2018 LEGISLATIVE REPORT

Reporting Data for Cohorts 1-7 | December 2018

WASHINGTON STATE OPPORTUNITY 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.

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



WSOS Executive Director Naria Santa Lucia

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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

| | COHORTS 1-6 | | COHORT 7 | | TOTAL | |
|--|---------------------------|------|----------|------|--------|------|
| MAJOR CATEGORY | # | % | # | % | # | % |
| 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 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 Schoentrup, 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



- 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 field 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**.





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 7), 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

| | COUODT | MAXI | | AWARD AMO | TOTAL # ANNUAL SCHOLARSHIPS | |
|---------------|--------------|---------|---------|-----------|-----------------------------|---------|
| ACADEMIC TEAR | CONORI | \$1,000 | \$2,500 | \$5,000 | \$7,500 | AWARDED |
| | Cohort 2 | - | - | 1 | - | 1 |
| c | Cohort 3 | - | - | 71 | - | 71 |
| | Cohort 4 | - | - | 34 | 363 | 397 |
| 2018-19 | 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 | | 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).



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 acerbated 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



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-ENF | OLLED | 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 | | | 32% | | 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%) |
| | | |
| Focioacion | | |
| 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 | 3,709 ²⁵ |

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%

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).

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

^{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.

^{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.

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 | | 1,057 | | 1,860 | 1,862 | 10,834 |

APPENDIX B

Selected Scholars Cohorts 1 – 7 by Major Category of Interest³³

| CATEGORIES | COHORT 1 | COHORT 2 | COHORT 3 | COHORT 4 | COHORT 5 | COHORT 6 | COHORT 7 | TOTAL |
|--|----------|----------|----------|----------|----------|----------|----------|-------|
| OF APPROVED MAJORS | % | % | % | % | % | % | % | % |
| 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 Studies35 | 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 TOTAL ³⁸ | 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 science-es; human computer interaction; mathematics; computer science and natural 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 | COHO PARTIC | ORT 1 IPANTS | COH(PARTIC | ORT 2 IPANTS | COH(PARTIC | ORT 3 IPANTS | COH(PARTIC | ORT 4 IPANTS |
|--------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|
| 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 | COH PARTIC | ORT 5 FIPANTS | COH PARTIC | ORT 6 IPANTS | COHC PARTIC | ORT 7 IPANTS |
|--------------|---------------|------------------|---------------|-----------------|----------------|-----------------|
| 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% | | |

APPENDIX E

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

| | | МАХ | | TOTAL # ANNUAL | | |
|---------------|--------------|---------|---------|----------------|---------|----------------------|
| ACADEMIC YEAR | COHORT | \$1,000 | \$2,500 | \$5,000 | \$7,500 | SCHOLARSHIPS AWARDED |
| 2012 – 13 | Cohort 1 | 2,990 | N/A | N/A | N/A | 2,990 |
| | ANNUAL TOTAL | 2,990 | | | | 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 | | 737 | | 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 | | | 300 | | 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 | | 2,828 | | | 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 | |
| Gonzaga University | - | 1 | 12 | 25 | 15 | 24 | 77 |
| Heritage University | - | - | 4 | 7 | 10 | 5 | |
| Northwest University | - | - | - | 4 | 2 | 6 | 12 |
| Pacific Lutheran University | - | 1 | 10 | 18 | 35 | 47 | |
| Saint Martin's University | - | - | 3 | 6 | 12 | 7 | |
| Seattle Pacific University | - | - | 2 | 14 | 16 | 41 | |
| Seattle University | - | - | 9 | 13 | 15 | 23 | |
| The Art Institute of Seattle | - | - | - | - | - | 1 | |
| University of Puget Sound | - | - | 1 | 6 | 11 | 14 | |
| Walla Walla University | - | - | 1 | 4 | 8 | 5 | |
| Western Governors University | - | - | - | 2 | 1 | 1 | |
| Whitman College | - | - | 3 | 1 | 2 | 1 | |
| 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 | |
| University of Washington Bothell | - | 3 | 14 | 38 | 47 | 59 | |
| University of Washington Seattle | - | 28 | 158 | 367 | 558 | 594 | |
| University of Washington Tacoma | - | 3 | 10 | 29 | 46 | 47 | |
| Washington State University Everett | - | - | - | 1 | - | 1 | |
| Washington State University Pullman | - | 12 | 59 | 98 | 134 | 171 | 474 |
| Washington State University Spokane | - | 3 | 11 | 9 | 2 | - | |
| Washington State University Tri-Cities | - | 1 | 9 | 14 | 24 | 26 | |
| Washington State University Vancouver | - | 2 | 6 | 17 | 24 | 17 | |
| 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 | |
| Bellevue College | - | - | 1 | 5 | 11 | 11 | |
| Bellingham Technical College | - | - | - | - | - | 1 | |
| Big Bend Community College | - | - | - | 2 | 3 | 4 | |
| Cascadia College | - | - | - | - | 2 | 3 | |
| Centralia College | - | - | - | 1 | 3 | 11 | |
| Clark College | - | - | - | 14 | 7 | 13 | |
| Clover Park Technical College | - | - | - | - | - | 2 | |
| Columbia Basin College | - | - | 2 | 9 | 23 | 34 | |
| Edmonds Community College | - | - | - | - | 6 | 12 | |
| Everett Community College | - | - | 1 | 12 | 8 | 16 | 37 |
| Grays Harbor College | - | - | - | 1 | 5 | 3 | |
| Green River College | - | - | - | 4 | 13 | 13 | |
| Highline College | - | - | 2 | 10 | 13 | 29 | |
| Lake Washington Institute of Technology | - | - | - | - | - | 3 | |
| Lower Columbia College | - | 1 | - | - | 1 | 2 | |
| North Seattle College | - | - | - | 2 | 2 | 3 | |
| Olympic College | - | - | - | 5 | 9 | 12 | |
| Peninsula College | - | - | - | - | 1 | 4 | |
| Pierce College at Fort Steilacoom | - | - | - | 1 | 7 | 4 | 12 |
| Pierce College at Puyallup | - | - | - | - | 4 | 6 | |
| Renton Technical College | - | - | - | 1 | 1 | 1 | |
| Seattle Central College | - | - | - | 5 | 10 | 13 | |
| Shoreline Community College | - | - | - | 2 | 4 | 3 | |
| Skagit Valley College | - | - | - | - | 6 | 14 | |
| South Puget Sound Community College | - | - | - | 1 | 6 | 4 | |
| South Seattle College | - | - | - | 3 | 4 | 14 | 21 |
| Spokane Community College | - | - | - | - | 7 | - | |
| Spokane Falls Community College | - | - | - | 4 | 6 | 13 | |
| Tacoma Community College | - | - | 1 | 1 | 17 | 22 | |
| Walla Walla Community College | - | - | - | 3 | 4 | 4 | |
| Wenatchee Valley College | - | - | - | - | 10 | 9 | |
| Whatcom Community College | - | - | - | 2 | 2 | 3 | |
| Yakima Valley Community College | - | - | 2 | 3 | 27 | 37 | |
| GRAND TOTAL | | | 397 | | | | 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%) | - | |
| 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%) | |
| 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%) | |
| 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%) | |
| 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 TOTAL ⁴⁴ | 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 | | 108 | | | | | 657 |
| Pacific Lutheran University | 87 | 27 | 26 | 7 | 2 | - | |
| Seattle University | 75 | 16 | 9 | 6 | 3 | - | |
| Gonzaga University | 79 | 16 | 10 | 3 | 1 | - | |
| Seattle Pacific University | 40 | 17 | 6 | 4 | 4 | - | 71 |
| Whitworth University | 26 | 14 | 9 | 3 | 2 | - | |
| Western Governors University | 33 | 1 | 6 | - | - | - | |
| Saint Martin's University | 19 | 2 | 4 | 1 | 3 | - | |
| Northwest University | 8 | 6 | 3 | 3 | - | - | |
| Bastyr University | 18 | 1 | 1 | - | - | - | |
| Whitman College | 13 | 3 | 1 | 1 | - | - | 18 |
| Heritage University | 8 | 2 | 3 | 1 | 1 | - | 15 |
| University of Puget Sound | 12 | - | 1 | 1 | - | - | |
| Walla Walla University | 2 | 2 | - | - | - | - | |
| DigiPen Institute of Technology | 3 | - | 1 | - | - | - | |
| Trinity Lutheran College | - | 1 | - | - | - | - | |
| FOUR-YEAR PUBLIC | 1,739 | | | | | | 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 | - | |
| 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 | |
| Washington State University Vancouver | 59 | 13 | 13 | 2 | 7 | - | |
| University of Washington Bothell | 54 | 12 | 15 | 7 | 4 | - | |
| The Evergreen State College | 47 | 5 | 5 | 1 | - | - | |
| Washington State University Spokane | 29 | 11 | 7 | 1 | - | - | |
| Washington State University Tri-Cities | 24 | 6 | 5 | 4 | 2 | - | |
| Eastern Washington University/WSU Spokane | 13 | 4 | 1 | 1 | 1 | - | |
| Washington State University Spokane/Whitworth University | 3 | 2 | 1 | - | - | - | |

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 | | | | | | | 21 |
| Olympic College | 4 | - | - | - | - | - | 4 |
| Pierce College at Fort Steilaoom | 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 | | | | | | | 58 |
| Other College | 46 | 6 | 6 | - | - | - | 58 |
| GRAND TOTAL | 2,219 | | | | 67 | | 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.



info@wa**opportunity**scholarship.org wa**opportunity**scholarship.org

206.800.8025 1414 31st Ave. S., Ste. 302 | Seattle, WA 98144

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