

# **Education and Workforce Outcomes for Children and Youth Experiencing Homelessness**

2021 Report



#### **Education Research and Data Center**

Forecasting and Research
Office of Financial Management



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#### **About the ERDC**

The research presented here uses data from the Education Research and Data Center, located in the Washington Office of Financial Management. ERDC works with partner agencies to conduct powerful analyses of learning that can help inform the decision-making of Washington legislators, parents, and education providers. ERDC's data system is a statewide longitudinal data system that includes deidentified data about people's preschool, educational and workforce experiences.

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#### **Executive Summary**

The 2020 Washington State Legislature directed the Education Research and Data Center (ERDC) with SHB 2711 to prepare annual reports on educational progress and outcomes for children and youth experiencing homelessness or in foster care in 2021 through 2024.

The ERDC completed the 2021 analysis with findings for children and youth experiencing homelessness between 2012 and 2020 summarized below.

#### Here are the most important takeaways from this study:

- 1. Gaps in educational progression and achievement between students experiencing homelessness and their peers persisted from 2015 to 2020.
- 2. Compared to their peers, students experiencing homelessness went through higher school mobility, had a higher risk of being absent, and they were more likely to experience school disciplinary action during their middle and high school years.
  - Students experiencing homelessness were more likely to change schools during high school, especially in 9<sup>th</sup> and 10<sup>th</sup> grade, and more likely to be absent in 11<sup>th</sup> and 12<sup>th</sup> grade.
  - Students experiencing homelessness had a higher proportion of facing school disciplinary action during middle school and their freshman year in high school.
- 3. The gap in Washington young adults' employment between those experiencing homelessness and those had not was quite close. However, the median earnings gap expanded over the same time. Those that did not experience homelessness had higher median earnings and their earnings increased at a higher rate over time.

#### **Background**

The 2020 Washington State Legislature directed the Education Research and Data Center (ERDC) to provide annual reports on the educational outcomes of students in foster care and students who had experienced homelessness, compared to their general peers<sup>1</sup>. The budget bill identified ten indicators to be reported, including kindergarten readiness, early grade reading and math test scores, ninth-grade students on track to graduate, high school completion, postsecondary enrollment, postsecondary completion, school attendance, school mobility, special education status, and school discipline. The Legislature also requested an analysis to examine racial/ethnic disparities. Additionally, the Project Education Impact (PEI) workgroup recommended examining the workforce outcomes for students as they transitioned into adulthood. This report specifically presents the findings for children and youth who experienced homelessness<sup>2</sup>.

#### Data and analytical approach

The samples of this study include children and youth who enrolled in Washington public K-12 schools and public postsecondary institutions any time between the 2012 and 2020 school years. The focus of the analysis is to descriptively compare the education and workforce outcomes between students experiencing homelessness to their housed peers.

The data employed was from the Washington State P-20 Data Warehouse (WA P-20 DW) housed at ERDC<sup>3</sup>. For the indicators representing only the K-12 in-sector analysis, the Office of Superintendent of Public Instruction State Report Card (OSPI-SRC) was utilized.

This study utilized descriptive analysis to measure changes in disparities over time. The table below describes the six student samples used for different analytical purposes<sup>4</sup>. Cross-sectional samples depicted the trend of educational and workforce gaps between homeless and non-homeless students in Washington from 2015 to 2020. Alternatively, longitudinal samples allowed for identifying gaps between the homeless and non-homeless youth, as well as identifying the direction of changes by following the same group of students for nine years. The latter is crucial for evaluating policy intervention.

<sup>&</sup>lt;sup>1</sup> Substitute House Bill 2711, Chapter 233, Law of 2020.

<sup>&</sup>lt;sup>2</sup> For findings from foster care analysis, see Chen, V. W. and Hough, G. (2021). *Education and Workforce Outcomes for Children and Youth in Foster Care*. Olympia, WA: Education Research and Data Center, Office of Financial Management.

<sup>&</sup>lt;sup>3</sup> See Technical Notes in Appendix A for details about data resources.

<sup>&</sup>lt;sup>4</sup> The sample selection is based on data availability and quality. Details about data, measurements, and samples are available in Appendix A.

Table 1: Study Samples

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Study samples									
Cross-sectional									
All K-12				K-12	K-12	K-12	K-12	K-12	K-12
All HSG				HSG	HSG	HSG	HSG	HSG	
All Adult age 18+				Age	Age	Age	Age	Age	
				18+	18+	18+	18+	18+	
Longitudinal									
2012 Kindergarten	K	G1	G2	G3	G4	G5	G6	G7	G8
2012 8 <sup>th</sup> grade	G8	G9	G10	G11	G12	PS1	PS2	PS3	PS4
2012 Adult age 18+	Age								
	18+	19+	20+	21+	22+	23+	24+	25+	

Note: K: kindergarten; G: grade level; HSG: high school graduate; PS: postsecondary education.

# What are the educational outcomes for students experiencing homelessness over the past 5 years?

#### Cross-Sectional Analysis of Education Outcomes

This section summarizes the key takeaways from the cross-sectional analysis. The findings below portray the trend of educational gaps between students experiencing homelessness and students not experiencing homelessness. Detailed tables that support corresponding findings can be found in Appendix B.

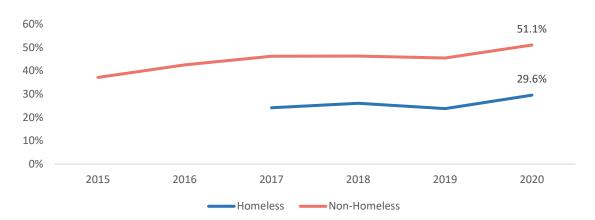
#### **Key Finding**

Gaps in educational progression and achievement between students experiencing homelessness and their peers persisted from 2015 to 2020.

#### Kindergarten readiness

Figure 1-1 indicates that students experiencing homelessness were less likely to meet kindergarten readiness standards compared to their non-homeless peers from 2017 to 2020. The gap between students experiencing homelessness and those not experiencing homelessness has been steady at about 21% over time.

Figure 1-1. Percent of Students Kindergarten Ready in 6 Assessment Domains, by Homeless Status for 2015-2020.



Data source: OSPI-SRC. Blank trends refer to no data. The 2020 data is impacted by Covid-19, which only reflects the records collected from September of 2019 to February of 2020, not the whole year. See Table 1 in Appendix B for details.

#### Early grade academic achievement: ELA

Students experiencing homelessness were less likely to meet 3<sup>rd</sup> grade English Language Arts (ELA) standards than their non-homeless peers in 2015 to 2019 (Figure 1-2). The percentage of students meeting ELA standard has increased slightly for non-homeless students. However, the percentage of students experiencing homelessness that met standards has remained flat, even dropping in 2019. As a result, the gap between the two groups was at its widest in 2019.

56.3% 60% 50% 40% 26.2% 30% 20% 10% 0% 2015 2016 2019 2017 2018 Homeless Non-Homeless

Figure 1-2. Percent of Students Meeting 3rd Grade English Language Arts Standard, by Homeless Status for 2015-2019

Data source: OSPI-SRC. See also Table 1 in Appendix B for details.

#### Early grade academic achievement: Math

Figure 1-3 finds that the percentage of students meeting 3<sup>rd</sup> grade Math standards remained almost constant from 2015 to 2018 for both groups of students. The percentage of students experiencing homelessness that met Math standards dropped by about 4.5% from 2018 to 2019, which increased the gap between the two groups of students in 2019.

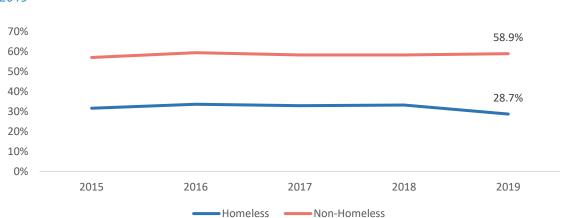


Figure 1-3. Percent of students Meeting 3rd Grade Mathematics Standard, by Homeless Status for 2015-2019

Data source: OSPI-SRC. See also Table 1 in Appendix B for details.

#### Ninth grade on-track to graduate

Between 2015 and 2019, less than half of 9<sup>th</sup> graders experiencing homelessness were on track to graduate from high school, compared to over 70% of non-homeless students. Although the percentage went up in 2020, the gap in 9<sup>th</sup> grade on track to graduate between the two groups was consistently about 25 or more percentage points in each year examined (Figure 1-4).

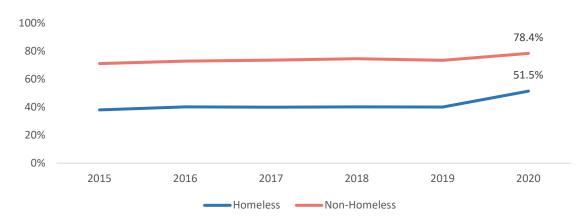


Figure 1-4. Percent of Students 9th Grade On-Track, by homeless Status for 2015-2020.

Data source: OSPI-SRC. The 2020 data is impacted by Covid-19, which only reflects the records collected from September of 2019 to February of 2020, not the whole year. See also Table 1 in Appendix B for details.

#### Five-year graduation rates

The five-year graduation rate for students experiencing homelessness has improved since 2015 (Figure 1-5). However, it is still much lower (by about 26 percentage points) than the graduation rate of non-homeless students.

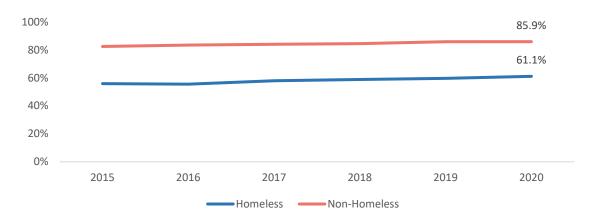


Figure 1-5. Percent of Students Graduating in 5 Years, by Homeless Status for 2015-2020.

Data source: OSPI-SRC. The 2020 data is impacted by Covid-19, which only reflects the records collected from September of 2019 to February of 2020, not the whole year. See also Table 1 in Appendix B for details.

#### **School Attendance**

Students not experiencing homelessness had better school attendance than students experiencing homelessness. The gap in attendance between these two groups has gradually narrowed over time, as attendance for homeless students improved.

90.0% 100% 80% 78.7% 60% 40% 20% 0% 2015 2016 2017 2018 2019 2020 Non-Homeless Homeless -

Figure 1-6. Percent of Students with Regular Attendance, by Homeless Status for 2015-2020.

Data source: OSPI-SRC. The 2020 data is impacted by Covid-19, which only reflects the records collected from September of 2019 to February of 2020, not the whole year. See also Table 1 in Appendix B for details.

#### School discipline

Figure 1-7 indicates that students experiencing homelessness were more likely to experience disciplinary action, defined as at least one school exclusion in the school year, compared to their non-homeless peers. Even as both groups trended towards less disciplinary actions, the gap in discipline rates remained constant between 2015 and 2019.

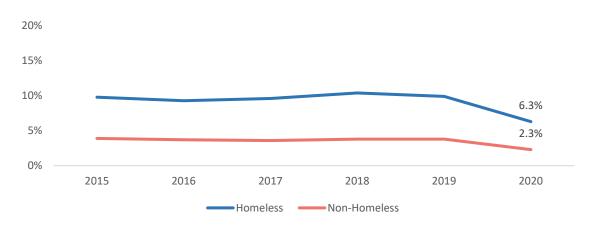


Figure 1-7. Percent of Students with Disciplinary Action, by Homeless Status for 2015-2020.

Data source: OSPI-SRC. The 2020 data is impacted by Covid-19, which only reflects the records collected from September of 2019 to February of 2020, not the whole year. See also Table 1 in Appendix B for details.

#### School mobility<sup>5</sup>

Students experiencing homelessness were more likely to change schools compared to their non-homeless peers. School mobility rates for homeless students experiencing homelessness has slightly declined in 2017 and have remained relatively constant since then (Figure 1-8).

20%

15%

12.8%

10%

5%

2015

2016

2017

2018

2019

2020

Homeless

Non-Homeless

Figure 1-8. Percent of Students with Mobility, by Homeless Status for 2015-2020.

Data source: OSPI-SRC. The 2020 data is impacted by Covid-19, which only reflects the records collected from September of 2019 to February of 2020, not the whole year. See also Table 1 in Appendix B for details.

#### Students with disabilities

Figure 1-9 indicates that students experiencing homelessness were more likely to have a disability compared to their housed peers. The gap remained constant by about 7 to 8 percent point difference.

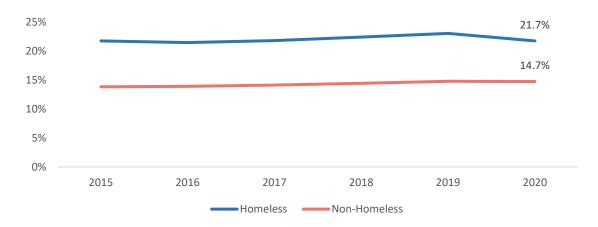


Figure 1-9. Percent of Students with Disability, by Homeless Status for 2015-2020.

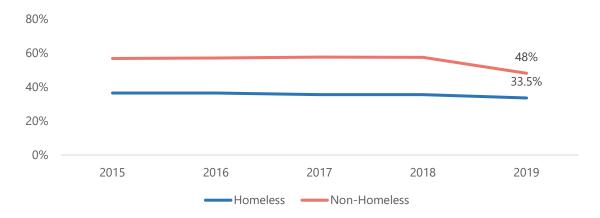
Data source: OSPI-SRC. The 2020 data is impacted by Covid-19, which only reflects the records collected from September of 2019 to February of 2020, not the whole year. See also Table 1 in Appendix B for details.

<sup>&</sup>lt;sup>5</sup> See glossary in Appendix A for school mobility definition

#### College going rate

College going rate refers to postsecondary enrollment one year after a student graduates from high school. Figure 1-10 demonstrates that a higher percentage of non-homeless students go to college compared to students experiencing homelessness. The gap in college going rate between these two groups remained at a 20 to 22 percentage point difference through the Class of 2018. Even though the gap was the smallest for the Class of 2019, it is unclear to what degree this result was impacted by 2020 college enrollment during COVID-19.

Figure 1-10. College Going Rate in One Year after High School Graduation, by Homeless Status for Graduation Class of 2015 to 2019



Data source: ERDC's analysis using data from CEDARS, PCHEES, and SBCTC. The analysis for the Class of 2019 includes 2020 college enrollment data which was impacted by COVID-19. The result is recommended to be interpreted with caution. See also Table 1 in Appendix B for details.

### What are the educational outcomes for a group of students that experienced homelessness *over time*?

Longitudinal Analysis of Education Outcomes

In a prior report<sup>6</sup>, ERDC researchers found racial/ethnic disparities in K-12 academic achievements between students experiencing homelessness and their peers that were not experiencing homelessness. To identify potential factors associated with achievement gaps, this study further examined the racial/ethnic disparities of three risk factors addressed in SHB 2711: student mobility, chronic absenteeism, and school discipline.

This section summarizes the key takeaways from the longitudinal analysis of the three risk factors. Rather than reporting on a snapshot in time, a longitudinal analysis studies the same cohort of students over an extended period. This type of analysis helps investigate when and whether there is impact of these factors on achievements and gaps over time<sup>7</sup>. This study follows the same group of individuals enrolled in the 2011-12 school year over nine years. There are three cohorts in this study: 2012 kindergarteners, 2012 8<sup>th</sup> graders, and 2012 young adults age 18 or older. Detailed tables that support corresponding findings can be found in Appendix B.

#### **Key Finding**

size less than 10.

Compared to their non-homeless peers, homeless students experienced higher school mobility, were at a higher risk of being absent, and were more likely to experience exclusionary school discipline actions during their middle and high school years.

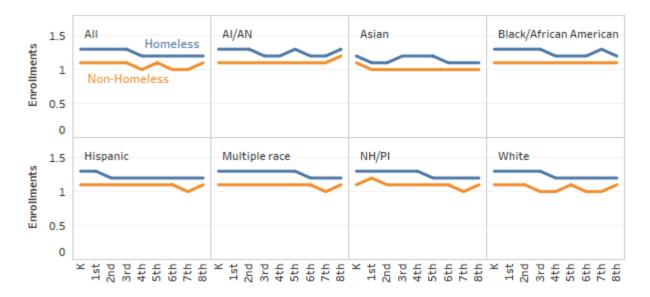
<sup>&</sup>lt;sup>6</sup> Chen, V., Pyle, K., and Aldrich, T. (2019). *Educational Outcomes of Children and Youth Experiencing Homelessness*. Olympia, WA: Education Research and Data Center, Office of Financial Management.

<sup>7</sup> The findings presented here focus on the overall patterns and less on discussions about racial/ethnic disparity, due to small sample size for homeless students after desegregating by race/ethnicity. It is required that ERDC reports need to follow the data privacy regulations to suppress records with sample

#### Frequency of school enrollments from 1st to 8th grade

Figure 2-1 indicates that regardless of race, the 2012 cohort of kindergarteners experiencing homelessness enrolled in more schools each school year than their non-homeless peers from elementary to middle school. Students experiencing homelessness became less mobile in middle school, thus narrowing the gap in school mobility between the two groups.

Figure 2-1. Average Number of School Enrollments for *2012 Kindergarten Cohort* from kindergarten to 8<sup>th</sup> grade (2012 to 2020), by Homeless Status and Race/Ethnicity

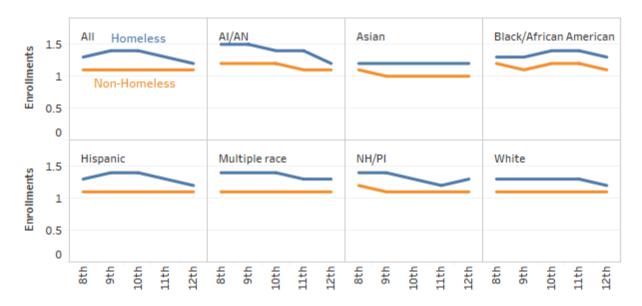


Data source: ERDC analysis using OSPI CEDARS data. The 8<sup>th</sup> grade result is from 2020 enrollment data which was impacted by COVID-19. See Table 2-1 in Appendix B for details.

#### Frequency of school enrollments from 8sth to 12th grade

Similarly, the 2012 8<sup>th</sup>graders experiencing homelessness were more likely to change schools than their counterparts, especially in 9<sup>th</sup> and 10<sup>th</sup> grade (Figure 2-2). This trend is consistent across the racial/ethnic groups. The gap in school mobility between the two groups almost disappeared by the senior year of high school. Among students experiencing homelessness, students identified as Asian American or White were more likely to stay in the same school over time.

Figure 2-2. Average Number of School Enrollments for 2012 8th Grade Cohort from 8th to 12th grade (2012 to 2016), by Homeless Status and Race/Ethnicity

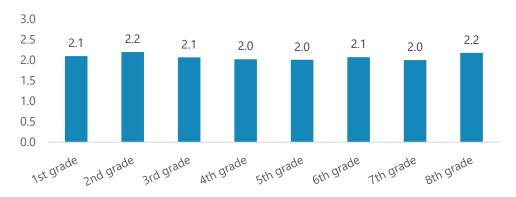


Data source: ERDC analysis using OSPI CEDARS data. See Table 2-2 in Appendix B for details.

#### Chronic absenteeism<sup>8</sup> over time

Figure 2-3 presents the odds ratio of chronic absenteeism for the 2012 kindergartener cohort. Students experiencing homelessness were about 2 times more likely to experience chronic absenteeism than students not experiencing homelessness from 1<sup>st</sup> to 8<sup>th</sup> grade<sup>9</sup>.

Figure 2-3. Odds of Chronic Absenteeism between Homeless and Non-Homeless over Grade Level (2013-2020), for 2012 Kindergarten Cohort



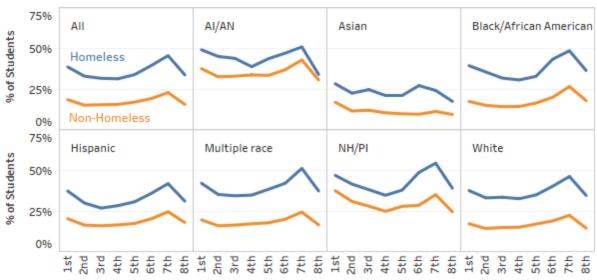
Data source: ERDC analysis using OSPI CEDARS data. The 8<sup>th</sup> grade result is from 2020 enrollment data which was impacted by COVID-19. See Table 2-3 in Appendix B for details.

<sup>&</sup>lt;sup>8</sup> Chronic absenteeism is defined as a student being absent from school for 15 or more days within a school year. (<a href="https://www2.ed.gov/datastory/chronicabsenteeism.html">https://www2.ed.gov/datastory/chronicabsenteeism.html</a>)

<sup>&</sup>lt;sup>9</sup> The increase in 8<sup>th</sup> grade may be due to inconsistent data collection in 2020 during COVID-19.

Figure 2-4 shows the percentage of chronic absenteeism disaggregated by race. Similar to other findings, students experiencing homelessness are more likely to be chronically absent, regardless of their racial/ethnic identity. Among students experiencing homelessness, American Indians/Alaskan Natives students were more likely to be absent than other racial/ethnic groups, whereas Asian American students had the lowest rates of chronic absenteeism. Amongst the racial/ethnic groups, the gap in chronic absenteeism between the two groups is smallest for students identified as American Indians/Alaskan Natives (by about 5% to 12% difference over time). For the other racial groups, the gap ranges from 10% to 27% difference.

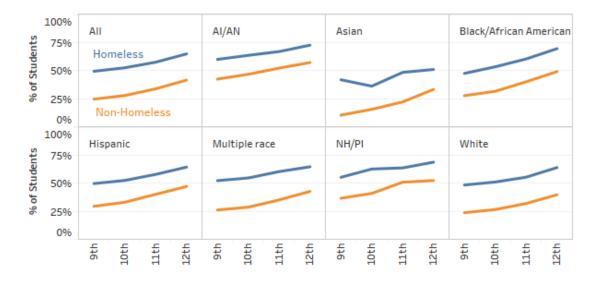
Figure 2-4. Percent Chronic Absenteeism between Homeless and Non-Homeless over Grade Level for 2012 Kindergarten Cohort, by Race/Ethnicity



Data source: ERDC analysis using OSPI CEDARS data. The  $8^{th}$  grade result is from 2020 enrollment data which was impacted by COVID-19. Blank trends refer to data with sample size < 10, which need to be suppressed in the report. See Table 2-3 in Appendix B for details.

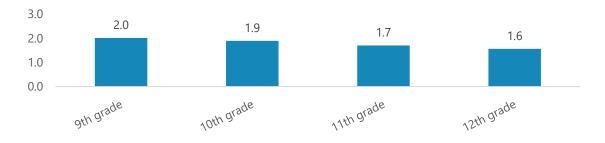
For the 2012 8<sup>th</sup> grade cohort, the chronic absenteeism rate grew during high school regardless of a student's homeless status or race, but students experiencing homelessness are still at a greater risk of being chronically absent (Figure 2-5). However, the gap in chronic absenteeism between homeless students and their non-homeless peers decreased from 9<sup>th</sup> to 12<sup>th</sup> grade (Figure 2-6).

Figure 2-5. Percent Chronic Absenteeism between Homeless and Non-Homeless Students over High School (2013-2016) for *2012 8th graders*, by Race/Ethnicity



Data source: ERDC analysis using OSPI CEDARS data. Blank trends refer to data with sample size < 10, which need to be suppressed in the report. See Table 2-4 in Appendix B for details.

Figure 2-6. Odds of Chronic Absenteeism between Homeless and non-Homeless over High School (2013-2016), for 2012 8th Grade Cohort

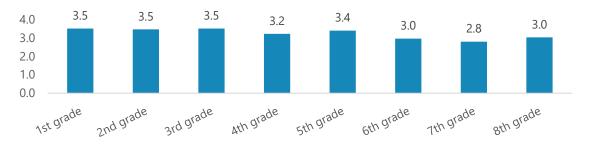


Data source: ERDC analysis using OSPI CEDARS data. See Table 2-4 in Appendix B for details.

#### School disciplinary exclusion over time

Among the 2012 kindergarten cohort, students experiencing homelessness were 3.2 to 3.5 times more likely to face school disciplinary exclusion than their non-homeless peers through 5<sup>th</sup> grade (Figure 2-7). The gap persisted through middle school, though it did decline slightly.

Figure 2-7. Odds of School Disciplinary Exclusion between Homeless and Non-Homeless over Grade Level (2013-2020), for *2012 Kindergarten Cohort* 



Data source: ERDC analysis using OSPI CEDARS data. The  $8^{th}$  grade result is from 2020 enrollment data which was impacted by COVID-19. See Table 2-5 in Appendix B for details.

The gap in school exclusion rates is particularly pronounced for Black/African American students in 7<sup>th</sup> grade, with a 16-percentage point difference between homeless and non-homeless students (Figure 2-8). Overall, the 2012 kindergarten cohort had an increasing proportion of disciplinary exclusion as they proceeded to middle school.

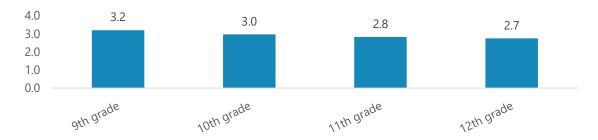
Figure 2-8. Percent Experiencing School Disciplinary Exclusion between Homeless and Non-Homeless over Grade Level (2013-2020) for *2012 kindergarten cohort*, by Race/Ethnicity



Data source: ERDC analysis using OSPI CEDARS data. The  $8^{th}$  grade result is from 2020 enrollment data which was impacted by COVID-19. Blank trend refers to no data or cell size < 10, which need to be suppressed in the report See Table 2-5 in Appendix B for details.

For the 2012 8th grade cohort, students experiencing homelessness were more likely than their peers to receive school disciplinary exclusion between 9<sup>th</sup> and 12<sup>th</sup> grade. The odds of facing disciplinary exclusion dropped slightly from 3.2 to 2.7 times across a student's high school career (Figure 2-9).

Figure 2-9. Odds of School Disciplinary Exclusion between Homeless and non-Homeless over High School, for 2012 8th Grade Cohort



Data source: ERDC analysis using OSPI CEDARS data. See Table 2-6 in Appendix B for details.

Similar to elementary and middle school, high schoolers experiencing homelessness received higher rates of school disciplinary exclusion than their non-homeless peers (Figure 2-10). The gap in school exclusion rate between is the largest among Black/African American students over four years. However, all racial/ethnic groups saw a decline over their high school career.

Figure 2-10. Percent School Disciplinary Exclusion for 2012 8th Grade Cohort over High School (2013-2016), by Homeless and Race/Ethnicity



Data source: ERDC analysis using OSPI CEDARS data. Blank trend refers to no data or cell size < 10. See Table 2-6 in Appendix B for details.

# What are the employment outcomes for young adults that experienced homelessness over the past 5 years?

#### Cross-sectional Analysis of Employment Outcomes

This section summarizes the main findings from the cross-sector analysis. Cross-sectional samples demonstrate the trend of employment gaps between students experiencing homelessness and those that are not. The analytical sample includes young adults who had enrolled in Washington public schools or colleges between 2012 and 2020 and reached age 18 between 2015 and 2019. All the data related to workforce outcomes are for young adults that were employed in Washington state (see Table A in Appendix A for age distribution of these young adults in the study sample).

#### **Key Findings**

- Young adults who did not experience homelessness had a higher percentage of employment, worked more hours, and had higher median annual earnings.
- The employment gap between young adults that had experienced homelessness and those that had not decreased and almost closed as of 2019. However, the median earnings gap expanded during that same time.

#### **Employment rate**

The percentage of employment increased for all young adults who were age 18 or older between 2015 and 2019, regardless of their housing status, as most aged and some gained more education and work experience. Figure 3-1 indicates that the gap between the two groups steadily closed between 2015 and 2019, reaching just a 2.5 percentage point difference in 2019.

80% 70% 64.0% 60% 61.50% 50% 40% 30% 20% 10% 0% 2015 2018 2016 2017 2019 Homeless Non-Homeless

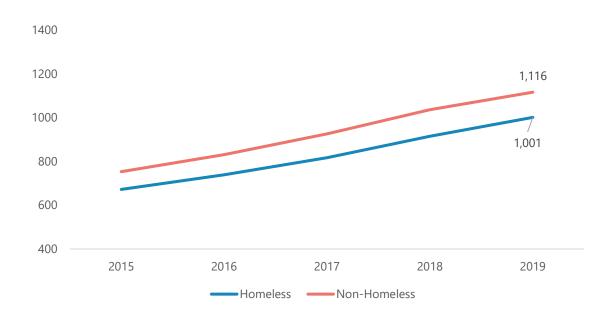
Figure 3-1. Percent Employed for Young Adults Age 18 or Older, by Homeless Status for 2015 to 2019

Data source: ERDC's analysis with homeless data from OSPI and UI Wage data from the Employment Security Department. See also Table 3 in Appendix B for details.

#### Work Hours

In addition to a higher rate of employment, young adults that did not experience homelessness worked more hours each year compared to their peers that had experienced homelessness. Non-homeless young adults had increasing work hours at a slightly higher pace. The gap in annual work hours thus expanded between 2015 and 2019.

Figure 3-2. Average Annual Work Hours for Young Adults Age 18 or Older, by Homeless from 2015 to 2019

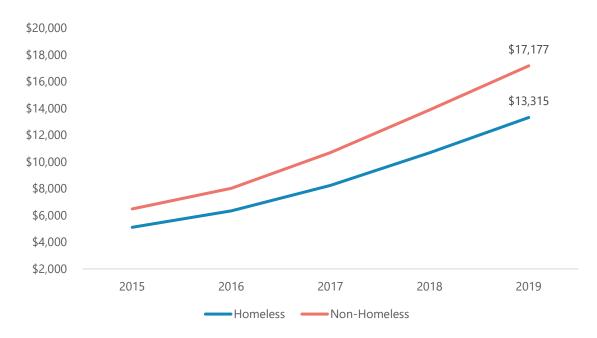


Data source: ERDC's analysis with homeless data from OSPI and UI Wage data from the Employment Security Department. See also Table 2 in Appendix B for details.

#### **Annual Earnings**

Finally, young adults who did not experience homelessness had higher median annual earnings compared to young adults that had experienced homelessness. The gap in median annual earnings has expanded as most of them aged (Figure 3-3).

Figure 3-3. Median Annual Earnings for Young Adults Age 18 or Older, by Homeless Status from 2015 to 2019



Data source: ERDC's analysis with homeless data from OSPI and UI Wage data from the Employment Security
Department. See also Table 3 in Appendix B for details. Earnings are adjusted to 2019 Consumer Price Index (CPI)

These findings from the cross-sectional analysis suggest that improving employment opportunities for young adults that had experienced homelessness does not reduce inequity. Even as the rate of employment increased, inequities persist and seem to be growing, both in terms of the number of hours worked and the annual earnings.

# What are the educational outcomes for a group of young adults that experienced homelessness *over time*?

Longitudinal Analysis of Employment Outcomes

This section summarizes the key findings from the longitudinal analysis of employment outcomes. The analysis on longitudinal cohorts follows the same group of young adults who were age 18 or older in 2012<sup>10</sup> and had enrolled in Washington public schools and colleges between the 2012 and 2020 school years. Again, the data related to workforce outcomes are for young adults that were employed in Washington state. Detailed tables can be found in Appendix B.

#### **Key Findings**

- There was a very slight gap in the employment rate between young adults that had experienced homelessness and their counterparts as workforce participation increased from 2012 to 2019.
- However, gaps in work hours and median earnings gradually expanded over the same time, with non-homeless young adults earning more.

<sup>&</sup>lt;sup>10</sup> See table A in Appendix A for the age distribution in 2012 for this longitudinal cohort.

Figure 4-1 indicates that the employment gap between homeless and non-homeless young adults was present between 2012 and 2019. The gap changed from about 7% in 2012 to 5% in 2019 (Table 4-1 in Appendix B).

100% AI/AN Black/African American ΑII Asian % Employed 75% Non-Homeless 50% Homeless 25% 0% 100% NH/PI Hispanic Multiple race White % Employed 75% 50% 25% 0% 2018 2019 2018 2019 2012 2013 2015 2016 2012 2013 2015 2016 2018 2019 2013 2017 2014 2017 2014 2017

Figure 4-1. Percent Employed for 2012 Age 18+ Cohort from 2012 to 2019, by Homeless and Race/Ethnicity

Data source: ERDC analysis using UI Wage data from ESD and homeless data from OSPI. Blank trend refers to no data or cell size<10. See Table 4-1 in Appendix B for details.

Similar to the results from the cross-sectional analysis, young adults who had experienced homelessness worked fewer hours and earned lower median earnings than their peers that had not experienced homelessness (Figures 4-2 and 4-3). Even though there was not a large employment gap, the gaps in work hours and median earnings expanded over time for the same cohort of young adults.

2015 2016 2017 2018 2019 2012 2013 2014

500 0

2,000 AI/AN Black/African American AII Asian Non-1,500 Homeless 1,000 Homeless 500 0 2,000 NH/PI Hispanic Multiple race White 1,500 Hours 1,000

Figure 4-2. Average Annual Work Hours for 2012 Age 18+ Cohort from 2012-2019, by Homeless Status and Race/Ethnicity

Data source: ERDC analysis using UI Wage data from ESD and homeless data from OSPI. See Table 4-2 in Appendix B for details.

2018

2012

2014

2016

2018

2012 2013 2014

2016

2015



Figure 4-3. Median Earnings for *2012 18+ Age Group* from 2012-2019, by Homeless Status and Race/Ethnicity

Data source: ERDC analysis using UI Wage data from ESD and homeless data from OSPI. See Table 4-3 in Appendix B for details.

#### Conclusion

Using both cross-sectional and longitudinal analyses, this study highlights persistent gaps in educational and employment outcomes between students that experienced homelessness and students that did not. The trends in this report illuminate potential areas for educators and policymakers to focus on to improve the Washington education system's ability to serve students that experienced homelessness.

The cross-sectional analysis revealed that gaps between the two groups in academic outcomes either perpetuated or slightly narrowed. During the same time, gaps in risk factors associated with negative academic outcomes remained with mixed trends. For students experiencing homelessness, the likelihood of facing school exclusion or having a disability was higher. However, compared to prior years, homeless students were more stable at enrolling in the same school and had higher rate of regular attendance since 2017. While employment among young adults improved over time, earnings disparities between the two groups continued to expand.

The longitudinal analysis tracked the same student cohorts over nine years. Findings indicate that students, especially those going through homelessness, were more likely to experience chronic absenteeism and school disciplinary exclusion during high school years. Washington young adults who had homeless experience did not differ much from their non-homeless counterparts in workforce participation. However, employment inequity between these two groups existed as number of work hours and earnings gaps expanded.

In addition to examining the outcome disparities by homeless status, this study disaggregated findings by race/ethnicity. However, the findings of racial/ethnic disparity are less conclusive due to data limitations. First, some racial/ethnic groups had lower numbers of students experiencing homelessness, so findings were either skewed or needed to be omitted in the report to protect student privacy. Second, the educational outcome measures are only available for students enrolled in Washington public K-12 schools or colleges. The enrollments from private schools or out-of-state postsecondary institutions were not accessible. Lastly, UI wage data used in the employment analysis offered a limited amount of information about the Washington workforce. Other records for employees that are self-employed or federal employees are not included. These limitations need to be taken into consideration while interpreting the findings and for future research.

#### **Future research**

This 2021 report provides an overview of education and workforce outcomes for students that experienced homelessness and their housed peers. The Legislature directed ERDC to continue partnering with the PEI workgroup to provide data-driven evidence for policies aiming to improve lifelong outcomes for students experiencing homelessness. Based on the findings of this study and the research priorities addressed with the workgroup, several directions or research questions for future studies are recommended.

First, the mechanisms through which homelessness impacts individual short- and long-term outcomes are not fully examined yet. For example, this study has portrayed several risk factors potentially disrupting student progression. The extent to which those factors associate with the outcome disparities between students that experienced homelessness and their housed peers need further investigation.

Second, examining whether students that experience homelessness have equitable access to educational and workforce opportunities as their housed peers will shed light on explaining outcome disparities. For example, whether there is variation in districts that successfully improved education outcomes or closing the opportunity gap for homeless students<sup>11</sup> needs further research.

Third, future research can investigate the impacts of homeless policy or program intervention. For example, in 2016, the Washington State Legislature passed the <u>Homeless Student Stability</u> and Opportunity Gap Act (HSSA) to improve education outcomes of homeless students. The state law provides grants for school districts to serve students experiencing homelessness through in-school supports and housing stability. This study found that students experiencing homelessness were less mobile and more likely to attend schools since 2017, compared to previous years. Whether the improved school stability and attendance found is attributed to the HSSA needs further investigation.

Fourth, the association between living conditions and outcomes can be explored. In other words, do different living conditions, such as couch-surfing, doubling-up, or staying in temporary housing like hotels or shelters make a difference in terms of student learning outcomes.

Finally, early evidence suggests that the COVID-19 pandemic exacerbated inequities, particular for already vulnerable groups such as the homeless population. It is critical to analyze the impact of COVID-19 on education and workforce outcomes for all students, paying particular attention to those who experienced homelessness<sup>12</sup>.

This report serves the first of the SHB 2711 research series. More in-depth studies on equity will contribute to evidence-based policymaking dedicated to close outcome gaps.

<sup>12</sup> National Academies of Sciences, Engineering, and Medicine (2021). *Addressing Disaster Vulnerability among Homeless Populations during COVID-19*. Washington, DC: The National Academies Press. <a href="https://doi.org/10.17226/26220">https://doi.org/10.17226/26220</a>.

<sup>&</sup>lt;sup>11</sup> Dhaliwal, T. K. Gregorio, S. DE, Owens, A., and Painter, G. (2021). *Putting Homelessness in Context: The Schools and Neighborhoods of Students Experiencing Homelessness*. The ANNALS of the American Academy of Political and Social Science, 693, January.

#### **Appendix A. Technical Notes**

#### Data

Two data sources contributed to this study:

- 1. The WA P-20 Data Warehouse maintained by ERDC provides administrative records about public K-12 enrollment, student homeless status, assessment outcomes, high school graduation, school disciplinary exclusion, absence, enrollment in public institutions, hours employed, and wage in Washington. It also provides demographic characteristics. Data sources include the Comprehensive Education Data and Research System (CEDARS) from the Office of Superintendent of Public Instruction (OSPI), State Board for Community and Technical Colleges (SBCTC) Data Warehouse from the WA SBCTC, the Public Centralized Higher Education Enrollment System (PCHEES) housed at the Office of Financial Management (OFM), and Unemployment Insurance wage (UI Wage) from Washington's Employment Security Department (ESD).
- 2. OSPI provided aggregated data from the OSPI State Report Card (OSPI-SRC) for the trend analysis.

The annual records used in this study summarize record-level data by screening enrollment, progression, achievement, and employment outcomes by time sequence in each year.

Table A. Number of Young Adults Employed in Washington from 2015 to 2019, by Age

		ng Addits Ei									
Age as of Jan 1	2012	2013	2014	2015	2016	2017	2018	2019			
Cross-sect	Cross-sectional: All Adult age 18+										
18				12,334	24,522	40,274	53,580	60,074			
19				23,469	39,332	52,566	60,256	60,822			
20				36,987	51,314	58,904	60,100	59,800			
21				48,253	58,200	58,969	58,605	58,757			
22				53,612	57,282	58,239	58,310	57,839			
23				51,119	53,303	55,511	57,017	56,349			
24				46,342	48,595	50,562	52,596	53,851			
25				24,462	25,644	26,619	27,593	29,059			
26				5,320	5,575	5,733	5,933	6,258			
27				1,753	1,826	1,850	1,934	2,082			
28				327	341	355	372	395			
Total				303,978	365,934	409,582	436,296	445,286			
Longitudi	<i>nal:</i> 2012 Adu	lt age 18+									
18	24,631	28,548	29,581	30,160	30,626	30,491	29,831	29,059			
19	5,127	5,953	6,380	6,569	6,615	6,521	6,376	6,258			
20	1,833	2,076	2,172	2,203	2,235	2,156	2,114	2,082			
21	363	419	425	427	415	413	407	395			
Total	31,954	36,996	38,558	39,359	39,891	39,581	38,728	37,794			

Data source: ERDC's analysis of UI Wage data. Earnings are adjusted to 2019 Consumer Price Index (CPI). The Sample includes only those who ever enrolled in Washington public schools between 2012 and 2020.

#### Glossary

- **Chronic absenteeism** refers to a student being absent from school for 15 or more days within a school year.
- **College going rate** is calculated by (total number of the graduation class enrolling in WA public institutions in one year after high school graduation)/(total number of the graduation class)
- **Early grade academic achievements** are presented by whether a student met 3<sup>rd</sup>-grade assessment standard in English Language Art or in Math.
- **Employment outcomes** refer to employment status, average annual work hours, and median annual earnings calculated from the Unemployment Insurance Wage records.
- **Five-year graduation rate** refers to the percent of the first-time ninth graders who stayed in high school and graduated in five years.
- **Homeless** flag indicates whether or not the student was homeless at any time during the current school year as defined in McKinney–Vento Act, Section 725(2). The identification of homeless status represents those who ever enrolled in Washington public K-12 schools or higher education institutions any time point between 2012 and 2020 school/academic years.
- **Kindergarten readiness** is a flag identifying whether a kindergartener met the WAKIDs assessment standard in six domain areas social emotional, physical, cognitive, language, literacy, mathematics.
- **Ninth-grade on track** is defined as first time ninth graders who passed all credits they attempted in their ninth grade year.
- **Number of school enrollment** is a measure of school mobility directly calculated from CEDARS enrollment file. It indicates the total number of enrollments in that school year.
- **Odds ratios** demonstrated in some figures are calculated by (percent of indicator for Homeless Care)/(percent of indicator for non-Homeless Care)
- **Race/ethnicity** is a categorical measure for seven categories from CEDARS.
- **School discipline** is a flag to identify whether a student experiencing disciplinary action in school.
- **School disciplinary exclusion** refers to the status that a student being excluded from school due to disciplinary action.
- **School mobility** is defined as changing schools at least one time during the school year. Non-mobile students are students enrolled on October 1st of the school year and are continuously enrolled in the same school for 150 days in the school year. Mobile students enroll with inverse pattern.
- **Young adults** refer to those who were age 18 or older as of January 1 in the year.

### **Appendix B. Supplemental Tables**

Table 1. Ten Project Education Impact (PEI) Disparity Indicators for Homeless Students

			School Ye	ear		
	2015	2016	2017	2018	2019	2020
Percent Ready in 6 Assessment Doma	iins					
All Students	37.2%	42.6%	45.7%	45.9%	44.9%	50.6%
Homeless			24.2%	26.1%	23.8%	29.6%
Non-Homeless	37.2%	42.6%	46.2%	46.4%	45.5%	51.1%
Percent Meeting 3rd grade English La	inguage Art	s standard				
All Students	51.7%	54.0%	52.4%	55.6%	55.4%	
Homeless	28.5%	28.1%	28.0%	30.9%	26.2%	
Non-Homeless	52.3%	54.8%	53.1%	56.3%	56.3%	
Percent Meeting 3rd grade Mathema			33.173	30.075		
All Church and a						
All Students	56.4%	58.6%	57.6%	57.6%	58.0%	
Homeless	31.6%	33.6%	32.9%	33.2%	28.7%	
Non-Homeless	57.0%	59.4%	58.3%	58.3%	58.9%	
Percent 9th grade on-track						
All Students	70.4%	72.1%	72.7%	73.7%	72.5%	77.7%
Homeless	38.1%	40.2%	39.9%	40.2%	40.0%	51.5%
Non-Homeless	71.2%	72.9%	73.6%	74.7%	73.5%	78.4%
Percent Graduating in 5 years	71.270	72.570	73.070	74.770	73.570	70.470
All Students	81.1%	81.9%	82.4%	82.7%	83.8%	83.9%
Homeless	55.9%	55.5%	58.0%	58.9%	59.7%	61.1%
Non-Homeless	82.5%	83.5%	84.1%	84.5%	85.9%	85.9%
Percent with Regular Attendance						
All Students	83.9%	83.1%	82.7%	82.7%	82.9%	89.4%
Homeless	66.9%	64.8%	66.0%	70.0%	70.1%	78.7%
Non-Homeless	84.6%	83.9%	83.5%	83.6%	83.8%	90.0%
Percent with Disciplinary Action						
All Students	4.1%	3.8%	3.8%	4.1%	4.0%	2.4%
Homeless	9.8%	9.3%	9.6%	10.4%	9.9%	6.3%
Non-Homeless	3.9%	3.7%	3.6%	3.8%	3.8%	2.3%

Table 1. Ten Project Education Impact (PEI) Disparity Indicators for Homeless Students (Continued)

	School Year							
	2015	2016	2017	2018	2019	2020		
Percent with mobility								
All Students	4.6%	4.5%	4.2%	4.4%	4.3%	4.2%		
Homeless	14.3%	14.8%	12.9%	12.9%	12.7%	12.8%		
Non-Homeless	4.3%	4.2%	4.0%	4.2%	4.1%	4.0%		
Percent with disability								
All Students	14.0%	14.1%	14.3%	14.6%	15.0%	14.9%		
Homeless	21.7%	21.5%	21.8%	22.4%	23.0%	21.7%		
Non-Homeless	13.8%	13.9%	14.1%	14.4%	14.8%	14.7%		

**College Going Rate** 

	Graduation Class						
	2015	2016	2017	2018	2019		
Enroll in WA public institution on	e year after gro	aduation					
Total	37,878	38,698	39,611	41,058	34,418		
	55.8%	56.0%	56.3%	56.0%	47.1%		
Homeless	1,085	1,224	1,373	1,538	1,484		
	36.4%	36.4%	35.5%	35.5%	33.5%		
Non-Homeless	36,793	37,472	38,236	39,513	32,934		
	56.7%	57.0%	57.5%	57.3%	48.0%		

Data source for top 9 indicators on the table: OSPI-SRC. The 2020 data is impacted by Covid-19, which only reflects the records collected from September of 2019 to February of 2020, not the whole year. Therefore, the 2020 result needs to be used with caution. See <a href="https://www.k12.wa.us/data-reporting/data-displays">https://www.k12.wa.us/data-reporting/data-displays</a> for details. Data source for college going rate comes from PCHEES and SBCTC.

Table 2-1. Average Number of School Enrollments for *2012 Kindergarteners* from kindergarten to 8<sup>th</sup> grade (2012 to 2020), by Homeless Status and Race/Ethnicity

	Grade Level								
	Kindergarten	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
		grade							
Total									
Homeless	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2
Non-Homeless	1.1	1.1	1.1	1.1	1.0	1.1	1.0	1.0	1.1
Total	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
American Indian,	/Alaska Native								
Homeless	1.3	1.3	1.3	1.2	1.2	1.3	1.2	1.2	1.3
Non-Homeless	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2
Total	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.2
Asian									
Homeless	1.2	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.1
Non-Homeless	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Black/African An	nerican								
Homeless	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.2
Non-Homeless	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Total	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Hispanic/Latino									
Homeless	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Non-Homeless	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.1
Total	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Native Hawaiian	/Pacific Islander								
Homeless	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2
Non-Homeless	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.0	1.1
Total	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1
Multiple race									
Homeless	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2
Non-Homeless	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.1
Total	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
White									
Homeless	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2
Non-Homeless	1.1	1.1	1.1	1.0	1.0	1.1	1.0	1.0	1.1
Total	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Data source: ERDC's analysis of OSPI CEDARS data. The 8<sup>th</sup>-grade (2020) data is impacted by Covid-19, which only reflects the records collected from September of 2019 to February of 2020, not the whole year. Therefore, the 2020 result needs to be used with caution. See <a href="https://www.k12.wa.us/data-reporting/data-displays">https://www.k12.wa.us/data-reporting/data-displays</a> for details.

Table 2-2. Average Number of School Enrollments for 2012 8<sup>th</sup> Graders from 8<sup>th</sup> to 12<sup>th</sup> grade (2012 to 2016), by Homeless Status and Race/Ethnicity

	8 <sup>th</sup> grade	9 <sup>th</sup> grade	Grade Level 10 <sup>th</sup> grade	11 <sup>th</sup> grade	12 <sup>th</sup> grade
All race/ethnicity					
Total	1.1	1.1	1.1	1.1	1.1
Homeless	1.3	1.4	1.4	1.3	1.2
Non-Homeless	1.1	1.1	1.1	1.1	1.1
American					
Indian/Alaska					
Native					
Homeless	1.5	1.5	1.4	1.4	1.2
Non-Homeless	1.2	1.2	1.2	1.1	1.1
Asian					
Homeless	1.2	1.2	1.2	1.2	1.2
Non-Homeless	1.1	1.0	1.0	1.0	1.0
Black/African					
American					
Homeless	1.3	1.3	1.4	1.4	1.3
Non-Homeless	1.2	1.1	1.2	1.2	1.1
Hispanic					
Homeless	1.3	1.4	1.4	1.3	1.2
Non-Homeless	1.1	1.1	1.1	1.1	1.1
Native					
Hawaiian/Pacific					
Islander					
Homeless	1.4	1.4	1.3	1.2	1.3
Non-Homeless	1.2	1.1	1.1	1.1	1.1
Multiple race					
Homeless	1.4	1.4	1.4	1.3	1.3
Non-Homeless	1.1	1.1	1.1	1.1	1.1
White					
Homeless	1.3	1.3	1.3	1.3	1.2
Non-Homeless	1.1	1.1	1.1	1.1	1.1

Data source: ERDC's analysis of OSPI CEDARS data.

Table 2-3. Percent Chronic Absenteeism for *2012 Kindergarteners* from 1<sup>ST</sup> to 8<sup>th</sup> grade (2013-2020), by Homeless Status and Race/Ethnicity

	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Grade 4 <sup>th</sup>	Level	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
	grade	grade	grade	grade	grade	grade	grade	grade
	N	N	N	N	N	N	N	N
	%	%	%	%	%	%	%	%
All race/ethnicity								
Homeless	3,120	2,534	2,485	2,420	2,614	3,005	3,427	2,418
	38.6%	32.9%	31.6%	31.3%	33.9%	39.5%	45.6%	33.7%
Non-Homeless	11,678	8,936	9,093	9,019	9,712	10,774	12,771	8,206
	18.4%	15.0%	15.3%	15.5%	16.9%	19.1%	22.8%	15.5%
American Indian/Alask	a Native							
Homeless	118	106	105	92	100	114	122	73
	49.2%	45.1%	43.9%	38.8%	43.7%	47.1%	51.0%	34.0%
Non-Homeless	272	224	236	246	230	262	301	195
	37.5%	32.5%	32.9%	33.7%	33.4%	36.9%	42.9%	30.6%
Asian								
Homeless	35	26	30	25	25	29	27	19
	28.2%	22.4%	24.6%	21.0%	21.0%	27.1%	24.1%	17.4%
Non-Homeless	688	438	452	374	346	321	385	292
	16.8%	11.4%	11.9%	10.3%	9.7%	9.4%	11.1%	9.3%
Black/African America	n							
Homeless	271	231	209	198	209	271	306	216
	39.4%	35.5%	31.7%	30.6%	32.8%	43.4%	48.6%	36.4%
Non-Homeless	406	325	298	294	330	385	504	315
	17.3%	14.9%	14.1%	14.2%	16.3%	19.9%	26.5%	17.8%
Hispanic								
Homeless	968	750	680	708	766	885	1,025	740
	37.3%	29.9%	26.8%	28.3%	30.7%	35.9%	41.9%	31.1%
Non-Homeless	3,062	2,344	2,290	2,289	2,430	2,810	3,383	2,353
	20.2%	16.3%	15.9%	16.4%	17.3%	20.2%	24.5%	17.9%
Native Hawaiian/Pacif	ic Islander	1						
Homeless	85	69	66	59	64	80	91	61
	47.0%	41.6%	38.2%	34.7%	37.9%	48.8%	54.5%	39.1%
Non-Homeless	199	152	137	117	130	129	154	105
	37.5%	30.9%	28.0%	24.8%	27.9%	28.5%	35.1%	24.5%
Multiple race								
Homeless	360	281	292	288	316	339	403	282
	42.1%	35.2%	34.4%	34.8%	38.4%	42.1%	51.3%	37.4%
Non-Homeless	1,034	784	806	832	850	938	1,137	731
	19.5%	15.9%	16.3%	17.1%	17.7%	19.9%	24.3%	16.5%
White								
Homeless	1,282	1,070	1,101	1,050	1,132	1,286	1,453	1,026
	37.6%	33.1%	33.5%	32.6%	34.9%	40.3%	46.3%	34.6%
Non-Homeless	6,016	4,669	4,873	4,867	5,396	5,927	6,905	4,215
	17.1%	14.2%	14.8%	15.0%	16.9%	18.9%	22.3%	14.4%

Data source: ERDC's analysis of OSPI CEDARS data. The 8th-grade (2020) data is impacted by Covid-19. Therefore, the 2020 result needs to be used with caution.

Table 2-4. Percent Chronic Absenteeism for *2012 8<sup>th</sup> Graders* from 9<sup>th</sup> to 12<sup>th</sup> grade (2013-2016), by Homeless Status and Race/Ethnicity

		Grade L	evel	
	9 <sup>th</sup> grade	10 <sup>th</sup> grade	11 <sup>th</sup> grade	12 <sup>th</sup> grade
	N	N	N	N
	%	%	%	%
All race/ethnicity				
Homeless	2,775	2,813	2,856	2,735
	49.5%	52.6%	57.6%	65.0%
Non-Homeless	16,011	17,669	19,755	22,612
	24.6%	27.8%	33.8%	41.6%
American Indian/Alas				
Homeless	137	142	139	123
	60.1%	63.7%	67.1%	72.8%
Non-Homeless	406	425	443	422
	42.5%	46.8%	52.3%	57.3%
Asian				
Homeless	44	38	47	47
	41.9%	36.2%	48.5%	51.1%
Non-Homeless	442	677	925	1,376
	10.3%	15.5%	22.1%	33.3%
Black/African Americ	an			
Homeless	274	298	313	334
	47.6%	53.5%	60.5%	69.7%
Non-Homeless	724	804	962	1,100
	27.7%	31.6%	40.1%	49.2%
Hispanic				
Homeless	668	678	687	656
	49.8%	52.6%	58.0%	64.5%
Non-Homeless	3,627	3,988	4,510	4,923
	29.5%	33.1%	40.2%	47.2%
Native Hawaiian/Pac	ific Islander			
Homeless	56	59	60	51
	55.4%	62.8%	63.8%	68.9%
Non-Homeless	186	196	231	221
	36.7%	41.0%	51.0%	52.5%
Multiple race				
Homeless	244	244	262	239
	52.4%	54.8%	60.5%	64.8%
Non-Homeless	1,004	1,055	1,223	1,382
	26.2%	28.7%	35.2%	42.8%
White				
Homeless	1,350	1,350	1,344	1,283
	48.5%	51.2%	55.5%	64.1%
Non-Homeless	9,616	10,513	11,455	13,181
	23.8%	26.6%	32.0%	39.8%
		_0.075	32.073	33.370

Data source: ERDC's analysis of OSPI CEDARS data.

Table 2-5. Percent School Disciplinary Exclusion *2012 Kindergarteners* from 1<sup>ST</sup> to 8<sup>th</sup> grade (2013-2020), by Homeless Status and Race/Ethnicity

				Grade	Level			
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>
	grade							
	N	N	N	N	N	N	N	N
	%	%	%	%	%	%	%	%
All race/ethnicity								
Homeless	297	317	458	502	633	1,084	1,366	943
	3.5%	3.8%	5.6%	6.1%	7.8%	13.6%	17.3%	12.1%
Non-Homeless	704	736	1,021	1,173	1,431	2,842	3,720	2,416
	1.0%	1.1%	1.6%	1.9%	2.3%	4.6%	6.2%	4.0%
American Indian/Alas	ka Native							
Homeless	10	N/A	15	18	27	46	50	34
	3.9%	N/A	6.0%	7.3%	11.0%	18.6%	20.3%	14.5%
Non-Homeless	14	11	25	32	32	65	91	61
	1.7%	1.4%	3.2%	4.2%	4.3%	8.8%	12.3%	8.4%
Asian								
Homeless	N/A	N/A	N/A	N/A	N/A	N/A	12	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	9.2%	N/A
Non-Homeless	13	22	18	19	28	55	111	41
	0.3%	0.5%	0.4%	0.4%	0.7%	1.3%	2.7%	1.0%
Black/African America	ın							
Homeless	41	45	61	75	85	164	194	123
	5.8%	6.5%	8.9%	11.1%	12.8%	25.2%	29.8%	19.5%
Non-Homeless	67	68	91	110	128	245	280	168
	2.6%	2.8%	3.9%	4.9%	5.8%	11.5%	13.5%	8.2%
Hispanic								
Homeless	81	82	91	115	147	307	371	280
	2.9%	3.0%	3.4%	4.3%	5.6%	11.8%	14.4%	11.0%
Non-Homeless	180	179	231	272	404	916	1,237	811
	1.1%	1.1%	1.5%	1.8%	2.7%	6.1%	8.3%	5.5%
Native Hawaiian/Paci	fic Islander							
Homeless	N/A	N/A	N/A	N/A	N/A	N/A	34	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	20.1%	N/A
Non-Homeless	N/A	N/A	13	10	N/A	35	43	22
	N/A	N/A	2.5%	2.0%	N/A	7.3%	9.3%	4.8%
Multiple race								
Homeless	43	26	64	44	77	119	157	115
	4.8%	3.0%	7.4%	5.1%	9.0%	14.3%	19.0%	14.3%
Non-Homeless	70	77	107	135	147	275	378	248
	1.2%	1.4%	2.0%	2.6%	2.8%	5.4%	7.5%	5.0%
White								
Homeless	119	154	216	238	275	427	548	366
	3.3%	4.4%	6.3%	7.0%	8.1%	12.7%	16.6%	11.3%
Non-Homeless	354	371	536	595	683	1,250	1,580	1,065

Data source: ERDC's analysis of OSPI CEDARS data. The 8th-grade (2020) data is impacted by Covid-19. Therefore, the 2020 result needs to be used with caution. N/A refers to sample size < 10, which needs to be suppressed in the report.

Table 2-6. Percent School Disciplinary Exclusion for *2012 8<sup>th</sup> Graders* over High School (2013-2016), by Homeless Status and Race/Ethnicity

		Grade	Level	
	9 <sup>th</sup> grade	10 <sup>th</sup> grade	11 <sup>th</sup> grade	12 <sup>th</sup> grade
	N	N	N	N
	%	%	%	%
All race/ethnicity				
Homeless	1,243	942	735	444
	20.8%	16.3%	13.0%	8.5%
Non-Homeless	4,670	3,833	3,101	2,031
	6.5%	5.5%	4.6%	3.1%
American Indian/Alaska Na	tive			
Homeless	68	47	40	25
	28.0%	19.5%	17.2%	12.3%
Non-Homeless	124	102	88	45
	11.6%	9.9%	9.0%	5.2%
Asian				
Homeless	10	N/A	N/A	N/A
	8.4%	N/A	N/A	N/A
Non-Homeless	117	107	70	62
	2.2%	2.1%	1.4%	1.2%
Black/African American				
Homeless	184	138	117	84
	30.2%	23.2%	20.2%	15.2%
Non-Homeless	442	355	271	172
	15.1%	12.9%	10.1%	6.7%
Hispanic				
Homeless	282	231	158	98
	19.8%	16.8%	11.8%	7.9%
Non-Homeless	1,213	950	730	471
	9.1%	7.3%	5.8%	3.9%
Native Hawaiian/Pacific Isla	ander			
Homeless	21	N/A	N/A	N/A
	20.0%	N/A	N/A	N/A
Non-Homeless	61	52	43	35
	11.2%	10.2%	8.7%	7.4%
Multiple race				
Homeless	106	77	70	39
	21.3%	15.7%	14.6%	8.9%
Non-Homeless	309	246	211	138
	7.3%	6.1%	5.3%	3.6%
White				
Homeless	571	428	327	183
	19.1%	14.9%	11.6%	7.1%
Non-Homeless	2,401	2,017	1,688	1,107
	5.4%	4.7%	4.0%	2.7%

Data source: ERDC's analysis of OSPI CEDARS data. N/A refers to sample size < 10, which needs to be suppressed in the report.

Table 3. Employment Outcomes for Young Adults Age 18 or Older by Homeless Status, 2015 to 2019

		Employment Year								
		2015	2016	2017	2018	2019				
Percent employed	1									
Homeless	Ν	17,144	22,772	27,105	30,307	31,695				
(N=51,551)	%	33.3%	44.2%	52.6%	58.8%	61.5%				
Non-Homeless	N	286,834	343,162	382,477	405,989	413,591				
(N=645,294)	%	44.5%	53.2%	59.3%	62.9%	64.1%				
Average work hou	ırs									
Homeless		672	739	817	915	1,001				
Non-Homeless		753	831	926	1,036	1,116				
Median earnings										
Homeless		\$5,110	\$6,344	\$8,242	\$10,676	\$13,315				
Non-Homeless		\$6,482	\$8,032	\$10,687	\$13,889	\$17,177				

Data source: ERDC's analysis of UI Wage and OSPI CEDARS data. Earnings are adjusted to 2019 Consumer Price Index (CPI)

Table 4-1. Percent Employed for 2012 18+ Age Group from 2012 to 2019, by Homeless Status and Race/Ethnicity

	Work Year							
	2012	2013	2014	2015	2016	2017	2018	2019
Total N	61,011	61,011	61,011	61,011	61,011	61,011	61,011	61,011
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Employed								
Total	31,954	36,996	38,558	39,359	39,891	39,581	38,728	37,794
Usasalasa	52.4%	60.6%	63.2%	64.5%	65.4%	64.9%	63.5%	61.9%
Homeless	1,505	1,821	1,978	2,015	2,031	2,012	1,955	1,890
Non-Homeless	45.8% 30,449	55.4% 35,175	60.2% 36,580	61.3% 37,344	61.8% 37,860	61.2% 37,569	59.5% 36,773	57.5% 35,904
NOII-HOITIEIESS	52.7%	60.9%	63.4%	64.7%	65.6%	65.1%	63.7%	62.2%
American Indian/			03.470	04.770	03.076	03.176	03.7 /6	02.270
Hamalass	47	Г1	62	63	G.F.	67	67	Γ0.
Homeless	47 38.5%	51 41.8%	63 51.6%	62 50.8%	65 53.3%	67 54.9%	54.9%	59 48.4%
Non-Homeless	511	560	637	692	711	738	735	714
14011-11011161622	42.7%	46.8%	53.2%	57.8%	59.4%	61.7%	61.4%	59.6%
Asian	72.770	40.070	33.270	37.070	33.470	01.770	01.470	33.070
Homeless	45	45	54	55	56	59	61	55
	55.6%	55.6%	66.7%	67.9%	69.1%	72.8%	75.3%	67.9%
Non-Homeless	1,841	2,231	2,389	2,522	2,631	2,662	2,675	2,632
	45.2%	54.8%	58.7%	62.0%	64.6%	65.4%	65.7%	64.7%
Black/African Am	erican							
Homeless	158	212	243	250	254	253	244	240
	40.4%	54.2%	62.1%	63.9%	65.0%	64.7%	62.4%	61.4%
Non-Homeless	1,498	1,890	2,044	2,129	2,128	2,100	2,055	2,029
	45.6%	57.5%	62.2%	64.8%	64.7%	63.9%	62.5%	61.7%
Hispanic								
Homeless	308	363	385	388	400	390	366	363
N	46.5%	54.8%	58.1%	58.5%	60.3%	58.8%	55.2%	54.8%
Non-Homeless	5,815	6,757	7,078	7,179	7,203	7,155	7,006	6,811
Native Hawaiian/	52.2%	60.7%	63.6%	64.5%	64.7%	64.2%	62.9%	61.2%
Homeless	<b>Ρατιγιτ Istano</b> 15	<b>zer</b> 20	21	22	23	21	21	23
i ioineless	36.6%	48.8%	51.2%	53.7%	56.1%	51.2%	51.2%	56.1%
Non-Homeless	242	315	328	355	348	345	340	331
NOII-HOIHEIESS	46.7%	60.8%	63.3%	68.5%	67.2%	66.6%	65.6%	63.9%
Multiple race								
Homeless	85	105	115	118	115	113	116	109
	47.0%	58.0%	63.5%	65.2%	63.5%	62.4%	64.1%	60.2%
Non-Homeless	1,285	1,529	1,608	1,640	1,661	1,622	1,598	1,549
	51.5%	61.3%	64.5%	65.8%	66.6%	65.1%	64.1%	62.1%
White								
Homeless	847	1,024	1,096	1,119	1,117	1,108	1,079	1,040
	46.9%	56.7%	60.7%	62.0%	61.9%	61.4%	59.8%	57.6%
Non-Homeless	19,253	21,889	22,493	22,825	23,176	22,944	22,362	21,836
	55.0%	62.5%	64.2%	65.2%	66.2%	65.5%	63.9%	62.4%

Data source: ERDC's analysis of UI Wage data. Employment records are only available for those worked in WA.

Table 4-2. Average Annual Work Hours for 2012 18+ Age Group from 2012-2019, by Homeless Status and Race/Ethnicity

	Work year							
	2012	2013	2014	2015	2016	2017	2018	2019
All race/ethnicity								
Homeless	483	716	892	1,033	1,105	1,177	1,227	1,256
Non-Homeless	577	798	980	1,110	1,195	1,311	1,393	1,403
American								
Indian/Alaska Native	250	675	707	004	000	070	4.407	1 000
Homeless	359	675	727	891	932	970	1,107	1,088
Non-Homeless	510	785	986	1,093	1,178	1,209	1,295	1,338
Asian								
Homeless	567	840	922	1,085	1,246	1,261	1,157	1,368
Non-Homeless	541	749	914	1,035	1,135	1,297	1,406	1,480
Black/African								
American								
Homeless	296	527	763	908	975	988	1,049	1,065
Non-Homeless	465	672	894	1,025	1,098	1,151	1,230	1,278
Hispanic								
Homeless	576	804	1,018	1,175	1,181	1,284	1,350	1,385
Non-Homeless	666	891	1,117	1,254	1,321	1,387	1,457	1,455
Native								
Hawaiian/Pacific								
Islander								
Homeless	456	637	678	885	978	1,222	1,056	984
Non-Homeless	618	813	1,022	1,125	1,268	1,375	1,456	1,445
Multiple race								
Homeless	444	618	796	987	1,018	1,134	1,164	1,195
Non-Homeless	523	754	947	1,088	1,155	1,277	1,345	1,368
NATION .								
<i>White</i> Homeless	401	721	000	1,025	1 1 2 2	1 102	1 2 4 7	1 260
	491 566	731 788	899	-	1,123	1,193	1,247	1,269
Non-Homeless	566	788	953	1,082	1,174	1,309	1,392	1,393

Data source: ERDC's analysis of UI Wage data. Employment records are only available for those worked in WA.

Table 4-3. Median Earnings for 2012 18+ Age Group from 2012-2019, by Homeless Status and Race/Ethnicity

	Work year							
	2012	2013	2014	2015	2016	2017	2018	2019
All race/ethnicity								
Homeless	\$3,375	\$5,761	\$8,269	\$11,234	\$13,616	\$17,152	\$19,028	\$20,989
Non-Homeless	\$4,698	\$7,343	\$10,398	\$13,721	\$17,102	\$21,780	\$25,674	\$27,977
American Indian/Ala	ska Native							
Homeless	\$1,994	\$4,279	\$5,180	\$7,213	\$10,504	\$11,359	\$14,913	\$18,577
Non-Homeless	\$3,762	\$7,016	\$10,397	\$13,304	\$15,799	\$17,956	\$20,938	\$23,481
Asian								
Homeless	\$3,544	\$6,645	\$6,987	\$12,384	\$16,900	\$18,793	\$18,626	\$25,258
Non-Homeless	\$4,087	\$6,811	\$9,180	\$12,767	\$16,670	\$22,396	\$27,551	\$32,986
Black/African Americ	can							
Non-Homeless	\$1,680	\$3,907	\$6,621	\$8,452	\$11,694	\$13,460	\$16,096	\$17,012
Homeless	\$3,190	\$5,096	\$8,496	\$11,447	\$13,965	\$17,053	\$20,174	\$22,916
Hispanic								
Homeless	\$4,467	\$7,631	\$11,089	\$14,290	\$14,694	\$19,037	\$21,955	\$25,077
Non-Homeless	\$5,726	\$8,668	\$12,650	\$16,099	\$19,064	\$22,508	\$25,910	\$27,577
Native Hawaiian/Pa	cific Islande	er						
Homeless	\$2,777	\$2,538	\$4,510	\$5,929	\$10,973	\$21,730	\$18,297	\$15,434
Non-Homeless	\$4,939	\$7,239	\$10,625	\$12,724	\$18,032	\$21,898	\$25,475	\$27,156
Multiple race								
Homeless	\$3,217	\$4,121	\$6,890	\$8,920	\$10,252	\$15,297	\$17,066	\$19,528
Non-Homeless	\$4,086	\$6,384	\$9,694	\$13,414	\$16,202	\$21,124	\$24,416	\$27,149
White								
Homeless	\$3,579	\$5,937	\$8,432	\$11,206	\$14,163	\$17,500	\$20,091	\$20,936
Non-Homeless	\$4,643	\$7,230	\$10,069	\$13,455	\$16,885	\$22,046	\$26,182	\$28,308

Data source: ERDC's analysis of UI Wage data. Earnings are adjusted to 2019 Consumer Price Index (CPI) and are available for those who were employed in WA only.