOOL NOT SERVED



COLLEGE OR UNIVERSITY



GU GEAR UP



JMG JOBS FOR MONTANA GRADUATES



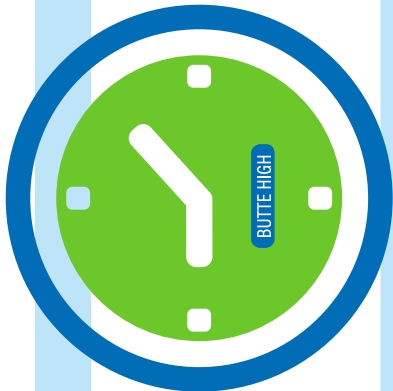
UB TRIO UPWARD BOUND



ETS TRIO EDUCATIONAL TALENT SEARCH



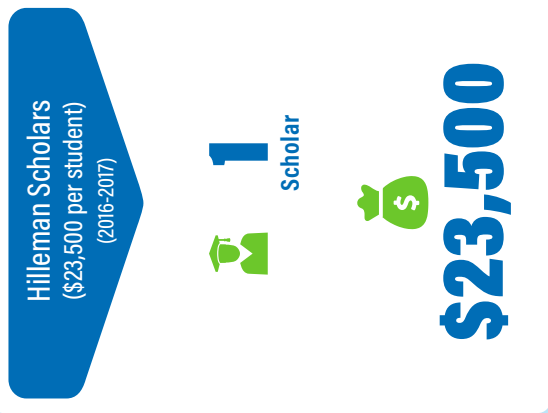
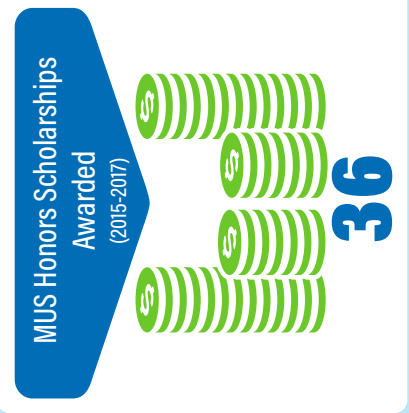
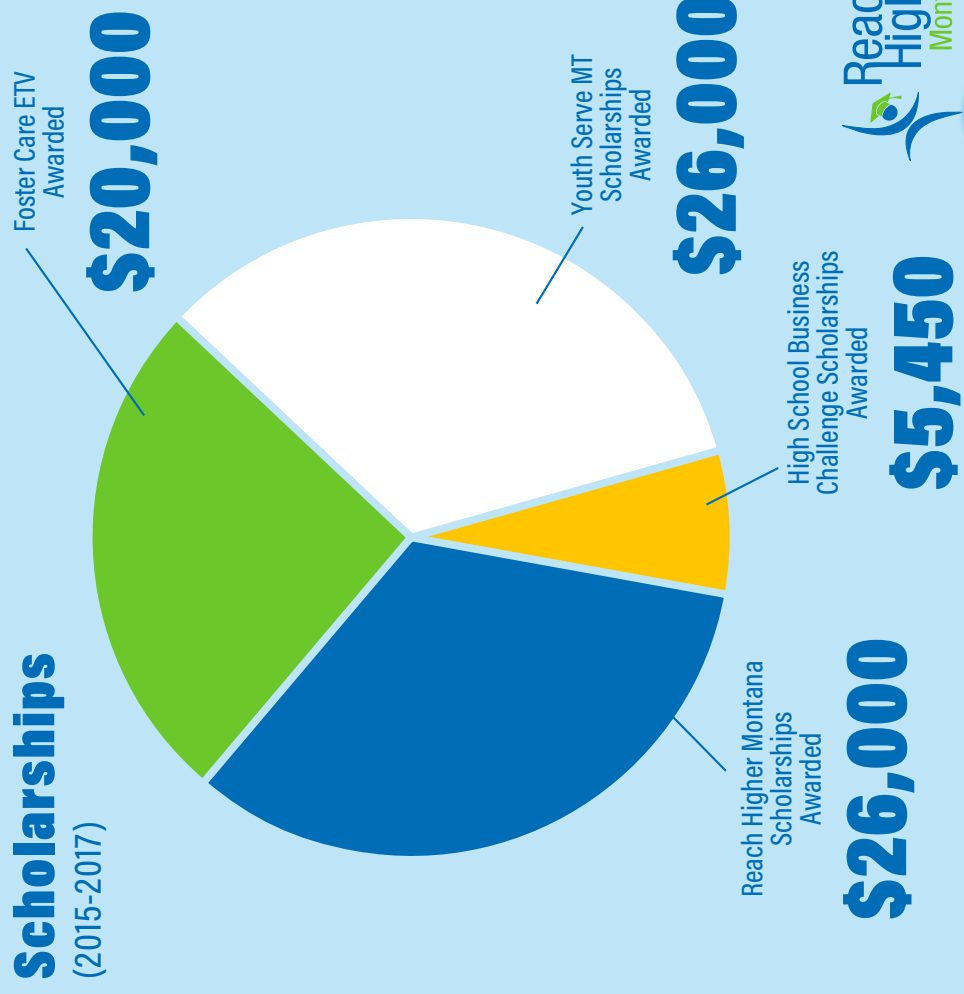
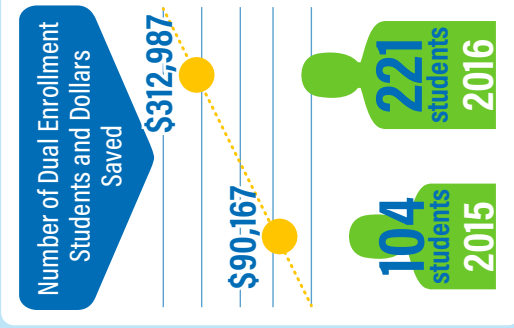
# Butte area outreach



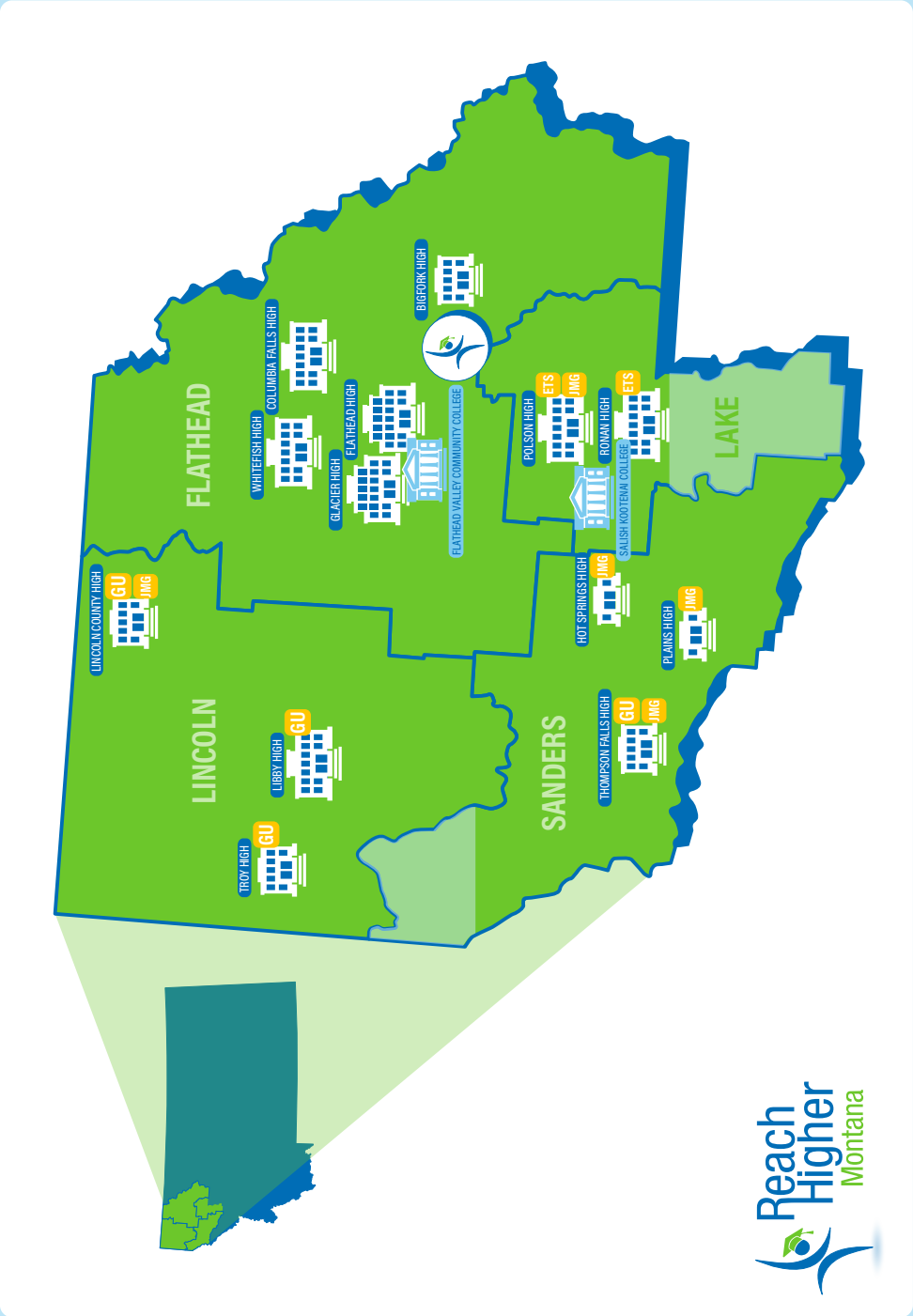
Time Spent at each School (%)	BUTTE HIGH	BUTTE CENTRAL HIGH	ANACONDA HIGH	BEAVERHEAD COUNTY HIGH	WHITEHALL HIGH	GRANITE COUNTY HIGH	LIMA HIGH	POWELL COUNTY HIGH	SHERIDAN HIGH	TWIN BRIDGES HIGH
High School Graduation Rate (2016)	82%	*	87%	89%	80%	91%	81%	93%	*	96%
MUS Capture rate (2016)	42%	*	48%	46%	42%	*	*	58%	*	46%
FAFSA Completion Rate (2016) (by priority assistance)	28%	*	51%	50%	61%	33%	*	22%	60%	52%
Remediation Rate (2016)	35%	*	47%	38%	*	*	*	*	*	*
Free/Reduced Lunch Eligibility (2016-17)	38%	*	54%	31%	53%	40%	47%	19%	59%	30%

\* data is masked when fewer than 10 students or all students were reported in a single category or not available

## Butte area outreach



# Flathead area outreach

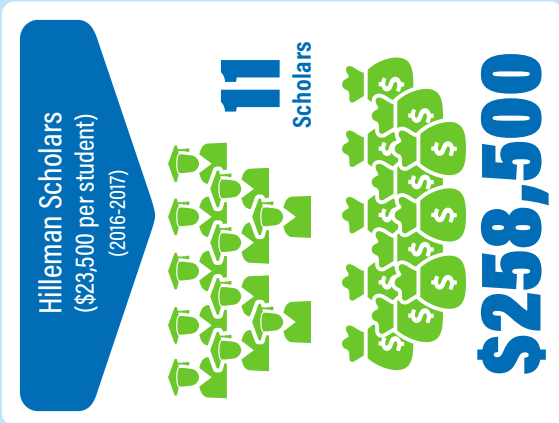
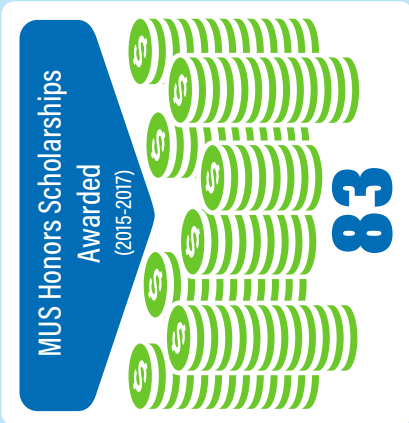
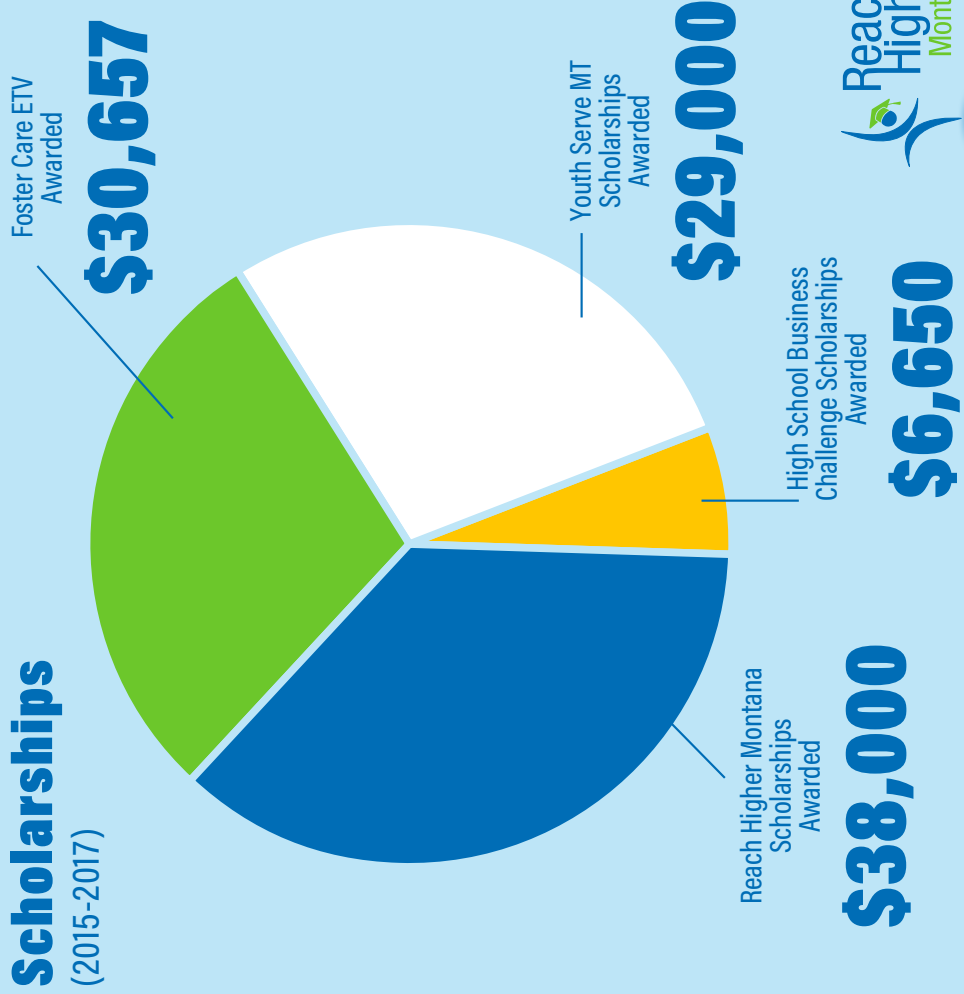
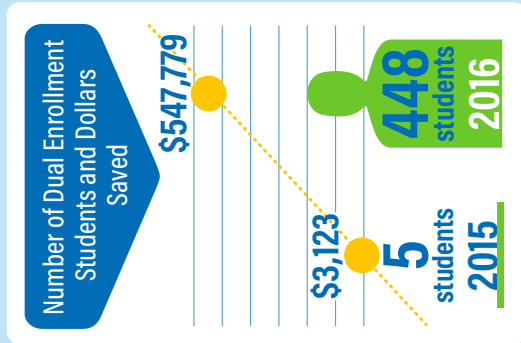


## Flathead area outreach

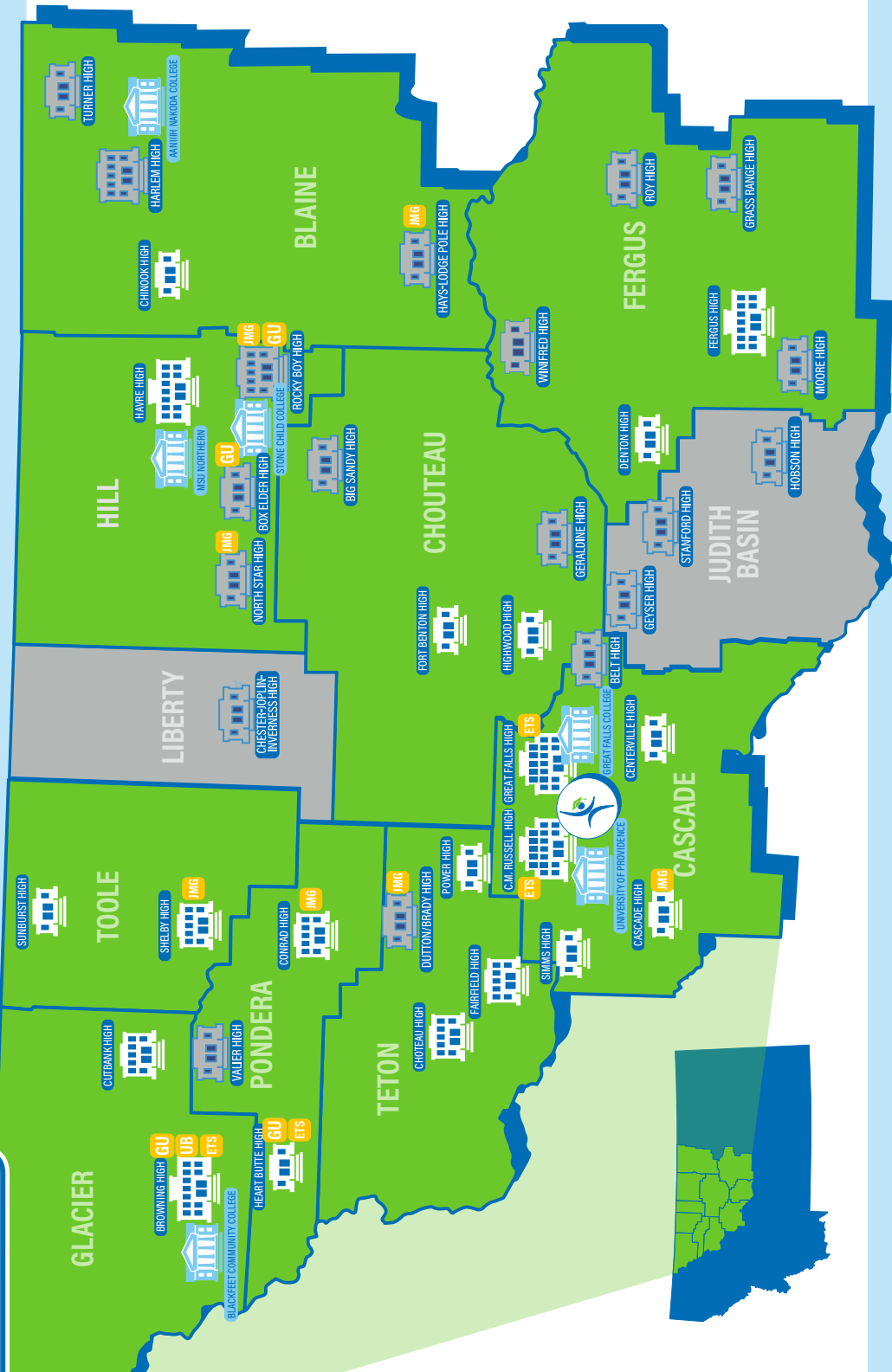
Time Spent at each School (%)	BIG FORK HIGH	COLUMBIA FALLS HIGH	GLACIER HIGH	LIBBY HIGH	TROY HIGH	WHITEFISH HIGH	HOT SPRINGS HIGH	PLAINS HIGH	THOMPSON FALLS HIGH	FLATHEAD HIGH	LINCOLN CO HIGH	STILLWATER CHRISTIAN	ROWAN HIGH
High School Graduation Rate (2016)	87%	87%	88%	85%	84%	89%	91%	89%	95%	86%	93%	*	83%
MUS Capture rate (2016)	40%	22%	30%	22%	*	36%	*	36%	*	22%	39%	*	24%
FAFSA Completion Rate (2016) <small>(by priority assistance)</small>	34%	34%	27%	42%	56%	28%	38%	56%	59%	22%	32%	*	41%
Remediation Rate (2016)	*	*	26%	*	*	*	*	*	*	24%	*	*	*
Free/Reduced Lunch Eligibility (2016-17)	35%	41%	27%	53%	67%	25%	54%	55%	63%	34%	50%	*	56%

\* data is masked when fewer than 10 students or all students were reported in a single category or not available

## Flathead area outreach

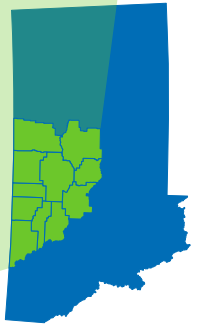


# Great Falls area outreach



**Map Key**

- OUTREACH OFFICE
- AA HIGH SCHOOL
- A HIGH SCHOOL
- B HIGH SCHOOL
- C HIGH SCHOOL
- SCHOOL NOT SERVED
- COLLEGE OR UNIVERSITY
- GEAR UP
- JOBS FOR MONTANA GRADUATES
- TRIG UPWARD BOUND
- TRIG EDUCATIONAL TALENT SEARCH

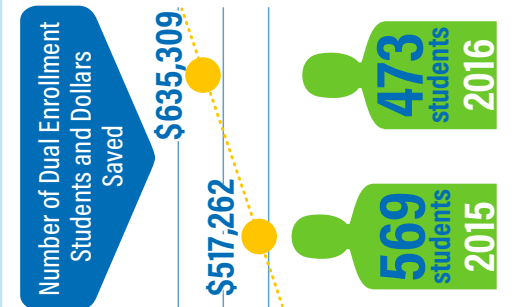


# Great Falls area outreach

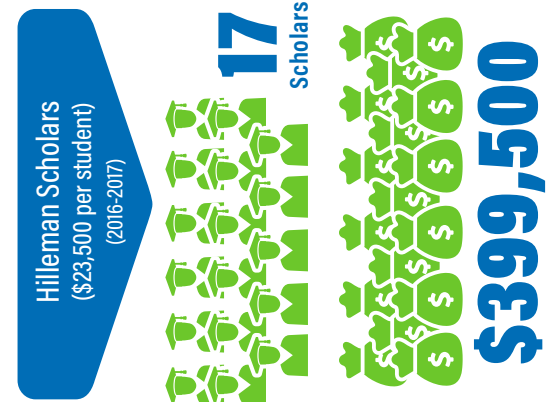
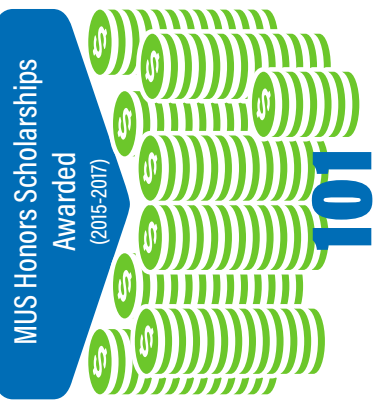
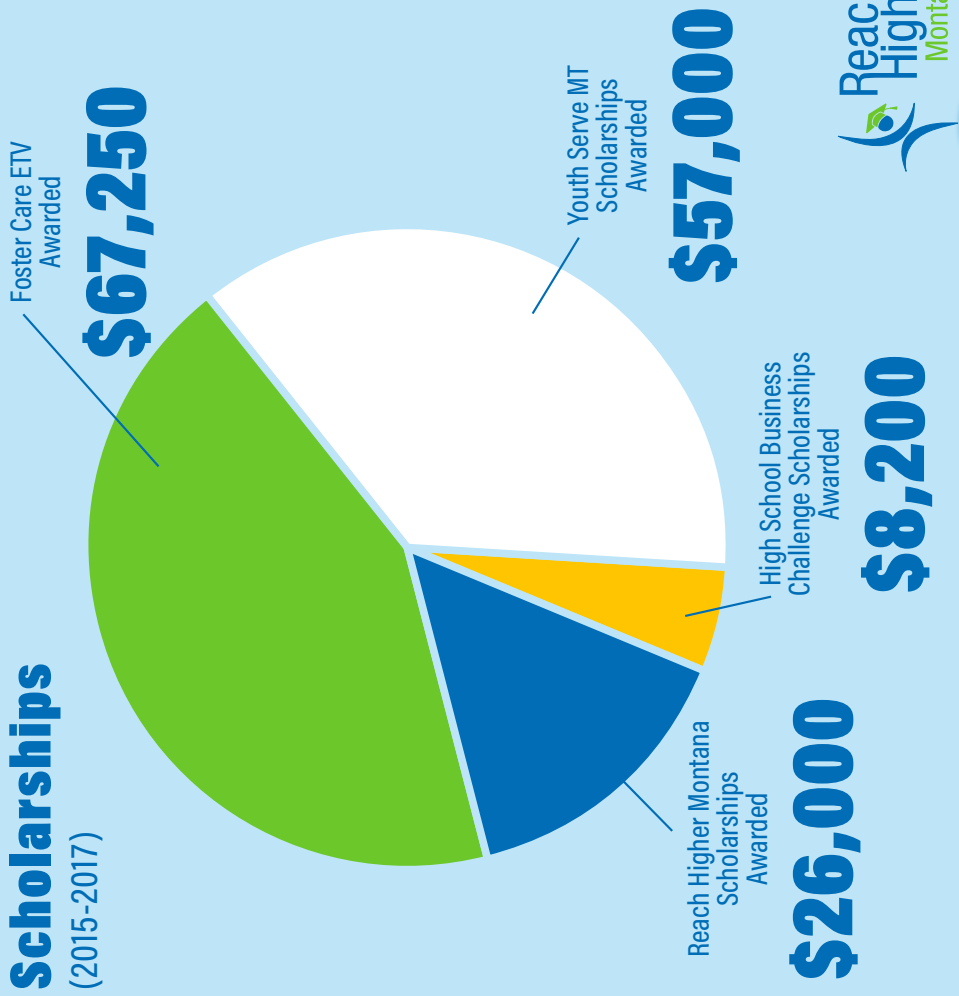
Time Spent at each School (%)	JUVENILE DETENTION CENTER	GREAT FALLS HIGH	CHOTEAU HIGH	PARIS GIBSON	SHELBY HIGH	CONRAD HIGH	FERGUS HIGH	SIMMS HIGH	CUT BANK HIGH	CENTERVILLE HIGH	SUNBURST HIGH	FORT BENTON HIGH	HEART BUTTE HIGH	HIGHWOOD HIGH	HAVRE HIGH
High School Graduation Rate (2016)	91%	85%	60%	91%	90%	74%	82%	100%	93%	82%	92%	82%	82%	79%	*
MUS Capture rate (2016)	47%	38%	22%	61%	50%	48%	46%	59%	48%	*	*	*	*	50%	*
FAFSA Completion Rate (2016) (by priority deadline)	53%	31%	18%	51%	58%	45%	31%	67%	50%	38%	27%	50%	*	21%	*
Remediation Rate (2016)	*	27%	52%	*	*	*	*	*	*	*	*	*	*	36%	*
Free/Reduced Lunch Eligibility (2016-17)	29%	43%	*	27%	31%	41%	26%	34%	41%	28%	60%	41%	*	39%	*

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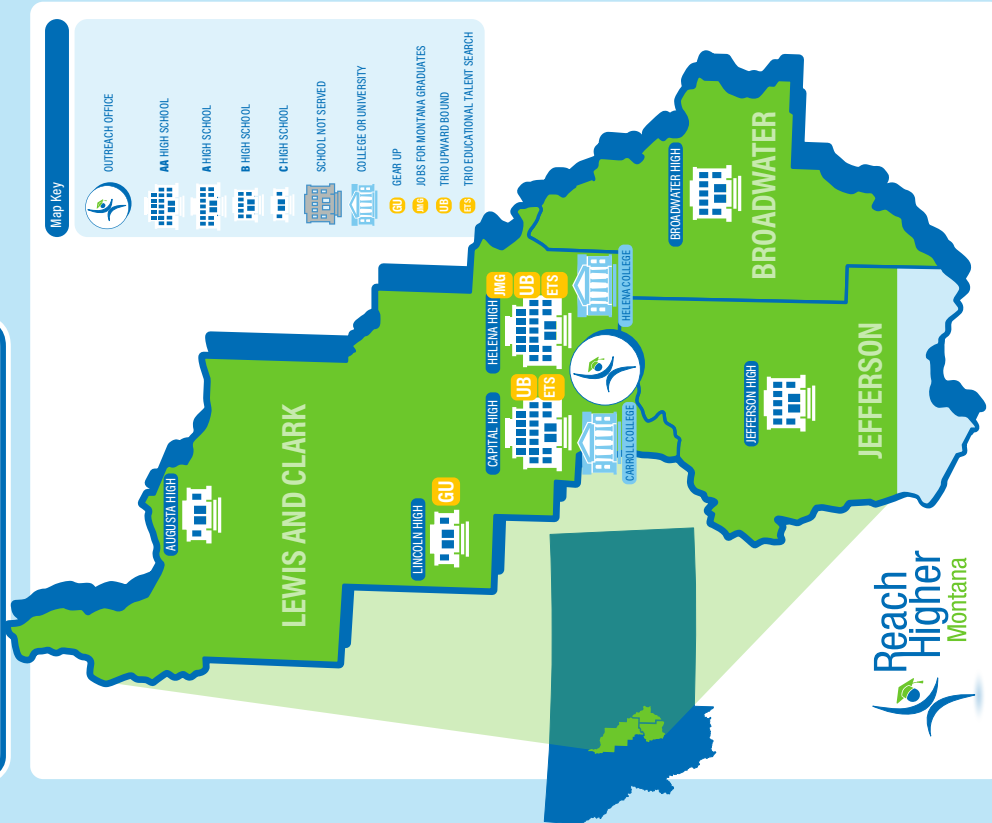
## Great Falls area outreach



## Scholarships (2015-2017)



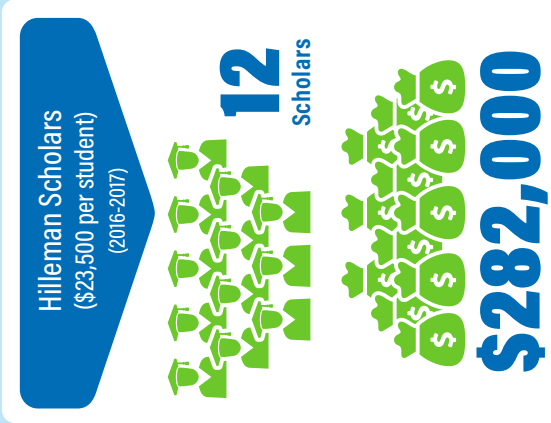
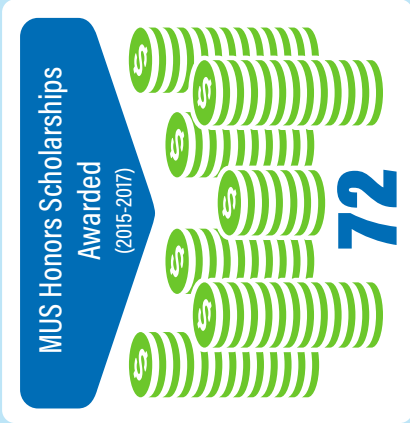
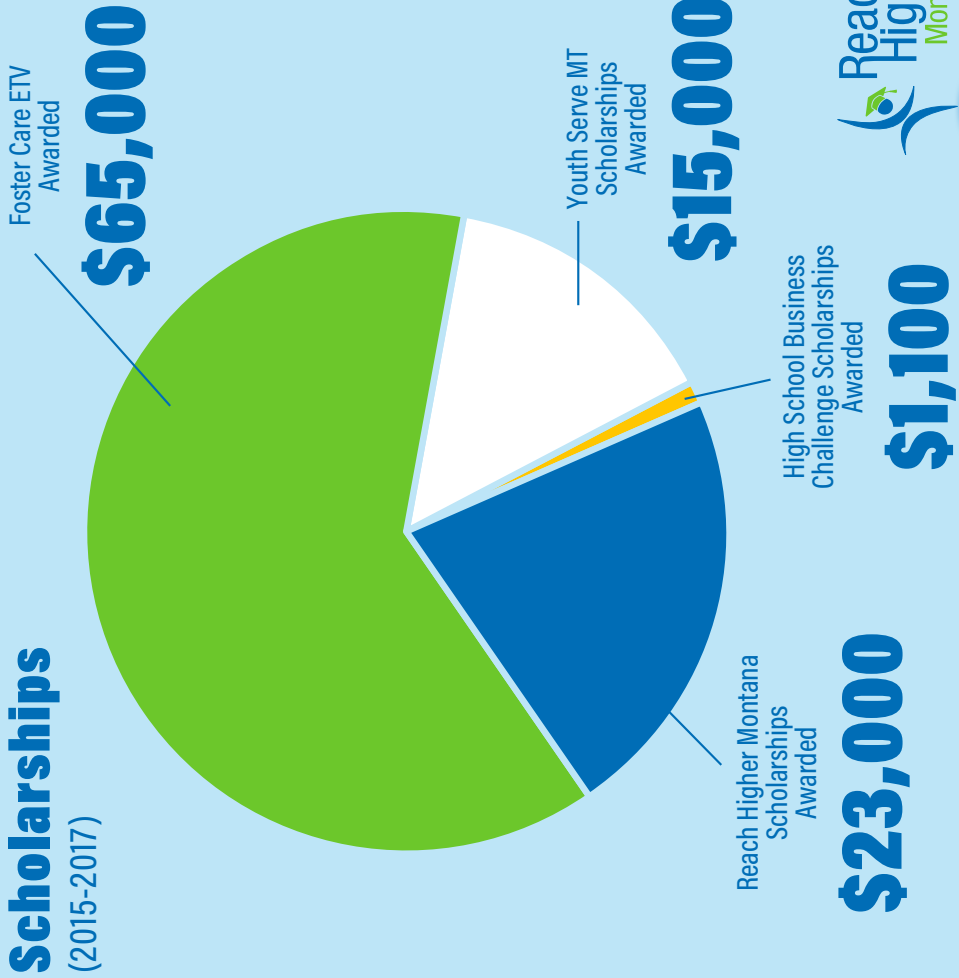
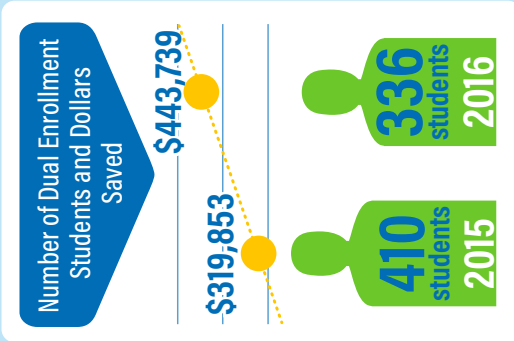
# Helena area outreach



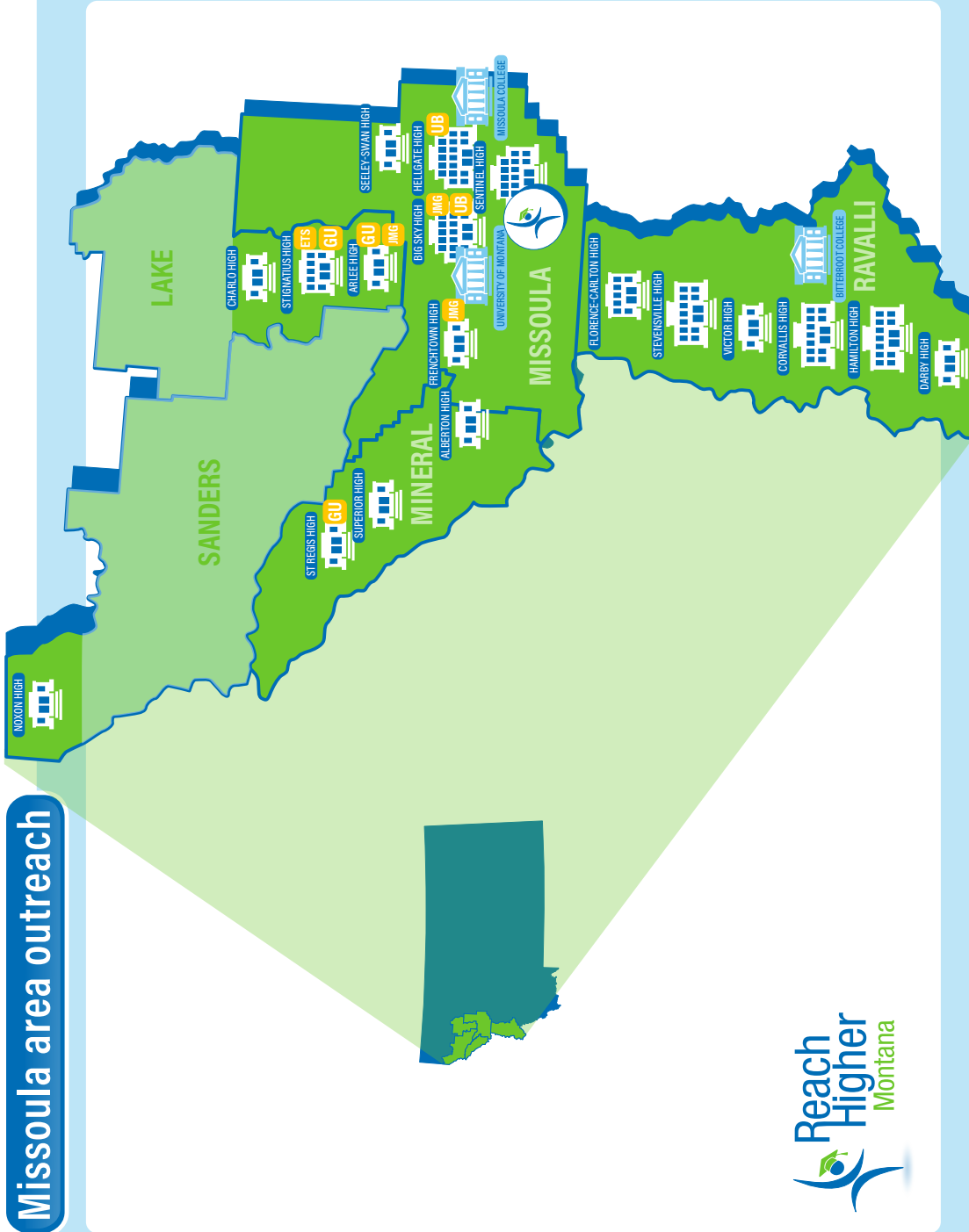
Time Spent at each School (%)	HELENA HIGH	CAPITAL HIGH	BROADWATER HIGH	JEFFERSON HIGH	LINCOLN HIGH	AUGUSTA HIGH	PAL & ACCESS TO SUCCESS
High School Graduation Rate (2016)	84%	89%	77%	85%	*	*	*
MUS Capture rate (2016)	44%	54%	40%	49%	*	*	*
FAFSA Completion Rate (2016) (by priority deadline)	40%	46%	36%	61%	75%	*	*
Remediation Rate (2016)	20%	24%	*	*	*	*	*
Free/Reduced Lunch Eligibility (2016-17)	23%	20%	32%	28%	58%	77%	*

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## Helena area outreach



# Missoula area outreach

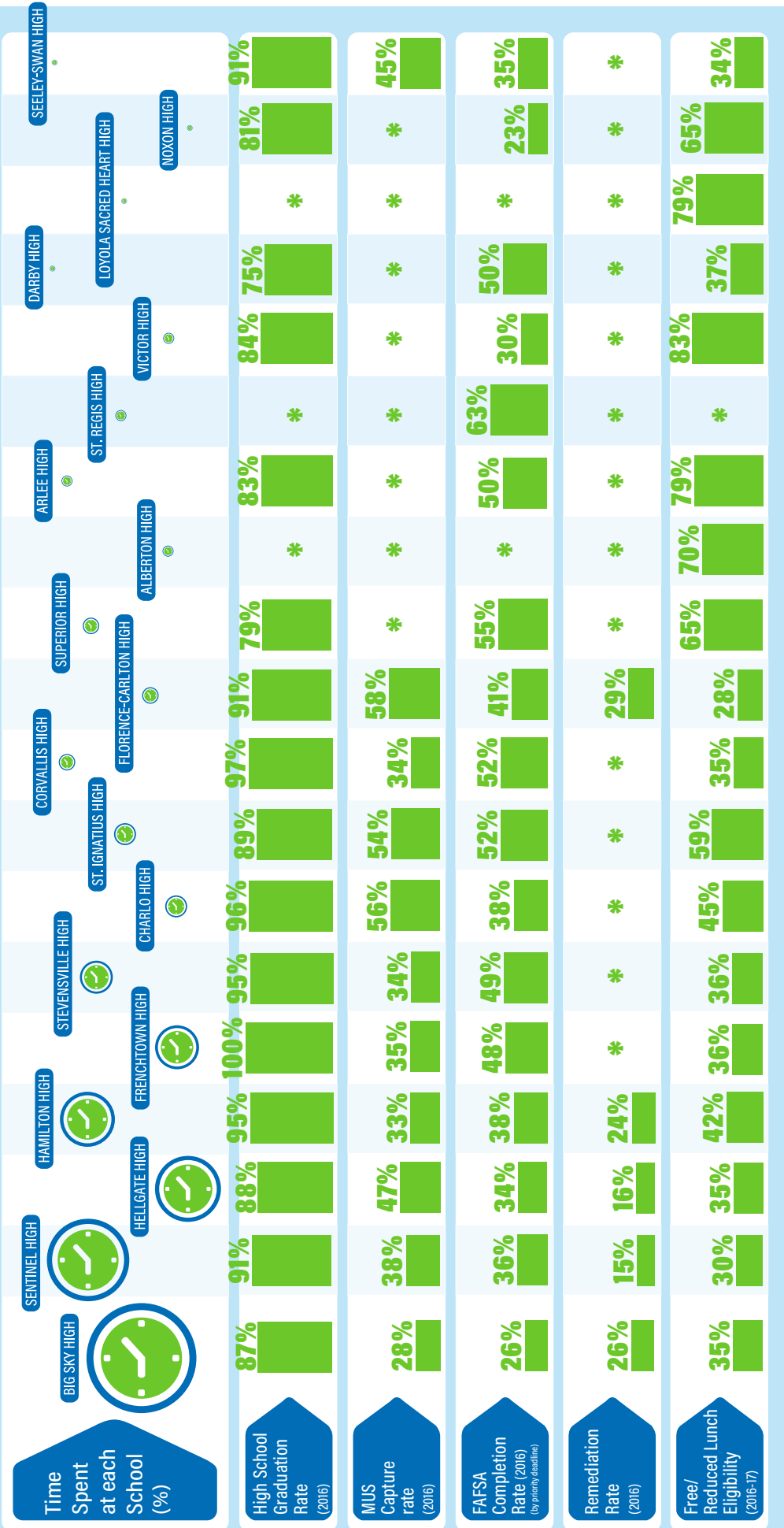


**Map Key**

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- AA HIGH SCHOOL
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- SCHOOL NOT SERVED
- COLLEGE OR UNIVERSITY
- GU GEAR UP
- JMG JOBS FOR MONTANA GRADUATES
- UB TRIO UPWARD BOUND
- ETS TRIO EDUCATIONAL TALENT SEARCH



# Missoula area outreach



\* data is masked when fewer than 10 students or all students were reported in a single category or not available


# Missoula area outreach

Current Enrollment  
Grades 9-12  
(2016)




**6,437**


Number of Dual Enrollment  
Students and Dollars  
Saved



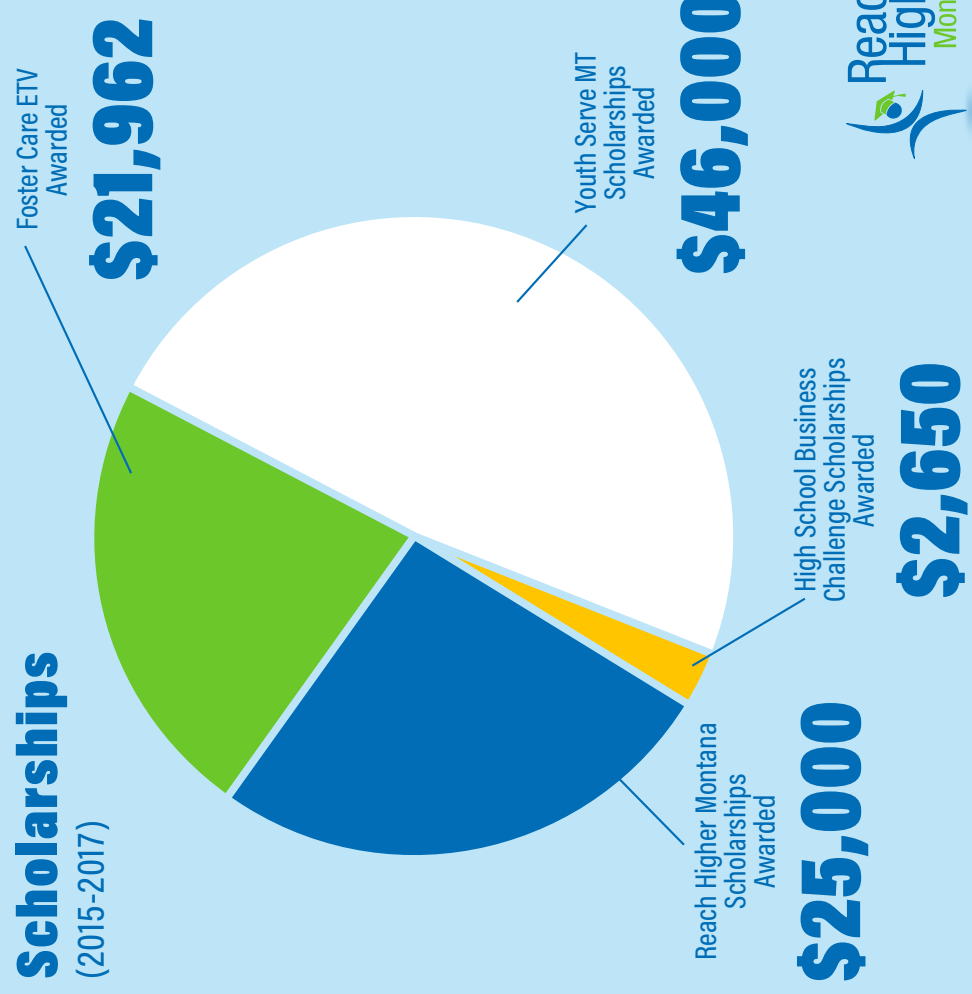
**\$584,939**      **\$614,242**



**699**  
students  
2015



**621**  
students  
2016

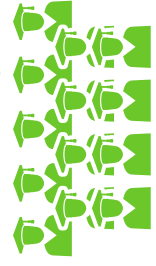


MUS Honors Scholarships  
Awarded  
(2015-2017)




**132**

Hilleman Scholars  
(\$23,500 per student)  
(2016-2017)



**13**  
Scholars



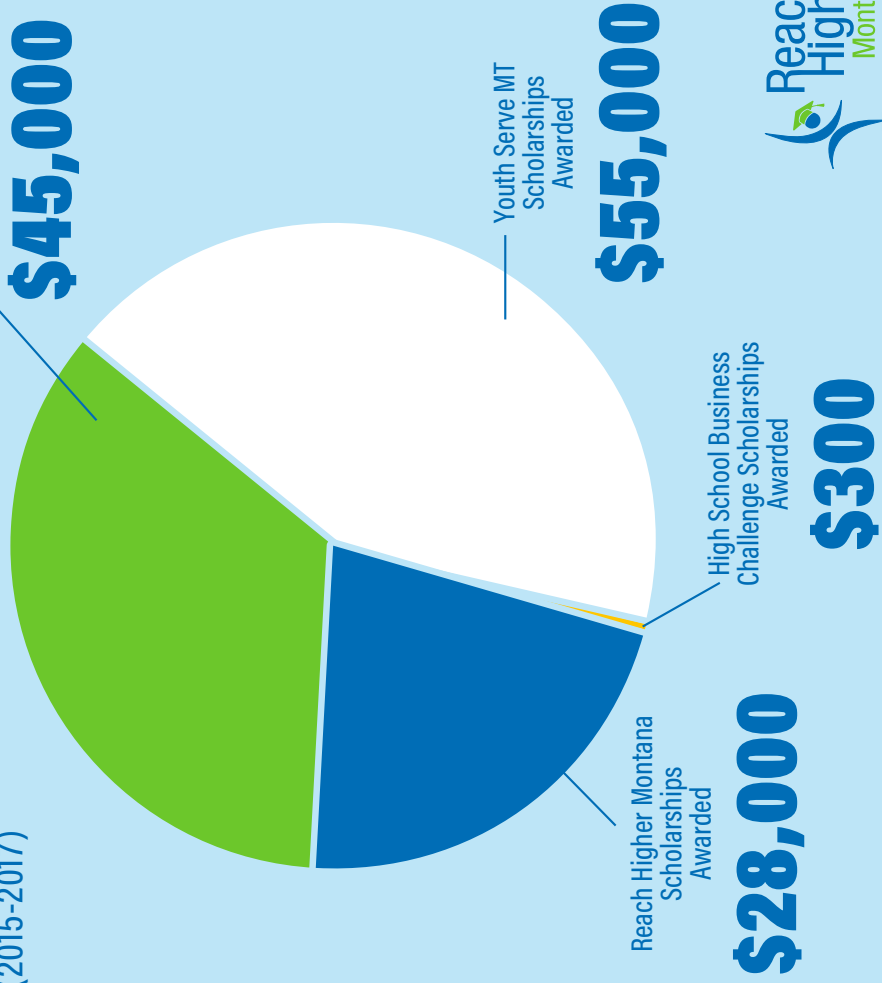
**\$305,500**



High schools not served

# Scholarships

(2015-2017)



MUS Honors Scholarships Awarded (2015-2017)

59

Hilleman Scholars (\$23,500 per student) (2016-2017)

12 Scholars

\$282,000

Current Enrollment Grades 9-12 (2016)

5,634

Number of Dual Enrollment Students and Dollars Saved

\$293,436 | \$266,754

253 students 2015 | 290 students 2016

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