

WASHINGTON STATE **OPPORTUNITY** SCHOLARSHIP

BOARD MEETING AGENDA THURSDAY, JANUARY 10, 2019 | 1:00-3:00 P.M. MICROSOFT CAMPUS, BUILDING 34

CONFERENCE CALL DIAL IN #: 425-616-0754 / CONFERENCE ID: 599 427 45#

I. Meeting Called to Order		Brad Smith, Chair	1:00p
II. Approval of Minutes from September 5, 2018 Meeting	[Tab A]	Brad Smith	1:00-1:05p
III. WSOS Scholar Spotlight	[Tab B]	Rebecca Darrow WSOS Scholar, University of Washington	1:05-1:10p
IV. 2018 Legislative Report & Five-Year Post Graduate Report	[Tab C]	Kimber Connors WSOS Deputy Director	1:10-1:50p
V. Pathways Scholarship Launch Proposal Action requested: Approval of Pathways Scholarship Design	[Tab D]	Naria K. Santa Lucia WSOS Executive Director	1:50-2:20p
VI. Celebrating 2018 & Looking to 2019 Action requested: Approval of 2019 Budget	[Tab E]	WSOS Staff	2:20-2:50p
VII. Finance and Program Administrator Update	[Tab F]	Mack Hogans F&I Committee Chair	2:50-3:00p
VIII. Closing		Brad Smith	3:00p

Important Upcoming Dates

- Scholarship Open Period – January 3 to February 28, 2019
- 2019 Board Meetings - all meetings at Microsoft campus at 1-3p
 - Tuesday, April 2
 - Wednesday, June 19
 - Thursday, September 26
 - Tuesday, December 17

Tab A

Minutes from the September 5, 2018 Board Meeting

**WASHINGTON STATE OPPORTUNITY SCHOLARSHIP BOARD MEETING
MONDAY, SEPTEMBER 5, 2018, 1-3 PM, MICROSOFT CAMPUS**

MEETING MINUTES

The Board of Directors of the Washington State Opportunity Scholarship (WSOS) met on September 5, 2018 at the Microsoft headquarters in Redmond, Washington.

Board members: Brad Smith, Miller Adams, Diane Cecchettini, Antony Chiang, Joelle Denney, Mack Hogans, Jane Park, Julie Sandler, Jim Sinegal and Mike Wilson present

Additional attendees: Naria Santa Lucia, Lianda Abraham, Erin Ashley, Michael Bragg, Jane Broom, Meg Chambers, Kimber Connors, Rachel Darany, Jennifer Dechaine, Perry Fizzano, Karyl Gregory, Patrick Kang, Josh Karas, Caroline King, Keenan Konopaski, Amy Liu, Ryan McCord, Hannah Olson, Casey Radostitz, Jennifer Sulcer and Sam Whiting present; Terrie Ashby-Scott, Theresa Britschgi, Jenna Magnotti, Joanna Moznette and Stan Pichinevskiy by phone

Meeting Called to Order

Brad Smith called the Board Meeting to order at 1:01 pm.

Approval of Minutes

Mack Hogans moved that the minutes of the April 16, 2018 Board Meeting be approved. Diane Cecchettini seconded the motion and it carried unanimously.

Joint Legislative Audit Review Committee Presentation

Keenan Konopaski, Legislative Auditor, presented an overview of the Joint Legislative Audit and Review Committee (JLARC) as it works to make state government operations more effective, efficient, and accountable. The Committee is comprised of an equal number of House and Senate members, Democrats and Republicans. The non-partisan staff auditors conduct performance audits, program evaluations, sunset reviews, and other analyses. Assignments to conduct studies are made by the Legislature and the Committee itself. The Committee's independent research yields answers to audit study questions and recommendations are presented to improve performance.

Konopaski reported that JLARC is currently evaluating two WSOS programs: the ongoing Opportunity Scholarship and the Opportunity Expansion program, which expanded the number of degrees produced at Washington's colleges and universities. Four study questions have been identified to address program participation, funding and outcomes. The study team, under the direction of the Legislative Auditor, will deliver a preliminary report in May 2019. WSOS will have opportunity to respond to this report in May/June 2019. JLARC will submit their proposed final report along with the response from WSOS in July 2019. The Legislative Auditor will then submit the final report with an option to append the Committee's comments. The final step is the Committee's vote to distribute the completed audit.

Konopaski reported that audit recommendations included in the final report may or may not require legislative changes and stated that JLARC's role is not to be viewed as asserting policy.

Mission Moment: OEF Grant Updates

Smith reported that the Opportunity Expansion Fund (OEF) was formed as a result of companies who could donate high-tech, research and development tax credits to WSOS. Microsoft was the only company who donated their tax credits which totaled \$6M. The WSOS Board previously approved giving this money as grants to three Washington universities with the end goal of expanding the number of seats to provide high-demand STEM degrees.

Representatives from each of these three universities presented highlights of their first year impacts and they also identified their plan for sustainability. Dr. Michael Bragg, Frank & Julie Jungers Dean of Engineering at UW, reported on the expansion of their STARS program and the academic supports they offer to WSOS-like students in the College of Engineering. Dr. Jennifer Dechaine, Associate Professor, Biological Sciences at CWU, presented their Teach STEM program which expands the number of STEM teachers in Washington state. Dr. Perry Fizzano, Professor & Department Chair, College of Science & Engineering at WWU, reported on the expansion of their computer science program by hiring four new faculty. Classroom space for the additional classes has been provided by WWU.

Smith commended the efforts of all three universities. The strong results indicate the Board should solicit further information from each of the three universities in the next few months regarding their continued impacts. With this information in hand, WSOS can reach out to the legislature to advocate for another tax credit to raise additional funds to be used for this same purpose. Bragg and Fizzano each indicated that any further OEF expansion at their respective university would be restricted by capital needed for a new building.

Program Update

Kimber Connors, Deputy Director at WSOS, highlighted key program updates. Connors reported that Cohort 7 has just started and altogether there are 4,400 new and renewing Scholars. Connors further reported that the new Scholar Lead program has just been launched with 150 third, fourth and fifth year Scholars being trained to mentor 1,667 incoming Scholars. Connors also reported that the newly-refreshed Skills that Shine program will connect third year Scholars with volunteer industry mentors. Connors introduced five new staff members: Lianda Abraham, Events Specialist; Rachel Darany, Communications Officer; Patrick Kang, Scholar Success Advisor; Hannah Olson, Talent Resource Manager; and Stan Pichinevskiy, Scholar Placement Manager. In her final update, Connors stated that the Legislative Report will be distributed on December 1st with highlights of Cohort 7 and survey results involving all our graduates to date.

Erin Ashley presented details on our fourth annual OpportunityTalks Breakfast to be held on Thursday, November 1st at the Sheraton Seattle. Board members are encouraged to register themselves and to invite their network connections to join their table. Ashley reported that the OpportunityTalks Challenge Fund has been launched to continue to offer the 4:1 match which had previously been provided by the Rubens Family Foundation for the first three years. Ashley also reported that already half of the \$150,000 goal has been raised which will become \$600,000 with the 4:1 match. Ashley further reported that the Named Scholarship program, which began in 2015 with a grant from the Rubens Family Foundation, has continued to expand. Most recently, Kaiser Permanente has agreed to fund ten full Scholars over five years utilizing the state match.

Finance & Program Administrator Update

Hogans reported that the Finance & Investment Committee met last week. The Committee welcomed new member Julie Sandler. Hogans further reported that the Committee expressed great confidence in Washington STEM in providing thorough financial reporting. Hogans additionally reported that WSOS is waiting for \$2M in state match money. Hogans also reported that Caroline King, CEO at Washington STEM, provided an update on the process to fill their CFO position following Cindy Gustafson's retirement. King stated that strong measures are in place to provide sound and responsible financial support in the interim.

Hogans reported that the performance of WSOS funds followed the market. The Committee expressed great confidence in WSIB's handling of our portfolio.

Hogans then reported on the asset allocation study conducted by WSIB and presented their recommendations. WSIB recommends no change to the Endowment Account with an ongoing 20-80 split for fixed income and equity. For the Scholarship Account, WSIB recommends that the 0-40-60 split with cash-fixed income-equity be shifted to 5-70-25 to reflect the market. This recommended change will lower risk, improve efficiency of the portfolio and increase growth of funds because we will be dipping into our private funds. Hogans also reported that the Committee authorized additional study of WSIB's recommendation. A committee decision will be made prior to WSIB's next board meeting on November 15th which is when recommendations are considered for final approval. Hogans stated that an update will be sent to the Board prior to our next board meeting.

Pathways Scholarship Discussion

Naria Santa Lucia reported that the legislature passed a bill that will enable WSOS to provide scholarship funds to low- and middle-income students who are pursuing high-demand professional and technical degrees and certifications at Washington's community and technical colleges. At four visioning sessions, 70+ industry, education, philanthropy and community leaders provided input for developing key guidelines related to student demographics, award amount, degree programs and support services for the Pathways Scholarship.

The initial design proposal included the following: \$1500 per quarter per Scholar or \$4500 for the year plus \$500 for support services; targeted awardees would be recent high school graduates who have demonstrated interest in a professional/technical career pathway; degree programs would be regional high-demand degrees verified by industry, with the capability to earn a STEM or health care degree in two years or less, and able to gain employment in a living wage within 12 months of graduation; full range of support services from industry mentorship to assistance getting work-like experiences and post-completion career placement counseling; the design model would fund 500 Scholars per year at \$5000 for a total expenditure of \$25M; the model would target a 66% completion rate in two years. The goal is to help students not take a gap but go straight into college or a professional/technical degree program and would increase the percentage of those who graduate. Flexible funding could be provided to help students with living expenses and the funding could be offered on a renewable basis until they graduate. The legislature has agreed to match the dollars that WSOS raises for the Pathways Scholarship so if the model is \$25M, then only \$12.5M needs to be raised.

Smith suggested that a menu be created with three possible sizes of the Pathways program to determine the viability of donor support. Santa Lucia will speak with college presidents to clarify the scope of the total program.

A discussion followed on various aspects of the design proposal. Giving would be incentivized as more Pathways Scholars graduate and, as their number grows, the state will likely target even more funding for the program.

Testing of the program may result in offering more than \$4500 per year and/or an expanded set of support services. If we focus on high schoolers as our target group for the Pathways Scholarship, then achieving a 66% completion rate may be realistic. However, if we target older students, that percentage may need to be lowered. The equity goals for the Pathways Scholarship should replicate those of our original Opportunity Scholarship.

The timeline of next steps include the Board's approval of the final Pathways Scholarship at the next board meeting and Pathways Scholars awarded in 2019.

The meeting adjourned at 3:03 pm.

Respectfully submitted,
Karyl Gregory

Tab B

WSOS Scholar Spotlight

WSOS Scholar Spotlight: Rebecca Darrow



Rebecca (Becky) Darrow is a senior at University of Washington Seattle, intending to graduate with a major in Bioengineering. She is a 2015 Rubens Scholar and a 2017 Battelle Scholar.

Not only has Becky been a participant at several WSOS hosted or sponsored events such as O-Talks and the 2018 Washington State Life Science Summit, but she is also a 2018-2019 Scholar Lead with a cohort of 12 C6 and C7 scholars.

As a WSOS scholar, she hosted the first ever Opportunity in Action event, the Ask Me Anything with Jane Park.

Tab C

2018 Legislative Report & Five Year Post Graduate Report

2018 LEGISLATIVE REPORT

Reporting Data for Cohorts 1- 7 | December 2018

WASHINGTON STATE
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SCHOLARSHIP

WASHINGTON STATE
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SCHOLARSHIP

Prepared by: Washington State Opportunity Scholarship

Prepared for: Washington State Legislature

Photography by: Kristian Marson Photography

December 1, 2018

Featured on the cover: Khyree Watson is an Opportunity Scholar at the University of Washington Seattle. Khyree is majoring in industrial engineering and has completed three internships at Boeing. Khyree is anticipated to complete his degree in 2019.

LETTER FROM THE EXECUTIVE DIRECTOR

2018 proved to be another year of exciting growth and opportunity for Washington State Opportunity Scholarship (WSOS), the Scholars we serve and the challenges facing our state. We look forward to the publication of our annual legislative report as a time to reflect on our progress and to refocus on the work ahead.

Driven by our commitment to be a win-win-win solution for students, industry and Washington state taxpayers, we continued to find ways for our innovative public-private partnership to match our state's top talent with high-demand careers. This year, we launched a revamped year-to-year support system to ensure our Scholars persist from day one of college to the launch of their career. Scholars begin their academic journey with the assistance of a near-peer mentor who provides guidance and support to help jump-start their academic journey. As Scholars move closer towards graduation, we've bolstered our industry mentorship program and created individualized job placement assistance so that our Scholars graduate career-ready with connections to professional networks.

Investing in these supports will get us closer to our goal of supporting 16,000 Scholars by 2025. These students are critical to filling our talent needs across bio-med, engineering, technology and aerospace industries in our state. We are proud of these numbers!

But we know that it isn't enough.

Washington's workforce shortages continue to loom large, and despite recent investment, we still have far too few Washington students graduating from high school and going on to pursue the education and training needed to compete for jobs in our economy.

While our need for bachelor's degrees continues, Washington state also needs more graduates with professional and technical degrees or certificates to fill jobs in fields which are vital to keeping our economy moving – manufacturing, transportation, construction, technology, agriculture, health care, utilities and more.

Last spring, the WSOS Board stepped up to the challenge and asked members of the Washington State Legislature to expand our program to create the Pathways Scholarship, the Rural Jobs Program and the Advanced Health Care Degree Scholarship for underserved areas. Collectively, these three new scholarships will ensure that students from across the education spectrum – from students pursuing professional and technical degrees and certifications at Washington state community and technical colleges to students pursuing post-baccalaureate health care degrees – can fill the high-demand job shortages in Washington state.

These are smart investments for Washington - investments that allows us to meet the demand for skilled workers by supporting the Scholars we have, right here at home. Thank you for your sustained support of the Washington State Opportunity Scholarship and our Scholars. They are the future of the state – and we invite you to be a part of their dream.



WSOS Executive Director Naria Santa Lucia

A handwritten signature in black ink, appearing to read 'Naria K. Santa Lucia'. The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Naria K. Santa Lucia
Executive Director, Washington State Opportunity Scholarship

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Paula Gibson is an Opportunity Scholar alumna, who now works at Philips as an electrical engineer. She graduated with an electrical and electronics degree from the University of Washington Seattle campus in 2017.

INTRODUCTION

The mission of the Washington State Opportunity Scholarship (WSOS) is to build pathways into high-demand Washington careers for Washington students. Washington has one of the fastest growing state economies with more STEM and health care jobs than we can fill. WSOS aims to connect our state's leading industries with top Washington talent by reducing barriers to education and training and facilitating entry into high-demand careers for low- and middle-income Washington students.

Eligible recipients are residents of Washington state who earned their high school credential from a Washington high school or alternative program, intend to pursue a bachelor's degree in an eligible, high-demand STEM or health care field from a Washington college or university and have a family income less than or equal to 125% of the Washington state median family income.

Opportunity Scholars can receive up to \$22,500 in scholarship funds over a maximum of five years to mitigate the financial burden of higher education. Additionally, Scholars receive a year-to-year system of student supports to ensure they are successful from day one of college to the launch of their professional career. Through WSOS, Scholars improve their job readiness skills, receive one-on-one mentorship, gain exposure to work-like experience and have access to industry professionals.

This report is published annually to provide information on both scholarship applicants and recipients. This year's report provides an overview of students who applied in 2018, the most recently awarded cohort of selected Scholars (Cohort 7) and updated data on Scholars in the six previously awarded cohorts.

EXECUTIVE SUMMARY

This Legislative Report responds to the guidelines in Section 8 of House Bill 2088, Opportunity Scholarship Act, filed on June 7, 2011, and provides overview information about Washington State Opportunity Scholarship (WSOS) applicants, participants and outcomes.

The Report begins with a review of the eligible programs of study, followed by an overview of the demographic, gender, socioeconomic, age and regional characteristics of Cohort 7 (the most recently awarded cohort) applicants and scholarship recipients across Cohorts 1-7. The remainder of the Report summarizes dollars awarded to date and program outcomes.

Additional information is provided in the attached Appendices: **Appendix A** Description of Program Administrator; **Appendix B** Selected Scholars Cohorts 1 – 7 by Major Category of Interest; **Appendix C** Race or Ethnicity of Cohort 1 – 7 Participants; **Appendix D** Cohort 1 – 7 Participants by Home County; **Appendix E** Number of Scholarships Awarded by Academic Year, Cohort and Maximum Amount; **Appendix F** Scholar Enrollment 2018-19 by Institution and Cohort; **Appendix G** Scholar Enrollment and Graduation by Cohort and Major Category of Study; **Appendix H** Graduation by Institution; **Appendix I** Description of the WSOS Impact Study.

At a glance, our results show:

4,889 applicants of diverse backgrounds applied in 2018 and 1,862 were selected. This is an increase of 1,053 applications from 2017.

- More than half (59%) of Cohort 7 eligible applicants are female.
- More than half (59%) of Cohort 7 eligible applicants self-identify as students of color.
- About two out of five (39%) Cohort 7 eligible applicants self-identify as underrepresented minorities in STEM fields.¹
- Half of Cohort 7 eligible applicants (50%) identify as first-generation college students.
- The median income of eligible applicants for Cohort 7 is \$52,073.

1,740 Scholars are currently enrolled full-time as part of Cohort 7 (most recently awarded cohort).

- More than half (61%) of Cohort 7 Scholars are female.
- Nearly two-thirds (64%) of Cohort 7 Scholars self-identify as students of color.
- 42% of Cohort 7 Scholars self-identify as underrepresented minorities in STEM fields.
- Nearly two-thirds (65%) identify as first-generation college students.
- The median income of Cohort 7 Scholars is \$42,303.

4,486 Scholars from Cohorts 2-7 are expected to receive scholarship support in 2018–19.

- 86% of Cohort 2 - 7 Scholars currently attend four-year colleges or universities.
- The largest proportion of each cohort attends the University of Washington Seattle.
- Scholars can choose from over 150 high-demand STEM and health care majors offered at Washington state colleges and universities.
- Scholars from every legislative district in the state are enrolled.

As of November 1, 2018, 3,387 Scholars have graduated with a bachelor's degree.

- Most WSOS graduates (81%) live in Washington state, with 55% living in or near their hometown.
- Over three-quarters (77%) of employed WSOS graduates work in STEM or health care.
- The average annual gross salary of WSOS graduates employed full-time is \$62,297.

1. Employers in STEM fields are aware that there are certain racial and ethnic backgrounds that are underrepresented in the workforce. Individuals who identify as: American Indian or Alaska Native; Black or African American; Hispanic/Latino of any race(s); Native Hawaiian or Other Pacific Islander; or two or more races are considered to be underrepresented minorities in STEM fields.

ELIGIBLE EDUCATION PROGRAMS

SEC. 8.1 (a) Education programs the Washington State Opportunity Scholarship Board determined eligible for purposes of the Washington State Opportunity Scholarship.

At the outset of the Opportunity Scholarship, applicants could choose from 364 eligible majors. In 2015, the WSOS Board approved a list of eligible majors using updated information about which STEM and health care majors are in high-demand in Washington state. This refinement reduced the list of eligible majors from 367 to 182. From 2016 to the present, WSOS staff have continued to refine the list of eligible majors in keeping with the criteria established by the Board. Currently, there are 155 eligible majors which fall within 14 categories of study and are applicable to Scholars in Cohorts 6 and beyond. Eligible Scholars must be pursuing or intend to pursue a bachelor's degree in one of these majors to be eligible to receive WSOS funds.

To date, 86% of selected Scholars have indicated a desire to pursue a bachelor's degree in the top four major categories of study: health care (30%), engineering (25%), biological or biomedical sciences (18%) or computer information science (13%). See **Table 1 below and Appendix B** for details.

Table 1: Selected Scholars by Major Category of Interest²

MAJOR CATEGORY	COHORTS 1-6		COHORT 7		TOTAL	
	#	%	#	%	#	%
Health Professions and Related Programs	2,706	30%	558	30%	3,264	30%
Engineering, Engineering Technologies and Engineering-Related Fields ³	2,300	26%	378	20%	2,678	25%
Biological and Biomedical Sciences	1,627	18%	315	17%	1,942	18%
Computer and Information Sciences and Support Services	1,068	12%	361	19%	1,429	13%
Physical Sciences	395	4%	65	3%	460	4%
Mathematics and Statistics	247	3%	27	1%	274	3%
Multi/Interdisciplinary Studies ⁴	207	2%	34	2%	241	2%
Natural Resources and Conservation	145	2%	31	2%	176	2%
Education ⁵	126	1%	54	3%	180	2%
Agriculture, Agriculture Operations and Related Sciences	64	0.7%	7	0.4%	71	0.7%
Science Technologies/Technicians	9	0.1%	-	-	9	0.1%
Business, Management, Marketing, and Related Support Services	18	0.2%	10	0.5%	28	0.3%
Other	60	0.7%	22	1%	82	0.8%
GRAND TOTAL	8,972 ⁶	100%	1,862	100%	10,834	100%

2. Not all Scholars who are selected to receive the scholarship end up enrolling in college to become WSOS participants. Therefore, it is important to note that selected Scholars differ from actual cohort participants. The table above references the major of interest indicated on the application. Many college students change their major over time, and Scholars may not graduate in the same field they declared their initial interest. The totals in this table may not equal 100% due to rounding.

3. Engineering and Engineering Technologies & Engineering-Related Fields, while separate Classification of Instructional Programs (CIP) families, have been combined into one category in the table above.

4. For Cohorts 1 - 4, multi/interdisciplinary studies include biological and physical sciences, computational science, human biology, human computer interaction, marine sciences, mathematics, computer science and natural sciences only. For Cohort 5 and beyond, this category includes accounting and computer sciences, biological and physical sciences, human computer interaction, mathematics and computer science and natural sciences.

5. The major category for education includes biology, chemistry, computer, earth science, mathematics, physics and science teacher education only.

6. In 2018, WSOS completed a data fidelity project which included re-examining old cohort application files. During this project, staff corrected nine student's major categories, resulting in a minor shift for Cohorts 1-6 applications as listed in the 2017 Legislative Report.

SCHOLAR SPOTLIGHT

JASMINE FUERTE-STONE

Institution: University of Washington, Seattle

Major: Bioengineering

Class: Opportunity Scholar Graduate, 2017

Current Role: Research Associate, Infectious Disease Research Institute (IDRI)

Growing up, Jasmine wanted to figure things out, discover things for the fun of knowing. Science caught her attention and never let go. Even though the girls in her family were not encouraged to pursue college, she thought otherwise. Jasmine developed an interest in bioengineering and wanted to help people from disadvantaged areas of the world by coming up with solutions to health problems that were less expensive to develop.

Paying for college was a barrier. Then a teacher at her Vancouver, Washington high school told her about WSOS. The scholarship helped Jasmine achieve her dreams of getting a bachelor's degree in bioengineering at the University of Washington.

A combination of WSOS and other scholarships helped Jasmine cover her tuition and living expenses. WSOS helped connect her with a full-time position the summer before her senior year to work in a lab on campus that researches cardiac wound healing.

WSOS also provided her with multiple networking opportunities both with students, helping her form valuable study groups, and with inspiring women in STEM jobs, where they discussed possible graduate school options and career trajectories. She toured biotech companies, including the Infectious Disease Research Institute (IDRI), where she landed an internship and now works full time. At IDRI, she is part of a six-person virology-based team that's exploring and testing quicker and more effective responses to outbreaks, including Zika, Chikungunya, and other viruses.



“MY SCHOLARSHIP ALLOWED ME TO START RESEARCHING IN MY JUNIOR YEAR AS A VOLUNTEER IN THE LAB, PROVIDING ME WITH THE EXPERIENCE I NEEDED TO GET AN INTERNSHIP WHICH TURNED INTO A JOB AFTER GRADUATION.”

And WSOS support continues today, Jasmine says, through an alumni network that allows Scholars to stay connected, share opportunities, and get advice from one another. What's next? Jasmine is currently applying to PhD programs that research microbiology viral-host interactions that can be leveraged to prevent tropical diseases.

“We were so impressed by Jasmine’s work as a summer intern here at IDRI that it was a natural fit to hire her as an employee; she continues to be an outstanding contributor to IDRI’s science in her role as a research associate. IDRI is very pleased with our ongoing relationship with WSOS, as it not only provides great mentorship opportunities for our scientists but also helps build our scientific workforce for the future.”

—Lee Schoentrop, Communications Director at IDRI

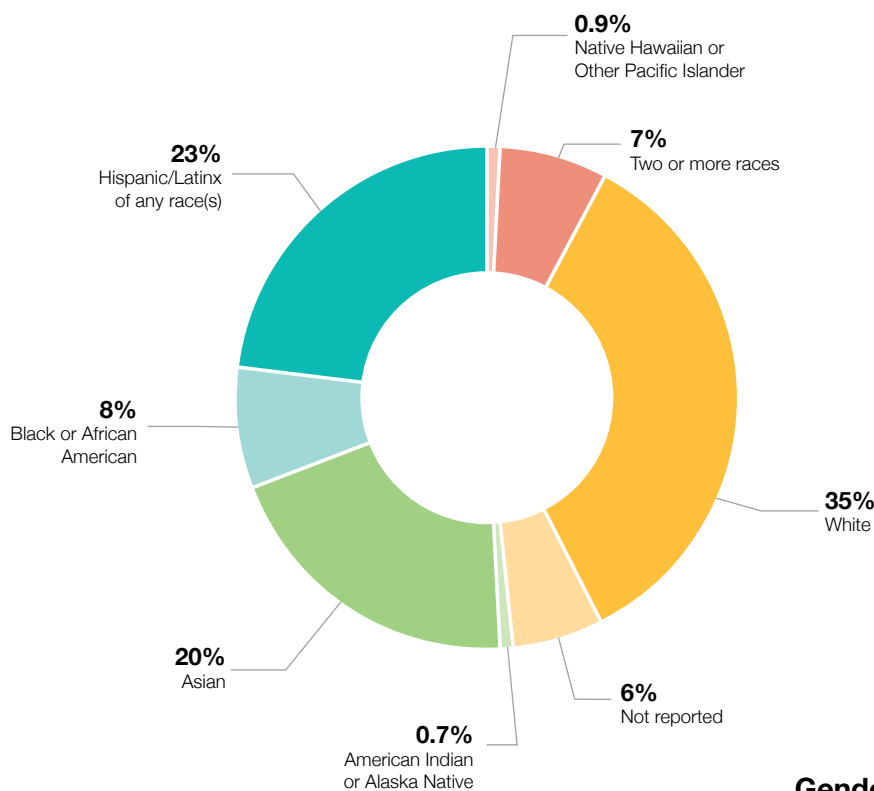
APPLICANT CHARACTERISTICS

SEC. 8.1 (b) The number of applicants for the Washington State Opportunity Scholarship disaggregated to the extent possible, by race, ethnicity, gender, county of origin, age and median family income.

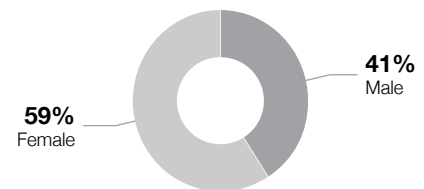
In total, 4,889 students submitted applications to join Cohort 7. Of those, 2,966 (61%) students met the eligibility⁷ requirements for the scholarship. Over half of eligible applicants were female (59%) or self-identified as students of color (59%). About two out of five (39%) eligible applicants self-identified as underrepresented minorities in STEM fields. Half (50%) identified as first-generation college students.⁸ See **Graphics 1 and 2**.

The majority of Cohort 7 eligible applicants self-identified as women and/or students of color. Eligible applicants for Cohort 7 came from 37 of Washington’s 39 counties.

Graphic 1: Race or Ethnicity of Eligible Applicants



GRAPHIC 2: Gender of Eligible Applicants⁹



7. Eligible applicants must be Washington state residents who have earned their high school credential from a Washington state high school or alternative program and intend to pursue an eligible, high-demand, four-year major in the STEM or health care fields from a Washington state college or university. Additionally, eligible applicants must have filed the Free Application for Student Financial Aid (FAFSA) or Washington Application for State Financial Aid (WASFA) and (if eligible) applied for Federal Education tax credits. Eligible applicants must have a family income equal to or less than 125% of the Washington state median income, controlling for family size (e.g., \$110,000 for a family of four for the 2018-19 application). Eligible applicants must have a GPA at or above 2.75, have been enrolled in college beyond high school for six or fewer quarters or four or fewer semesters (first bachelor’s degree only) at time of application.

8. n = 176 or 6% did not report their first generation status and are therefore unknown. These Scholars are excluded from the calculations above.

9. n = 11 or 0.4% of participants indicated their gender as “other”, and n=142 or 5% chose not to report their gender and are therefore unknown. All are excluded from the calculations above.

Counties with the most eligible applicants include:

- 29% in King County
- 12% in Pierce County
- 9% in Snohomish County
- 7% in Yakima County
- 7% in Spokane County
- 5% in Clark County

Most eligible applicants are 18 years old or younger.

At the scholarship application deadline,¹⁰ eligible applicants indicated they were the following ages:

- 86% were 18 years old or younger;
- 13% were 19 to 22 years old; and
- Less than 2% were 23 years old or older.

Eligible applicant income distribution demonstrated a greater proportion of applicants from the lower income deciles.

The median household income for all eligible applicants (regardless of household size) was \$52,073 while the mean family income for all eligible applicants was \$53,755.¹¹

For each household size, the maximum household income was divided into 10 equal categories to create income deciles (with 1 as the lowest and 10 as the highest). An individual in the lowest income decile reported a family income in the bottom 10% of eligible incomes for his or her family size. Conversely, an individual in the highest income decile reported a family income equal to 90% or more of the maximum eligible incomes for his or her family size. In total, eligible applicants for Cohort 7 came from the following income deciles:

- 30% from the lowest three income deciles (below the 30th percentile)
- 45% from the middle four income deciles (30th to 69th percentile)
- 25% from the top three income deciles (70th percentile or above)

10. For analysis purposes, age calculations were as of March 1, 2018.

11. All applicants determined to be eligible (n = 2,966) were confirmed to meet family income requirements through the Washington Student Achievement Council (WSAC). While WSAC has access to each student's filed FAFSA/WASFA to confirm family income, WSOS does not. Family incomes used for analyses in this report are from self-reported family income on the scholarship application. Ninety-six (3%) students confirmed as eligible via WSAC reported ineligible family incomes (in excess of the maximum for their reported family size) on their application form; therefore, their reported family income was deemed invalid and excluded from all family income analyses.

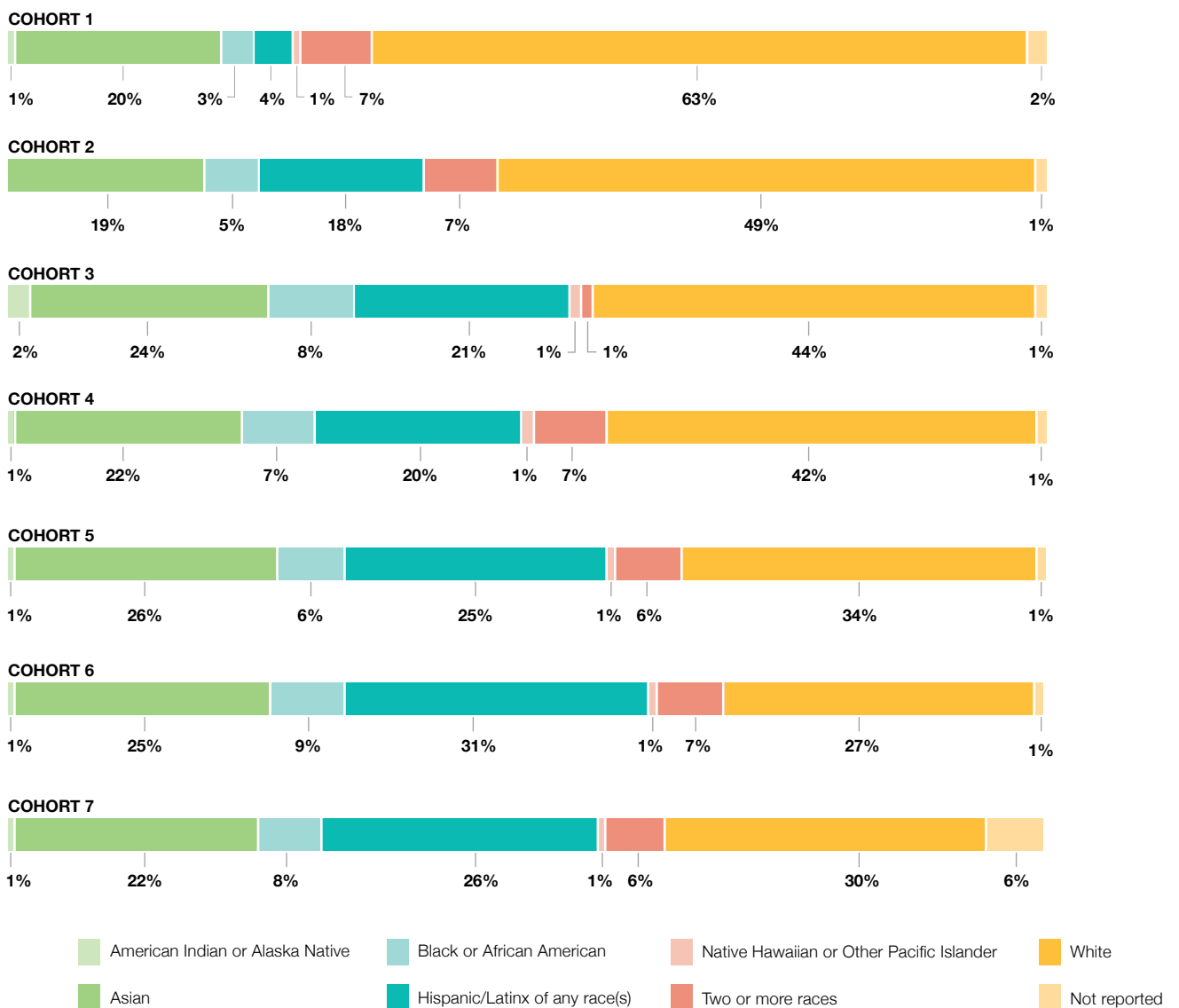
SCHOLAR CHARACTERISTICS

SEC. 8.1 (c) The number of Scholars in the Washington State Opportunity Scholarship program disaggregated to the extent possible, by race, ethnicity, gender, county of origin, age and median family income.

Of the 2,966 eligible applicants who applied to be a part of Cohort 7, 1,862 were selected. As of November 1, 2018, 122 Cohort 7 selected Scholars had either not enrolled in college in Washington state, enrolled less than half-time or withdrew. This leaves 1,740 (93%) selected Cohort 7 Scholars enrolled for the 2018-19 academic year. In total, 61% of Cohort 7 Scholars are female (n=1,009), 39% are male (n=649).¹² Nearly two-thirds (65%) identified as first-generation college students.¹³

Over time, WSOS Cohorts have been comprised of an increasing percentage of students of color and more students who are traditionally underrepresented in STEM or health care fields. See Graphic 4.

Graphic 3: Race or Ethnicity of Scholars

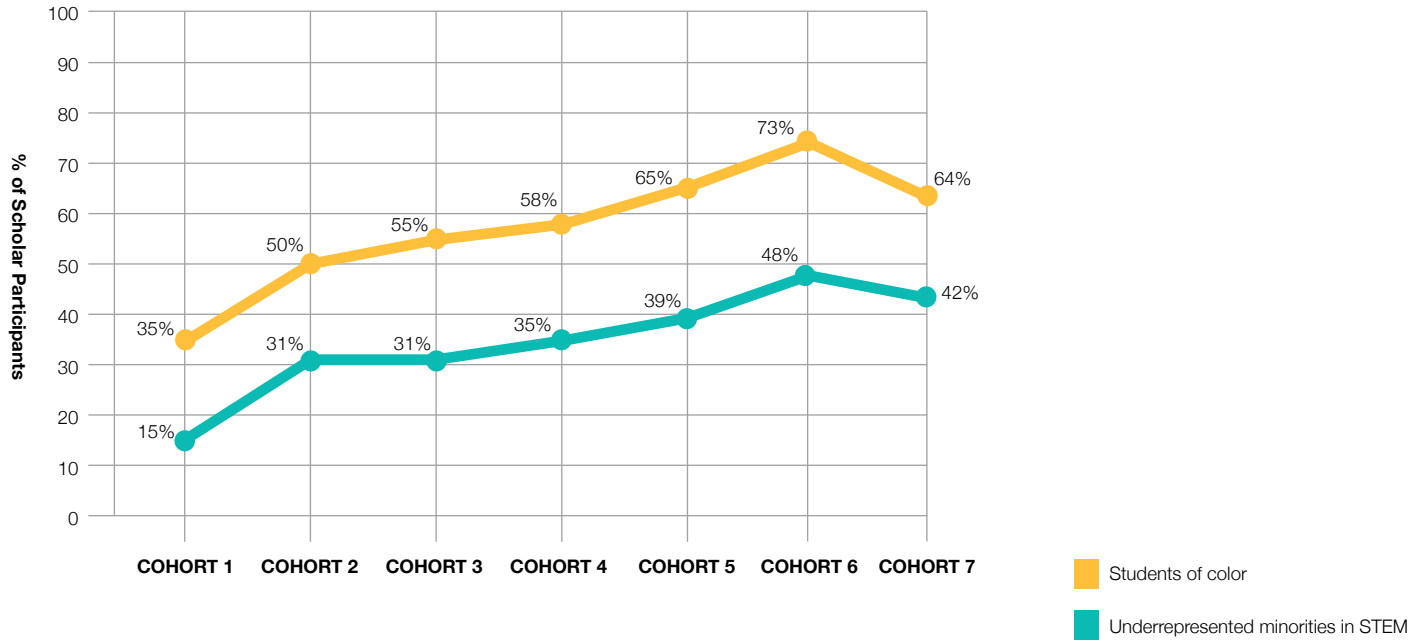


12. Seventy-eight (4%) of Cohort 7 participants indicated they preferred not to identify as male or female. Four (0.2%) indicated a gender of "Other." They are excluded from the calculations above.

13. Seventy-nine (5%) did not indicate their first generation status and are excluded from the calculations above.

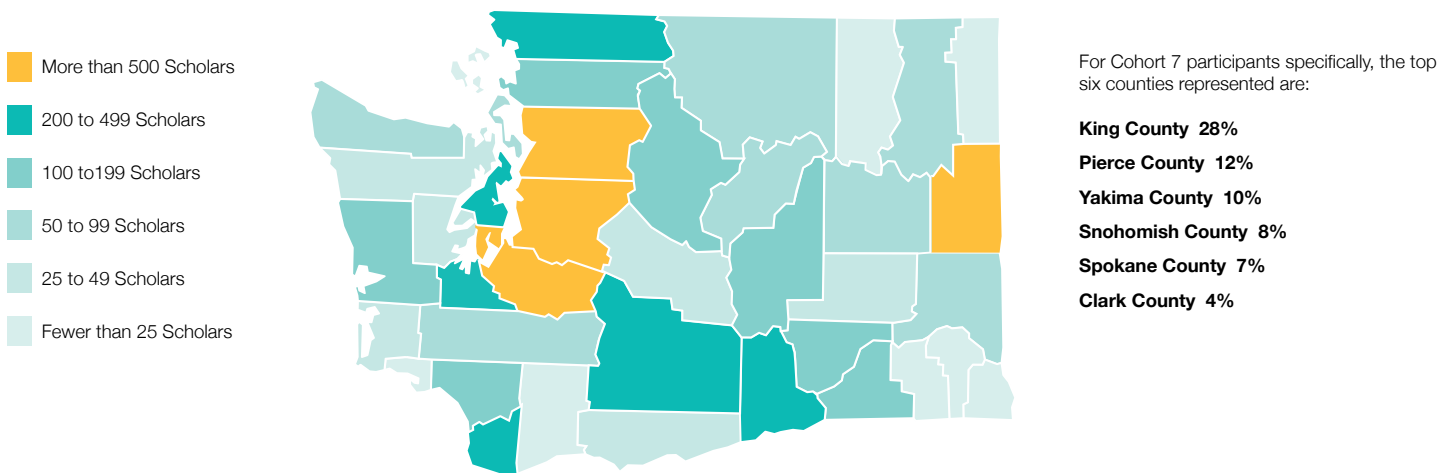
Of Cohort 7 participants, nearly two-thirds (64%) identify as students of color. Of additional interest is that 42% of Cohort 7 participants identify as underrepresented minorities in STEM fields.¹⁴ See **Graphic 4**. For details on the race or ethnicity of Scholars Cohorts 1 – 7, see **Appendix C**.

Graphic 4: Scholars Who Identify as Students of Color and Underrepresented Minorities in STEM



Scholars in Cohorts 1 – 7 have come from every county in the state. The top six counties by proportion of Cohort 1 – 7 Scholars are: King (31%), Pierce (12%), Snohomish (9%), Spokane (7%), Yakima (7%) and Clark (6%). See **Appendix D** for more details. **Graphic 5** below illustrates Scholar home counties for all cohorts.

Graphic 5: Home County¹⁵ for Cohorts 1 – 7 Scholars



14. Employers in STEM fields are aware that there are certain racial and ethnic backgrounds that are underrepresented in the workforce. Individuals who identify as: American Indian or Alaska Native; Black or African American; Hispanic/Latinx of any race(s); Native Hawaiian or Other Pacific Islander; or two or more races are considered underrepresented minorities in STEM fields.

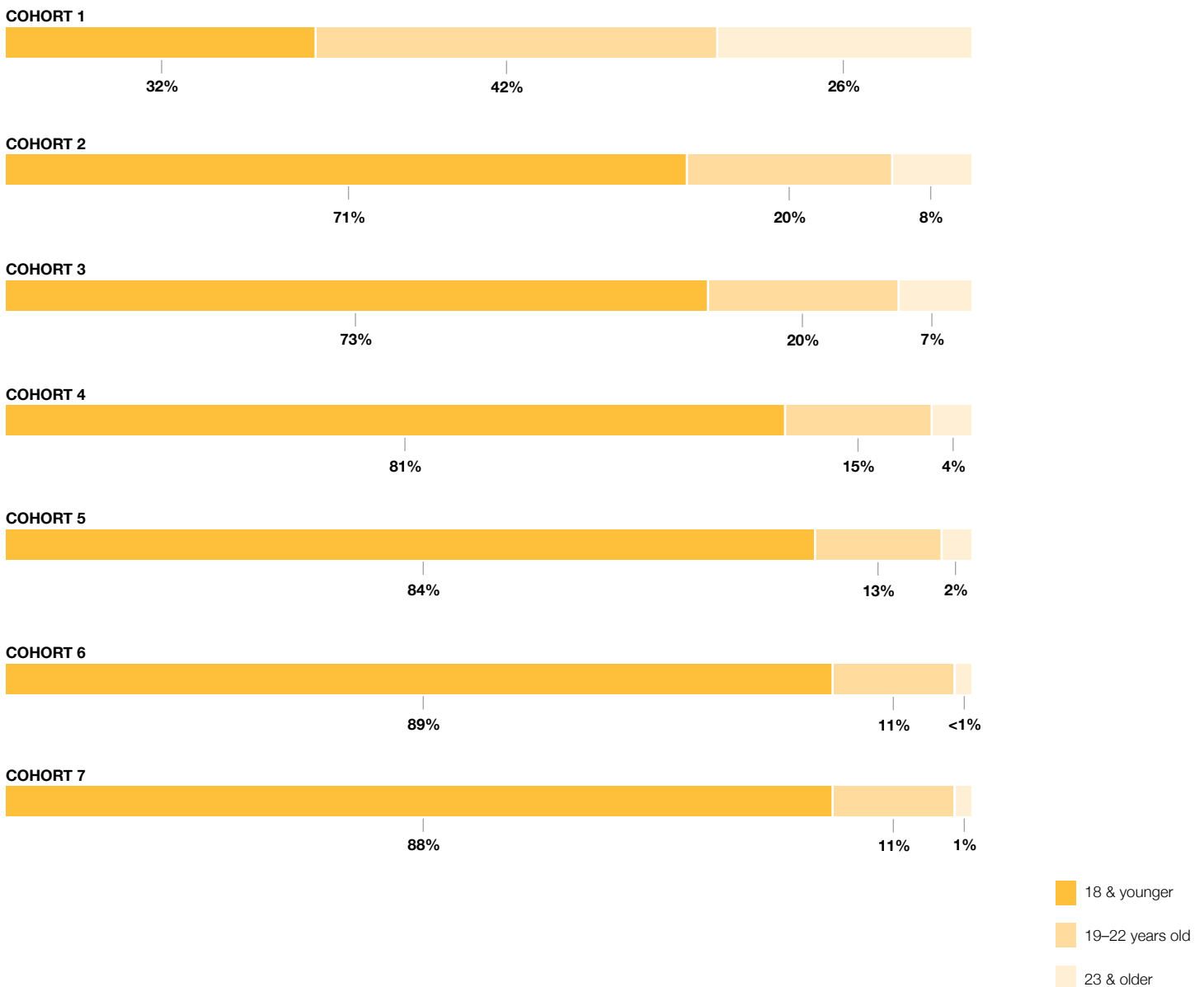
15. Home county is determined by the zip code of the graduated high school listed on Scholars' original applications.

Most Cohort 7 participants (88%) are 18 years old or younger. At the scholarship application deadline, Cohort 7 participants indicated they were the following ages:¹⁶

- 88% were 18 years old or younger;
- 11% were 19 to 22 years old; and
- 1% were 23 years old or older.

Over time, more Scholars aged 18 and younger have applied to WSOS. The increase in younger applicants between Cohort 1 and Cohort 2 coincides with the WSOS Board’s decision to allot a higher proportion of scholarships to incoming first-year college students and a change in scholarship eligibility criteria. The new criteria limits the eligible class standing beginning with Cohort 2 applicants to entering their first, second or third year in college. In contrast, Cohort 1 Scholars in their fourth or fifth year of college were also eligible to be selected for the scholarship.

Graphic 6: Age of Cohort 1 – 7 Scholars by Percent



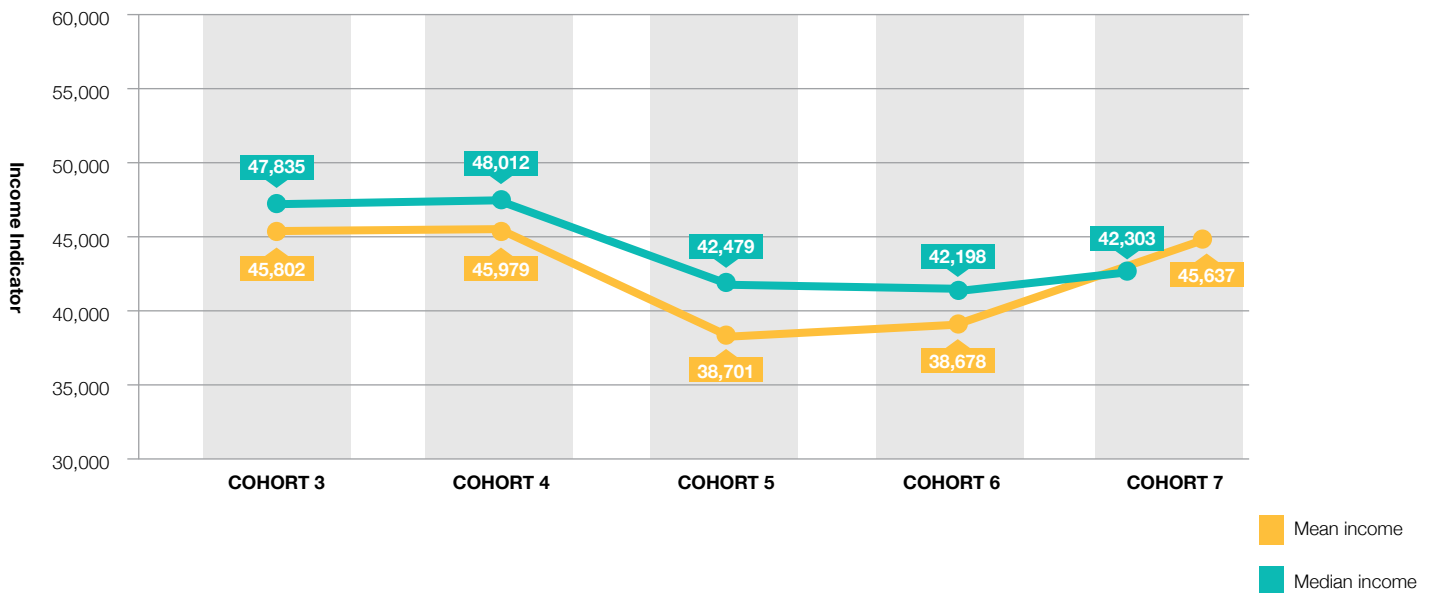
16. For analysis purposes, age calculations were as of March 1 of the year of application.



Riley Germanis is an Opportunity Scholar alumnus, who now works as a math teacher at Decatur High School in Federal Way, Washington. Riley graduated with a mathematics degree from Western Washington University in 2014 and a Masters in teaching math and science from Seattle Pacific University in 2015.

The median and mean family income (regardless of household size) for Cohort 7 Scholars is higher when compared with Cohort 6 Scholars.¹⁷ The median family income for Cohort 7 was \$42,303 (compared with \$38,678 for Cohort 6), while the mean family income for Cohort 7 is \$45,637 (compared with \$42,198 for Cohort 6).

Graphic 7: Mean and Median Income by Cohort

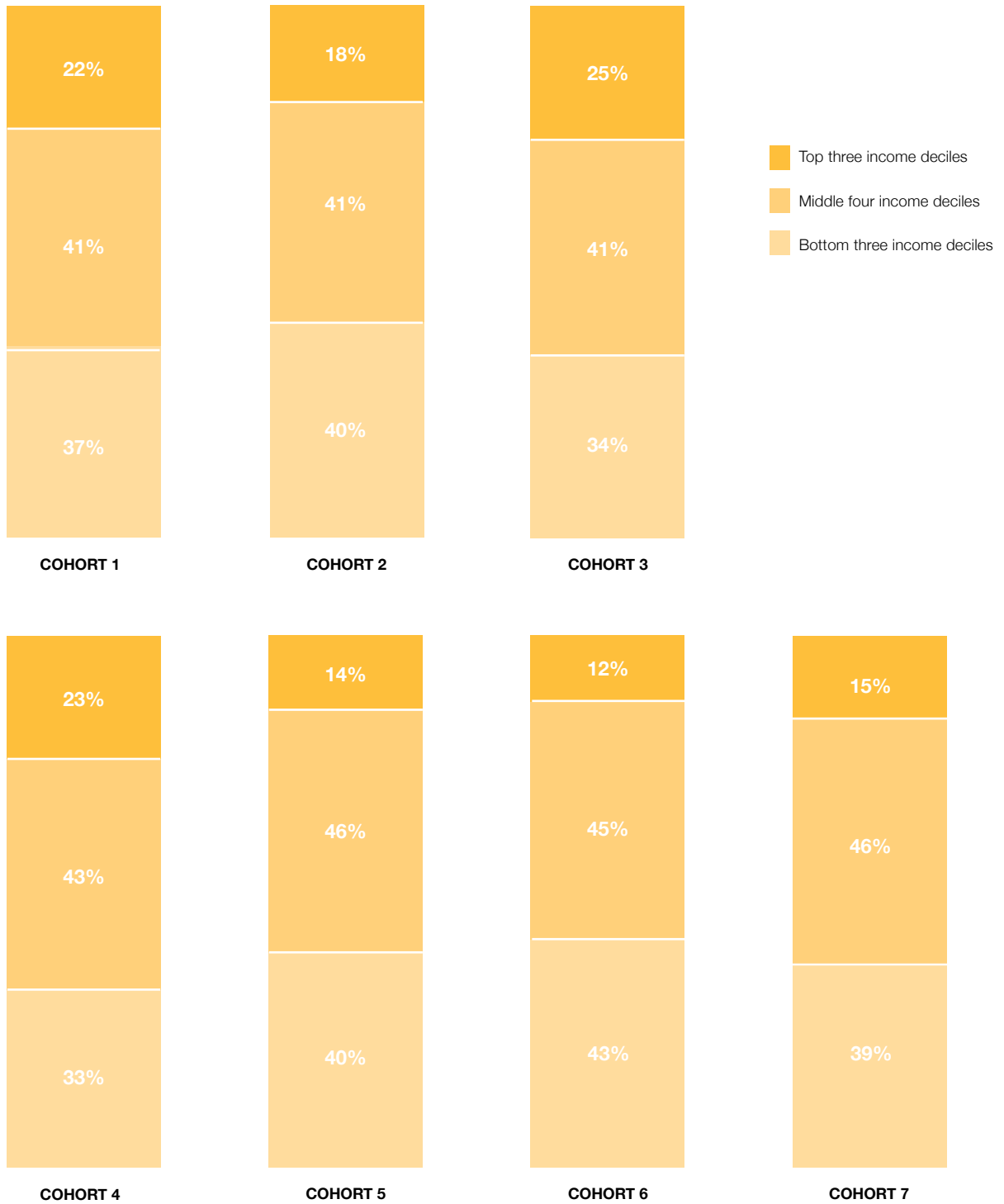


17. All applicants determined to be eligible ($n = 2,966$) were confirmed to meet family income requirements through WSAC. While WSAC has access to each student's filed FAFSA/WASFA to confirm family income, WSOS does not. Family incomes used for analyses in this report are from self-reported family income on the scholarship application. Ninety-six (3%) students confirmed as eligible via WSAC reported ineligible family incomes (in excess of the maximum for their reported family size) on their application form; therefore, their reported family income was deemed invalid and excluded from all family income analyses.

In total, Cohort 7 Scholars come from the following income deciles:

- 39% from the lowest three income deciles (below the 30th percentile)
- 46% from the middle four income deciles (30th to 69th percentile)
- 15% from the top three income deciles (70th percentile or above)

Graphic 8: Family Incomes of Cohort 1 – 7 Scholars





Matt Lee (*front*) is an Opportunity Scholar studying electrical engineering at the University of Washington's Seattle campus. Matt has completed three internships at Boeing and is pictured here with his mentor Mason Mazza. Matt and Mason were connected through our Skills that Shine mentorship program. Matt is anticipated to complete his degree this year.

SCHOLARSHIP DISBURSEMENT

SEC. 8.1 (d) The number and amount of scholarships actually awarded and whether the scholarships were paid from the scholarship account or the endowment account.

WSOS funding is renewable for up to five years of college attendance depending on class standing at time of selection. In the initial year of the program (2012-13), Scholars received only \$1,000.

In 2013-14, the WSOS Board increased the scholarship amount to \$5,000 for Scholars who attained junior class standing and were accepted into an eligible high-demand major. In 2014-15, the WSOS Board increased the minimum scholarship amount from \$1,000 to \$2,500 for students in their first or second year in college. In addition, they increased the scholarship amount to \$7,500 for Scholars who achieved senior class standing and had been accepted into an eligible, high-demand major. The annual award amounts section of the WSOS website explains our current model in detail.

As of November 1, 2018, 4,486¹⁸ Scholars across Cohorts 2 - 7 were enrolled for the 2018-19 academic year. Of these Scholars, 2,828 were eligible to receive up to \$2,500; 1,130 were eligible to receive up to \$5,000; and 528 were eligible to receive up to \$7,500 over the course of the academic year (**Table 2**). From 2012-13 to 2018-19, scholarships have been awarded to 10,113 unique Scholars.¹⁹ See **Appendix E** for all scholarships awarded 2012-13 through 2018-19.

18. This number is determined by the number of Scholars with anticipated disbursements for the 2018-19 academic year as of this date. It includes currently enrolled Scholars as well as those with an approved Leave of Absence.

19. Three students who withdrew were selected for a future cohort to rejoin the program. In the unique count, they are included only once.

Table 2: Number of Scholarships Awarded in 2018–19 by Cohort and Maximum Amount²⁰

ACADEMIC YEAR	COHORT	MAXIMUM ANNUAL AWARD AMOUNT				TOTAL # ANNUAL SCHOLARSHIPS AWARDED
		\$1,000	\$2,500	\$5,000	\$7,500	
2018-19	Cohort 2	-	-	1	-	1
	Cohort 3	-	-	71	-	71
	Cohort 4	-	-	34	363	397
	Cohort 5	-	-	805	87	892
	Cohort 6	-	1,182	125	78	1,385
	Cohort 7	-	1,646	94	-	1,740
	ANNUAL TOTAL	-	2,828	1,130	528	4,486

20. The maximum annual award amount does not necessarily reflect the dollars that will be received by a Scholar. If other funding sources leave less than the maximum award amount due to a Scholar's institution, only the balance remaining would be paid in WSOS funds. Maximum annual award amount was calculated using Scholars' estimated grade (based on years passed in program and grade at time of application).



BY THE END OF 2018-19, SCHOLARS WILL HAVE RECEIVED OVER \$64 MILLION IN SCHOLARSHIP DOLLARS.

Rutha Nuguse is an Opportunity alumna who graduated from the University of Washington Tacoma in 2017. Rutha is a software engineer at Microsoft.

All scholarships are paid from the Scholarship Account. Between the 2012-13 academic year and the 2017-18 academic year, \$49,184,297 has been disbursed in scholarships to Scholars. In 2018-19, another \$15,282,400 in scholarship funding is anticipated for disbursement for an estimated grand total of scholarship funds awarded by the end of 2018-19 of \$64,466,697. See **Table 3**.

Table 3: Scholarship Funding Disbursed to Date²¹

ACADEMIC YEAR	SCHOLARSHIP FUNDING DISBURSED
2012-13	\$2,871,641
2013-14	\$5,725,844
2014-15	\$8,739,555
2015-16	\$9,293,107
2016-17	\$10,161,447
2017-18	\$12,392,703
ANTICIPATED DISBURSEMENT FOR 2018-2019	\$15,282,400

21. The maximum annual awards amounts in Table 2 are calculated using Scholars' estimated grade level. Many Scholars will receive less than the maximum award amount because their financial need has already been met elsewhere or other nuances of awarding. Total anticipated disbursements as noted in the table above better represent anticipated totals for disbursement based on individual student circumstances. Anticipated disbursement data for 2018-19 is as of November 6, 2018. This includes actual disbursements through this date as well as anticipated disbursements through the end of the academic year. Scholarship funding disbursed for prior years is based on accounting records for those historical terms.

SCHOLAR SPOTLIGHT

AGUSTIN CASTRO

Institution: University of Washington Seattle

Major: Civil engineering

Class: Opportunity Scholar, anticipated graduation 2020

Agustin is the first person in his family to go to college. He attributes much of the motivation behind this accomplishment to his dad who grew up on a farm in Mexico with 11 siblings and didn't get to finish high school. He pushed Agustin to study hard and engrained in him the belief that higher education would open doors. Agustin had always loved math and science and decided that engineering offered ways to solve complex problems, help people and have a meaningful career.

College tuition, of course, was its own problem. His dad had run his own house painting business for a generation to help support his family, but money was still tight. Agustin cobbled together several scholarships, including WSOS, and his dad couldn't believe they covered all the costs for his first year at the University of Washington. Starting in his Sophomore year, however, the WSOS funds continued while his other scholarships sunsetted. Agustin took advantage of all the other benefits available to Scholars to help guide him toward a promising future.

He joined Skills that Shine, the WSOS industry mentorship program, that, like a dating app, looks at your interests and skills and matches you with a professional mentor. His experience, he says, couldn't have gone any better. He was matched with Justin Anderson, a Project Engineer at HNTB, a national civil engineering consulting and construction management firm. He spent six months meeting regularly with Justin, talking about the industry, asking endless questions, learning the terminology and getting more clarity about his career.



“MY DAD ALWAYS TELLS ME TO PURSUE EDUCATION, SO I DON'T HAVE TO DO WHAT HE'S DOING. HE TAKES PRIDE IN HIS WORK AND SO DO I, BUT HE UNDERSTANDS THE TOLL IT TAKES, AND HE WANTS ME TO HAVE MORE OPPORTUNITIES THAN HE HAD TO GO TO SCHOOL AND PURSUE MY DREAMS.”

At HNTB, he landed a Traffic Design Intern position last summer which he was able to continue part time in his Junior year and gain hands on experience proofing civil engineering plans for Sound Transit's Lynnwood Link Extension and incorporating last minute changes. As locals know, I-5 corridor traffic is notoriously awful and is only being exacerbated by increased growth. Agustin enjoys complicated challenges and wants to be part of a team that develops solutions. While it might never be perfect, he appreciates optimization and figuring out strategies that make things incrementally better.

Agustin finds WSOS mentorship opportunities invaluable and is giving back. He's a WSOS Scholar Lead, mentoring 15 first-year students who are interested in civil engineering. He guides them through developing their academic plans to ensure they're on course to fulfill their requirements and graduate on time.

He's also exploring summer internships with contractors on the construction side, so he can see engineering plans to fruition. These meetings and interviews provide more rich networking opportunities where he's learning about where to start his career, how to solve conflicts, and discussing relocation opportunities. On top of that, each Spring, WSOS gives Scholars a chance to do speed networking with professionals in related fields.

“Agustin has exceeded all expectations since I first met him through the mentorship program, and he has significantly contributed to our traffic design team on many different projects through our internship program at HNTB. I had the pleasure of being his mentor, and I have been humbled and inspired by his efforts to become a civil engineer. It has been my pleasure to help Agustin tell his story and provide an opportunity to turn ambitions into reality.”

—Justin Anderson, Project Engineer at HNTB and Agustin's mentor



WSOS HAS SUPPORTED MORE THAN
3,300 SCHOLARS IN EARNING A
BACHELOR'S DEGREE.

Monish Naidu (*left*) is an Opportunity Scholar alumnus who graduated from the University of Washington Seattle with a degree in biochemistry in 2016. He is currently pursuing graduate studies in computer science through the Align Master's program at Northeastern University. Zak Hussain (*right*) is also an Opportunity Scholar alumnus who graduated from the University of Washington Seattle with a degree in neurobiology and anatomy this year. Zak started the Align Master's program in computer science this fall.

PROGRAM ENROLLMENT

SEC. 8.1 (e) The institutions and eligible education programs in which Washington State Opportunity Scholarship Scholars enrolled, together with data regarding Scholars' completion and graduation.

As of November 1, 2018, 3,387 Cohorts 1 - 6 Scholars had graduated with a bachelor's degree. See **Appendix G** for details of major categories of graduates by cohort. (See **Appendix H** for details of graduation by institution.) In 2018 -19, 2,746 Cohort 2 - 6 Scholars had re-enrolled to join the 1,740 Cohort 7 enrolled Scholars.

Table 4: Participant Enrollment, Retention and Graduation by Cohort²²

	TOTAL PARTICIPANTS		GRADUATED		RE-ENROLLED		Graduated or Re-Enrolled	
	#	#	%	#	%	#	%	
COHORT 1 (2012)	2,887	2,219	77%	-	-	2,219	77%	
COHORT 2 (2013)	713	540	76%	1	-	541	76%	
COHORT 3 (2014)	734	414	56%	71	10%	485	66%	
COHORT 4 (2015)	982	144	15%	397	40%	541	55%	
COHORT 5 (2016)	1,344	67	5%	892	66%	959	71%	
COHORT 6 (2017)	1,708	3	0.2%	1,385	81%	1,388	81%	
COHORT 7 (2018)	1,748	-	-	-	-	-	-	
TOTAL C1-C6 PARTICIPANTS	8,368	3,387	40%	2,746	32%	6,133	73%	

Engineering, health care and biology are the most common degrees earned and pursued in 2018–19.

To date, 3,387 Cohort 1 - 7 Scholars have earned 3,709 bachelor's degrees. Among the 3,709 degrees earned, 3,069 (83%) of those degrees were earned in STEM or health care.²³ In 2018-19, 4,486 Cohort 2 - 7 Scholars are pursuing a bachelor's degree. Biology, engineering, and health care represent more than half (57%) of all bachelor's degrees earned to date (n=2,068 out of 3,709 or 20%, 20% and 17%, respectively). Health care, engineering, and biology represent two-thirds (66%) of all bachelor's degrees currently pursued (n=2,960 out of 4,486 or 26%, 21% and 20%, respectively). See **Graphic 9**.

22. Previous graduation data has been updated to reflect revised scholarship disbursement and/or graduation information. Note that this has slightly reduced the number of participants in some cohorts from previously printed legislative reports due to timing differences. Only Scholars who received funding and earned their first bachelor's degree after the academic year of their first scholarship disbursement or later are included in the analysis above. Total participant numbers listed above include all Scholars who received a net disbursement greater than zero as of this report's publication.

23. Please note that many Cohort 1 Scholars originally entered the program under college majors in 2012-13 that became ineligible in 2013-14. Additionally, college students change their major over time; while Scholars only receive funding while studying in eligible fields, some Scholars receive funding while in an eligible field but later transfer and graduate in a non-STEM or health care field. Finally, some Scholars (n=320) earn more than one bachelor's degree. In these cases, oftentimes the Scholar earns one degree in a STEM or health care field and a second degree in a non-STEM or health care degree. (Of the 3,387 graduates to date, 2,829 or 84% earned at least one degree in a STEM or health care field). As a result of these complications, n=640 (17% of degrees earned) are in non-STEM or-health care fields.

Graphic 9: Bachelor's Degrees Earned to Date and Pursued by Enrolled Scholars in 2018–19²⁴

	ENROLLED SCHOLARS (2018–19)	BACHELOR'S DEGREES AS OF 11/1/2018
Health Professions and Related Programs	1,138 (25%)	613 (17%)
Biological and Biomedical Sciences	911 (20%)	730 (20%)
Engineering	911 (20%)	725 (20%)
Computer and Information Sciences and Support Services	733 (16%)	325 (9%)
Physical Sciences	157 (3%)	205 (6%)
Multi/Interdisciplinary Studies	114 (3%)	112 (3%)
Natural Resources & Conservation	124 (3%)	110 (3%)
Engineering Technologies and Engineering-Related Fields	82 (2%)	18 (0.5%)
Mathematics and Statistics	111 (2%)	148 (4%)
Education	82 (2%)	69 (2%)
Agriculture, Agriculture Operations and Related Sciences	43 (1%)	33 (0.9%)
Business, Management, Marketing and Related Support Services	30 (0.7%)	133 (4%)
Architecture and Related Services	49 (1%)	9 (0.2%)
Family and Consumer Sciences/Human Services	1 (0.02%)	12 (0.3%)
All Other	(0.0%)	467 (13%)
TOTAL	4,486	3,709²⁵

24. Since many college students change their major over time, degrees pursued in 2018-19 represents the most recent major reported by Scholars with anticipated scholarship disbursements in 2018-19 but does not necessarily reflect the major in which Scholars will eventually graduate. While Scholars may ultimately earn degrees in ineligible majors, they only receive funding when enrolled in eligible majors. Total proportions may exceed or fall below 100% due to rounding.

25. 318 Scholars earned bachelor's degrees in two different major categories. Two Scholars earned three degrees. Therefore, the total bachelor's degrees earned is 3,709 while the total unique Scholars is 3,387.

Most Scholars (86%) currently attend four-year colleges or universities.

The remaining Cohort 2 Scholar, 99% of Cohort 3 Scholars, 98% of Cohort 4 Scholars, 90% of Cohort 5 Scholars, 84% of Cohort 6 Scholars and 81% of Cohort 7 Scholars are enrolled in four-year public or private institutions for the 2018-19 academic year. See **Table 5**. While a larger proportion of Cohort 7 Scholars are currently attending two-year community or technical colleges (19%), we anticipate that many will transfer to a four-year college or university within two years as evidenced by the behavior of Scholars in earlier cohorts.

The largest proportion of Cohort 7 Scholars attend the University of Washington Seattle.

The proportions of Cohort 7 Scholars per school with the most attendees are ranked as follows:

- University of Washington Seattle: n=594, 34%
- Washington State University Pullman: n=171, 10%
- Western Washington University: n=107, 6%
- Eastern Washington University: n=89, 5%
- Central Washington University: n=81, 5%

Table 5: 2018–19 Attendance by Institution Type by Cohort²⁶

INSTITUTION TYPE	COHORT 2 (2013)	COHORT 3 (2014)	COHORT 4 (2015)	COHORT 5 (2016)	COHORT 6 (2017)	COHORT 7 (2018)	ALL ENROLLED SCHOLARS 2018-19
Four-Year Independent College	0%	4%	13%	13%	11%	13%	12%
Four-Year Public College	100%	94%	85%	77%	73%	69%	73%
College – Two-Year	0%	1%	2%	10%	16%	19%	14%

The proportions of Scholars Cohorts 2 - 7 per school with the most attendees are ranked as follows:

- University of Washington Seattle: n=1,705; 37%
- Washington State University Pullman: n=474; 10%
- Western Washington University: n=238; 5%
- Eastern Washington University: n=236; 5%
- Central Washington University: n=171; 4%

Graphic 10: Institutions with the Highest Scholar Enrollment (2018 –19)



The top three schools from which the greatest number of Scholars have graduated include:

- University of Washington Seattle: n=1,336; 39%
- Washington State University Pullman: n=376; 11%
- Western Washington University: n=195; 6%

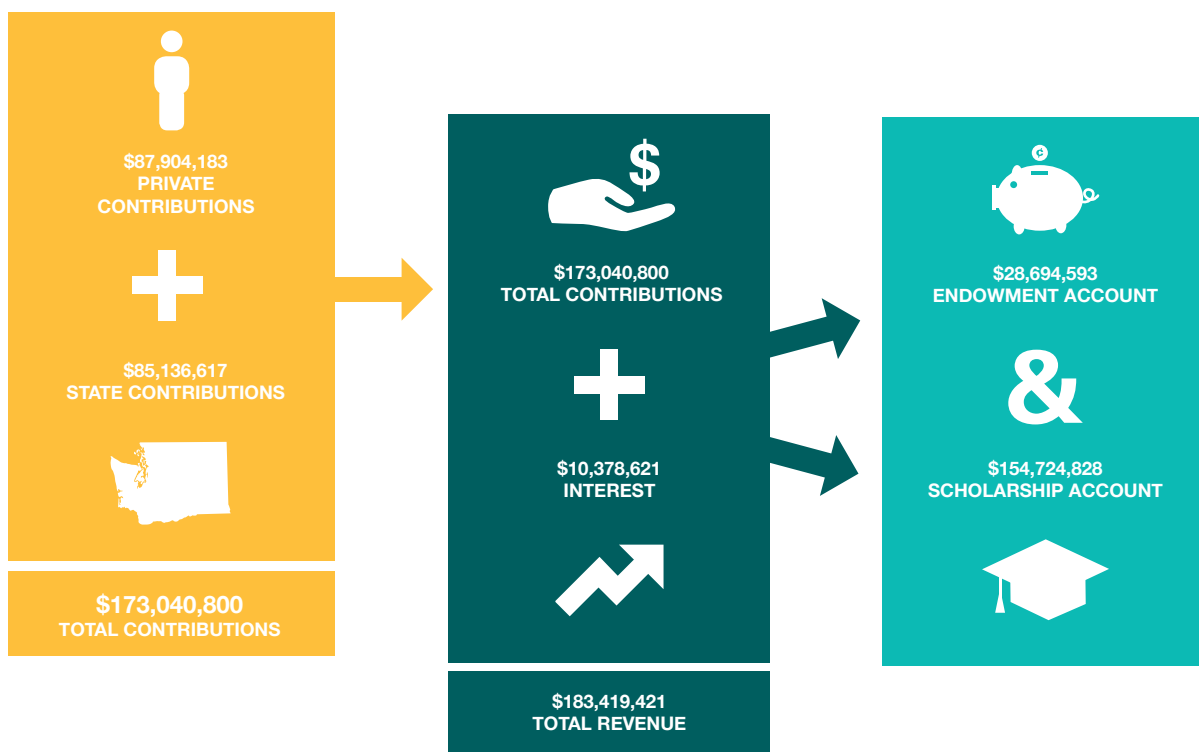
26. Total proportions may exceed or fall below 100% due to rounding.

CONTRIBUTIONS

SEC. 8.1 (f) The total amount of private contributions and state-match funds received for the Washington State Opportunity Scholarship program, how the funds were distributed between the scholarship and endowment accounts, the interest or other earnings on the accounts and the amount of any administrative fee paid to the program administrator.

As of October 31, 2018, private contributions and state-match dollars accounted for \$87,904,183 and \$85,136,617, respectively. Funds in the amount of \$154,724,828 have been distributed to the scholarship account and \$28,694,593 has been distributed to the endowment account.²⁷ The accounts have earned \$10,378,621 in interest. The total administrative fee paid to the prior program administrator, the College Success Foundation, is \$5,082,672. The total administrative fee paid to the current program administrator, Washington STEM, to October 31, 2018, is \$735,757. In total, administrative fees of \$5,818,429 have been paid. See **Graphic 11**.

Graphic 11: WSOS Contributions, Distributed Funds and Interest Earnings



27. Includes investment income (including unrealized gains) from both the scholarship and endowment accounts.

EXPANSION PROGRAM

SEC. 8.1 (g) Identification of the programs the Washington State Opportunity Scholarship Board selected to receive Opportunity Expansion awards and the amount of such awards. Opportunity Account to be leveraged in 2015.

In addition to managing the scholarship portion of WSOS, per HB 2801, the WSOS Board of Directors also has the authority to distribute donations to the Opportunity Expansion Fund (OEF).

Under this 2011 legislation, Washington companies could donate high-tech, research & development (R&D) tax credits to the Fund between June 2011 and January 2015 and the total contributions would be used toward increasing the capacity of Washington colleges and universities to produce high-demand degrees.

As of October 31, 2015, \$6,000,326.64 had been certified and transferred to the Opportunity Expansion Account for the purpose of supporting opportunity expansion awards. Microsoft was the only company to contribute funds.

In late 2015, a working group of 14 community, business and government leaders was convened to develop a Request for Information (ROI) process, review final applications and identify three final proposals to grant out the opportunity expansion awards. In the initial round of applications, 20 colleges and universities responded with requests totaling nearly \$50 million.

In June of 2016, the WSOS Board of Directors approved funding for the proposals below. Grants were awarded in full to winning institutions by August 2016.

\$2.2M to University of Washington's STARS Program

The University of Washington's STARS program provides intensive wraparound services to first-year, Pell-eligible engineering students from Washington high schools. The Opportunity Expansion Fund grant enabled the STARS program to accept a larger cohort of students for the 2017-18 and 2018-19 academic years, which ultimately resulted in 20-35 engineering and computer science degrees awarded to Washington residents from low-income backgrounds. In addition to serving an extended cohort of intensive STARS participants, the WSOS Opportunity Expansion Funding enabled the Engineering Academic Center (EAC) to enroll 215 students in supplemental engineering workshops.

\$2.2M to Central Washington University for their Teach STEM Program

The Teach STEM Program at Central Washington University (CWU) is a new teacher recruiting and retention program modeled after the University of Texas Austin's UTeach program. Teach STEM aims to develop and offer a new computer science teaching endorsement and math competency. Through the Opportunity Expansion Fund grant, the Teach STEM program has increased the number of students who have enrolled in STEM teaching courses. In 2017-2018, 116 students took Teach STEM courses. This is an approximately 25% increase in enrollment in science and math teaching programs versus the average of the three previous years. This trajectory meets CWU's goal to double the number of STEM teaching graduates by spring 2022. The Opportunity Expansion Fund grant also enabled CWU to develop a new computer science teaching endorsement which was launched for the 2018 -19 academic year.

\$1.6M to Western Washington University's computer science degree program and to develop a new computer science K-12 endorsement at WWU's Center for Science Math and Technology (SMATE).

By 2020, Western Washington University (WWU) will graduate 175 students with a Bachelor of Science degree in computer science and deliver professional development for 10 K-12 teachers (pre-service or in-service) each year. Through the support of the Opportunity Expansion Fund grant in 2017-18, WWU was able to offer 15 more sections of computer science courses as compared to the previous year, which contributed to 150 computer science graduates and 10 Cybersecurity graduates in 2018.

SCHOLAR SPOTLIGHT

EWURAMA KARIKARI

Institution: University of Washington Seattle

Major: Mechanical engineering

Class: Opportunity Scholar, anticipated graduation 2019

A robotics club at Ewurama's high school helped her discover an exciting way to apply her interest in math and fueled her pursuit of a degree in mechanical engineering at the University of Washington. She had the requisite AP credits to help her get accepted, but soon discovered that, in many ways, her high school academic experience had ill-prepared her for the rigorous challenges she faced in college.

That's where WSOS stepped in. Not only did the Scholarship help cover tuition, WSOS provided her with a support system that helped her overcome obstacles...like Calculus. WSOS offers Scholar mentors and Scholar peers who helped Ewurama navigate new systems, make new friends, and pass along their knowledge and experience in meaningful ways.

As a senior this year, WSOS is allowing her to focus on her research rather than having to find an extra job. She's working on creating a 3D robotic joint that can be used in the food service industry and help avoid contamination.



“WSOS OFFERS GREAT NETWORKING OPPORTUNITIES BECAUSE THEY’RE CONNECTED TO SO MANY PROFESSIONALS IN OUR FIELDS. ONE THING LEADS TO ANOTHER AND, THANKS TO THEIR CONNECTIONS TO SO MANY DIFFERENT BUSINESSES AND SCHOOLS, THERE’S ALWAYS A GOOD OPPORTUNITY TO NETWORK AND MEET NEW PEOPLE.”

WSOS has offered Ewurama multiple opportunities to collaborate, network, and gain mentorship. Through the Skills that Shine mentorship program, she was paired with a mentor at Synapse Product Development, Inc. who shared her professional experiences and interests. Her mentor worked with her for an entire year, learning about her interests, offering career advice, even helping with her resume. Ewurama secured a paid internship at Boeing for two summers, working with product and technology integration and design engineering with flight controls. She really enjoyed the collaborative group dynamic which offered hints as to what her career would look like after graduation.

Ewurama's parents, who live in Spanaway, Washington, immigrated from Ghana and sacrificed a lot for her family, she says. Ewurama and her siblings are certainly paying back that commitment. Her older sister is pursuing a Master's in Public Health while her younger brother is a freshman at the UW studying Neurobiology. Her brother is also an Opportunity Scholar, giving her another opportunity to be a mentor and pay forward all the support she has received along her own path. Despite juggling all these responsibilities, Ewurama still finds time to go roller skating with friends and performs traditional dances from Ghana on Afro-Caribbean night each spring at UW.

SCHOLAR OUTCOMES

What We've Learned So Far: The intent of this section is to provide a deeper look at program outcomes that may or may not be evident from the preceding sections. Findings highlighted are selected based on strength of data and relevance to the intended impact of the legislation that created WSOS.

In fall of 2018, WSOS conducted an Impact Study of the more than 3,000 WSOS graduates to date. (See **Appendix I** for purpose and methodology.) The findings of that survey are outlined in this section.

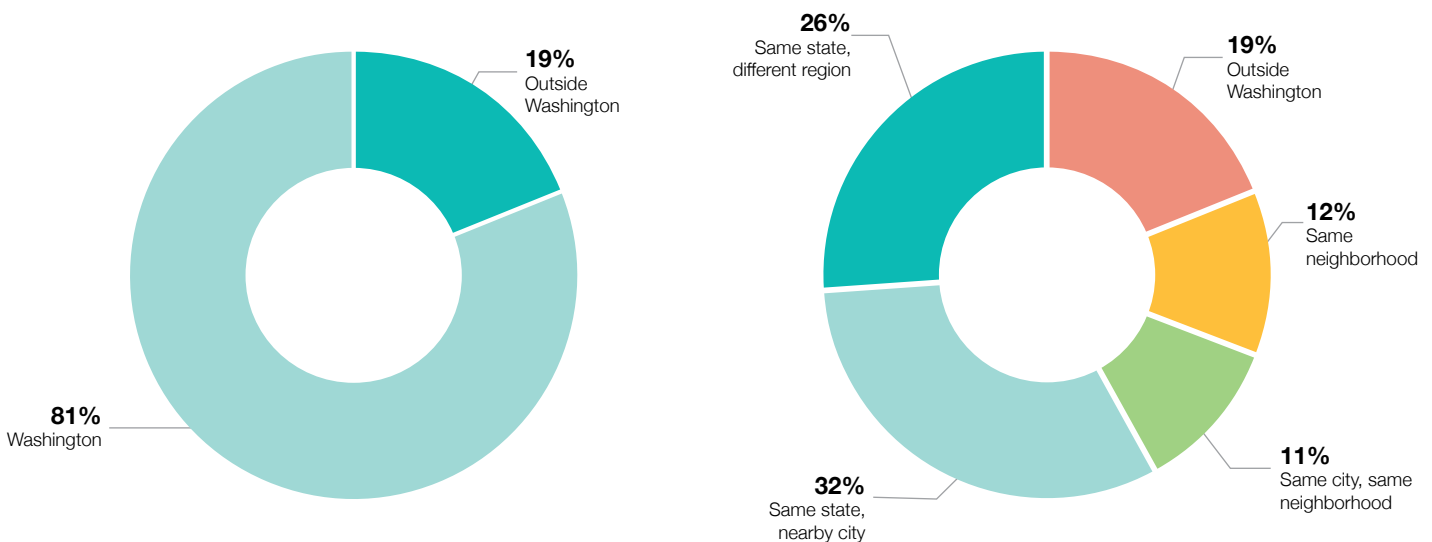
Nearly all WSOS graduates (94%) are employed or in graduate school: 70% are employed; 24% are attending or preparing for graduate school; 5% are searching for employment; 1% are pursuing other endeavors (i.e., military and stay-at-home parent).

Among all respondents, 9% have earned a post-graduate degree (7% a master's degree and 2% a doctoral or professional degree). Of those who graduated three or more years ago, 16% have earned a post-graduate degree: 11% have earned a master's degree and 5% a doctoral or professional degree. Master's degrees have been earned in biology, chemistry, computer science, education, engineering, mathematics, information technology, neuroscience, nursing and physics. Doctoral degrees have been earned in optometry, pharmacy and physical therapy.

There are no statistically significant differences by gender or race/ethnicity in the proportion of graduates who have earned a post-graduate degree. This suggests that **WSOS graduates are helping to close the gender and race/ethnicity gaps in STEM.**

Most WSOS graduates (81%) live in Washington state (Graphic 12). A majority (55%) of WSOS graduates live in the same or a nearby city to their hometown. The state's investment in Washington students is supporting young professionals who choose to stay not only in their home state but return to their home community.

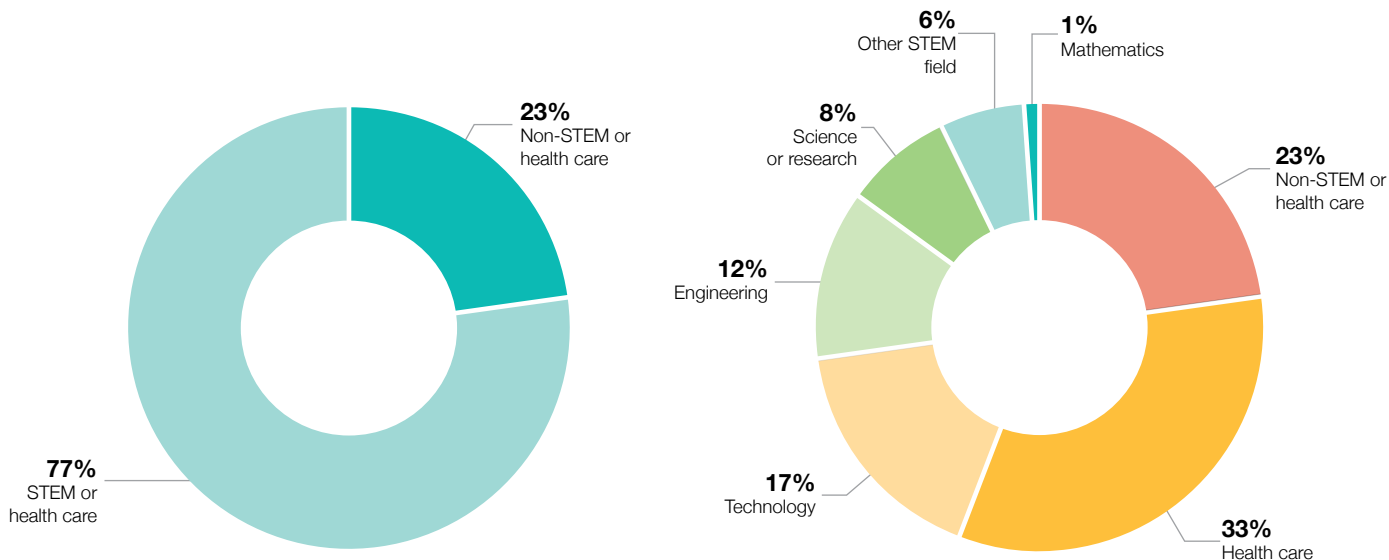
Graphic 12: Current Residence of WSOS Graduates



In addition to returning to their home communities, WSOS graduates are active civic members. Nearly two-thirds (64%) volunteer in their communities. Over one-quarter (26%) have held a leadership role outside of their primary employment. Over one-tenth (11%) have played a key role in starting a new program, organization or business.

WSOS employed graduates contribute to high-demand job sectors.²⁸ **Over three-quarters (77%) of employed WSOS graduates work in STEM or health care.** Over one-third (34%) work in health care, 23% in non-STEM, 17% in technology (e.g., computer science), 12% in engineering, 8% in science or research, 6% in another STEM field and 1% in mathematics (**Graphic 13**).

Graphic 13: Field of Work for Employed Graduates



Most employed WSOS graduates (79%) searched for their job for less than three months. Approximately half of employed WSOS graduates (51%) received job offers that they did not accept.

Most employed WSOS graduates (86%) work in Washington state²⁹ followed by 5% in California, 2% in Oregon, 2% outside the United States and less than 1% each across seven other US states and territories. Over half of employed WSOS graduates (54%) work in six Washington cities: 29% in Seattle, 7% in Tacoma, 6% in Spokane, 5% in Bellevue, 5% in Vancouver and 3% in Richland. Relative to where they lived as a senior in high school, over half (57%) work in the same city or nearby city.

The average³⁰ annual gross salary of WSOS graduates employed full-time is \$62,297. Of those employed full-time³¹, 32% earn less than \$50,000 per year; 46% earn \$50,000-\$79,999; and 22% earn 80,000 or higher (**Graphic 14**).

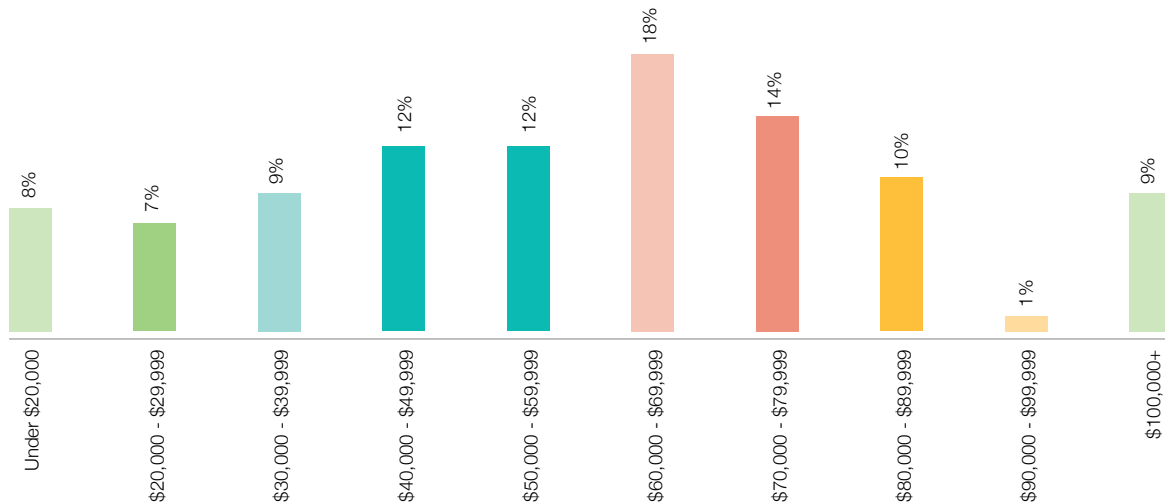
28. The following results pertain to the 70% of survey respondents who indicate that they are currently employed.

29. Note that this refers to employed WSOS graduates whereas the 81% living in Washington state referenced earlier refers to all WSOS graduates.

30. The average refers to mean. The median salary is \$61,000.

31. Among employed WSOS graduates, 70% are employed full-time and 30% part-time.

Graphic 14: Salary Distribution of Full-time Employed Graduates



Mean salary is statistically different by graduation year, generally increasing each year out of college: \$41,641 (2018), \$52,897 (2017), \$59,488 (2016), \$61,448 (2015), \$94,258 (2014) and \$87,391 (2013).

Over time, an increasing proportion of Scholars are seeking support services from WSOS and finding the services useful. Over one-fifth (21%) met with a WSOS advisor while enrolled in college. Statistically higher proportions of graduates in later cohorts met with a WSOS advisor: Cohort 1 (13%), Cohort 2 (24%), Cohort 3 (38%) and Cohort 4 (46%).³² Of those who sought support from a WSOS advisor, the following proportions indicate that it was helpful: 99% post-graduation preparation, 100% academic support, and 100% personal support. Nearly one-quarter (24%) indicate that they are interested in mentoring a younger WSOS scholar.

Of the 220 survey responses received, 88 (40%) provided open-ended feedback to the prompt, “Please take a moment to share any feedback related to your participation in WSOS. We would love to hear your comments, reflections or suggestions related to your experience as a WSOS Scholar.”

The majority (58%) expressed gratitude related for the financial aid provided by the scholarship program; 18% expressed gratitude for the supports provided; 9% combined positive feedback with constructive feedback, primarily related to not knowing about WSOS supports; and 15% provided constructive feedback only, primarily related to frustration regarding losing the scholarship after switching majors.

32. Results for Cohort 5 are not reported due to a sample size less than 10.

Rutha Nuguse (left) is an Opportunity alumna who graduated from the University of Washington Tacoma in 2017. Kathryn McClintic (right) is also an Opportunity alumna who earned her bachelor's degree in computer science from Western Washington University in 2016. Rutha and Kathryn are both software engineers at Microsoft.



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APPENDIX A

Description of Program Administrator

In 2011, the College Success Foundation (CSF) was named as the program administrator of WSOS. In this capacity, CSF was charged with the management and development of the application and selection processes based on selection criteria authorized by the WSOS Board. Administration of the scholarship program involved development of application materials, outreach to potential applicants, collaboration with financial aid, academic advisement and post-graduate support professionals at colleges and universities and storing of student data in CSF's in-house data system. CSF also oversaw communications to WSOS applicants and managed the scholarship awarding and disbursement processes through an electronic database as well as through student service supports.

In 2017, the responsibilities of program administrator for WSOS transitioned to Washington STEM. As program administrator, Washington STEM supports the human resources and technology needs of the WSOS team. Additionally, Washington STEM is responsible for the fiscal management and disbursement of funds to Scholars. Washington STEM and WSOS also work in partnership to raise awareness of WSOS, promote the scholarship to potential Scholars and establish partnerships across regions and industries.

APPENDIX B

Selected Scholars Cohorts 1 – 7 by Major Category of Interest

CATEGORIES OF APPROVED MAJORS	COHORT 1	COHORT 2	COHORT 3	COHORT 4	COHORT 5	COHORT 6	COHORT 7	TOTAL
	#	#	#	#	#	#	#	#
Health Professions and Related Programs	830	254	272	324	470	556	558	3,264
Engineering, Engineering Technologies and Engineering-Related Fields	743	197	179	267	414	500	378	2,678
Biological and Biomedical Sciences	596	159	170	219	180	303	315	1,942
Computer and Information Sciences and Support Services	315	49	59	99	268	278	361	1,429
Physical Sciences	180	46	25	46	30	68	65	460
Mathematics and Statistics	143	23	19	28	15	19	27	274
Multi/Interdisciplinary Studies	82	17	16	23	29	40	34	241
Natural Resources and Conservation	73	13	12	21	7	19	31	176
Education	14	15	13	18	27	39	54	180
Agriculture, Agriculture Operations and Related Sciences	25	3	16	9	5	6	7	71
Science Technologies/Technicians	3	2	1	3	-	-	-	9
Business, Management, Marketing and Related Support Services	2	-	-	-	5	11	10	28
Other	39	-	-	-	-	21	22	82
GRAND TOTAL	3,045	778	782	1,057	1,450	1,860	1,862	10,834

APPENDIX B

Selected Scholars Cohorts 1 – 7 by Major Category of Interest³³

CATEGORIES OF APPROVED MAJORS	COHORT 1	COHORT 2	COHORT 3	COHORT 4	COHORT 5	COHORT 6	COHORT 7	TOTAL
	%	%	%	%	%	%	%	%
Health Professions and Related Programs	27%	33%	35%	31%	32%	30%	30%	30%
Engineering, Engineering Technologies and Engineering-Related Fields ³⁴	24%	25%	23%	25%	29%	27%	20%	25%
Biological and Biomedical Sciences	20%	20%	22%	21%	12%	16%	17%	18%
Computer and Information Sciences and Support Services	10%	6%	8%	9%	18%	15%	19%	13%
Physical Sciences	6%	6%	3%	4%	2%	4%	3%	4%
Mathematics and Statistics	5%	3%	2%	3%	1%	1%	1%	3%
Multi/Interdisciplinary Studies ³⁵	3%	2%	2%	2%	2%	2%	2%	2%
Natural Resources and Conservation	2%	2%	2%	2%	0.5%	1%	2%	2%
Education ³⁶	0.5%	2%	2%	2%	2%	2%	3%	2%
Agriculture, Agriculture Operations and Related Sciences	1%	0.4%	2%	0.9%	0.3%	0.3%	0.4%	0.7%
Science Technologies/Technicians	0.1%	0.3%	0.1%	0.3%	-	-	-	0.1%
Business, Management, Marketing and Related Support Services	0.1%	-	-	-	0.3%	0.6%	0.5%	0.3%
Other ³⁷	1%	-	-	-	-	1%	1%	0.8%
GRAND TOTAL³⁸	100%	100%	100%	100%	100%	100%	100%	100%

33. In 2018, WSOS completed a data fidelity project which included re-examining old cohort application files. During this project, staff corrected nine students' major categories resulting in a minor shift for Cohorts 1 -6 applications as listed in the 2017 Legislative Report. Not all Scholars who are eligible for the scholarship are selected. Likewise, not all students selected to receive the scholarship end up enrolling in college to become WSOS participants. Therefore, it is important to note that selected Scholars differ from eligible applicants and actual cohort participants. The table above references the major of interest indicated on Scholars' applications; many college students change their major over time, and Scholars may not graduate in the same field in which they declared their initial interest.

34. Engineering and Engineering Technologies and Engineering-Related Fields, while separate CIP families, have been combined into one category in the table above.

35. For Cohorts 1 - 4, Multi/Interdisciplinary Studies include biological and physical sciences, computational science, human biology, human computer interaction, marine sciences, mathematics, computer science and natural sciences only. For Cohort 5 and beyond, this category includes accounting and computer sciences; biological and physical sciences; human computer interaction; mathematics; computer science and natural sciences.

36. Education includes biology, chemistry, computer, earth science, mathematics, physics and science teacher education only.

37. Prior to determining the original set of 367 eligible majors within the 12 categories for Cohort 2, 42 Cohort 1 Scholars originally applied under "Other" majors that no longer qualify. For Cohort 6, the n=21 scholars in "Other" majors are studying architecture or food service management information systems. For Cohort 7, the n=22 scholars in "Other" majors are studying architecture.

38. Total proportions may not equal 100 percent due to rounding.

APPENDIX C

Race or Ethnicity of Cohort 1 – 7 Participants³⁹

RACE OR ETHNICITY	COHORT 1	COHORT 2	COHORT 3	COHORT 4	COHORT 5	COHORT 6	COHORT 7
American Indian or Alaska Native	1%	0%	2%	1%	1%	1%	1%
Asian	20%	19%	24%	22%	26%	25%	22%
Black or African American	3%	5%	8%	7%	6%	9%	8%
Hispanic/Latinx of any race(s) ⁴⁰	4%	18%	21%	20%	25%	31%	26%
Native Hawaiian or Other Pacific Islander	1%	0%	1%	1%	1%	1%	1%
Two or More Races	7%	7%	1%	7%	6%	7%	6%
White	63%	49%	44%	42%	34%	27%	30%
Not Reported	2%	1%	1%	1%	1%	1%	6%

39. Note that for Cohorts 1-6, participant data reflects known participants at the time of publication of each cohort's legislative report and does not reflect the same updates as graduation and enrollment data.

40. In accordance with federal and state norms, students who identify as Hispanic/Latinx of any race(s) are categorized as Hispanic/Latinx of any race(s). Students who do not identify as Hispanic/Latinx and identify two or more races are categorized as "Two or more races". All other students are categorized in the race category under which they self-identified.

APPENDIX D

Cohort 1 – 7 Participants⁴¹ by Home County

COUNTY	COHORT 1 PARTICIPANTS		COHORT 2 PARTICIPANTS		COHORT 3 PARTICIPANTS		COHORT 4 PARTICIPANTS	
Adams	7	0.2%	3	0.4%	5	0.7%	2	0.2%
Asotin	7	0.2%	1	0.1%	2	0.3%	1	0.1%
Benton	36	1.2%	10	1.4%	16	2.2%	20	2.0%
Chelan	39	1.3%	14	1.9%	11	1.5%	17	1.7%
Clallam	30	1.0%	3	0.4%	2	0.3%	18	1.8%
Clark	211	7.1%	37	5.1%	45	6.1%	46	4.6%
Columbia	2	0.1%	0	0.0%	1	0.1%	2	0.2%
Cowlitz	36	1.2%	14	1.9%	13	1.8%	8	0.8%
Douglas	11	0.4%	2	0.3%	12	1.6%	3	0.3%
Ferry	2	0.1%	2	0.3%	1	0.1%	4	0.4%
Franklin	15	0.5%	10	1.4%	13	1.8%	15	1.5%
Garfield	0	0.0%	0	0.0%	0	0.0%	2	0.2%
Grant	33	1.1%	12	1.7%	12	1.6%	20	2.0%
Grays Harbor	36	1.2%	9	1.3%	7	0.9%	9	0.9%
Island	32	1.1%	8	1.1%	2	0.3%	8	0.8%
Jefferson	11	0.4%	1	0.1%	2	0.3%	4	0.4%
King	924	30.9%	220	30.6%	214	29.0%	298	30.0%
Kitsap	94	3.1%	16	2.2%	27	3.7%	22	2.2%
Kittitas	24	0.8%	5	0.7%	3	0.4%	7	0.7%
Klickitat	3	0.1%	5	0.7%	8	1.1%	5	0.5%
Lewis	27	0.9%	5	0.7%	7	0.9%	14	1.4%
Lincoln	12	0.4%	4	0.6%	6	0.8%	5	0.5%
Mason	11	0.4%	4	0.6%	6	0.8%	8	0.8%
Okanogan	15	0.5%	13	1.8%	5	0.7%	10	1.0%
Pacific	4	0.1%	4	0.6%	1	0.1%	5	0.5%
Pend Oreille	2	0.1%	1	0.1%	5	0.7%	6	0.6%
Pierce	402	13.4%	88	12.2%	89	12.0%	107	10.8%
San Juan	3	0.1%	3	0.4%	0	0.0%	4	0.4%
Skagit	42	1.4%	12	1.7%	15	2.0%	21	2.1%
Skamania	2	0.1%	0	0.0%	0	0.0%	0	0.0%
Snohomish	303	10.1%	61	8.5%	59	8.0%	65	6.5%
Spokane	200	6.7%	45	6.3%	49	6.6%	72	7.2%
Stevens	18	0.6%	7	1.0%	7	0.9%	11	1.1%
Thurston	107	3.6%	22	3.1%	16	2.2%	32	3.2%
Wahkiakum	1	0.0%	0	0.0%	1	0.1%	1	0.1%
Walla Walla	33	1.1%	4	0.6%	7	0.9%	6	0.6%
Whatcom	123	4.1%	19	2.6%	14	1.9%	28	2.8%
Whitman	44	1.5%	11	1.5%	2	0.3%	8	0.8%
Yakima	88	2.9%	44	6.1%	54	7.3%	80	8.0%
TOTAL	2,990	100%	719	100%	739	100%	994	100%

41. Home county is determined by the zip code of the graduated high school listed on the Scholars' original applications.

APPENDIX D

Cohort 1 – 7 Participants by Home County, *continued*

COUNTY	COHORT 5 PARTICIPANTS		COHORT 6 PARTICIPANTS		COHORT 7 PARTICIPANTS	
Adams	7	0.5%	10	0.6%	13	0.7%
Asotin	2	0.1%	1	0.1%	4	0.2%
Benton	27	2.0%	46	2.6%	62	3.6%
Chelan	29	2.1%	32	1.8%	36	2.1%
Clallam	4	0.3%	15	0.9%	22	1.3%
Clark	87	6.3%	74	4.2%	73	4.2%
Columbia	1	0.1%	1	0.1%	0	0.0%
Cowlitz	6	0.4%	7	0.4%	18	1.0%
Douglas	14	1.0%	21	1.2%	5	0.3%
Ferry	0	0.0%	0	0.0%	4	0.2%
Franklin	33	2.4%	50	2.9%	44	2.5%
Garfield	0	0.0%	1	0.1%	1	0.1%
Grant	23	1.7%	33	1.9%	31	1.8%
Grays Harbor	12	0.9%	19	1.1%	9	0.5%
Island	8	0.6%	1	0.1%	7	0.4%
Jefferson	4	0.3%	7	0.4%	2	0.1%
King	451	32.9%	567	32.4%	482	27.7%
Kitsap	35	2.6%	29	1.7%	51	2.9%
Kittitas	4	0.3%	5	0.3%	7	0.4%
Klickitat	7	0.5%	3	0.2%	9	0.5%
Lewis	10	0.7%	16	0.9%	19	1.1%
Lincoln	7	0.5%	11	0.6%	6	0.3%
Mason	3	0.2%	5	0.3%	10	0.6%
Okanogan	12	0.9%	14	0.8%	15	0.9%
Pacific	9	0.7%	10	0.6%	6	0.3%
Pend Oreille	5	0.4%	9	0.5%	7	0.4%
Pierce	125	9.1%	211	12.1%	204	11.7%
San Juan	4	0.3%	3	0.2%	3	0.2%
Skagit	14	1.0%	40	2.3%	55	3.2%
Skamania	0	0.0%	1	0.1%	0	0.0%
Snohomish	144	10.5%	164	9.4%	145	8.3%
Spokane	91	6.6%	112	6.4%	126	7.2%
Stevens	6	0.4%	10	0.6%	4	0.2%
Thurston	30	2.2%	21	1.2%	20	1.1%
Wahkiakum	0	0.0%	1	0.1%	0	0.0%
Walla Walla	18	1.3%	14	0.8%	19	1.1%
Whatcom	27	2.0%	20	1.1%	43	2.5%
Whitman	6	0.4%	8	0.5%	6	0.3%
Yakima	107	7.8%	159	9.1%	172	9.9%
TOTAL	1,372	100%	1,751	100%	1,740	100%

APPENDIX E

Number of Scholarships Awarded by Academic Year, Cohort and Maximum Amount⁴²

ACADEMIC YEAR	COHORT	MAXIMUM ANNUAL AWARD AMOUNT				TOTAL # ANNUAL SCHOLARSHIPS AWARDED
		\$1,000	\$2,500	\$5,000	\$7,500	
2012 – 13	Cohort 1	2,990	N/A	N/A	N/A	2,990
	ANNUAL TOTAL	2,990	N/A	N/A	N/A	2,990
2013 – 14	Cohort 1	1,197	N/A	660	N/A	1,857
	Cohort 2	642	N/A	77	N/A	719
	ANNUAL TOTAL	1,839	N/A	737	N/A	2,576
2014 – 15	Cohort 1	N/A	286	261	415	962
	Cohort 2	N/A	425	42	121	588
	Cohort 3	N/A	714	19	6	739
	ANNUAL TOTAL	N/A	1,425	322	542	2,289
2015 – 16	Cohort 1	N/A	24	111	309	444
	Cohort 2	N/A	168	119	157	444
	Cohort 3	N/A	475	41	93	609
	Cohort 4	N/A	964	29	1	994
	ANNUAL TOTAL	N/A	1,631	300	560	2,491
2016 – 17	Cohort 1	N/A	14	47	30	91
	Cohort 2	N/A	16	44	188	248
	Cohort 3	N/A	205	110	156	471
	Cohort 4	N/A	657	48	89	794
	Cohort 5	N/A	1,333	26	13	1,372
	ANNUAL TOTAL	N/A	2,225	275	476	2,976
2017 – 18	Cohort 1	N/A	-	-	1	1
	Cohort 2	N/A	-	-	62	62
	Cohort 3	N/A	-	75	206	281
	Cohort 4	N/A	278	224	164	666
	Cohort 5	N/A	929	124	81	1,134
	Cohort 6	N/A	1,728	19	4	1,751
	ANNUAL TOTAL	N/A	2,935	442	518	3,895
2018 – 19	Cohort 1	N/A	-	-	-	-
	Cohort 2	N/A	-	1	-	1
	Cohort 3	N/A	-	71	-	71
	Cohort 4	N/A	-	34	363	397
	Cohort 5	N/A	-	805	87	892
	Cohort 6	N/A	1,182	125	78	1,385
	Cohort 7	N/A	1,646	94	-	1,740
	ANNUAL TOTAL	N/A	2,828	1,130	528	4,486

42. Home county is determined by the zip code of the graduated high school listed on Scholars' original applications.

43. The maximum annual award amount does not necessarily reflect the dollars that will be received by a Scholar. If other funding sources leave less than the maximum award amount due to a Scholar's institution, only the balance remaining would be paid in WSOS funds. For past years, the maximum total represents the maximum annual totals that were calculated at the time the legislative report for that year was completed.

APPENDIX F

2018-19 Scholar Enrollment by Institution and Cohort

INSTITUTION & TYPE	COHORT 2 (2013)	COHORT 3 (2014)	COHORT 4 (2015)	COHORT 5 (2016)	COHORT 6 (2017)	COHORT 7 (2018)	GRAND TOTAL
FOUR-YEAR INDEPENDENT							
DigiPen Institute of Technology	-	1	-	5	2	1	9
Gonzaga University	-	1	12	25	15	24	77
Heritage University	-	-	4	7	10	5	26
Northwest University	-	-	-	4	2	6	12
Pacific Lutheran University	-	1	10	18	35	47	111
Saint Martin's University	-	-	3	6	12	7	28
Seattle Pacific University	-	-	2	14	16	41	73
Seattle University	-	-	9	13	15	23	60
The Art Institute of Seattle	-	-	-	-	-	1	1
University of Puget Sound	-	-	1	6	11	14	32
Walla Walla University	-	-	1	4	8	5	18
Western Governors University	-	-	-	2	1	1	4
Whitman College	-	-	3	1	2	1	7
Whitworth University	-	-	6	12	18	47	83
FOUR-YEAR PUBLIC							
Central Washington University	-	3	13	24	50	81	171
Eastern Washington University	-	6	23	44	74	89	236
The Evergreen State College	-	1	1	2	5	1	10
University of Washington Bothell	-	3	14	38	47	59	161
University of Washington Seattle	-	28	158	367	558	594	1,705
University of Washington Tacoma	-	3	10	29	46	47	135
Washington State University Everett	-	-	-	1	-	1	2
Washington State University Pullman	-	12	59	98	134	171	474
Washington State University Spokane	-	3	11	9	2	-	25
Washington State University Tri-Cities	-	1	9	14	24	26	74
Washington State University Vancouver	-	2	6	17	24	17	66
Western Washington University	1	5	33	41	51	107	238

APPENDIX F

2018-19 Scholar Enrollment by Institution and Cohort, *continued*

INSTITUTION & TYPE	COHORT 2 (2013)	COHORT 3 (2014)	COHORT 4 (2015)	COHORT 5 (2016)	COHORT 6 (2017)	COHORT 7 (2018)	GRAND TOTAL
TWO YEAR							
Bates Technical College	-	-	-	-	1	1	2
Bellevue College	-	-	1	5	11	11	28
Bellingham Technical College	-	-	-	-	-	1	1
Big Bend Community College	-	-	-	2	3	4	9
Cascadia College	-	-	-	-	2	3	5
Centralia College	-	-	-	1	3	11	15
Clark College	-	-	-	14	7	13	34
Clover Park Technical College	-	-	-	-	-	2	2
Columbia Basin College	-	-	2	9	23	34	68
Edmonds Community College	-	-	-	-	6	12	18
Everett Community College	-	-	1	12	8	16	37
Grays Harbor College	-	-	-	1	5	3	9
Green River College	-	-	-	4	13	13	30
Highline College	-	-	2	10	13	29	54
Lake Washington Institute of Technology	-	-	-	-	-	3	3
Lower Columbia College	-	1	-	-	1	2	4
North Seattle College	-	-	-	2	2	3	7
Olympic College	-	-	-	5	9	12	26
Peninsula College	-	-	-	-	1	4	5
Pierce College at Fort Steilacoom	-	-	-	1	7	4	12
Pierce College at Puyallup	-	-	-	-	4	6	10
Renton Technical College	-	-	-	1	1	1	3
Seattle Central College	-	-	-	5	10	13	28
Shoreline Community College	-	-	-	2	4	3	9
Skagit Valley College	-	-	-	-	6	14	20
South Puget Sound Community College	-	-	-	1	6	4	11
South Seattle College	-	-	-	3	4	14	21
Spokane Community College	-	-	-	-	7	-	7
Spokane Falls Community College	-	-	-	4	6	13	23
Tacoma Community College	-	-	1	1	17	22	41
Walla Walla Community College	-	-	-	3	4	4	11
Wenatchee Valley College	-	-	-	-	10	9	19
Whatcom Community College	-	-	-	2	2	3	7
Yakima Valley Community College	-	-	2	3	27	37	69
GRAND TOTAL	1	71	397	892	1,385	1,740	4,486

APPENDIX G

Scholar Enrollment and Graduation by Cohort and Major Category of Study⁴³

DEGREES EARNED	COHORT 1 (2012)	COHORT 2 (2013)	COHORT 3 (2014)	COHORT 4 (2015)	COHORT 5 (2016)	COHORT 6 (2017)	GRAND TOTAL
Biological and Biomedical Sciences	474 (19%)	111 (19%)	101 (23%)	32 (21%)	12 (17%)	-	730 (20%)
Engineering	517 (21%)	114 (19%)	60 (14%)	20 (13%)	14 (19%)	-	725 (20%)
Health Professions and Related Programs	392 (16%)	99 (17%)	76 (17%)	27 (18%)	18 (25%)	1 (33%)	613 (17%)
Computer and Information Sciences and Support Services	219 (9%)	38 (6%)	38 (9%)	17 (11%)	13 (18%)	-	325 (9%)
Physical Sciences	140 (6%)	34 (6%)	19 (4%)	11 (7%)	1 (1%)	-	205 (6%)
Mathematics and Statistics	109 (4%)	17 (3%)	14 (3%)	6 (4%)	2 (3%)	-	148 (4%)
Social Sciences	86 (4%)	28 (5%)	24 (5%)	7 (5%)	1 (1%)	-	146 (4%)
Business, Management, Marketing and Related Support Services	79 (3%)	25 (4%)	21 (5%)	7 (5%)	-	1 (33%)	133 (4%)
Multi/Interdisciplinary Studies	73 (3%)	18 (3%)	12 (3%)	8 (5%)	1 (1%)	-	112 (3%)
Natural Resources and Conservation	77 (3%)	16 (3%)	12 (3%)	5 (3%)	-	-	110 (3%)
Psychology	44 (2%)	23 (4%)	20 (5%)	3 (2%)	2 (3%)	-	92 (2%)
Education	42 (2%)	14 (2%)	8 (2%)	2 (1%)	2 (3%)	1 (33%)	69 (2%)
Liberal Arts and Sciences, General Studies and Humanities	30 (1%)	5 (0.8%)	2 (0.5%)	-	-	-	37 (1%)
Agriculture, Agriculture Operations and Related Sciences	21 (0.9%)	3 (0.5%)	9 (2%)	-	-	-	33 (0.9%)
Foreign Languages, Literatures and Linguistics	17 (0.7%)	10 (2%)	2 (0.5%)	1 (0.7%)	1 (1%)	-	31 (0.8%)
Parks, Recreation, Leisure and Fitness Studies	16 (0.7%)	7 (1%)	6 (1%)	-	1 (1%)	-	30 (0.8%)
Communication, Journalism and Related Programs	14 (0.6%)	10 (2%)	3 (0.7%)	-	1 (1%)	-	28 (0.08%)
Visual and Performing Arts	16 (0.7%)	2 (0.3%)	3 (0.7%)	2 (1%)	-	-	23 (0.6%)
Engineering Technologies and Engineering-Related Fields	13 (0.5%)	2 (0.3%)	2 (0.5%)	1 (0.7%)	-	-	18 (0.5%)
Public Administration and Social Service Professions	11 (0.4%)	1 (0.2%)	3 (0.7%)	-	2 (3%)	-	17 (0.5%)
English Language and Literature/Letters	10 (0.4%)	2 (0.3%)	3 (0.7%)	-	-	-	15 (0.4%)
Philosophy and Religious Studies	12 (0.5%)	2 (0.3%)	1 (0.2%)	-	-	-	15 (0.4%)
Family and Consumer Sciences/Human Sciences	9 (0.4%)	3 (0.5%)	-	-	-	-	12 (0.3%)
Area, Ethnic, Cultural, Gender and Group Studies	7 (0.3%)	1 (0.2%)	1 (0.2%)	1 (0.7%)	-	-	10 (0.3%)
Architecture and Related Services	5 (0.2%)	1 (0.2%)	2 (0.5%)	1 (0.7%)	-	-	9 (0.2%)
History	6 (0.2%)	1 (0.2%)	-	1 (0.7%)	-	-	8 (0.2%)
Legal Professions and Studies	3 (0.1%)	-	2 (0.5%)	-	1 (1%)	-	6 (0.2%)
Homeland Security, Law Enforcement, Firefighting and Related Protective Services	2 (0.1%)	3 (0.5%)	-	-	-	-	5 (0.1%)
Personal and Culinary Services	3 (0.1%)	-	-	-	-	-	3 (0.1%)
Transportation and Materials Moving	-	1 (0.2%)	-	-	-	-	1 (0.03%)
GRAND TOTAL	2,447 (100%)	591 (100%)	444 (100%)	152 (100%)	72 (100%)	3 (100%)	3,709 (100%)

44. 320 Scholars earned bachelor's degree in two or three different major categories. Therefore, the total degrees by major category is 3,709 while the total unique Scholars who have earned bachelor's degrees in 3,387.

APPENDIX G

Scholar Enrollment and Graduation by Cohort and Major Category of Study - *Continued*

DEGREES PURSUED IN 2018-19	COHORT 2 (2013)	COHORT 3 (2014)	COHORT 4 (2015)	COHORT 5 (2016)	COHORT 6 (2017)	COHORT 7 (2018)	GRAND TOTAL
Agriculture, Agriculture Operations and Related Sciences	-	-	7 (2%)	15 (2%)	6 (0.4%)	15 (0.9%)	43 (1%)
Architecture and Related Services	-	-	2 (0.5%)	8 (0.9%)	17 (1%)	22 (1%)	49 (1%)
Biological and Biomedical Sciences	-	16 (23%)	88 (22%)	145 (16%)	247 (18%)	415 (24%)	911 (20%)
Business, Management, Marketing and Related Support Services	-	1 (1%)	5 (1%)	12 (1%)	6 (0.4%)	6 (0.3%)	30 (0.7%)
Computer and Information Sciences and Support Services	-	5 (7%)	60 (15%)	173 (19%)	254 (18%)	241 (14%)	733 (16%)
Education	-	-	7 (2%)	10 (1%)	20 (1%)	45 (3%)	82 (2%)
Engineering	-	24 (34%)	87 (22%)	189 (21%)	290 (21%)	321 (18%)	911 (20%)
Engineering Technologies and Engineering-Related Fields	-	2 (3%)	2 (0.5%)	20 (2%)	23 (2%)	35 (2%)	82 (2%)
Family and Consumer Sciences/Human Sciences	-	-	-	1 (0.1%)	-	-	1 (0.02%)
Health Professions and Related Programs	-	10 (14%)	68 (17%)	217 (24%)	385 (28%)	458 (26%)	1,138 (25%)
Mathematics and Statistics	1 (100%)	1 (1%)	12 (3%)	29 (3%)	33 (2%)	35 (2%)	111 (2%)
Multi/Interdisciplinary Studies	-	2 (3%)	13 (3%)	22 (2%)	38 (3%)	39 (2%)	114 (3%)
Natural Resources and Conservation	-	5 (7%)	26 (7%)	21 (2%)	28 (2%)	44 (3%)	124 (3%)
Physical Sciences	-	5 (7%)	20 (5%)	30 (3%)	38 (3%)	64 (4%)	157 (4%)
GRAND TOTAL⁴⁴	1 (100%)	71 (100%)	397 (100%)	892 (100%)	1,385 (100%)	1,740 (100%)	4,486 (100%)

45. Some students have graduated from multiple institutions since receiving their first WSOS funding. These students are reflected as associated with the institution from which they have the first graduation date.

APPENDIX H

Graduation by Institution

INSTITUTION & TYPE	COHORT 1 (2012)	COHORT 2 (2013)	COHORT 3 (2014)	COHORT 4 (2015)	COHORT 5 (2016)	COHORT 6 (2017)	GRAND TOTAL
FOUR-YEAR INDEPENDENT	423	108	80	30	16	-	657
Pacific Lutheran University	87	27	26	7	2	-	149
Seattle University	75	16	9	6	3	-	109
Gonzaga University	79	16	10	3	1	-	109
Seattle Pacific University	40	17	6	4	4	-	71
Whitworth University	26	14	9	3	2	-	54
Western Governors University	33	1	6	-	-	-	40
Saint Martin's University	19	2	4	1	3	-	29
Northwest University	8	6	3	3	-	-	20
Bastyr University	18	1	1	-	-	-	20
Whitman College	13	3	1	1	-	-	18
Heritage University	8	2	3	1	1	-	15
University of Puget Sound	12	-	1	1	-	-	14
Walla Walla University	2	2	-	-	-	-	4
DigiPen Institute of Technology	3	-	1	-	-	-	4
Trinity Lutheran College	-	1	-	-	-	-	1
FOUR-YEAR PUBLIC	1,739	425	325	111	49	2	2,651
University of Washington Seattle	890	213	170	46	17	-	1,336
Washington State University Pullman	245	73	42	12	4	-	376
Western Washington University	130	31	21	7	5	-	194
Eastern Washington University	97	28	21	7	5	1	159
University of Washington Tacoma	88	11	17	8	3	-	127
Central Washington University	60	16	7	15	1	1	100
Washington State University Vancouver	59	13	13	2	7	-	94
University of Washington Bothell	54	12	15	7	4	-	92
The Evergreen State College	47	5	5	1	-	-	58
Washington State University Spokane	29	11	7	1	-	-	48
Washington State University Tri-Cities	24	6	5	4	2	-	41
Eastern Washington University/WSU Spokane	13	4	1	1	1	-	20
Washington State University Spokane/Whitworth University	3	2	1	-	-	-	6

APPENDIX H

Graduation by Institution, *continued*

INSTITUTION & TYPE	COHORT 1 (2012)	COHORT 2 (2013)	COHORT 3 (2014)	COHORT 4 (2015)	COHORT 5 (2016)	COHORT 6 (2017)	GRAND TOTAL
COLLEGE TWO-YEAR	11	1	3	3	2	1	21
Olympic College	4	-	-	-	-	-	4
Pierce College at Fort Steilacoom	1	-	-	1	-	-	2
Bellevue College	2	-	-	-	-	-	2
Clark College	-	-	-	1	1	-	2
Columbia Basin College	-	-	1	1	-	-	2
Seattle Central College	-	-	1	-	-	1	2
Centralia College	1	-	-	-	-	-	1
Spokane Community College	-	-	-	-	1	-	1
Northwest Indian College	-	-	1	-	-	-	1
Green River College	1	-	-	-	-	-	1
Yakima Valley Community College	1	-	-	-	-	-	1
ITT Technical Institute Seattle	1	-	-	-	-	-	1
Lake Washington Institute of Technology	-	1	-	-	-	-	1
OTHER COLLEGE	46	6	6	-	-	-	58
Other College	46	6	6	-	-	-	58
GRAND TOTAL	2,219	540	414	144	67	3	3,387

APPENDIX I

Purpose and Methodology of the WSOS Impact Study

The WSOS Impact Study was intended to evaluate the post-graduation outcomes of WSOS graduates, including post-graduate education, employment, community involvement, volunteer service, leadership roles and entrepreneurship. It also solicited feedback related to strengthening WSOS programming for current and future Scholars. It was conducted by Kelly Bay-Meyer, an independent consultant.

As of mid-September 2018, 3,394⁴⁵ Opportunity Scholars had earned their bachelor's degree according to National Student Clearinghouse data and self-report. Among these graduates, WSOS had an email on record for 3,384. To ensure a 95% confidence level and +/- 5% margin of error among these 3,384 Scholar graduates with email addresses requires a random sample of 345 graduates. Given that survey responses were incentivized responses with \$5 Starbucks cards for every respondent, plus a drawing for a \$250 Amazon card, a 75% response rate was estimated and 431 graduates were randomly selected for the sample.

There are no statistically significant differences between graduates in the random sample and those who were not randomly selected in terms of cohort year, class standing at application, college, major, gender, race/ethnicity, household income level, high school district or home county.

The survey was administered via Survey Monkey on October 8, 2018, with five follow-up email reminders sent to non-respondents through October 26, as well as two text messages and one phone call before the survey closed on November 4, 2018.

Among the 431 graduates in the sample, 220 completed surveys were received (51% response rate). Given that the actual response rate was below the estimated one, the margin of error increases from +/-5% to +/-6%. This suggests that WSOS should consider sampling twice as many students as desired in future iterations of the survey, even when offering incentives. It may also indicate a need for increasing incentives for survey participants.

There are no statistically significant differences in proportions between survey respondents and all other graduates by gender, race/ethnicity, family income while in college, high school district or county or graduation primary field of study. This suggests that survey respondents are representative of all graduates with respect to these demographic, geographic and academic characteristics.

Given that juniors and seniors in college were selected in Cohort 1 and that they received only \$1,000 with few programmatic supports offered, it is not surprising that a statistically lower proportion of Cohort 1 Scholars responded to the survey (56% of respondents, compared to 66% of all graduates).⁴⁶ This suggests that Cohort 1 Scholars are underrepresented by 10% in the sample.

There are also statistically significant differences⁴⁷ between survey respondents and all WSOS graduates by graduation college. For example, Central Washington University is the most underrepresented alma mater, representing only 0.5% of respondents, compared to 3.1% of all graduates. In contrast, University of Washington Seattle is the most overrepresented alma mater, making up 42.1% of respondents, compared to 39.1% of all graduates. This suggests that college-level results should be interpreted cautiously.

All statistical analysis was conducted in IBM SPSS 23 and differences in proportions were determined using a Chi-Square test.

46. This number differs by n=9 from the number of graduates reported in Section 8.1(e). The database is constantly being updated with more reliable data. This difference may be explained by Scholars reporting they had graduated and WSOS later learned they had earned an associate degree and not a bachelor's degree.

47. This difference in proportions is statistically significant at the 90% confidence level.

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WSOS Impact Study Executive Summary 2018

Kelly Bay-Meyer, Ph.D.*

November 17, 2018

Prepared on behalf of WA STEM and Washington State Opportunity Scholarship

*Kelly Bay-Meyer, Ph.D. is an independent evaluator and sole proprietor of Bay-Meyer & Meyer Consulting. She currently serves as Operations Director at [Degrees of Change](#). In her former role as Senior Research and Evaluation Analyst at the College Success Foundation, she led program evaluation activities for Washington State Opportunity Scholarship for four years.

WSOS Impact Study Executive Summary 2018

PURPOSE

The WSOS Impact Study is intended to evaluate the post-graduation outcomes of WSOS graduates, including post-graduate education, employment, community involvement, volunteer service, leadership roles and entrepreneurship. It also solicits feedback related to strengthening WSOS programming for current and future scholars.

METHODOLOGY

As of mid-September 2018, 3,394 WSOS scholars had earned their bachelor's degrees according to National Student Clearinghouse data. Among these graduates, WSOS had an email on record for 3,384. To ensure a 95% confidence level and +/- 5% margin of error among these 3,384 graduates with email addresses requires a random sample of 345 graduates. Given that survey responses were incentivized responses with \$5 Starbucks cards for every respondent, plus a drawing for a \$250 Amazon card, a 75% response rate was estimated and 431 graduates were randomly selected for the sample.

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Given that juniors and seniors in college were selected in Cohort 1 and that they received only \$1,000 with few programmatic supports offered, it is not surprising that a statistically lower proportion of Cohort 1 scholars responded to the survey (56% of respondents, compared to 66%

of all graduates).¹ This suggests that Cohort 1 scholars are underrepresented by 10% in the sample.

There are also statistically significant differences² between survey respondents and all WSOS graduates by graduation college. For example, Central Washington University is the most underrepresented alma mater, representing only 0.5% of respondents, compared to 3.1% of all graduates. In contrast, University of Washington Seattle is the most overrepresented alma mater, making up 42.1% of respondents, compared to 39.1% of all graduates. This suggests that college-level results should be interpreted cautiously.

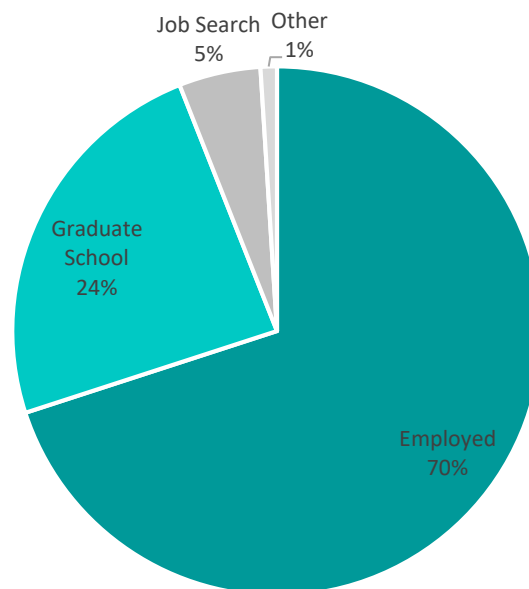
All statistical analysis was conducted in IBM SPSS 23 and differences in proportions were determined using a Chi-Square test.

OVERALL STATUS

Employment

Nearly all WSOS graduates (94%) are employed or in graduate school: 70% employed; 24% attending or preparing for graduate school; 5% searching for employment; 1% other (i.e., military and stay-at-home parent) (Graphic 1).

Graphic 1. Employment Status



¹ This difference in proportions is statistically significant at the 90% confidence level.

² This difference in proportions is statistically significant at the 99% confidence level.

Postgraduate Education

Among all respondents, 9% have earned a post-graduate degree: 7% a master's degree and 2% a doctoral or professional degree.

Of those who graduated three or more years ago, 16% have earned a post-graduate degree: 11% have earned a master's degree and 5% a doctoral or professional degree.

There are no statistically significant differences by gender or race/ethnicity in the proportion of graduates who have earned a post-graduate degree. This suggests that WSOS graduates are helping to close the gender and race/ethnicity gaps in STEM.

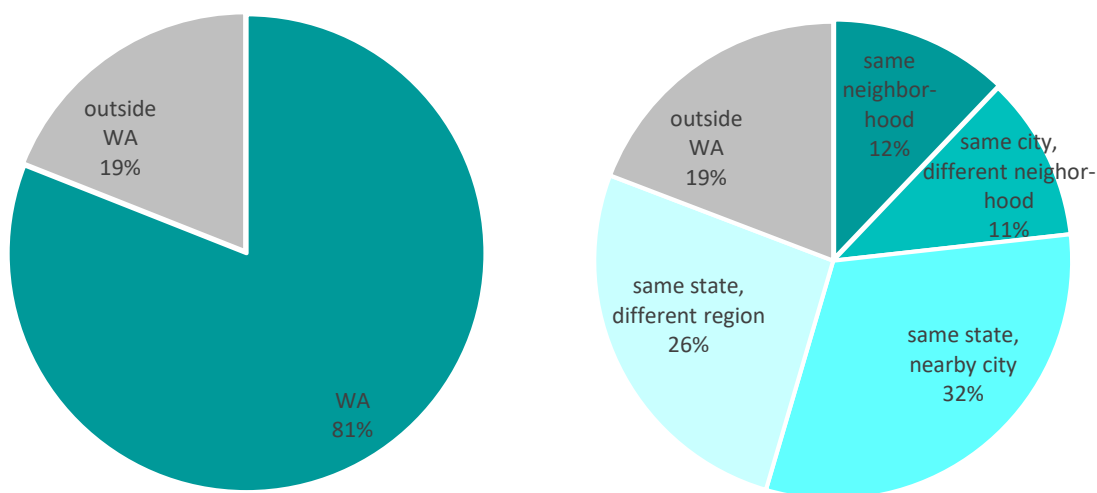
Master's degrees have been earned in biology, chemistry, computer science, education, engineering, mathematics, information technology, neuroscience, nursing and physics.

Doctoral degrees have been earned in optometry, pharmacy and physical therapy.

Residence

Most WSOS graduates (81%) live in Washington State (Graphic 2).

Graphic 2. Current Residence

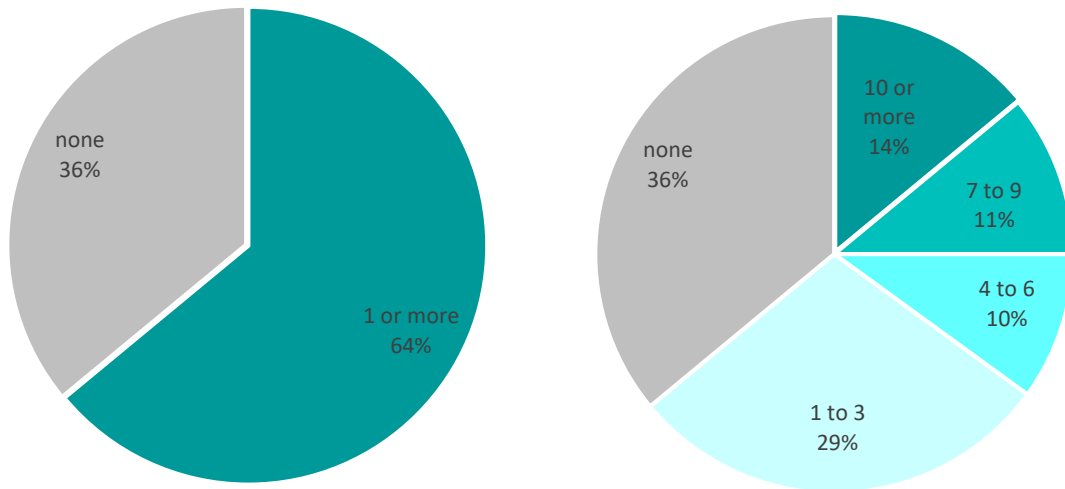


COMMUNITY ENGAGEMENT

Volunteering

Nearly two-thirds (64%) of WSOS graduates volunteer in their communities (Graphic 3).

Graphic 3. Volunteer Hours Per Month



Leadership

Over one-quarter (26%) have held a leadership role outside of their primary employment.

Entrepreneurship

Over one-tenth (11%) have played a key role in starting a new program, organization or business.

EMPLOYED WSOS GRADUATES

The following results pertain to the 70% of survey respondents who indicate that they are currently employed.

Job Search Duration

Most employed WSOS graduates (79%) searched for their job for less than three months; 15% four to six months; 2% seven to twelve months; and 5% more than one year.

Job Applications

The largest proportion of employed WSOS graduates applied to less than three positions within their field of study (44%).

Job Offers

Most employed WSOS graduates (81%) received one to three job offers within their field of study.

Declined Job Offers

Approximately half of employed WSOS graduates (51%) received job offers that they did not accept.

The following proportion of graduates indicate the following reasons for declining job offers: 23% salary, 16% undesired geographic location, 12% poor fit with work setting, 10% benefits, 10% not full-time, 10% lack of advancement opportunities, 8% poor fit with work culture, and 5% not in field of study.

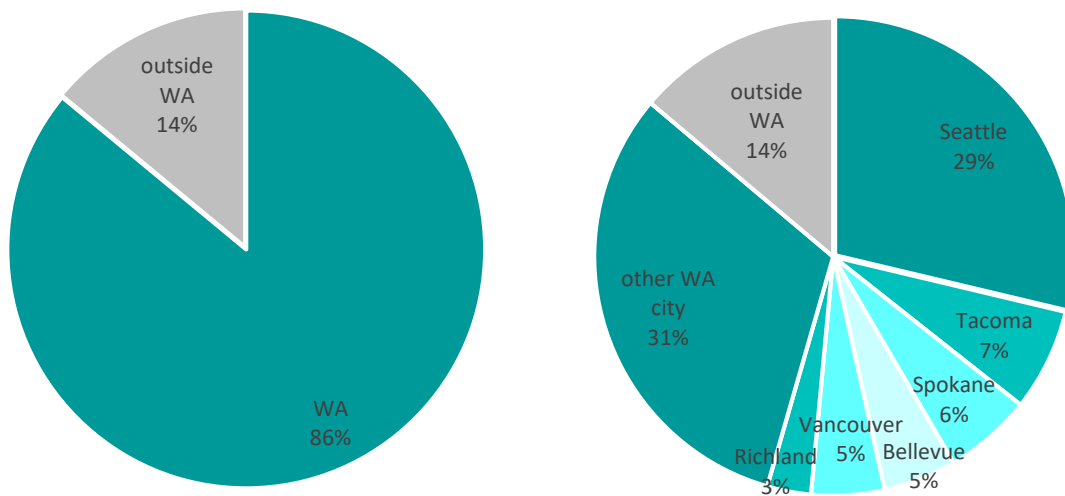
Location

Most employed WSOS graduates (86%) work in Washington State, followed by 5% in California, 2% in Oregon, 2% outside the United States and less than 1% each across seven other US states and territories (Graphic 4).

Over half of employed WSOS graduates (54%) work in six Washington cities: 29% Seattle, 7% Tacoma, 6% Spokane, 5% Bellevue, 5% Vancouver and 3% Richland.

Relative to where they lived as a senior in high school, over half (57%) work in the same city or nearby city.

Graphic 4. Job Location



Previous Internship or Employment

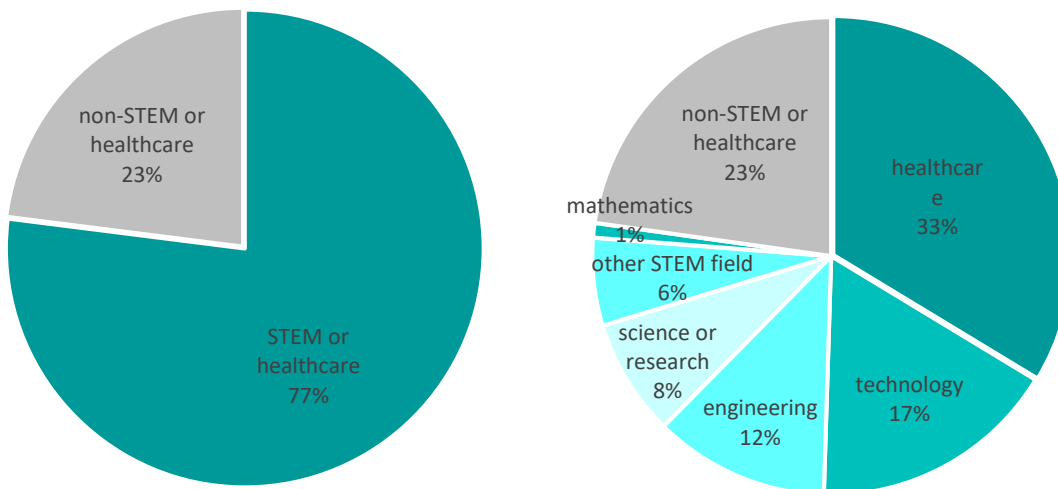
Over one-quarter (28%) of employed WSOS graduates previously interned or worked at their current job.

Field

Over three-quarters (77%) of employed WSOS graduates work in STEM or healthcare.

Over one-third (34%) work in healthcare, 23% non-STEM, 17% technology (e.g., computer science), 12% engineering, 8% science or research, 6% other STEM field, and 1% mathematics (Graphic 5).

Graphic 5. Employment Field



Hours

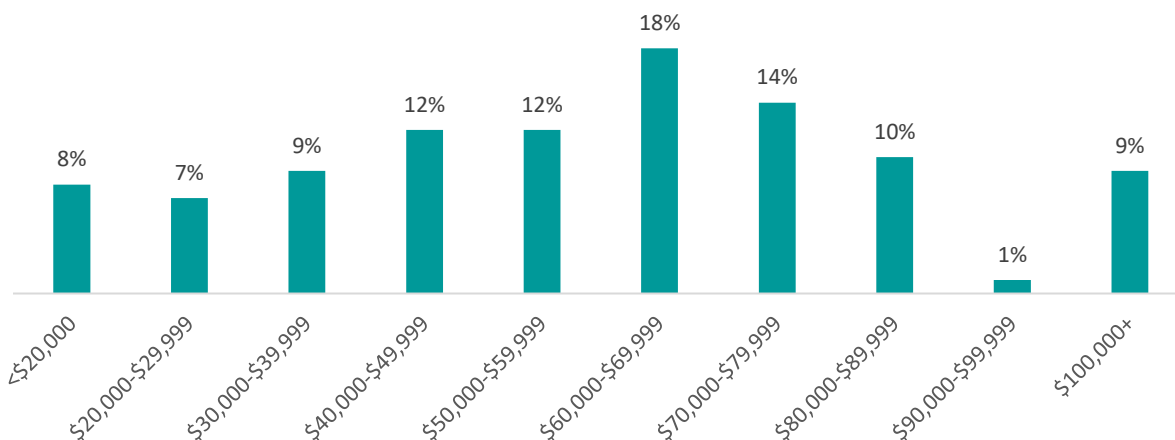
Among employed WSOS graduates, 70% are employed full-time and 30% part-time.

Salary

Of those employed full-time, 32% earn less than \$50,000 per year; 46% earn \$50,000-\$79,999; and 22% earn 80,000 or higher (Graphic 5).

The median annual gross salary is \$61,000 and mean is \$62,297.

Graphic 5. Salary Distribution



Mean salary is statistically different by graduation year, generally increasing each year out of college: \$41,641 (2018), \$52,897 (2017), \$59,488 (2016), \$61,448 (2015), \$94,258 (2014) and \$87,391 (2013).

WSOS GRADUATES IN POST-GRADUATE SCHOOL

The following section pertains to the 24% of survey respondents who indicate that they are enrolled or preparing to enroll in graduate school.

Degree Goal

Among those graduates who are attending or preparing for graduate or professional school, 70% are pursuing a doctoral degree, 28% master's degree and 2% a second bachelor's degree.

Field of Study

Master's degrees are being pursued in aerospace, biology, computer engineering, marine biology, music therapy, neuroscience, nursing, nutrition science, physician assistant, psychology, social work and wildlife science.

Doctoral degrees are being pursued in biochemistry, bioengineering, bioinformatics, biology, biomedical science, chemistry, communication, computer engineering, dentistry, electrical engineering, EMT paramedic, information science, marine biology, mathematics, mechanical engineering, medicine, neuroscience, nursing, pharmacy, physical therapy and veterinary science.

Enrollment Status

Among graduate students, 83% are currently enrolled; 4% plan to enroll within six months; 8% within twelve months; 4% within eighteen months; and 2% are unsure.

Over half (53%) are or will attend graduate school in Washington State; 19% may attend graduate school in-state; and 28% will attend graduate school out-of-state.

Workforce Plans

Most graduates (60%) who are attending or preparing for graduate or professional school plan to enter the workforce after more than eighteen months; 30% within twelve to eighteen months; 4% within six months; and 6% are unsure.

Nearly three-quarters (72%) indicate that they will search for a job in-state, 25% are unsure and 4% indicate that they plan to work out-of-state.

WSOS GRADUATES SEEKING EMPLOYMENT

The following section pertains to the 5% of respondents who indicate that they are currently seeking employment.

Job Search Duration

Among those who are seeking employment, nearly three-quarters (73%) have been searching for less than three months; 18% four to six months; and 9% longer than one year.

Job Applications Submitted

More than half (55%) of WSOS graduates who are currently seeking employment have submitted seven or more applications within their field of study; 18% have submitted four to six

applications; and 27% less than three. Nearly all (89%) have submitted less than three outside their field of study and 11% seven or more.

Job Offers Not Accepted

Among those who are currently seeking employment, 9% indicate that they have received a job offer that they did not accept due to the position not being full-time and not in their field of study.

WSOS PROGRAM FEEDBACK

WSOS Event Participation

Nearly one-third (31%) attended an event that WSOS encouraged them to attend; 16% attended a WSOS sponsored event; 11% attended a WSOS “Skills That Shine” workshop.

Lower participation rates can be explained, in part, by graduates not knowing that these supports existed: 32%, 41% and 60%, respectively. Statistically higher proportions of scholars in earlier cohorts did not know about or access these services, which is consistent with services provided at that time.

WSOS Event Utility

Of those who attended, the following proportions of scholars indicate that the support was helpful: 90% WSOS encouraged event, 94% WSOS sponsored event and 82% “Skills That Shine” workshop.

WSOS Program Officer Support

Over one-fifth (21%) met with their WSOS Program Officer while enrolled in college.

Statistically higher proportions of graduates in later cohorts met with their WSOS program officer: Cohort 1 (13%), Cohort 2 (24%), Cohort 3 (38%) and Cohort 4 (46%).³

Of those who did, one-third (33%) sought post-graduation preparation support, 23% academic support, and 10% personal support.

WSOS Program Officer Utility

Of those who sought each support from their WSOS Program Officer, the following proportions indicate that it was helpful: 99% post-graduation preparation, 100% academic support, and 100% personal support.

Mentoring Younger WSOS Scholars

Nearly one-quarter (24%) indicate that they are interested in mentoring a younger WSOS scholar.

³ Results for Cohort 5 are not reported due to a sample size less than 10.

Open-Ended Feedback

Of the 220 survey responses received, 88 (40%) provided open-ended feedback to the prompt, “Please take a moment to share any feedback related to your participation in WSOS. We would love to hear your comments, reflections or suggestions related to your experience as a WSOS Scholar.”

The majority (58%) expressed gratitude related to the financial aid provided by the scholarship program; 18% expressed gratitude related to the supports provided; 9% combined positive feedback with constructive feedback, primarily related to not knowing about WSOS supports; and 15% provided constructive feedback only, primarily related to frustration regarding losing the scholarship after switching majors.

Return on Investment: Near-Peer and Industry Mentoring

Kelly Bay-Meyer, Ph.D.*

October 25, 2018

Prepared on behalf of WA STEM and Washington State Opportunity Scholarship

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Introduction

The Washington State Opportunity Scholarship (WSOS) helps low- and middle-income Washington State residents earn their bachelor's degrees in the high-demand fields of science, technology, engineering, math and health care. Ultimately, WSOS seeks to fill local employment gaps, preparing youth to compete for desirable jobs that are in high-demand by local employers.

Through a public-private partnership between Washington State government, Boeing and Microsoft, WSOS scholars receive up to \$22,500 over a maximum of five years to help mitigate the financial burden of postsecondary education. Scholars also receive a variety of career readiness supports.

To strengthen the program's impact, WSOS has scaled up program supports by investing in near-peer and industry mentoring. To help determine the extent to which the anticipated benefits will outweigh the additional costs, WSOS contracted an independent evaluator to lead a return on investment analysis for these two additional program components.

This document summarizes the independent evaluator's findings related to two main bodies of work: (1) literature review addressing the anticipated impact of near-peer mentoring and industry mentoring on college retention and (2) return on investment (ROI) analysis comparing the increased cost per student for the proposed model relative to its estimated, relative benefits.

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Definitions and Limitations

For this analysis, return on investment (ROI) is defined as the following:

$$ROI = (\text{Benefit} - \text{Cost}) / \text{Cost}$$

This study is not intended to provide a comprehensive analysis of student-level costs and benefits for students, colleges, WSOS and society at large. Instead, it is primarily focused on estimating the value-add of near-peer and industry mentoring *relative* to existing program costs. Costs are limited to WSOS-incurred costs (e.g., scholarship dollars and staffing costs) and do not include the costs that college campuses invest in retention, graduation or job placement (Delta Cost Project, 2009). Benefits (i.e., the value-add of new program components in terms of increasing college persistence and graduation) are estimated by triangulating findings from available research studies. Only the most rigorous studies available that quantify mentoring's impact on college persistence are used to estimate program impact. Existing, research-based ROI calculations are used to quantify the impact of increased persistence and graduation rates in the form of net college revenue, estimated lifetime earnings of graduates and estimated tax revenues per graduate. Net benefits are calculated by subtracting the costs from benefits.

Since near-peer and industry mentoring are currently in beginning implementation stages, this study represents a “what-if analysis,” in which actual program costs, persistence rates and four-year graduation rates provided by WSOS (Appendix A) are compared to the additional costs of near-peer and industry mentoring (Appendix B) and the estimated, additional benefits of mentoring on college persistence and graduation rates.

Literature Review

The following literature review is broken into two main sections: Near-Peer Mentoring and Industry Mentoring. Each section includes a discussion of research findings, limitations and estimates of program impact based on these findings. Each section also includes a “what-if analysis,” using actual program students served and outcomes to date. We conclude with an estimate of the combined impact of near-peer and industry mentoring may have had on actual WSOS numbers to date.

Near-Peer Mentoring

Recent reviews of research spanning nearly 40 years on undergraduate mentoring programs (Jacobi, 1991; Crisp & Cruz, 2009; Gershenfeld, 2014) lament the absence of a widely accepted operational definition of mentoring. According to Jacobi, the lowest common denominator definition of mentoring includes the following five components (Jacobi, 1991, p. 513):

1. Mentoring relationships are helping relationships usually focused on achievement. The primary dynamic of the mentoring relationship is the assistance and support provided to the protégé by the mentor. This support can take many forms but is always intended to help the protégé succeed in school or work.
2. [M]entoring includes any or all of three broad components: (a) emotional and psychological support, (b) direct assistance with career and professional development and (c) role modeling.

3. Mentoring relationships are reciprocal relationships. The mentor as well as the protégé derives benefits from the relationship, and these benefits may be either emotional or tangible in nature.
4. Mentoring relationships are personal...[M]entorship requires direct interaction between the mentor and the protégé.
5. Relative to their protégés, mentors show greater experience, influence, and achievement within a particular organization or environment.

More specifically, undergraduate mentoring programs typically aim to provide psychological or emotional support in the form of a role model to set and achieve college- and career-related goals (Nora & Crisp, 2007). Peer mentors have also been shown to benefit from developing professional and leadership skills, increased confidence and increased self-efficacy in seeing themselves as leaders (Zevallos & Washburn, 2014).

Overall, there are many research studies that suggest a positive relationship between undergraduate mentoring programs and mentee outcomes; however, while studies have improved over time to incorporate theoretical frameworks and investigate the impact of mentoring on diverse groups of students, the methodological rigor of most studies continues to raise concern (Jacobi, 1991; Crisp & Cruz, 2009; Gershenfeld, 2014). Of the twenty studies reviewed most recently, 0% met the top two standards of methodological rigor (i.e., experimental designs with or without a longitudinal analysis); 25% met the middle standard (i.e., quasi-experimental design); 20% met the second lowest standard (i.e., single group pre/post test without a comparison group); and the remaining 55% fell into the lowest category of rigor (i.e., research design lacks validity and/or findings suggest no change or negative change) (Gershenfeld, 2014, p. 368).

Given the methodological limitations of existing research, variation in mentoring program design and implementation, and the limited number of studies that measure impact in terms of persistence and graduation rates, estimating the impact of a new undergraduate mentoring program on student persistence and graduation rates is relatively tenuous. To generate the strongest estimate possible, more recent studies with stronger methodological rigor are weighed more heavily. Studies that provide persistence rate comparisons, relate to undergraduate mentoring programs in STEM and/or supporting historically underrepresented students are also discussed here.

With respect to undergraduate STEM majors, several studies have demonstrated a positive impact of peer mentoring on academic performance and persistence in a STEM major. Using a quasi-experimental design, Fox et al (2010) found that first-year students who participated in a peer-mentoring program demonstrated better academic performance as compared to a similar group of nonparticipants. Additional non-experimental studies have also found that STEM majors indicate that mentoring was the largest contributing factor to their academic success (Kendricks, Nedunuri, & Arment, 2013). Peer mentoring among STEM majors has also demonstrated a positive impact on mentees' involvement in, satisfaction with and commitment to their major (Holland, Major, & Orvis, 2012).

With respect to college persistence among undergraduate students, several experimental studies with randomized treatment and control groups have demonstrated a strong, positive impact of peer mentoring on college persistence. For example, Rodger and Tremblay (2003) found that first-year

college students who met with their peer mentor at least once per month returned to campus at a statistically higher rate than the applicant control group (86.1% vs. 81.4%) (Rodger & Tremblay, 2003, p. 12). This suggests that peer mentoring could potentially increase first to second year retention by 4.7%. Similarly, Bettinger and Baker (2011) found that a one-year private coaching model had a comparable impact on college persistence. Students in the treatment group were assigned coaches who contacted students regularly to define and track goals and develop time management, self-advocacy and study skills. Seventeen independent experiments that were conducted over two years across public and private colleges consistently demonstrated an immediately and lasting increase in persistence: +5.3% at twelve months, +4.3% at eighteen months and 3.4% at twenty-four months. Differences in proportions were statistically significant at the 99 percent confidence level.

Estimated Impact of Near-Peer Mentoring and Assumptions

According to the most relevant and rigorous data available, near-peer mentoring in the first year of college has a significant, positive impact on first to second year college persistence, ranging from 4.7% to 5.3% or 5.0% on average. This would increase WSOS's current 84% Year 1 to Year 2 persistence rate to 89%.

Given that first-year, near-peer mentoring has also been shown to have a lasting impact of 3.4% two years later, we would assume that continuing near-peer mentoring through a student's second year would have an even stronger impact on second to third year persistence; however, since we do not know exactly what this impact might be, we conservatively estimate 3.0%. This would increase WSOS's current 72% Year 1 to Year 3 persistence rate to 75% (Table 1).

Assuming the same attrition rates between years¹ and the same persistence and graduation rates beyond the third year, if near-peer mentoring had been implemented from the program's inception, we estimate that it would have yielded 85 or 9.91% additional four-year graduates² (Table 1).

Table 1. Estimated Impact of Near-Peer Mentoring

OUTCOMES	ACTUAL			ESTIMATED		
	Total #	Persisted or Graduated #	Rate %	Total #	Persisted or Graduated #	Rate %
Year 1 to Year 2 Persistence	3,549	2,993	84%	3,549	3,159	89%
Year 1 to Year 3 Persistence	2,447	1,759	72%	2,584	1,938	75%
Year 1 to Year 4 Persistence	1,712	1,143	67%	1,886	1,264	67%

¹ To date, WSOS attrition is estimated at 18.2% between Years 2 and 3 and 2.7% between Years 3 and 4.

² It should be noted that the WSOS five-year graduation rate is 71% and the six-year graduation rate is 74%. This study truncates the graduation rate at four years due to the limited range of existing research studies, upon which this analysis estimates near-peer and industry mentoring impact.

4-Year Graduation	1,712	858	50%	1,886	943	50%
Additional Graduates					85	10%

Clearly, program design and fidelity will mediate the relationship between near-peer mentoring and its impact on student persistence. To help ensure a positive impact on student persistence, it will be important to incorporate best practices in mentor recruitment, screening, training, matching, initiating, monitoring, supporting and closing, which have been rigorously researched and documented for adult-youth mentoring programs (MENTOR, 2015). Specific to undergraduate mentoring programs, Putsche et al (2008) find that program success depends on appropriate staffing, matching and continuous communication regarding mentee needs. Moreover, setting mentor and mentee expectations about the purpose of the relationship; the scope of topics to be discussed; and the frequency and duration of contact are particularly important for undergraduate mentoring programs given the many factors that influence college persistence (Egege & Kutieleh, 2015).

Industry Mentoring

For the purposes of this analysis and building off Jacobi’s (1991) framework, industry mentoring is defined as a personal, reciprocal relationship in which a career professional mentor, who has greater experience, influence and achievement within a particular industry, provides direct assistance with career and professional development and serves as a role model to an undergraduate mentee, who is interested in pursuing a career similar to their industry mentor.

Available research on career-specific mentoring for undergraduates focuses on mentoring relationships between students and faculty or staff on campus. While this is not the exact model proposed by WSOS, it does suggest a strong, positive relationship between career-specific mentoring relationships, self-efficacy, academic performance and college persistence.

With respect to self-efficacy, an evaluation of an undergraduate STEM research program at four selective universities demonstrates that students attribute mentoring to increased confidence in their professional skills and abilities related to conducting research (Thiry, Laursen, & Hunter, 2011). Believing in one’s own ability to succeed has been demonstrated to be critically important to college success. After controlling for gender, ethnicity, first-generation status, and high school grade GPA, research suggests that increased levels of college self-efficacy are associated with greater odds of persisting into the spring semester and of being academically successful (Wright, Jenkins-Guarnieri, & Murdock, 2012).

Further supporting the connection between self-efficacy and academic success, Tovar (2014) finds that after controlling for pre-college factors, transition factors, and academic and social factors, time with faculty and counselors discussing career issues was positively related to Latinx community college students’ cumulative GPA. These findings coincide with other bodies of research that demonstrate the importance of emphasizing career goals throughout college to increase a student’s sense of purpose and motivation to perform academically and persist in college. For example, first-

year college students reporting job-related goals are more likely to make positive persistence decisions than students reporting unknown goals (Hull-Blanks, et al., 2005).

Reinforcing the relationship between career-focus and college persistence, Barnett (2011) finds that students' intent to persist in college is associated with those who have had at least one or more faculty that they have considered a mentor. While intent to persist is not synonymous with persisting, previous studies have found that intent to persist strongly predicts actual persistence (Braxton, Milem, & Sullivan, 2000). Moreover, Hu and Ma (2010) find that having an assigned college mentor was positively related to the probability of persisting through a student's second year in college. While the number of mentor meetings did not have a statistically significant impact, the odds of persisting increased 1.6 times for every unit increase in turning to their mentor for support and 1.7 times for every unit increase in the perceived importance of mentoring. To help explain why this relationship exists, Schreiner, Noel, Anderson and Cantwell (2011) interviewed at-risk students across nine institutions and found that mentoring roles were perceived as most important in terms of encouragement, motivation, taking time, expressing interest in students' successes, relating to students on their level, and balancing rigorous standards with support to succeed.

Overall, multiple strands of research find evidence of positive, reinforcing relationships among career-specific mentoring, self-efficacy, sense of purpose, academic performance and college persistence. However, research on career-specific mentoring for undergraduate students typically focuses on mentoring from college faculty and staff—not career professionals outside of academia that WSOS will be recruiting. Given the greater college-specific expertise that college faculty and staff likely hold in comparison to external career professionals, we might expect career professional mentors to have a lesser *direct* impact on academic performance and college success behaviors; however, given the current, applied, career-specific expertise that career professionals likely hold relative to full-time college faculty, we might expect industry mentoring to yield a greater impact on self-efficacy and sense of purpose, which, in turn, influence academic performance and college persistence *indirectly*.

Estimated Impact of Industry Mentoring and Assumptions

If we assume that industry mentoring has the potential to yield a similar impact on persistence outcomes through different causal pathways and that the quality of mentoring will be such that scholars will turn to their mentor for support, then we can estimate that the odds of persisting will increase by at least 1.6 compared to those without mentors, based on the available quantifiable data from Hu and Ma (2010).

While there is no quantifiable data on the impact of industry mentoring on college persistence aside from college faculty mentoring among first-year students, conservatively, we estimate the same increase in odds for industry mentoring among upperclassmen. Given WSOS's current first to fourth year persistence rate of 67% without an industry mentor, the estimated persistence rate with an industry mentor would be 76%. If WSOS had implemented industry mentoring from the program's inception, we estimated that this would have added 158 students to the four-year graduation

pipeline. Assuming a constant 50% four-year graduation rate, this would yield 77 or 8.97% additional graduates (Table 2).³

Table 2. Estimated Impact of Industry Mentoring

OUTCOMES	ACTUAL			ESTIMATED		
	Total #	Persisted or Graduated #	Rate %	Total #	Persisted or Graduated #	Rate %
Year 1 to Year 4 Persistence	1,712	1,143	67%	1,712	1,301	76%
4-Year Graduation	1,712	858	50%	1,870	935	50%
Additional Graduates					77	9%

Combining Near-Peer and Industry Mentoring

Combining near-peer mentoring in the first two years with industry mentoring in the third and fourth years would exponentially magnify the impact on graduation outcomes by increasing the number of students throughout the pipeline. In total, if the two programs had been implemented together from the beginning of the program, it is estimated to have yielded 230 or 26.81% additional four-year graduates (Table 3).

Table 3. Estimated Impact of Near-Peer and Industry Mentoring Combined

OUTCOMES	ACTUAL			ESTIMATED		
	Total #	Persisted or Graduated #	Rate %	Total #	Persisted or Graduated #	Rate %
Year 1 to Year 2 Persistence	3,549	2,993	84%	3,549	3,159	89%
Year 1 to Year 3 Persistence	2,447	1,759	72%	2,584	1,938	75%
Year 1 to Year 4 Persistence	1,712	1,143	67%	1,886	1,433	76%
4-Year Graduation	1,712	858	50%	2,176	1,088	50%
Additional Graduates					230	27%

³ Odds ratio = mentor(persisted/dropped)/no mentor(persisted/dropped); $1.6 = [x/(100-x)]/(67/33)$; $x = 76.46$

Return on Investment

To estimate the return on investment of near-peer mentoring and industry mentoring, we use existing benefit calculations of college persistence and graduation with respect to net college revenue, individual earnings and societal benefits in the form of tax revenue. To estimate the cost of investment, we rely on budget data provided by WSOS to determine the cost per student. Finally, the net return on investment is calculated by subtracting the current return on investment by the estimated return on investment.

Benefits

Net College Revenue: According to the College Board, average institutional revenue per FTE student enrolled at public four-year institutions is \$24,140 in annual net college tuition and state/local appropriations revenue, based on the most recent data available from 2014-15 (College Board, 2015). Comparable data was not readily available for independent, private colleges and universities. Thus, we use the public institution revenue per FTE to estimate the value-add of program components. The benefits of near-peer and industry mentoring to colleges and universities include increased persistence, more FTE students enrolled, and higher net revenue gained through college tuition and state/local appropriations.

Individual Earnings: According to the Hamilton Project sponsored by the Brookings Institution (2018), the median bachelor's degree graduate (any major) who is working full-time will earn \$490,000 more in lifetime earnings than the median full-time worker with some college, no degree⁴. Many bachelor's degree graduates in STEM and health care fields earn even more. For example, median bachelor's degree graduates working full-time in Computer Science earn \$950,000 more than the median full-time worker with some college, no degree over their lifetime; Mathematics and Statistics \$720,000 more; Engineering Technologies \$750,000 more; Nursing \$640,000 more; and Microbiology, Physiology, Genetics and Neuroscience \$520,000 more. To be conservative, we use the median increase in lifetime earnings for any bachelor's degree graduate compared to full-time employees with "some college": \$490,000. Since we estimate a combined federal and state tax rate of 32% and include this revenue as "Societal Benefits" (see below), we subtract this additional lifetime tax revenue (\$156,800) from the additional income (\$490,000) to arrive at an estimated \$333,200 in additional net income.

Societal Benefits: Many research studies have demonstrated the positive, wide-reaching impact of higher education beyond college revenue and individual earnings. Additional market benefits to society include increased tax revenues, faster economic growth, greater innovation and labor market flexibility, increased productivity of co-workers and reduced burden on public finances due to lower unemployment, healthier lifestyles, more preventative care, better educational parenting and lower crime rates (United Kingdom Department for Business, Innovation & Skills, 2013). Unlike net college revenue and individual earnings, social return on investment calculators are not yet available

⁴ We use the comparison group "some college, no degree" because near-peer mentoring and industry mentoring will impact college persistence and graduation for students who are already enrolled in college. Thus, at minimum, students impacted by these program components would have "some college."

publicly. As a result, we focus on one easily quantifiable societal benefit: increased tax revenues. For the purposes of this study, tax revenue is estimated at 32%. This includes estimates of the federal income tax (22%, based on median salaries for STEM and health care bachelor’s degree holders and 2018 income tax brackets) and average Washington state and local sales tax (10%). Overall, 32% of the additional lifetime income of \$490,000 would be \$156,800 per additional graduate.

Overall, the estimated benefit per four-year graduate in terms of net college revenue, individual earnings and societal benefits is \$586,560 more than students with some college, no degree (Table 4).

Table 4. Relative Benefit/Student: Bachelor’s Degree vs. Some College, No Degree

BENEFITS	DIFFERENCE: BACHELOR’S DEGREE MINUS SOME COLLEGE, NO DEGREE
Net College Revenue (\$24,140 x 2 years) ⁵	\$48,280
Added After-Tax Lifetime Earnings	\$333,200
Added Lifetime Federal, State & Local Tax Payments	\$156,800
TOTAL ADDED BENEFIT	\$538,280

If near-peer mentoring had been implemented with first- and second-year WSOS scholars from the beginning of the program, it is estimated to have yielded 166 additional, enrolled students in year two; 179 in year three; 121 in year four; and 85 additional four-year graduates (Table 1). If industry mentoring had been implemented with third-year WSOS scholars from the beginning of the program, it is estimated to have yielded 158 additional, enrolled students and 77 additional four-year graduates (Table 2). If both had been implemented together from the beginning, it is estimated to have yielded 166 additional, enrolled students in year two; 179 in year three; 290 in year four; and 230 additional four-year graduates (Table 3).

Costs

According to WSOS-provided budget data (Appendix B), scholarship dollars represent 89% of the 2018-19 budget, followed by staffing costs (7%) and all other costs (4%). For this analysis of estimated four-year graduation rates, the scholarship cost per student is \$2,500 for first-year scholars, \$2,500 for second-year scholars; \$5,000 for third-year scholars; and \$7,500 for fourth-year scholars or \$17,500 total over four years⁶. Based on WSOS-provided budget data for 2018-19, the additional staffing cost for the near-peer mentoring program is estimated to be \$200 per year per participant and the industry mentoring program to be \$172 per year per participant. At this time, WSOS estimates that all other costs will remain constant. Thus, we estimate the cost of additional

⁵ To estimate the difference in net college revenue among students who earn a bachelor’s degree within four years compared to those with “some college,” we estimate a mean of two years given that stopping out occurs most frequently among first and second year college students.

⁶ WSOS scholarship amounts are based on current award levels:
<https://www.waopportunitiescholarship.org/scholarship-supports/scholarship/current-recipients/requesting-an-increase/> (accessed 9/25/2018)

scholarship dollars and staff costs over four years. While this likely does not include all costs, we can safely assume that this represents approximately 96% of all costs based on WSOS budget data.

Overall, the estimated cost per student over four years is summarized below for each program configuration (Table 5).

Table 5. Estimated Cost/Student x 4 Years

COST/STUDENT x 4 YEARS	EXISTING	NEAR-PEER MENTORING	INDUSTRY MENTORING	NEAR-PEER + INDUSTRY MENTORING
WSOS scholarship	\$17,500	\$17,500	\$17,500	\$17,500
WSOS existing program ⁷	\$2,136	\$2,136	\$2,136	\$2,136
WSOS near-peer mentoring		\$400		\$400
WSOS industry mentoring			\$344	\$344
TOTAL ADDED COST	\$19,636	\$20,036	\$19,980	\$20,380

Return on Investment

To estimate the return on investment of near-peer and industry mentoring, we divide the estimated net benefit (benefit minus cost) by the estimated cost. Based on our analysis of estimated benefits and costs, we estimate how many students out of every hundred are expected to graduate within four years. We estimate the following returns on investment relative to the existing program design:

Near-peer mentoring in a student’s first and second year is anticipated to yield \$1.06 for every dollar spent (6% return); industry mentoring in a student’s third year is anticipated to yield \$1.11 for every dollar spent (11% return); and combining near-peer and industry mentoring is anticipated to yield \$2.93 for every dollar spent (193% return) (Table 6).

Table 6. Return on Investment: 100 Students x 4 Years

For every 100 students...	EXISTING	NEAR-PEER MENTORING	INDUSTRY MENTORING	NEAR-PEER + INDUSTRY MENTORING
Graduates within 4 Years ⁸	50	55	55	63
Cost	\$1,963,600	\$2,003,600	\$1,998,000	\$2,038,000
Benefit	\$26,914,000	\$29,605,400	\$29,605,400	\$33,911,640
ROI (Benefit-Cost)/Cost	\$12.71	\$13.77	\$13.82	\$15.64
RELATIVE ROI (New-Existing ROI)		\$1.06	\$1.11	\$2.93

Again, it is important to note that overall ROI estimates for each intervention are not intended to be used in isolation. This ROI analysis is not comprehensive and does not reflect all costs and benefits.

⁷ WSOS existing program costs include line items Scholar Awards Staff, All Other Staff and All Other Program Costs (\$65, \$203 and \$265 per student, per year, respectively) multiplied by four years.

⁸ The estimated number of graduates is rounded up to the nearest whole number to reflect actual students.

Instead, this analysis is intended to highlight the estimated, *relative* ROI of the new program interventions.

Conclusion

To estimate WSOS's return on investment for its near-peer and industry mentoring components, this report relied on a thorough review of the literature on the impact of near-peer and industry mentoring on college student retention. Based on these research-based estimates, a "what-if analysis" was conducted that replaced actual persistence rates with estimated persistence rates over the lifetime of the program. Based on this "what-if analysis," this study estimates that near-peer mentoring would yield 10% more graduates within four years, industry mentoring would yield 9% more, and combining near-peer and industry mentoring would yield 27% more. Of course, the strength of the impact of both mentoring components depends on fidelity of program implementation based on best practices in the mentoring field.

To monetize benefits and costs of the program components, net college revenue, individual earnings and societal benefits in the form of tax revenue were included from publicly available sources. Costs per student were estimated using 2018-19 budget data provided by WSOS. Overall ROI estimates for each intervention are not intended to be used in isolation. Instead, this analysis is intended to highlight the estimated, *relative* ROI of the new program interventions compared to the current program model. The relative ROI is calculated by subtracting the current ROI by the estimated ROI.

Near-peer mentoring in a student's first and second year is anticipated to yield \$1.06 for every dollar spent (6% return); industry mentoring in a student's third year is anticipated to yield \$1.11 for every dollar spent (11% return); and combining near-peer and industry mentoring is anticipated to yield \$2.93 for every dollar spent (193% return). In other words, either program component is expected to more than pay for itself. Combined, the impact on graduation outcomes are exponentially magnified by increasing the number of students throughout the pipeline. This analysis suggests that the greatest relative ROI would come from combining near-peer and industry mentoring.

Appendix A: WSOS Outcome Data

Program Outcome	Denominator (# Students Enrolled for X Years)	Numerator (# Persisted or Graduated of Denominator)	Rate (Numerator/ Denominator)
Year 1 to Year 2 Persistence	3,549	2,993	84%
Year 1 to Year 3 Persistence	2,447	1,759	72%
Year 1 to Year 4 Persistence	1,712	1,143	67%
4-Year Graduation	1,712	858	50%

Provided by WSOS Deputy Director Kimber Connors (8/25/2018)

Appendix B: WSOS 2018-19 Budget Summary

	Scholars Supported	Total Cost	Cost/ Student
2018-19 Budget Costs			
Scholar Awards Staff (Disbursement Support)	4,371	\$285,960	\$65
Scholar Success Staff (Support Near-Peer Leader Program)	1,516	\$303,009	\$200
Scholar Placement Staff (Support Job Placement and Industry Mentoring Program)	2,583	\$444,156	\$172
All Other Staff Costs (includes all other staff costs of team members not in the direct student support groups)	4,371	\$889,141	\$203
All Other Program Costs (includes all costs except staff and scholarship funds)	4,371	\$1,159,375	\$265

Provided by WSOS Deputy Director Kimber Connors (8/28/2018)

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Tab D

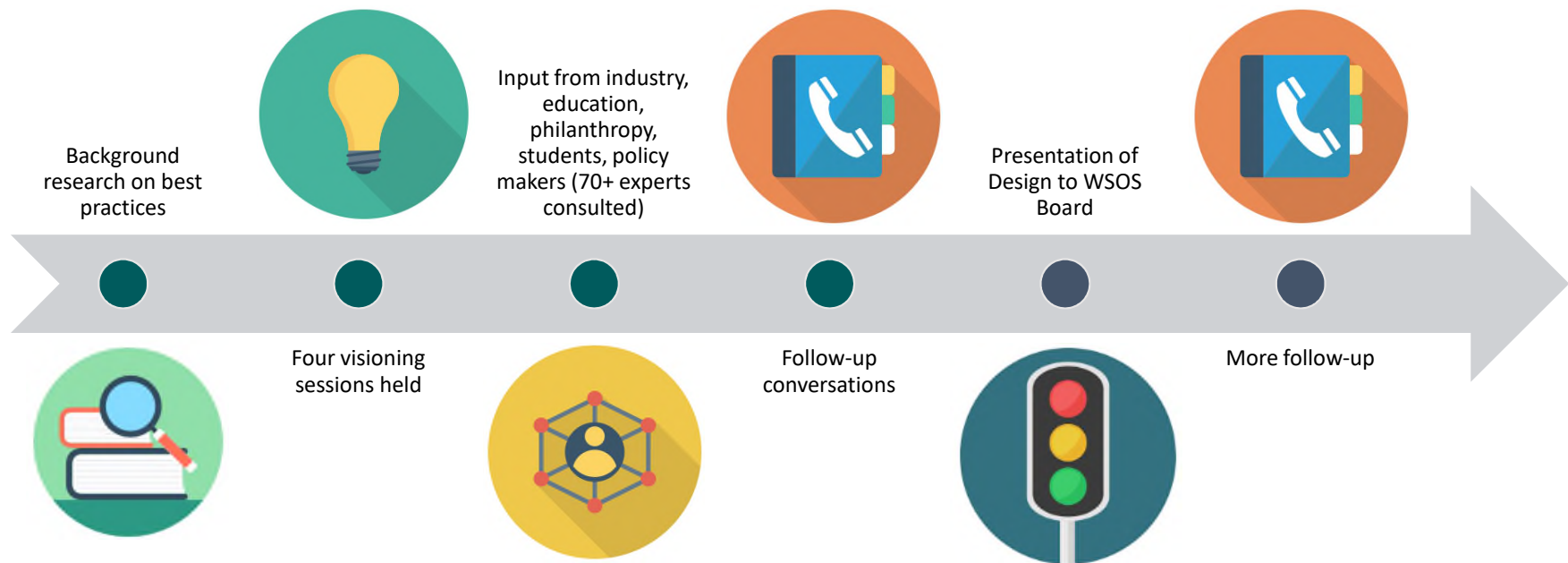
Pathways Scholarship Launch Proposal

WASHINGTON STATE
OPPORTUNITY
SCHOLARSHIP

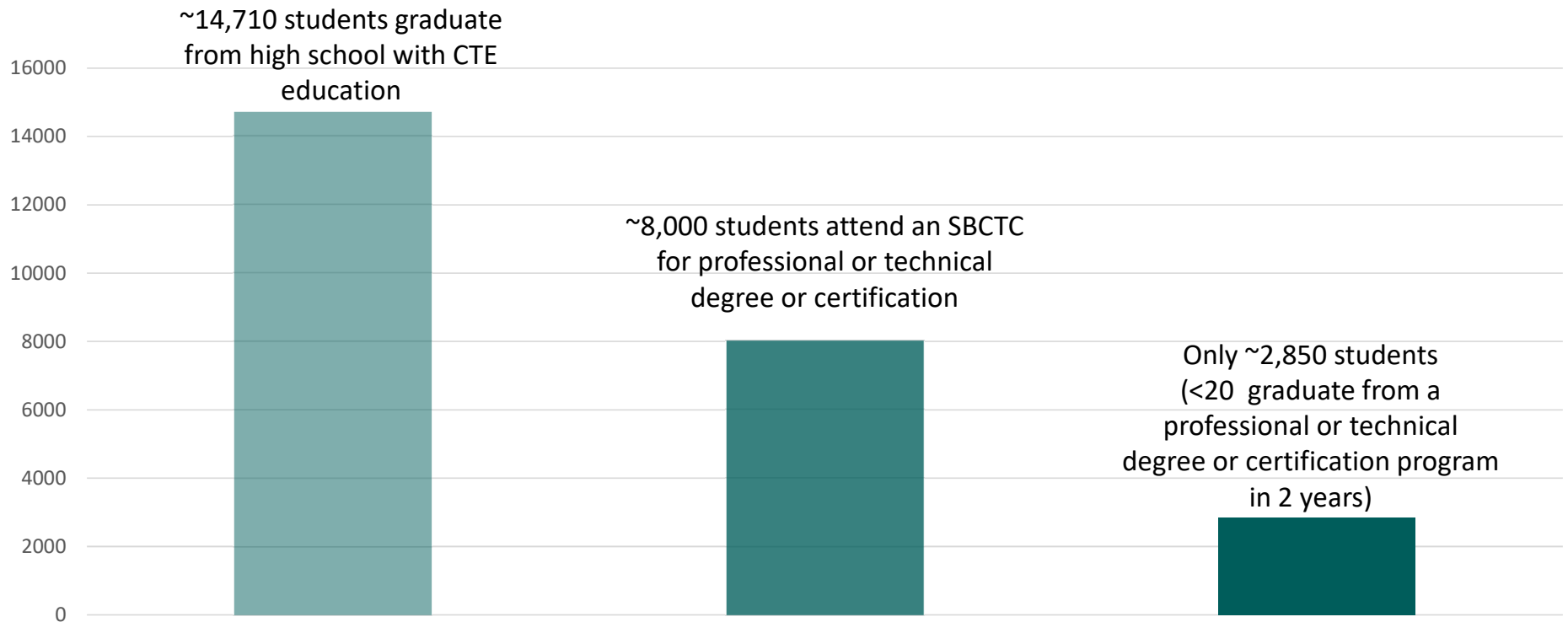


Pathways Scholarship Design Proposal

Pathways scholarship design process

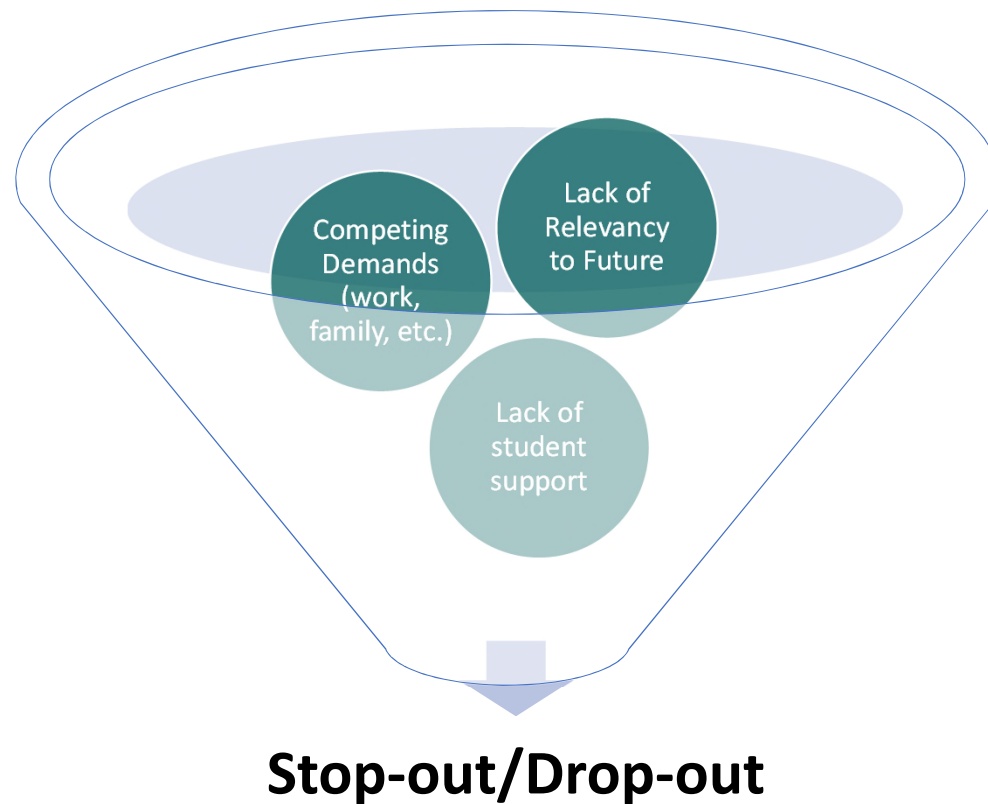


The problem

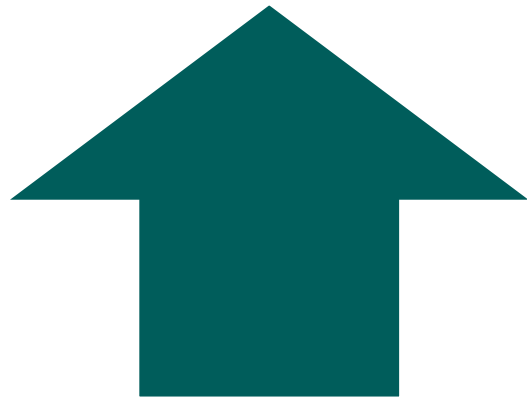


Not enough students are attending and completing high-demand professional and technical degree/certification programs

Frequently cited reasons for why students don't go and why students don't finish



Pathways scholarship is a gig bet for Washington



50% increase in number of Washington students who graduate from an industry verified, regionally determined high-demand professional & technical degree program and are employed within nine months of graduation.



Decrease the # of students with demonstrated interest in CTE education who decline to immediately pursue a post-secondary degree or certification program.

How we will accomplish the big bet



Scholarship Dollars
\$1,500 per quarter/\$500 per
month while enrolled

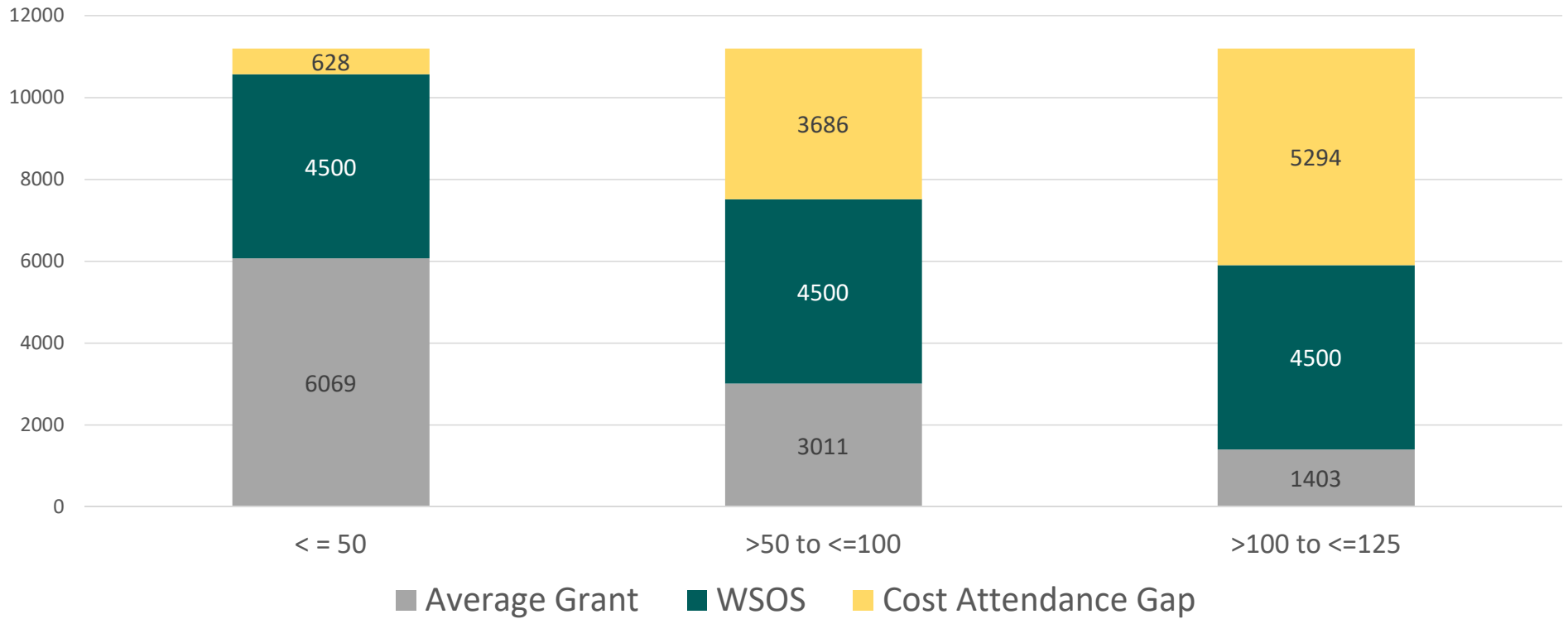
Support Services
Navigators to coach Pathways Scholars
into job placement

Targeted Eligible Programs
Data Driven Analysis of Eligible
Degree/Certification Programs



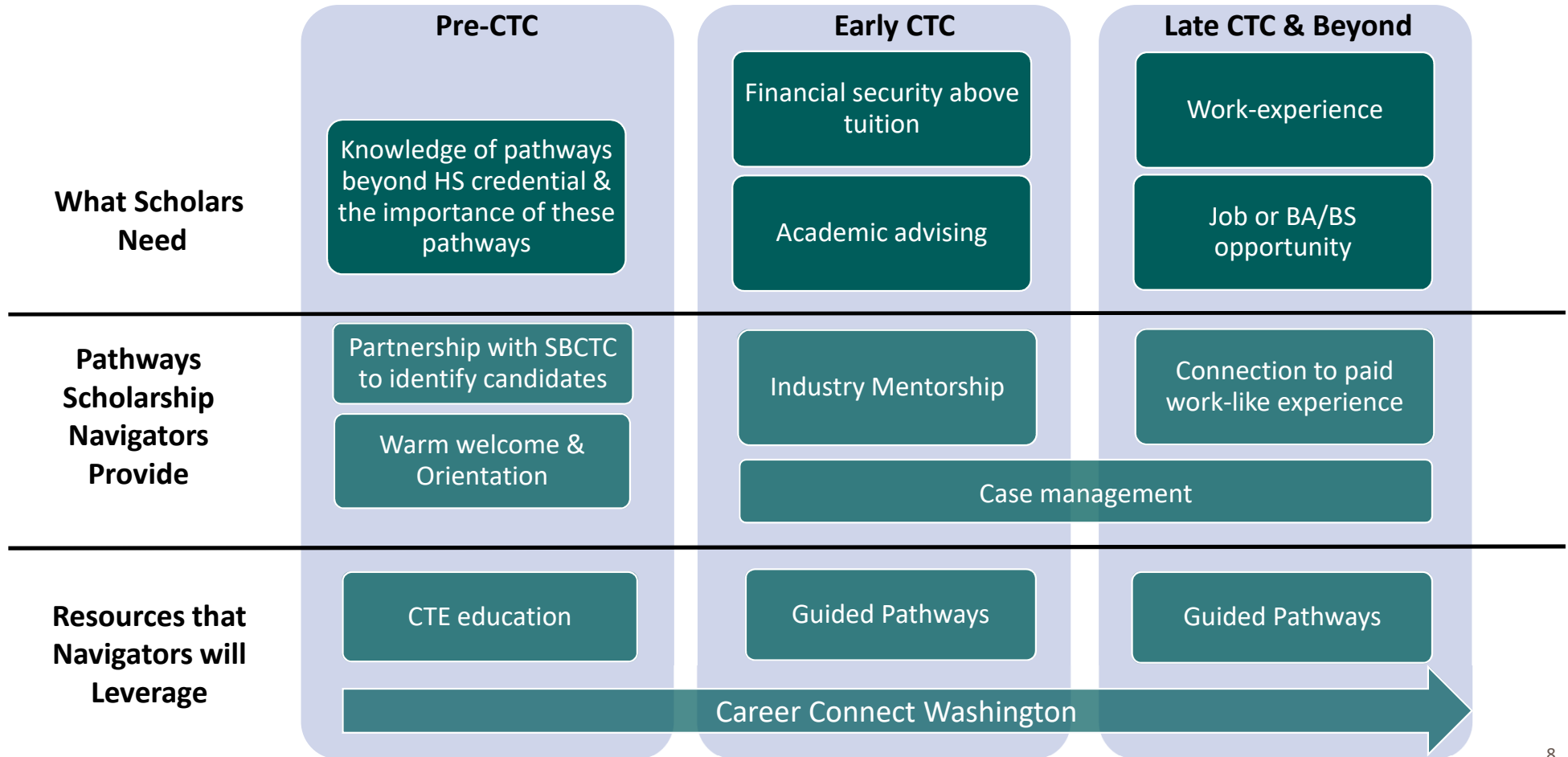
Financial impact on average Pathways Scholar is meaningful

Impact of Pathways Scholarship on Average Awardee





Pathways scholarship support services





Eligible degree/certification programs*

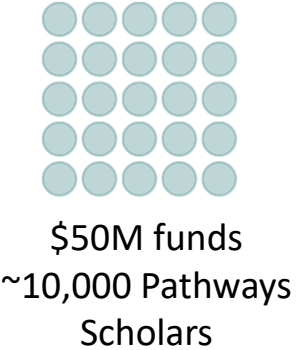


*see Draft Eligible Occupations list

Action requested: Pathways Scholarship Model for 2019-20

	Components
Scholarship Award Amount	<p>\$1,500 per quarter \$6,000 per year (\$4,500 per academic year) or \$500 per month while enrolled in school; approx. ~32% of non-tuition student budget per quarter</p>
Targeted Awardees	<p>Recent high school graduates Demonstrated interest in prof/tech career pathway (n < 4,562 per year)</p>
Degree Programs	<p>Regional high-demand degrees, differentiated by institution (verified by industry) Living wage and evergreen</p>
Support Services – Pathways Navigators	<p>\$500 per student Industry mentorship Case management support Assistance with securing paid work-like experiences Post-completion career placement counseling and navigation</p>
Target completion rate in 2 years or less	<p>66% (current SBCTC completion rate for 25 and younger is 16-24%)</p>

Modeling of Pathways Scholarship



WASHINGTON STATE
OPPORTUNITY
SCHOLARSHIP



Pathways Scholarship Design Appendix



After College Status

Professional/Technical Program Median Wages and Earnings

All

College

Year

Career Cluster

Field of Study

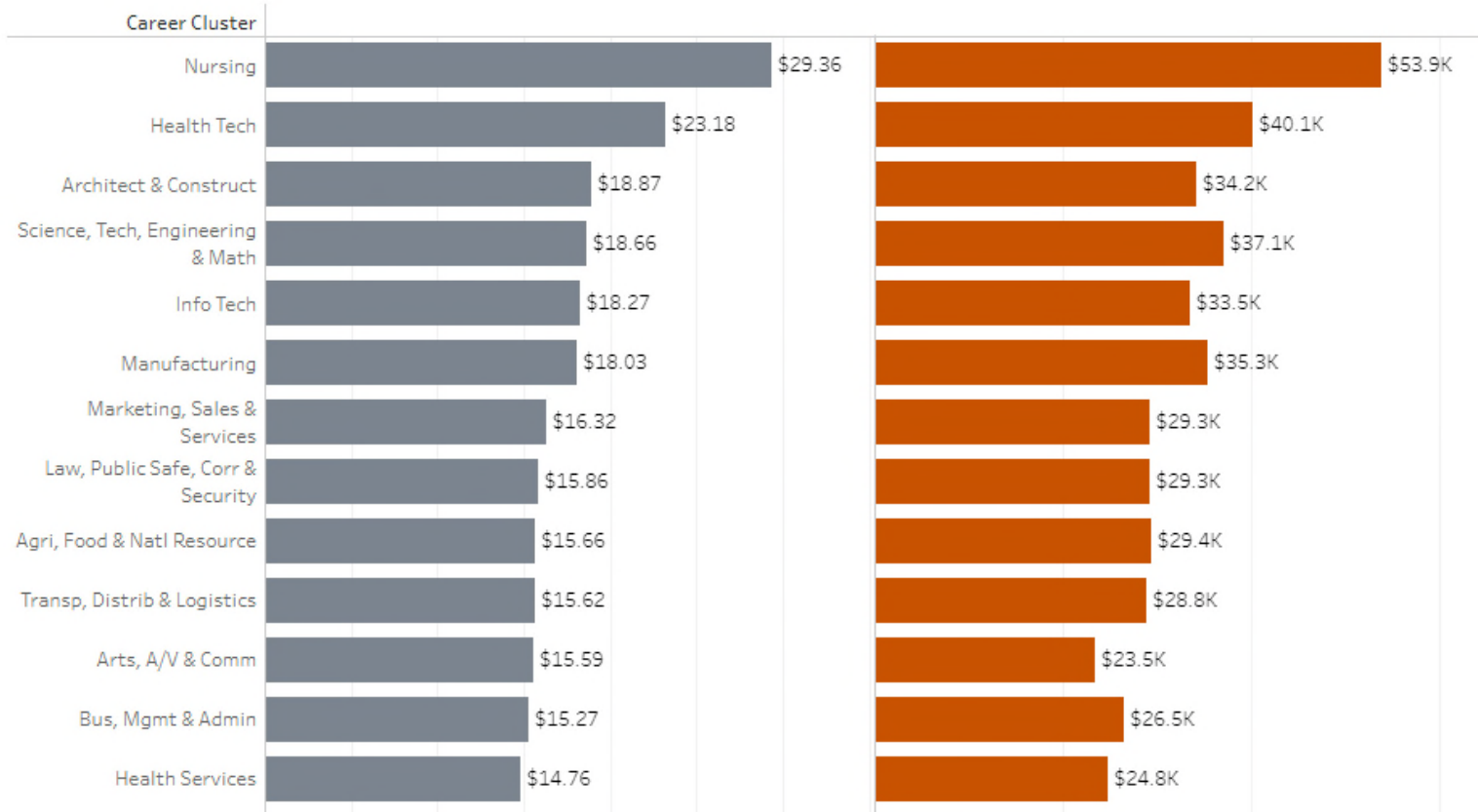
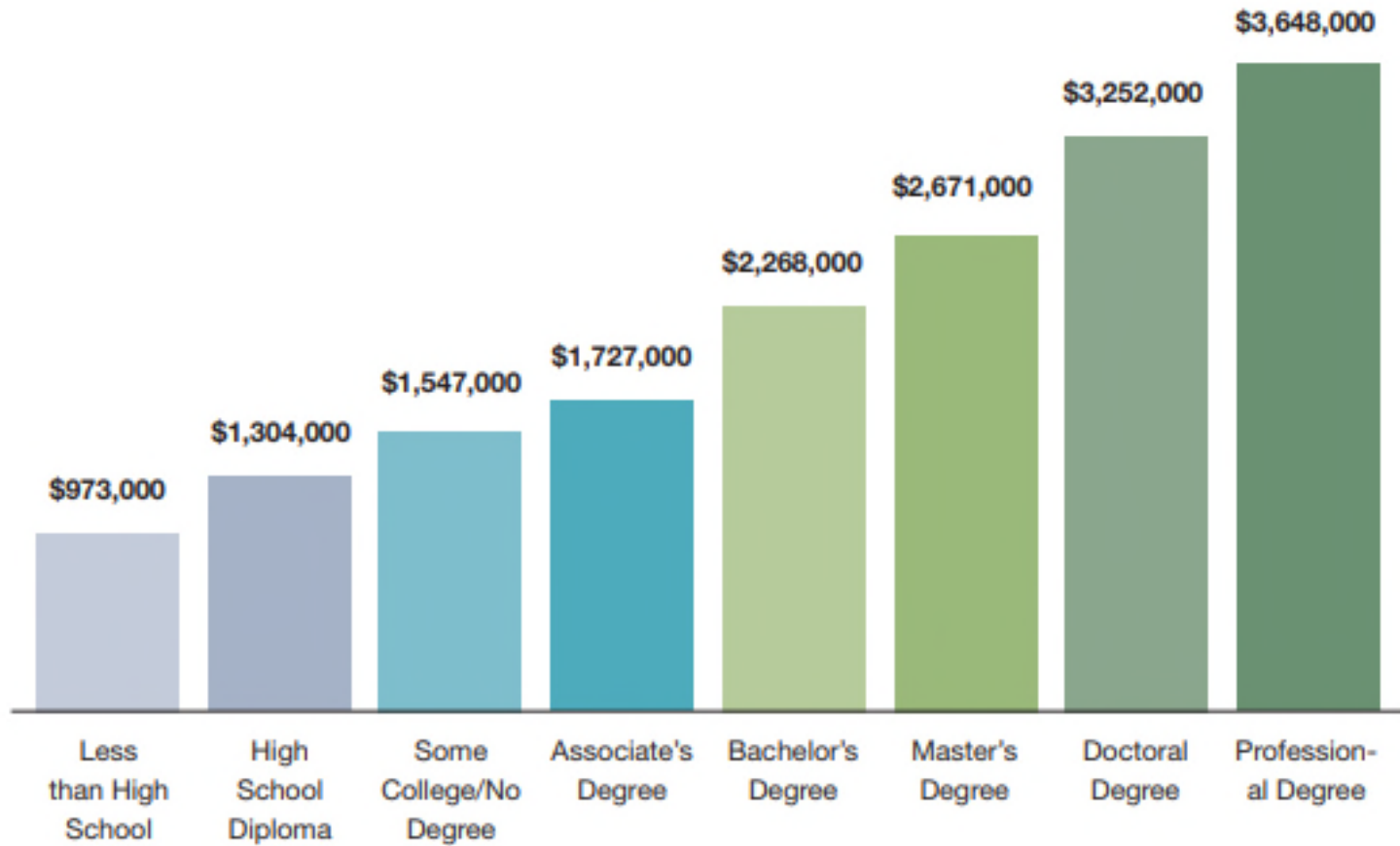


FIGURE 1: MEDIAN LIFETIME EARNINGS BY HIGHEST EDUCATIONAL ATTAINMENT, 2009 DOLLARS



The College Payoff, Georgetown University Center on Education and the Workforce, 2009

MFI Category	Dependency Status					
	Dependent		Independent		Not Provided	
	Number	Average Grant	Number	Average Grant	Number	Average Grant
<= 50	14,386	\$6,069	33,439	\$5,990	8	\$1,819
>50 - <=100	6,495	\$3,018	9,469	\$3,284		
>100 - <=125	437	\$1,063	873	\$1,524		
>125	146	\$1,413	307	\$1,540		
Not Provided	598	\$2,057	4,687	\$1,672	847	\$781
Total	22,062	\$4,932	48,775	\$4,942	855	\$791



Typical Awards

- Gift Aid
 - Federal Pell Grant / State Need Grant
 - College Bound Scholarship
 - Passport to College
 - Federal Supplemental Opportunity Grant (FSEOG)
 - Institutional Grant (3 ½ %)
- Self Help Aid
 - Workforce Education funding
 - WorkFirst, Basic Food Education and Training (BFET), Worker Retraining, and Opportunity Grant
 - Scholarships
 - Foundation Scholarships, Athletic and private scholarships
 - Federal or State Work Study
 - Federal Direct Subsidized Stafford Loans
 - Federal Direct Unsubsidized Stafford Loans

2018-19 SBCTC Prof/Tech Degree Tuition

Lower Division Tuition

2018-2019 Tuition*	Resident	Nonresident
One Quarter (15 credits)	\$1,342	\$3,153
Academic Year (3 quarters/45 credits total)	\$4,027	\$9,458
<i>* Rounded to the nearest dollar</i>		

2018-19 Student Budget

	Dependent, living with parent	Independent, living with parent	Not living with parent	High-cost regions*
Tuition & Fees				
Books & Supplies	\$870	\$870	\$870	\$870
Room & Board	\$3,270	\$7,860	\$9,870	\$10,440
Transportation	\$1,170	\$1,530	\$1,170	\$1,170
Misc./Personal	\$1,860	\$1,920	\$2,100	\$2,340
Total	\$7,170	\$12,180	\$14,010	\$14,820

Grant programs serve different students

	State Need Grant	College Bound Scholarship	WA Opportunity Scholarship	SBCTC Opportunity Grant
Number Students	68,495	15,973	2,952	4,618
% Two-Year	58%	42%	14%	100%
% Four-Year	42%	58%	86%	0%
Percent Younger than 24	59%	100%	97%	21%
% Dependent & Avg. Income	46% \$29,160	91% \$30,005	94% \$52,915	10% \$22,991
% Independent & Avg. Income	54% \$15,980	9% \$8,971	6% \$15,393	90% \$13,389
Full-time in Fall	77%	81%	97%	58%
Students of Color	45%	65%	56%	46%
Have Children	24%	1%	1%	49%

Note: State aid student profile, 2016-17. Unit Record Report.

**CHARACTERISTICS OF ONLINE STUDENTS AND ALL STATE SUPPORTED STUDENTS
FALL 2016**

	Students Taking All Courses Online	Students Taking Some Courses Online	Students Taking No Courses Online	Total - All State Support Students
Students	14,191	26,253	124,598	165,028
Median Age	27	24	26	26
% Female	68%	62%	54%	56%
% Students of Color	35%	39%	46%	44%
% enrolled Full-Time	26%	72%	46%	48%
% with No Prior College	52%	63%	61%	60%
% Working	57%	45%	44%	45%

Source: SBCTC data warehouse.

Students Receiving Need-Based Financial Aid

% of Eligible



	15-16	16-17	17-18
System Total	55%	53%	52%
Bates	42%	40%	38%
Bellevue	30%	29%	28%
Bellingham	61%	62%	58%
Big Bend	62%	59%	59%
Cascadia	34%	36%	30%
Centralia	75%	72%	66%
Clark	64%	62%	58%
Clover Park	57%	50%	52%
Columbia Basin	51%	49%	50%
Edmonds	70%	66%	63%
Everett	35%	35%	35%
Grays Harbor	73%	74%	70%
Green River	52%	51%	49%
Highline	57%	49%	45%
Lake Washington	48%	45%	46%
Lower Columbia	77%	72%	67%
Olympic	49%	48%	44%
Peninsula	69%	67%	70%
Pierce Fort Steilacoom	61%	60%	60%
Pierce Puyallup	58%	55%	56%
Renton	48%	44%	51%
Seattle Central/SVI	45%	44%	44%
Seattle North	33%	36%	30%
Seattle South	30%	28%	24%
Shoreline	41%	41%	46%
Skagit Valley	47%	47%	48%
South Puget Sound	61%	62%	65%
Spokane	67%	63%	62%
Spokane Falls	69%	65%	64%
Tacoma	71%	64%	59%
Walla Walla	70%	72%	69%
Wenatchee Valley	59%	56%	56%
Whatcom	68%	63%	59%
Yakima Valley	75%	74%	72%

Specify Measure:
% of Eligible

Specify Timeframe:

Academic Year
Multiple values

Additional Customizations:

Student Type
Prof/Tech

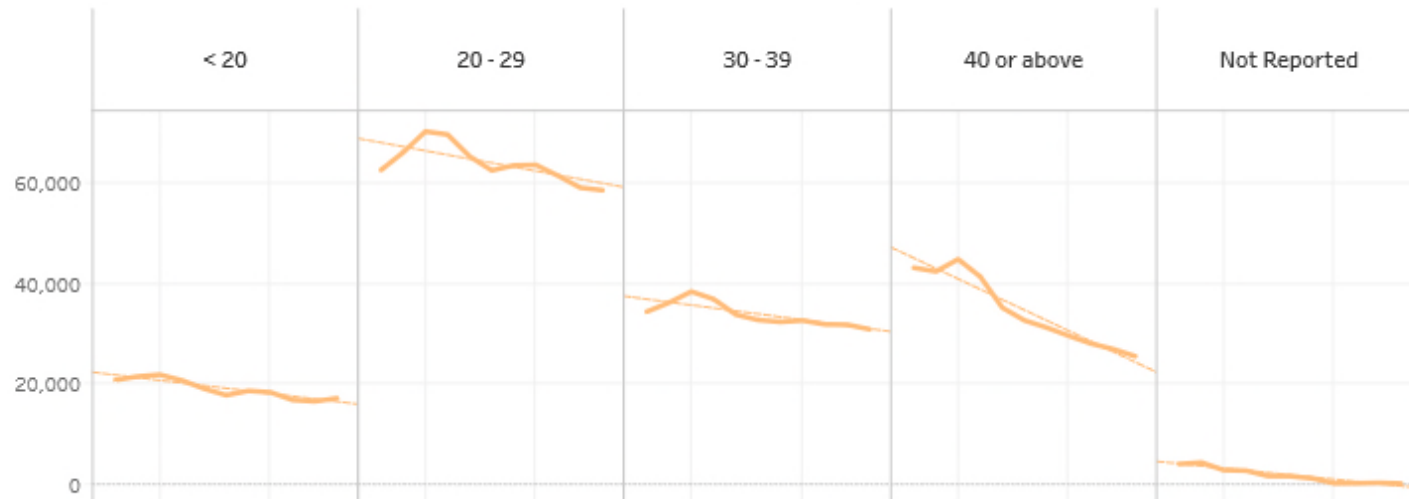
Family Status
All

Full/Part-Time
Full-time

Gender
All

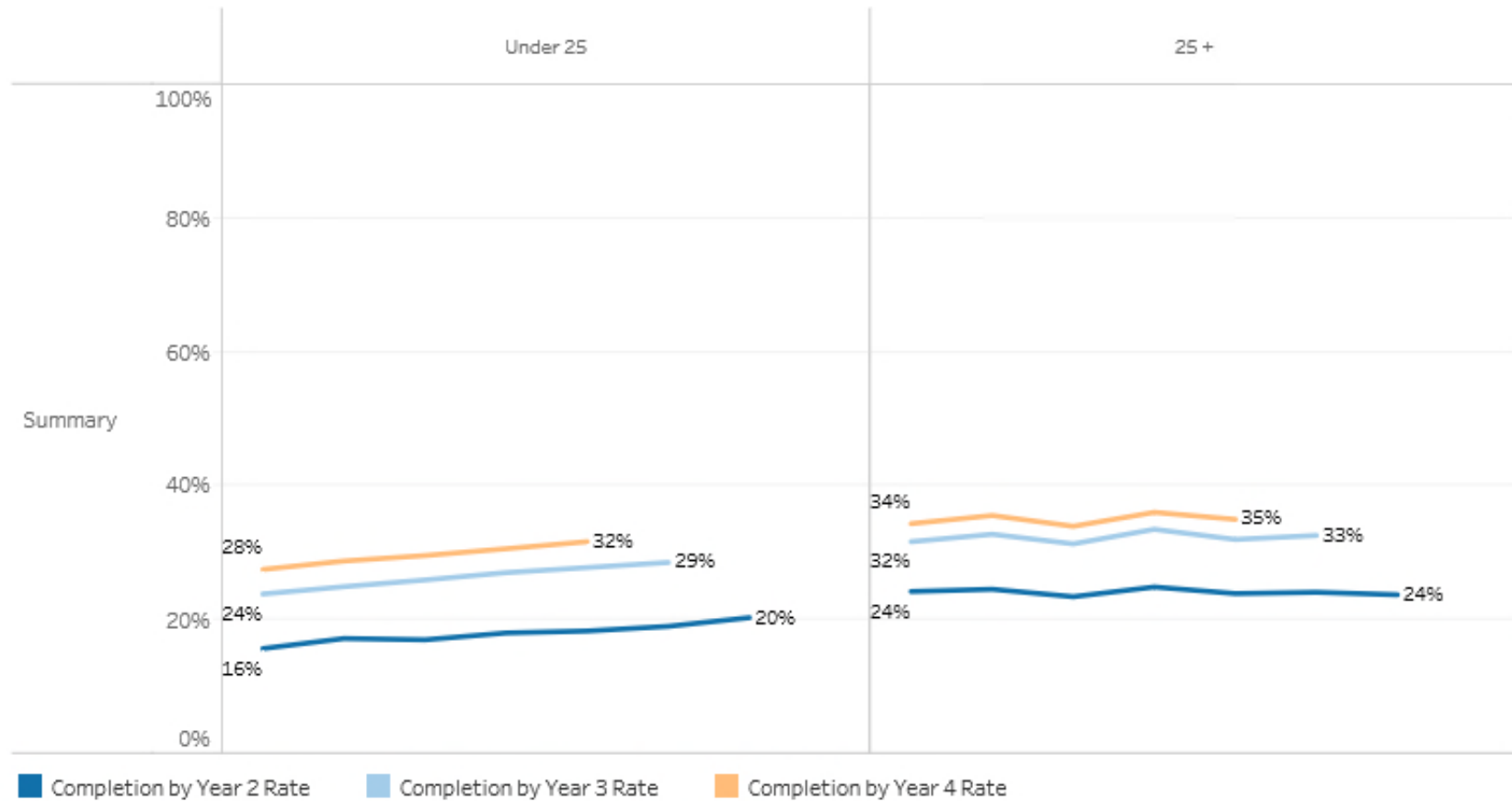
Students of Color
All

2018-19 Headcount of Professional/Technical Students at SBCTC



Year	< 20	20 - 29	30 - 39	40 or above	Not Reported	Grand Total
07-08	20,844	62,735	34,466	43,231	4,098	165,374
08-09	21,551	66,248	36,270	42,496	4,394	170,959
09-10	21,904	70,405	38,476	44,922	2,873	178,580
10-11	20,760	69,791	36,983	41,449	2,779	171,762
11-12	19,124	65,436	33,880	35,258	1,699	155,397
12-13	17,815	62,631	32,814	32,725	1,667	147,652
13-14	18,689	63,643	32,438	31,306	1,231	147,307
14-15	18,392	63,725	32,700	29,660	239	144,716
15-16	16,862	61,560	31,931	28,120	264	138,737
16-17	16,594	59,192	31,876	27,009	346	135,017
17-18	17,205	58,689	30,959	25,575	226	132,654

Completion Rates Professional/Technical Students at SBCTC



SBCTC Completion Rates

Detail: Professional/Technical Program Completers

	2011-12	2012-13	2013-14	2014-15	2015-16
45 Credits or More	5,929	5,115	5,221	4,934	4,734
Certificate	8,295	8,210	6,912	7,973	7,561
Degree	9,941	9,387	9,565	9,184	8,694
Completers Placed in UI-Covered Jobs	17,854	16,377	15,977	16,174	15,527
Completers Continuing in Education	1,023	934	784	801	735
% Completers Placed in UI-Covered Jobs or Continuing in Education	78%	76%	77%	77%	77%

Detail: Left without Completing

	2011-12	2012-13	2013-14	2014-15	2015-16
Left Without Completing	15,849	13,757	13,901	13,108	13,628
Left Without Completing Placed in UI-Covered Jobs	9,478	7,929	8,789	8,331	8,888
Left without Completing Continuing in Education	716	662	551	446	468
% Left Without Completing Placed in UI-Covered Jobs or Continuing in Education	64%	62%	67%	67%	69%

Source: State Board of Community Technical Colleges

Living wage, high demand, evergreen STEM or health care opportunities (national)

Career Pathway	Median Annual Wage, 2017	2016-2026 Projected Annual Openings (National)
Automotive service technicians and mechanics	39,550	75,600
Licensed practical and licensed vocational nurses	45,030	62,700
Computer user support specialists	50,210	55,500
Dental assistants	37,630	45,900
Heating, air conditioning, and refrigeration mechanics and installers	47,080	38,700
Emergency medical technicians and paramedics	33,380	19,400
Dental hygienists	74,070	17,500
Phlebotomists	33,670	16,900
Computer network support specialists	62,340	16,500
Medical records and health information technicians	39,180	15,800
Physical therapist assistants	57,430	14,700
Web developers	67,990	14,600
Radiologic technologists	58,440	13,600
Medical and clinical laboratory technicians	Varies considerably by field	12,900
Electrical and electronics engineering technicians	63,660	12,000
Health technologists and technicians, all other	41,800	11,000
Aircraft mechanics and service technicians	61,020	10,900
Veterinary technologists and technicians	33,400	10,700
Surgical technologists	46,310	10,000
Life, physical, and social science technicians, all other	48,090	9,900

Note: Job openings are based on national data. Regional data across Washington state is expected to be available in Fall 2018.

Living wage, high demand, evergreen STEM or health care opportunities (national), cont.

Audio and video equipment technicians	42,190	9,000
Civil engineering technicians	51,620	7,200
Engineering technicians, except drafters, all other	62,230	7,100
Chemical technicians	47,280	6,600
Occupational therapy assistants	59,310	6,600
Electrical and electronics repairers, commercial and industrial e	57,190	6,100
Mechanical drafters	55,130	5,900
Industrial engineering technicians	54,280	5,500
Diagnostic medical sonographers	71,410	5,400
Ophthalmic medical technicians	35,910	4,600
Environmental science and protection technicians, including he	45,490	4,600
Medical equipment repairers	48,820	4,300
Mechanical engineering technicians	55,360	4,200
Forest and conservation technicians	36,130	4,000
Cardiovascular technologists and technicians	55,270	3,500
Electronic home entertainment equipment installers and repair	37,190	3,300
Computer numerically controlled machine tool programmers, r	52,550	3,100
Agricultural and food science technicians	39,910	3,000
Electrical and electronics drafters	59,690	2,600
Healthcare practitioners and technical workers, all other	51,530	2,600
Magnetic resonance imaging technologists	69,930	2,500

Note: Job openings are based on national data. Regional data across Washington state is expected to be available in Fall 2018.

Living wage, high demand, evergreen STEM or health care opportunities (national), cont.

Air traffic controllers	124,540	2,400
Electrical and electronics repairers, powerhouse, substation, ar	78,410	2,100
Motorcycle mechanics	35,680	1,900
Geological and petroleum technicians	54,190	1,900
Environmental engineering technicians	50,230	1,700
Sound engineering technicians	55,810	1,700
Radio, cellular, and tower equipment installers and repairs	56,000	1,600
Avionics technicians	62,650	1,500
Drafters, all other	50,290	1,500
Wind turbine service technicians	53,880	1,400
Nuclear medicine technologists	75,660	1,300
Ship engineers	73,110	1,300
Electro-mechanical technicians	56,740	1,200
Radiation therapists	80,570	1,200
Aerospace engineering and operations technicians	67,240	1,100

Note: Job openings are based on national data. Regional data across Washington state is expected to be available in Fall 2018.

Outcomes for CTE students (high school)

All achievers in 2012 and 2013 graduating classes	CTE students	Non-CTE students
While in school, were more likely to be low income, have accommodations for a disability under a Section 504 plan, and have a lower GPA	X	
More likely to persist in an apprenticeship program	X	
More likely to persist in a community or technical college	X	
More likely to be employed	X	
More likely to receive a degree or certificate from a community or technical college, or persist in a four-year university		X

DRAFT Pathways Program Eligible Occupations

as of 1/10/19

2010 SOC Codes	Occupation	Available Jobs (WA)	Average Wage (WA)
15-1134	Web Developers	37148	76220
15-1151	Computer User Support Specialists	15718	55724
15-1152	Computer Network Support Specialists	10824	71476
17-3011	Architectural and Civil Drafters	1331	56638
17-3022	Civil Engineering Technicians	3675	66419
17-3023	Electrical and Electronics Engineering Technicians	3655	73360
17-3026	Industrial Engineering Technicians	3816	89544
29-2021	Dental Hygienists	1858	90040
29-2032	Diagnostic Medical Sonographers	1804	92416
29-2034	Radiologic Technologists	5929	67216
29-2041	Emergency Medical Technicians and Paramedics	65	54992
29-2055	Surgical Technologists	3267	55413
29-2056	Veterinary Technologists and Technicians	1284	37736
29-2057	Ophthalmic Medical Technicians	3047	46247
29-2061	Licensed Practical and Licensed Vocational Nurses	31725	51415
29-2071	Medical Records and Health Information Technicians	15309	44044
29-2081	Opticians, Dispensing	1350	49006
31-1014	Nursing Assistants	44976	30454
31-2011	Occupational Therapy Assistants	920	62125
31-2021	Physical Therapist Assistants	4004	57658
31-9011	Massage Therapists	4160	62359
31-9091	Dental Assistants	5855	42312
31-9092	Medical Assistants	21439	38714
31-9097	Phlebotomists	2926	41516
47-2031	Carpenters	25440	55327
47-2041	Carpet Installers	384	53926
47-2044	Tile and Marble Setters	363	53027
47-2081	Drywall and Ceiling Tile Installers	1692	61550
47-2111	Electricians	11898	71450
47-2141	Painters, Construction and Maintenance	7920	38928
47-2152	Plumbers, Pipefitters, and Steamfitters	7866	79831
47-2181	Roofers	180	53830
47-2211	Sheet Metal Workers	572	61912
49-2022	Telecommunications Equipment Installers and Repairers, Except	14864	59840
49-2094	Electrical and Electronics Repairers, Commercial and Industrial	1161	74105
49-2098	Security and Fire Alarm Systems Installers	1068	53108
49-3011	Aircraft Mechanics and Service Technicians	2948	80655
49-3021	Automotive Body and Related Repairers	569	50603
49-3023	Automotive Service Technicians and Mechanics	9580	48345
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	33124	53960
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and	3882	48565
49-9041	Industrial Machinery Mechanics	13754	55551
49-9044	Millwrights	442	58059
49-9051	Electrical Power-Line Installers and Repairers	312	75985
49-9062	Medical Equipment Repairers	492	57289
51-4041	Machinists	36018	50313
51-4121	Welders, Cutters, Solderers, and Brazers	44874	48825
51-8031	Water and Wastewater Treatment Plant and System Operat	560	65062
53-3032	Heavy and Tractor-Trailer Truck Drivers	96930	46449
53-5021	Captains, Mates, and Pilots of Water Vessels	2128	95917

Tab E

Celebrating 2018 & Looking to 2019

PROGRAM UPDATE | DECEMBER 2018

What an amazing year 2018 was for WSOS!

Over the course of this year, we launched our new near-peer and industry mentorship programs, successfully expanded the WSOS statute to include professional and technical degree and certification programs, raised nearly \$1M for our fourth annual OpportunityTalks, and expanded our reach by onboarding new staff members and connecting with new industry partners.

While the entire year was a busy one, the fourth quarter stands out as a time to truly celebrate our accomplishments.

SCHOLAR SUPPORT SERVICES

A. SCHOLAR AWARDS

During Q4, the Scholar Awards team tackled numerous important projects. First, the team rebuilt the scholarship application for 2019. This effort involved revisions to make the process easier and more equitable for students as well as creating new essay questions that better allow students to highlight their motivations and experiences. Also, since October 1, the Awards team has disbursed \$5,836,026.50 to 4,425 students. This brings our total disbursements for the 2018-19 academic year up to \$11,538,762 to 4,498 students, with another \$3,769,668 total anticipated disbursements before the end of the 2018-19 academic year.

Moreover, during Q4, we said goodbye to Reiko Kono and welcomed Steve Walker as the new Awards Administration Director. Steve joins us most recently from Apex Learning, a leading provider of e-Learning solutions for K-12 education. Steve is also the founder and CEO of ChalkDoc, an online platform for math teachers to easily create activities and projects for grades 6-10. Steve is formerly a teacher and continues to volunteer at Rainier Beach High School through the WA-BLOC program.

B. SCHOLAR SUCCESS

This fall, the Scholar Success team launched our newly developed, near-peer mentorship program. During this period, **148 Scholar Leads** worked with over **1750 Scholar** mentees. Each Scholar Lead: (1) connected with their mentee(s) at least twice during September - December, (2) invited their mentee(s) to a campus event, and (3) assisted their mentee(s) with filling out a comprehensive academic plan, a required activity for WSOS participation. In addition, 88 Scholar Leads are participating in a new program called Opportunity Outloud which teaches public speaking skills.

We have already received positive feedback from our Scholar Leads including the following quotes:

- “I’ve enjoyed getting to know students that are enthusiastic to be attending college. I’m thankful to be given the opportunity to share my college experiences in hope that new students can learn from my mistakes as well as learn things I wish I knew. I look forward to continue working with

students to assist them through their first year of college.” Amairani Martinez – WSOS Scholar Lead

- "I got to talk to my mentees in person and gave them advice, be able to help someone to not make the same mistakes as i did feel awesome. I feel more responsible because someone is relying on me for information. I feel useful. I am glad that i was able to help one of my mentees choose her major and start her research.” Thanh Dinh – WSOS Scholar Lead
- “I could relate to many of the experiences and struggles they were dealing with during the first quarter of college, allowing me to share my experiences and give genuine advice.” Colin Veilleux – WSOS Scholar Lead
- “As a freshman I had a lot of trouble settling down into the UW environment; I really enjoyed giving back to a group of new students and helping them learn the parts of college that aren't obvious at first.” Casey Silcox – WSOS Scholar Lead

The response to the Scholar Lead near-peer mentoring program has been extremely positive, and we are confident that the program will help to increase our retention and degree attainment rates. As we look toward to 2019, we will continue to consider ways to refine and improve this model!

In addition to the Scholar Lead launch, the Scholar Success team also hosted our first ever Ask Me Anything (AMA) event featuring WSOS Board member Jane Park. During the AMA, WSOS Scholars across the state had the opportunity to engage via web stream with Jane to learn more about her personal and professional journey, accomplishments and goals. The conversation was facilitated by current WSOS Scholar Becky Darrow. We are looking forward to hosting additional AMA events with WSOS Board members and other industry leaders.



C. SCHOLAR PLACEMENT

The roughly 1100 currently enrolled Scholars of junior standing and older are now participating in newly established, career-launching “Placement Programs”. The cornerstone of the Placement program is the Opportunity Scholarship Skills that Shine (StS) mentorship program which features an automated mentorship pair matching program and online curriculum to expedite connections between the mentorship pair. We invite board members to view the StS curriculum, available at https://washington-state-opportunity-scholarship.teachable.com/p/skills_that_shine_2018.

Working with volunteer mentors, mentees enhance their repertoire of skills and resources as they apply for internships, jobs and post-baccalaureate studies. 100% of our most recently accepted Placement Scholars and dozens of other Placement Scholars from previous enrollments are actively participating in StS.

Placement Scholars across the state have access to one-on-one Placement advising services outside of the StS program. Services and opportunities are disseminated to Scholars through email, a Placement LinkedIn group and in person during office hours occurring during campus career fairs statewide. All engagements and Scholar placement outcomes are documented in the WSOS database (Wizehive).

DEVELOPMENT UPDATE

It has also been an incredibly busy and productive time for our development team!

On November 1, over 800 guests gathered at the Sheraton Seattle to celebrate WSOS and share in the journey of our WSOS Scholars. Guests heard moving remarks by WSOS Scholar Yarely Gomez and sobering comments about the challenge of paying for college by our keynote speaker Sara Goldrick-Rab. To date, we have raised over \$950,000 (including the challenge fund and state match) and counting!!

A huge thank you to our entire Board of Directors for ensuring that OpportunityTalks 2018 was a huge success. All of you came out in a big way to host a table, participate in the challenge fund, and connect us with new sponsors to WSOS.



MEDIA & SOCIAL MEDIA

In Q4, WSOS created a private LinkedIn group for Scholars to share career development advice and internship opportunities. The group currently has over 140 Scholars who have opted in to receive updates from the group. We also received coverage related to the release of our 2018 Legislative Report.

The following summarizes our media and social media activity in Q4.

Coverage summary:

- Opportunity Scholarship aims to prepare local students to high paying jobs | KNKX 88.5 FM, December 10, 2018
- Washington's most generous scholarship for STEM students has helped thousands. Could you be next? | The Seattle Times, December 28, 2018

WASHINGTON STATE
OPPORTUNITY
 SCHOLARSHIP

Twitter

- 1,762 followers as of December 19, 2018 (+0.9%)
- Total impressions from August 1 – December 19: 59,531 (+4.1%)
- We saw a 70% increase in impressions from October to November with the help of partners and OpportunityTalks attendees engaging with our posts.
- We also provided partners with social media posts to promote our annual Legislative Report and had 113 impressions from these efforts.

Top Tweet earned 1,762 impressions

“Don’t give up, please don’t give way, there’s still fire in your soul and life in your dreams.” Inspired by the message from this year’s **#OpportunityScholar** speaker Yarely! **#OpportunityTalks**

3 7

[View Tweet activity](#)

[View all Tweet activity](#)

Facebook

- 3,514 Page likes as of December 19, 2019 (+0.6%)
- Total impressions from August 1 – December 19, 2018: 28,442 (+16.5%)

Top Post: October 1, 2018

Our most engaging post was related to the opening of the FAFSA. The blog post for the Legislative Report and our earned media on KNKX were also popular, reaching over 1,100 people.

Post Details ✕

Washington State Opportunity Scholarship
Published by Rachel Darany [?] · October 1 · 🌐

The FAFSA opens today! Complete the form early to ensure you receive the maximum award. Filing the form also completes one of our annual scholarship renewal requirements. Be one step ahead and complete the form this week!

FAFSA.ED.GOV

FAFSA - Free Application for Federal Student Aid

Apply now! Federal Student Aid has more than \$150 billion available to help you pay for school.

✔ **Get More Likes, Comments and Shares**
Boost this post for \$30 to reach up to 16,000 people.

5,658
People Reached

489
Engagements

Boost Post

👍 ❤️ Sheri White, Joanna Phung and 37 others 66 Shares

👍 Like
💬 Comment
➦ Share
⋮

Performance for Your Post

5,658 People Reached

278 Reactions, Comments & Shares 👤

166 👍 Like	38 On Post	128 On Shares
8 ❤️ Love	1 On Post	7 On Shares
1 😂 Haha	0 On Post	1 On Shares
33 Comments	0 On Post	33 On Shares
70 Shares	66 On Post	4 On Shares

211 Post Clicks

0 Photo Views	60 Link Clicks 👤	151 Other Clicks 👤
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NEGATIVE FEEDBACK

0 Hide Post	1 Hide All Posts	
0 Report as Spam	0 Unlike Page	

Reported stats may be delayed from what appears on posts



Your Connection To Jazz, Blues and NPR News

Opportunity Scholarship aims to prepare local students for high-paying jobs

By [ASHLEY GROSS](#) • DEC 10, 2018



Many recipients of the Washington State Opportunity Scholarship attend the University of Washington Seattle.

ELAINE THOMPSON / AP PHOTO

In recent years, Washington state has been attracting workers from other parts of the country to fill jobs in growing industries such as engineering and computer programming.

But a scholarship created in 2011 aims to help young people from low- and middle-income families in the state land those jobs.

The Legislature created the Washington State Opportunity Scholarship in 2011. Microsoft and Boeing each donated \$25 million to help create the program, and the state matches the investments from private industry.

“We really do see the impact now with 94 percent of our grads employed with an average salary of \$60,000,” said Naria Santa Lucia, executive director of the program. “And a majority of them, almost 90 percent, are staying in Washington state, so it’s really working.”

Students can receive a maximum of \$22,500 over five years. The money can be used for books and living expenses, not just tuition. Santa Lucia said it covers five years because it often takes that long to earn a degree in science, engineering or another technical field. Students who want to become teachers of math or science also are eligible to apply. The program starts accepting applications Jan. 3.

Many of the scholarship recipients are first in their families to go to college, so the program pairs students with “near-peer” mentors who are a couple of years ahead of them in school. The mentors help students navigate getting into a major and other aspects of campus life.

Santa Lucia said the scholarship program also assigns students mentors from private industry, who help them prepare résumés and get ready for job interviews. She said it’s a way to help students build networks of contacts in high-growth industries in the state. And she said it’s been remarkably easy recruiting volunteers from companies to mentor the students.

“It’s been really heartening to see,” she said.

The Washington State Opportunity Scholarship will request about \$20 million from the Legislature in the upcoming session, Santa Lucia said. The program has received bipartisan support in past years, she added.

The Seattle Times

Washington's most generous scholarship for STEM students has helped thousands. Could you be next?

Originally published December 28, 2018 at 5:00 am Updated December 28, 2018 at 9:37 am

Students can get up to \$22,500 to pursue technology and health-care careers, through the Washington State Opportunity Scholarship. It's available to those from low- and middle-income households and opens to applicants Jan. 3.

By Katherine Long, Seattle Times staff reporter

If you're a Washington college student studying science, technology or health care, put this one on your calendar: The application period opens Jan. 3 for the Washington State Opportunity Scholarship, the state's most generous scholarship for students studying in those fields.

The scholarship program is funded with public and private money, and it has helped nearly 3,400 Washington students earn a bachelor's degree since it began giving out award money in 2012, a new state report says. The scholarship is aimed at low- and middle-income students and grants them up to \$22,500 over a maximum of five years to earn their bachelor's or community college degrees in science, technology, engineering, math (STEM) and health-care fields. The deadline for applications is Feb. 28, and WSOS officials expect to award 1,850 scholarships this year.

The Washington State Opportunity Scholarship (WSOS) is the only program of its kind in the nation because it's "trying to impact workforce outcomes with scholarship dollars," and because private donations are matched with public dollars, said WSOS Executive Director Naria Santa Lucia.

The report says it's both helping produce more employees for high-paying, high-demand fields, and also working to close gender and race/ethnicity gaps. Sixty percent of the scholars are women, 73 percent are students of color and 72 percent are the first in their families to go to college, according to the annual report to the state Legislature, released this month.

It's also reaching a higher percentage of underrepresented minorities (Hispanic/Latino, African American, American Indian and Native Hawaiian or other Pacific Islander) than it did in its early years. This academic year, 42 percent of new students given a WSOS award were underrepresented minorities, compared to 16 percent in 2012-13, the first year that it awarded money, according to the report.

WSOS helps students whose families make up to 125 percent of the state median family income, or \$114,500 for a family of four – a number chosen to help middle-income students who often don't qualify for aid because their family's income is too high.

Bailey Griffin, a junior at the University of Washington, is one of the recipients. Griffin is majoring in civil engineering and plans to go into construction – two male dominated fields. Griffin grew up in Oroville, a small town in North Central Washington, and she needed help paying for college. But she described WSOS as “so much more than just a scholarship,” because it helped her make connections in her chosen field.

WSOS organized events on campus that helped her meet other engineering students when she first arrived. It connected her with professionals in the industry, and helped her find an internship in construction, where only about 10 percent of employees are women. “It’s making sure students have the skills to really excel and recognize the importance of professional development while in college,” she said. This year, she’s working as a mentor for younger students who have received the award.

The program’s major private funding comes from Boeing, Microsoft, Rubens Family Foundation and the Ballmer Group, and those donations are matched by taxpayer dollars. By the end of 2018-19, it will have awarded \$64 million in scholarships, half of which comes from taxpayers.

The legislative status report says 94 percent of students who received the scholarship and graduated are now either employed or in graduate school. Nine percent have earned a postgraduate degree (a master’s, doctoral or professional degree). About 79 percent were able to find work after searching for less than three months.

Four-fifths of the recipients continued to live in Washington after earning their degree. The largest percentage, about one-third, works in health care, and 17 percent work in technology. Other popular fields for WSOS recipients include engineering (12 percent) and science or research (8 percent). Their median annual gross salary is \$61,000.

The scholarship application opens for the 2019-20 academic year on Jan. 3. For more information, or to apply, go to www.opportunityscholarship.org

Later this spring, the program will expand to cover skills programs at state community and technical colleges. A separate scholarship application will be rolled out this spring for students who want to apply, Santa Lucia said.



WASHINGTON STATE
OPPORTUNITY
SCHOLARSHIP

1

2019 Goals & Budget

2019 WSOS Programmatic Goals

- Pathways Scholarship Pilot Scholarship awarded and fundraising
- Endowment discussion
- Advocacy – College Bound and WSOS & Municipal investments
- Organizational Capacity Building and Strategic Synergies with Program Administrator Washington STEM

Proposed 2019 WSOS Budget

\$ IN THOUSANDS

	2018 Budget	2019 Budget	Variance
REVENUE	3,960	24,817	20,857
SCHOLARSHIP EXPENSE	24,071	24,339	268
Salaries, Taxes, and Benefits	1,922	1,895	(27)
Administrative Fee	419	514	95
Other	741	636	(105)
OPERATING EXPENSES	3,082	3,045	(37)
NEAR PEER MENTORING	189	360	171

2019 WSOS Budget | Key Assumptions

- Revenue comprised of event, investment income, private gifts and expected state match revenue
- Contingency included in personnel cost to account for support services for WSOS
- Decrease in salaries and “other” (program expenses) due to better information on actual expenses for WSOS support services expansion
- Increase in payments to near peer mentors as class sizes continue to grow

Tab F

Finance and Program Administrator Update

Agenda

WSOS Investment & Finance Committee Meeting

December 5, 2018 1:00pm - 2:15 pm

Call-in: 800-582-3014 – PIN: 13389906

- | | | | |
|----|-------------------------------------|-----------------|----------|
| 1. | Call to Order & Introductions | Mack H. | (5 min) |
| 2. | Approval of August 30, 2018 Minutes | Mack H. | |
| 3. | Program Administrator Report | Washington STEM | (15 min) |
| 4. | WSIB Report | Chris P. | (15 min) |
| 5. | Asset Allocation Implementation | Patrick M. | (15 min) |
| 6. | Endowment Strategy | Beau D. | (15 min) |
| 7. | Other Business | Mack H. | (5 min) |
| 8. | Executive Session | Mack H. | (5 min) |

2019 MEETINGS:

Tuesday, March 26 at 2-3 pm

Wednesday, June 12 at 2-3 pm

Wednesday, September 18 at 2-3 pm

Section 2

Approval of August 30, 2018 Minutes

FINANCE & INVESTMENT COMMITTEE MEETING MINUTES | THURSDAY, AUGUST 30, 2018

Member participants: Mack Hogans (Committee Chair); Beau Damon, Peter Harvey, Manish Jain, Carolyn Kelly, DeShay McCluskey, Bob Moser, Julie Sandler and Elizabeth Tinkham via teleconference

Other participants: Caroline King (Washington STEM) and Karyl Gregory (WSOS); Naria Santa Lucia (WSOS Executive Director), Chris Phillips (WSIB), Patrick Martinell (WSIB) and Matt Poth (Washington STEM) via teleconference

Mack Hogans called the meeting of the Washington State Opportunity Scholarship (WSOS) Finance and Investment (F&I) Committee to order at 2:02 pm and conducted a roll call and self-introduction of all participants.

Hogans thanked Gary Rubens (in absentia) for his service to the committee and welcomed Julie Sandler as the newest member of the committee. Sandler shared her background with WSOS as a board member, her role at Pioneer Square Labs as Managing Director, her faculty position at UW as well as serving as board member at Washington Roundtable.

Approval of Minutes from April 5, 2018 Finance and Investment Committee

Carolyn Kelly made a motion to approve the minutes of the April 5, 2018 meeting. DeShay McCluskey seconded the motion and it carried unanimously.

Program Administrator Report

Matt Poth, Controller at Washington STEM, reported highlights of the balance sheet, income statement and cash flow through June 30, 2018. Naria expressed thanks to Poth for his stepping in and so capably handling the financials since Cindy Gustafson's retirement in May.

Naria Santa Lucia reported that the documentation for the state match funds is almost complete and anticipates private funds from the Scholarship Account will be drawn down soon.

WSIB Report

Chris Phillips provided a performance review of WSOS funds invested through June 30, 2018. In response to a question from Hogans about the impact of tariffs, Phillips indicated that there is concern among some sectors and this impact will be watched very closely.

The committee engaged in a discussion about managing the Endowment Account. Peter Harvey asked if there was any potential to reclassifying the cash portion of the Endowment Fund as Scholarship Funds so it could be spent down. Santa Lucia indicated this would require a constitutional amendment/statutory change and this step is not likely. Santa Lucia reported that the Board will be examining options with the Endowment Fund. Santa Lucia further reported that the state match follows the intent of the donor as to whether it is blind or measured. Boeing is considering their intent with their earlier \$12.5M donation.

Beau Damon requested background on the BlackRock assets. Phillips reported that BlackRock is part of the private equity investing and he explained how the reporting works.

Asset Allocation Study

Patrick Martinell, Assistant Senior Investment Officer at WSIB, reported that it is appropriate to conduct an asset allocation study every four years and make recommendations. Martinell reviewed quantitative and qualitative inputs for the Scholarship and Endowment Accounts. Martinell recommended that the current policy of 20% fixed income and 80% equity for the Endowment Account should continue with no change. Martinell proposed making a large shift for the Scholarship Account from equity to fixed income with these recommended changes: from 0% to 5% cash, from 40% to 70% fixed income, and from 60% to 25% equity. Martinell presented projected portfolio outcomes with simulated returns on a one year and a 15-year basis for each account.

Hogans asked Martinell what steps would be taken to transition from the current policy to the new one. Martinell reported that the committee's recommended changes would be presented at WSIB's next board meeting on November 15th. Once approved there, changes would be made in about a week.

Martinell fielded various questions from committee members. Martinell reported that 80-90% of funds are invested in credit with a shorter duration than benchmark. Martinell further reported that the potential for loss is much lower with fixed income because it is a buy and hold portfolio. Martinell reported he has no concerns about WSIB default rates. In terms of credit, Martinell additionally reported that most is corporate credit but also some emerging market, but no mortgage. Santa Lucia reported that our model is very conservative and a buffer is in place for our ongoing cash need. Martinell reported that the range for fixed equity funds is 5%.

Hogans asked committee members if they could continue the meeting past 3 pm to 3:15 pm. All members confirmed their availability except Bob Moser. Hogans confirmed he would update Moser the following day.

Hogans asked each committee member to express their opinion regarding the proposed asset allocation for both accounts. The consensus indicated all members are fine with no changes to the Endowment Account. Peter Harvey suggested that the proposed cash percentage to the Scholarship Account be increased and the fixed income decreased. While other committee members agreed with this approach, it was decided to give this potential shift further thought.

Hogans thanked Phillips and Martinell for their respective presentations. Santa Lucia indicated she would get back in contact with each of them within a short time. Both individuals left the meeting.

Hogans requested further committee feedback on how best to move forward with the allocations for the Scholarship Account. Peter Harvey stated that if we are not drawing down the account significantly in the next year or two, then leave the current percentages; otherwise follow through with the changes which Martinell has recommended.

Carolyn Kelly made a motion to delegate authority on behalf of the entire committee to Santa Lucia and Hogans to formalize the final recommendation regarding the asset allocation proposal. They will follow up with committee members and Martinell before communicating their final recommendation to the committee and WSIB. Beau Damon seconded the motion and it passed unanimously.

Other Business

Caroline King, Executive Director at Washington STEM, reported that a new CFO was hired in June but has since left the position. Matt Poth had previously worked closely with Gustafson until she retired in May, and he has provided all the necessary financial management since June without missing a beat. King further reported that Washington STEM will be using a short-term consultant until a new CFO can be hired. King is confident that all the financials will continue to be well-managed in the interim.

The committee then went into Executive Session at 3:17 pm, had a two minute discussion and adjourned.

Respectfully submitted,
Karyl Gregory

DRAFT

Section 3

Program Administrator Report



Finance & Program Administrator Update September 30, 2018

WSOS Balance Sheet

Comparative Balance Sheets
September 30, 2018

	Comparison to Last Reported Period			Notes	Comparison to Same Period LFY		
	6/30/18	% Change	9/30/18		9/30/17	% Change	9/30/18
Assets							
Cash	2,983,127	65%	4,919,677	1	2,140,890	130%	4,919,677
Investments	112,231,254	-1%	111,178,014	2	109,879,985	1%	111,178,014
Accounts Receivable	38,492	64%	63,270		39,725	59%	63,270
Pledges and Grants Receivable, net	12,463,262	-24%	9,500,000	3	13,154,779	-28%	9,500,000
State match receivable, net	4,745,530	29%	6,110,986	4	-		6,110,986
Prepaid Expenses	120,621	-9%	109,498		74,392	47%	109,498
Property and equipment, net	40,122	1%	40,371		24,302	66%	40,371
Total Assets	132,622,408	-1%	131,921,816		125,314,073		131,921,816
Liabilities and Net Assets							
Accounts Payable	71,050	-6%	66,465		61,521	8%	66,465
Payroll Related Liabilities	57,576	10%	63,309		5,335	1087%	63,309
Scholarship Commitments, net	23,465,518	77%	41,531,784	5	30,290,993	37%	41,531,784
Total Liabilities	23,594,144	77%	41,661,558		30,357,849	37%	41,661,558
Net Assets							
Temporarily Restricted Net Assets	84,028,264	-22%	65,260,258		69,956,224	-7%	65,260,258
Permanently Restricted Net Assets	25,000,000	0%	25,000,000		25,000,000	0%	25,000,000
Total Net Assets	109,028,264	-17%	90,260,258		94,956,224	-5%	90,260,258
Total Liabilities and Net Assets	132,622,408	-1%	131,921,816		125,314,073	5%	131,921,816

WSOS Balance Sheet

Notes:

1. Increase in cash QoQ largely due to receipt of Rubens \$3M pledge payment late September. The total Q3 private receipts of \$3.14M was invested with WSIB Scholarship on 10/10/18.
2. Investments balance as of 9/30/18 includes WSIB Scholarship \$66.1M, WSIB Endowment \$29.8M and KeyBank Capital \$15.3M. Total investments lower QoQ due to funding of fall scholarship disbursements of \$5.7M, offset by investment earnings and new investments made.
3. WSOS received pledge payment from Rubens Family Foundation in amount of \$3M in September. Remaining balance includes Rubens (\$7M) and Microsoft (\$2.5M).
4. The Q1 2018 private receipts of \$1.78M was matched by WSAC in August. The state match accrual of Q3 private receipts (\$3.14M) was recorded in September. Note that \$3.59M was received from WSAC in October. The resubmitted amount of \$2.8M still outstanding as of 10/18.
5. The scholarship liability for Cohort 7 was recorded in August. The larger balance is reflective of increasing student selections. Scholarship disbursements totaled \$5.7M in Q3.

WSOS Income Statement

Actual vs. Budget

Nine Months Ending September 30, 2018

	Nine Months Ended September 31, 2018			Notes	December 31, 2018
	Actual	Budget	Variance Fav (Unfav)		Annual Budget
Revenue					
Private	377,404	900,000	(522,596)	1	1,200,000
Public	4,940,070	-	4,940,070	2	-
Investment Income	2,340,066	2,070,000	270,066	3	2,760,000
Total Revenue	7,657,540	2,970,000	4,687,540		3,960,000
Program Expense					
Salaries and Benefits	1,198,280	1,458,473	260,193	4	1,922,266
Professional Fees - Program Admin fees	333,604	307,788	(25,816)		418,788
Professional Fees - Contractors & Lobbying	323,307	147,075	(176,232)	5	190,700
Conferences, Conventions & Meetings	66,894	96,671	29,777		286,858
Operating Expenses	146,553	201,045	54,492	6	263,029
	2,068,637	2,211,052	142,414		3,081,641
Income (Loss) before Scholarship Exp	5,588,903	758,948	4,829,955		878,359
Scholarship Expense	23,275,471	24,143,050	867,579	7	24,071,050
Net Income (Loss)	(17,686,568)	(23,384,102)	5,697,534		(23,192,691)

WSOS Income Statement

Notes:

1. Revenue Private: Jan-Sep 2018 contribution revenue includes Hanson-\$50K, Castners-\$50K, Costco-\$50K, Seattle Foundation-\$25K, Battelle grant-\$25K and Sinegal Family Foundation-\$25K.
2. Revenue Public: Includes state match revenues of \$1.7M Q1, \$93K Q2 and \$3.14M in Q3. State Match revenues not budgeted.
3. Investment income: Actual YTD includes unrealized/realized gains of \$1.97M, interest & dividend income of \$422K and investment expense of <\$50K>.
4. Salaries and benefits: ~\$60K of variance relates to year-end payroll accruals (will catch-up in Dec '18). Rest of variance is related to true hiring savings.
5. Professional Fees – Actual expense over budget in part due to near-peer mentoring (\$72K), financial-based consultant time (\$21K), lobbying (\$27K) and I.T. (\$32K) related needs.
6. Operating Expenses – Actual expense very close to budget when excluding <\$54K> net credit to bad debt expense reversal from 2017.
7. Scholarship expense for CY 2018 was recorded in August after incorporating Cohort 7 student pool. Actual expense is net of scholarship refunds of \$496K.

WSOS Cash Flow

Cash Flow Summary

Inception-To-Date
September 30, 2018

CASH FLOW

Cash Inflow:

Boeing	12,610,000	12,500,000	1	25,110,000
Microsoft	32,500,000	-		32,500,000
Other Private	30,263,755	-	2	30,263,755
State	69,049,682	12,500,000	3	81,549,682
Investment Income*	9,914,044	4,788,234	4	14,702,278
Total Cash Inflows	154,337,481	29,788,234		184,125,715

Cash Outflow:

Scholarships	(54,837,721)	-	5	(54,837,721)
Program Expenses	(13,184,491)	(5,812)		(13,190,303)
Total Cash Outflows	(68,022,212)	(5,812)		(68,028,024)

Net Cash Flow Inception-To-Date

86,315,269	29,782,422		116,097,691
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Composition of Net Cash Flow

KeyBank Checking Account	4,919,677	-	6	4,919,677
Investment Accounts at WSIB and KeyBank	81,395,592	29,782,422		111,178,014
Total	86,315,269	29,782,422		116,097,691

* Includes unrealized gains and losses.

WSOS Cash Flow

Notes:

1. Cash Inflow: Boeing – Received \$10K Opportunity Talks donation in Q3.
2. Cash Inflow: Other Private – Rubens Family Foundation pledge payment of \$3M received in Q3.
3. State – Received \$1.77M from WSAC in August. Note that another \$3.59M was received in October (will be reflected in Q4 Cash Flow).
4. Investment Income – Includes net unrealized gains from inception of \$10.82M (Scholarship: \$7.61M and Endowment: \$3.21M). YTD 2018 the total gain is \$1.97M.
5. Scholarship disbursements were \$9M during the first nine months of 2018 and scholarship refunds totaled \$496K.
6. WSOS Cash in KeyBank – Received \$3M Rubens pledge late September. Q3 private donations invested with WSIB on 10/10/18. Furthermore, \$3.59M in state match funds were received in October. These dollars were subsequently invested in fixed income securities via KeyBank according to investment policies.

**Washington State Opportunity Scholarship (WSOS)
Statement of Cash Flows
2018**

*Note: State Match to WSAC reflected in A/R, net once invoice submitted.

	2018 Jul	2018 Aug	2018 Sep	2018 Q1	2018 Q2	2018 Q3	2018 Q4	2018 YTD
OPERATING ACTIVITIES								
Change in net assets	1,560,776	(23,373,115)	3,044,333	824,646	256,792	(18,768,006)	-	(17,686,568)
Adjustments to reconcile change in net assets to net cash used by operating activities-								
Add: Depreciation & Amortization	801	829	859	1,361	2,176	2,489	-	6,026
Add: Loss (Subtract: Gain) on disposal of fixed assets	-	-	-	-	-	-	-	-
Add: Loss (Subtract: Gain) on realized/unrealized investments	(1,655,607)	(674,480)	(96,286)	592,423	(508,182)	(2,426,373)	-	(2,342,132)
Add: Accretion of prepaid loan fees	-	-	-	-	-	-	-	-
Add: Loss on extinguishment of debt	-	-	-	-	-	-	-	-
Changes to balance sheet accounts:								
Accounts receivable, net	(116)	1,773,913	(3,142,516)	(335,136)	(4,660,656)	(1,368,719)	-	(6,364,511)
Prepaid expenses & other assets	2,590	4,853	3,680	(81,936)	3,341	11,123	-	(67,472)
Pledges receivable	(5,000)	30,000	2,938,262	221,915	4,555,271	2,963,262	-	7,740,448
Accounts payable	54,796	(39,250)	(20,023)	26,190	(23,517)	(4,477)	-	(1,804)
Scholarship commitments	(1,460)	18,346,907	(279,180)	(3,253,023)	(74,038)	18,066,267	-	14,739,206
Accrued expenses and other	(1,955)	6,566	1,012	(60,874)	(5,255)	5,623	-	(60,506)
Net Cash (used) provided by operations	(45,175)	(3,923,777)	2,450,141	(2,064,434)	(454,068)	(1,518,811)	-	(4,037,313)
INVESTING ACTIVITIES								
Purchases of property & equipment	(1,327)	(1,411)	-	(10,101)	(13,213)	(2,738)	-	(26,052)
Proceeds from sale of property & equipment	-	-	-	-	-	-	-	-
Proceeds from sale of investments	6,040,600	2,550	602,925	16,985,401	26,804,222	6,646,075	-	50,435,698
Purchases of investments	-	(2,588,387)	(599,588)	(11,457,182)	(28,414,024)	(3,187,975)	-	(43,059,181)
Proceeds from sale of subsidiary	-	-	-	-	-	-	-	-
Other investing activities	-	-	-	-	-	-	-	-
Net Cash (used) by investing activities	6,039,273	(2,587,248)	3,337	5,518,118	(1,623,015)	3,455,362	-	7,350,465
FINANCING ACTIVITIES								
Cash contributions and pledges collected for endowment purposes	-	-	-	-	-	-	-	-
Payments on capital leases	-	-	-	-	-	-	-	-
Net Cash (used) provided by financing activities	-	-	-	-	-	-	-	-
Cash Flow	5,994,098	(6,511,025)	2,453,478	3,453,684	(2,077,083)	1,936,551	-	3,313,152
Cash at Beginning of Period	2,983,126	8,977,224	2,466,199	1,606,525	5,060,209	2,983,126	4,919,677	1,606,525
Cash at End of Period	8,977,224	2,466,199	4,919,677	5,060,209	2,983,126	4,919,677	4,919,677	4,919,677

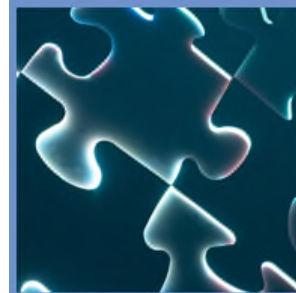
Section 4

WSIB Report



**Washington State
Investment Board**

**WSOS Investment and Finance Committee
Performance Review
December 5, 2018**



**Chris Phillips
Director of Institutional Relations**



WSOS Scholarship/Endowment Funds – Growth of Assets

September 30, 2018



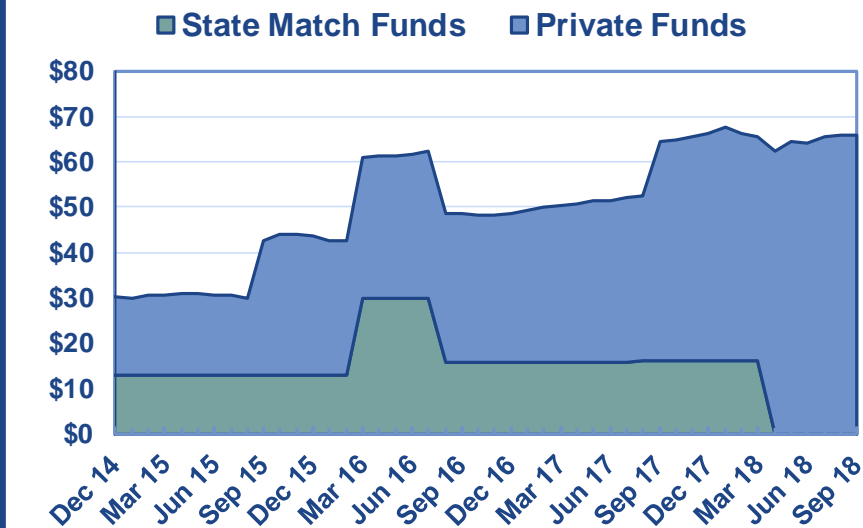
Scholarship Account

- Total assets: \$66.0 million
- 100% private funds

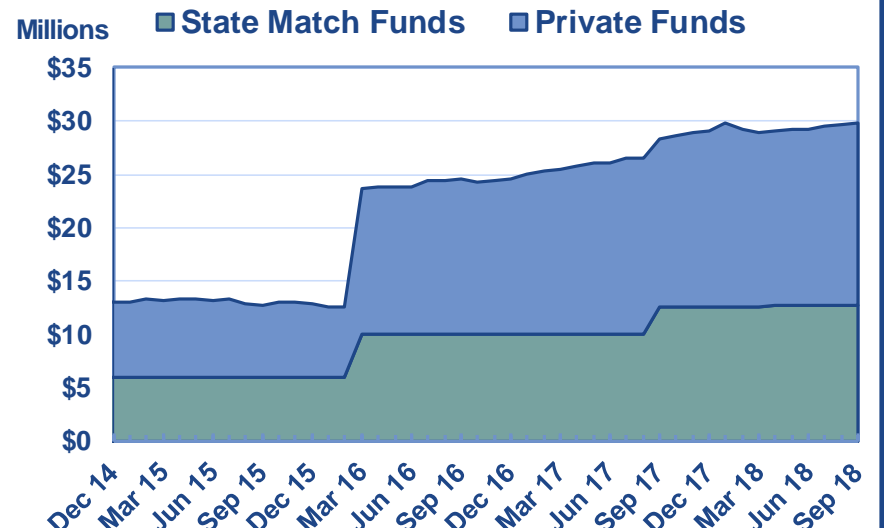
Endowment Account

- Total assets: \$29.8 million
- 56% private funds and 44% state match funds

Growth of Scholarship Account Assets



Growth of Endowment Account Assets



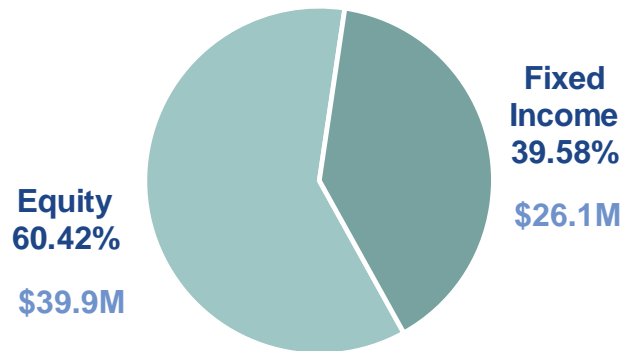


Market Values and Asset Allocation for Private Funds

September 30, 2018

Scholarship Account – Private Funds

Market Value \$65,965,652



Equity

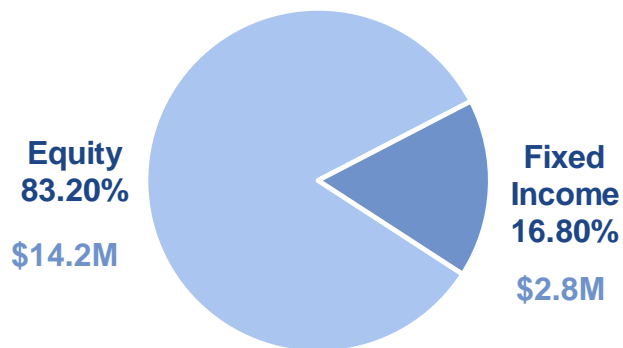
- Passive equity strategy managed by BlackRock
- Expected to closely track the MSCI All Country World Investable Market Index

Fixed Income

- Actively managed by WSIB staff
- Expected to meet or exceed the Barclays U.S. Intermediate Credit Index

Endowment Account – Private Funds

Market Value \$17,018,449





Market Values and Asset Allocation for State Match Funds

September 30, 2018

Asset Allocation for All State Match Funds

Scholarship Market Value \$83,516

Endowment Market Value \$12,763,974



State Match Funds

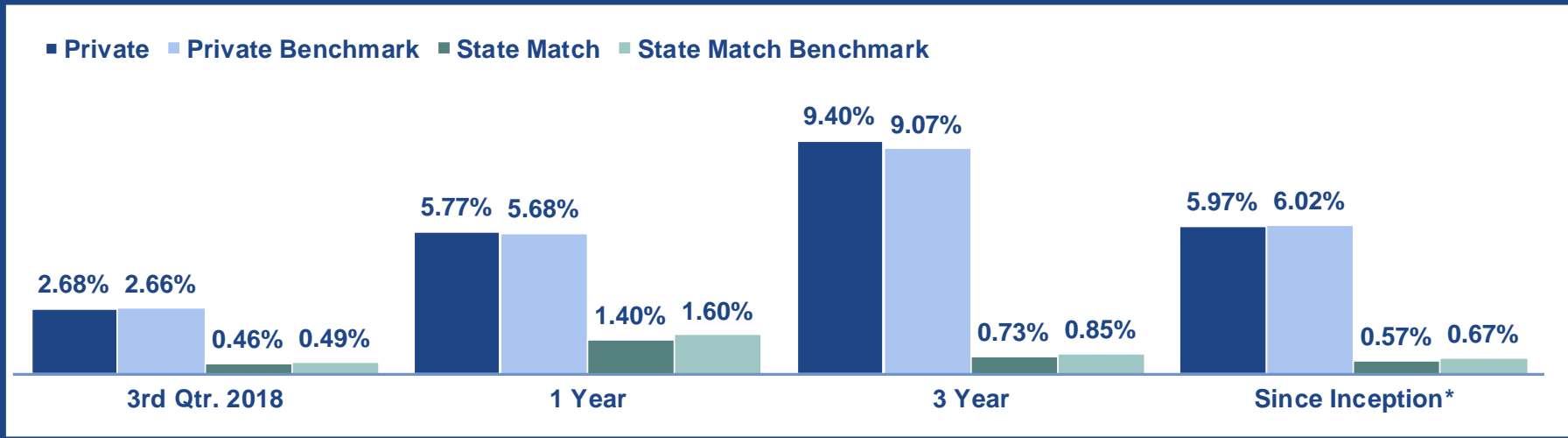
- ▣ Both target and current allocations are 100% cash
- ▣ Cash is invested in a money market fund managed by BlackRock



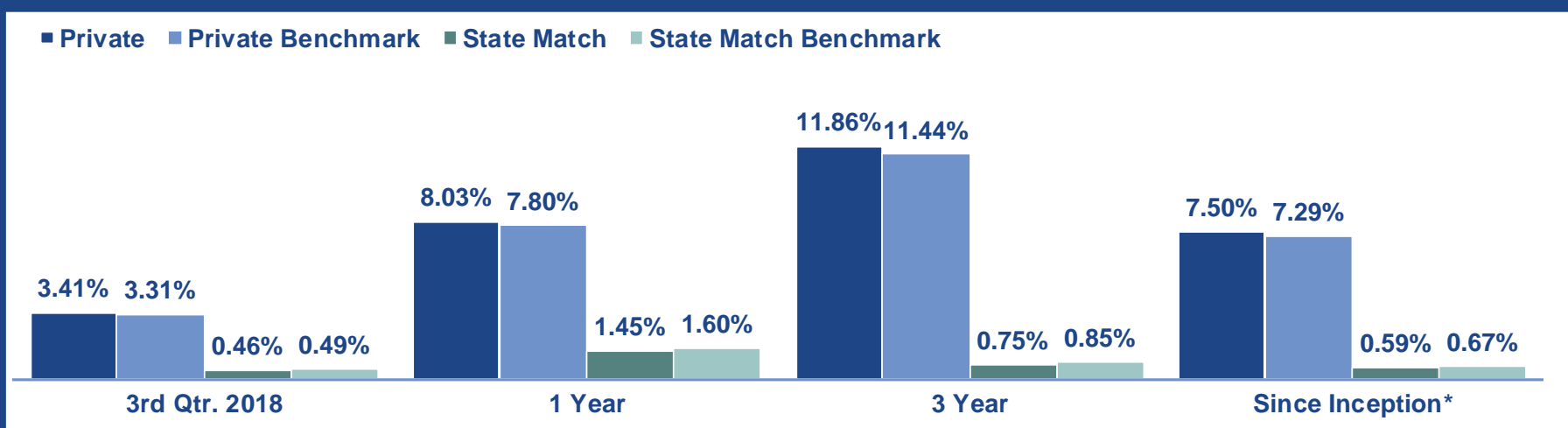
Fund Performance Updates

September 30, 2018

Private and State Match Scholarship



Private and State Match Endowment



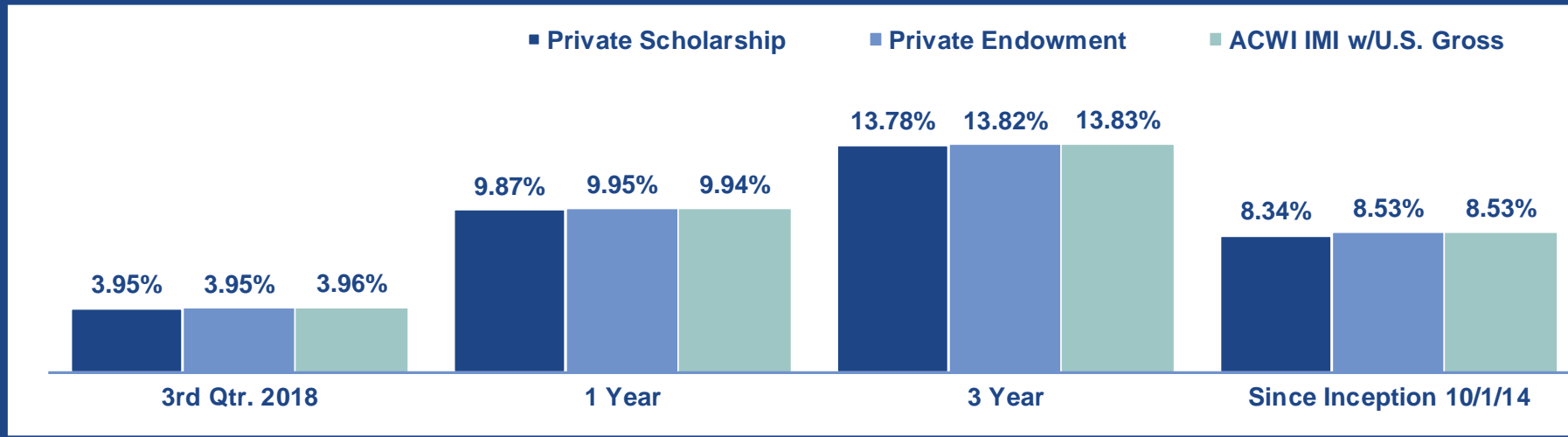
Scholarship Benchmarks: Private 60% MSCI ACWI IMI w/U.S. Gross & 40% Bloomberg Barclays Intermediate Credit, State Match 90 Day T-bill
Endowment Benchmarks: Private 80% MSCI ACWI IMI w/U.S. Gross & 20% Bloomberg Barclays Intermediate Credit, State Match 90 Day T-bill
* Since Inception: Private 10/1/14, State Match 11/25/14



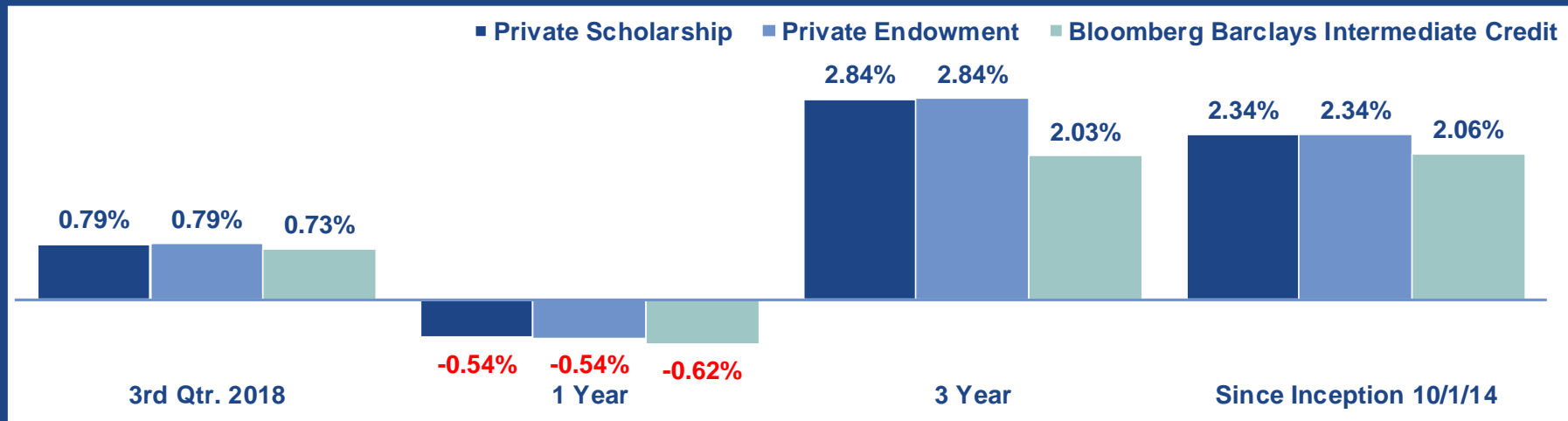
Fund Performance Updates

September 30, 2018

Equity Returns



Fixed Income Returns



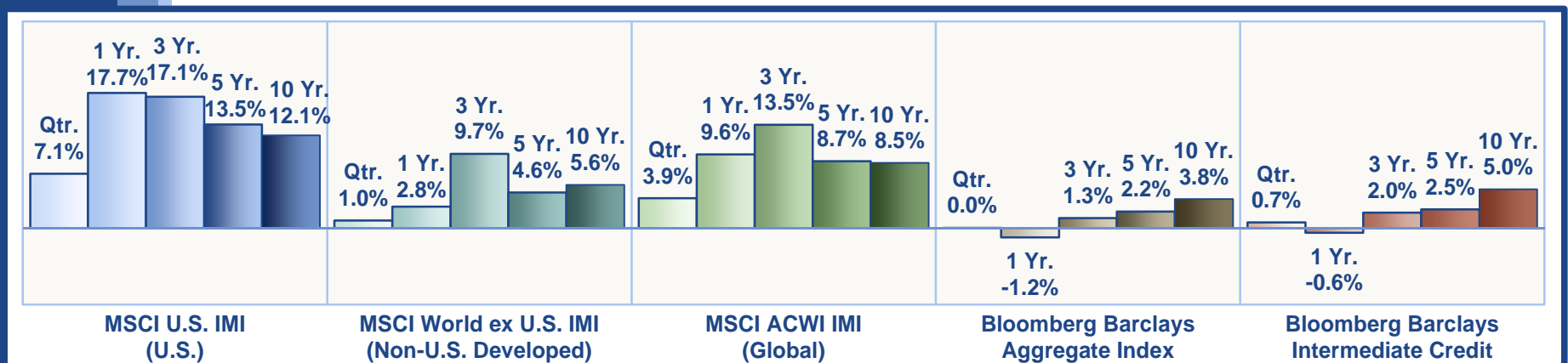
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* Since Inception: Private 10/1/14, State Match 11/25/14



Capital Markets at a Glance

September 30, 2018

- First quarter of fiscal year saw new highs in developed equity markets despite an uptick in market volatility, trade wars, and ongoing geopolitical risk.
- Global index (MSCI World Developed IMI) was up 0.28% in September and 4.56% for the quarter as strong fundamentals continue to support stocks in the developed world.
- Geopolitical risk and trade wars had a cooling effect on emerging markets, with the MSCI Emerging Markets IMI index returning -1.45% for the quarter.
- The Fed raised interest rates 0.25% in September; this marked the eighth increase since the current hiking cycle began back in 2015. The target range is now 2.00% to 2.25%.
- Unemployment continued to drop, reaching 3.7% in September -- the lowest unemployment rate since December 1969.
- 10-year Treasury rate ended September at 3.06%, up 0.20% for the quarter -- the first month-end closing above 3% since July 2011.





Contact Information



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Washington State Opportunities Scholarship

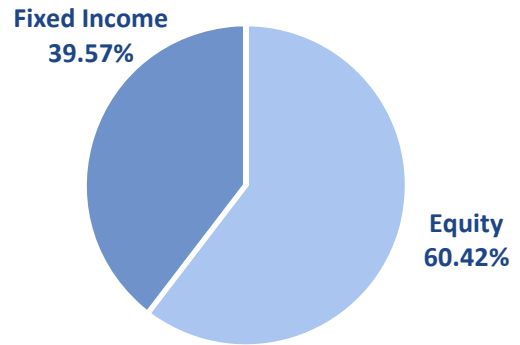
Quarterly Report – September 30, 2018

Portfolio Size, Allocation, and Assets Under Management	1
Performance.....	2

Private and State Match Scholarship

Private Private Allocation

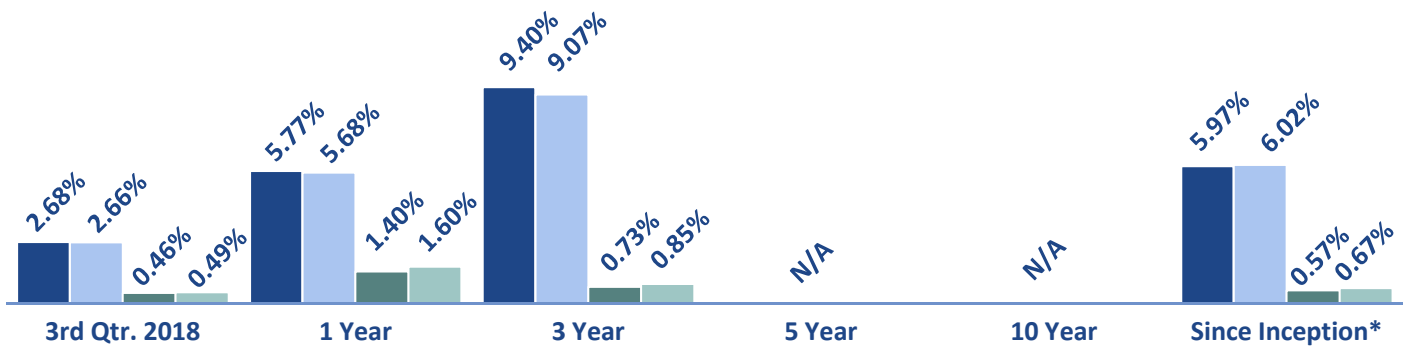
Total	\$65,965,652
Equity	\$39,858,358
Fixed Income	\$26,103,605
Cash	\$3,689



State Match

Total	\$83,516
Cash	\$83,516

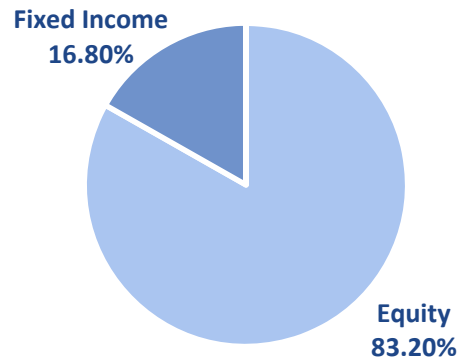
■ Private ■ Private Benchmark ■ State Match ■ State Match Benchmark



Private and State Match Endowment

Private Private Allocation

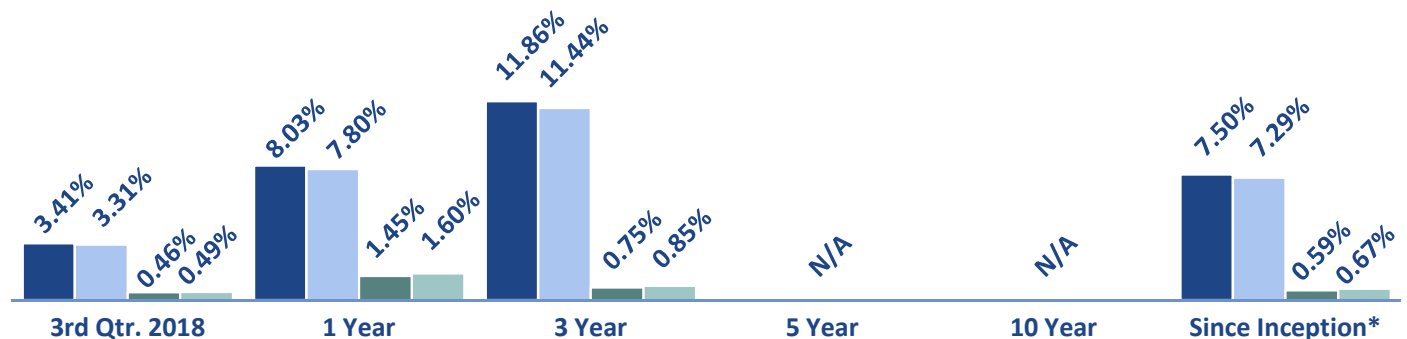
Total	\$17,018,449
Equity	\$14,159,180
Fixed Income	\$2,858,939
Cash	\$330



State Match

Total	\$12,763,974
Cash	\$12,763,974

■ Private ■ Private Benchmark ■ State Match ■ State Match Benchmark

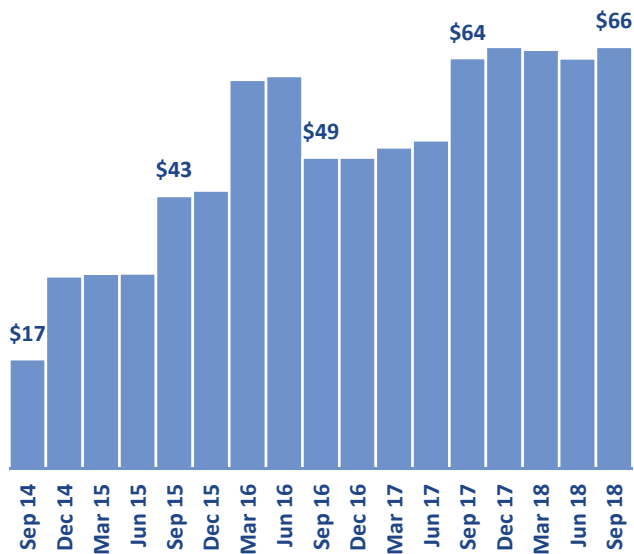


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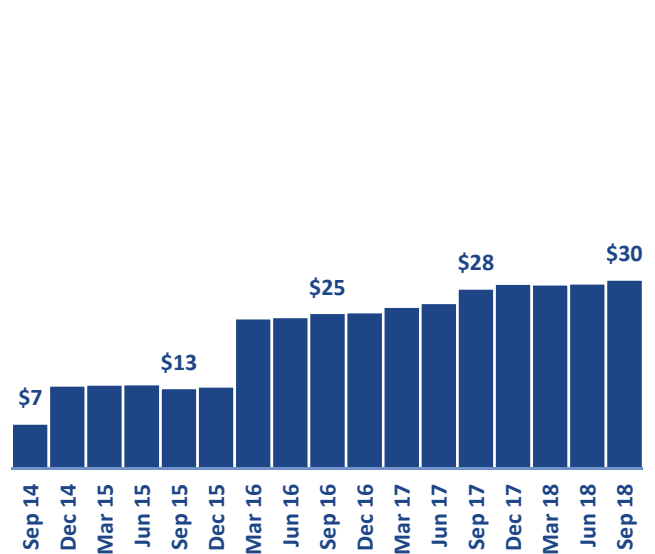
* Since Inception: Private 10/1/14, State Match 11/25/14

Assets Under Management (\$ Millions)

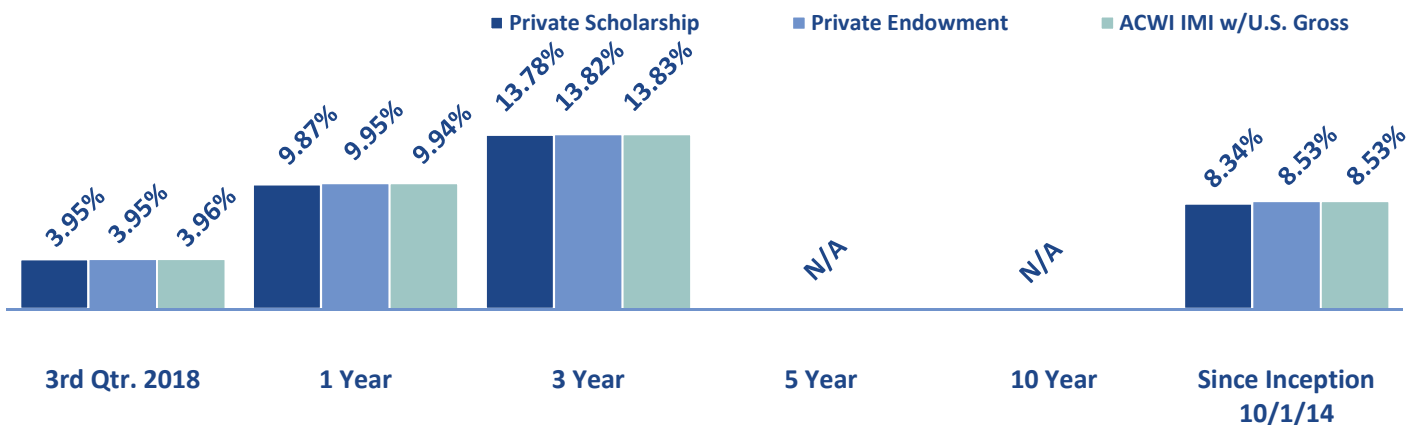
Private and State Match Scholarship



Private and State Match Endowment



Equity Returns



Fixed Income Returns

