

**DATA BRIEF**

# **MORE THAN DROPPING OUT**

UNDERSTANDING FACTORS RELATED TO  
STUDENT DISENGAGEMENT IN SOUTH  
SEATTLE AND SOUTH KING COUNTY



**FEBRUARY 2020**

# ABOUT THE ROAD MAP PROJECT

The Road Map Project is a collective impact initiative that began in 2010 to improve student achievement from cradle through college and career in seven King County, Washington school districts: Auburn, Federal Way, Highline, Kent, Renton, (South) Seattle, and Tukwila. Together, this region serves more than 90 percent of the county's high-poverty schools and has more than 127,000 K12 students, of whom 72 percent are of color, 55 percent are low-income, and 22 percent are English-language learners.

Through multisector collaboration with hundreds of partners, the Road Map Project aims to increase equitable policies and practices in education systems by 2020 and for 70 percent of its region's youth to earn a college degree or career credential by 2030.

## ABOUT CCER AND ITS DATA & RESEARCH TEAM

The Community Center for Education Results (CCER) is a nonprofit created to staff and support the Road Map Project. The CCER data and research team developed and maintains a pre-kindergarten through college data warehouse that integrates several years of information across the region to support continuous improvement. The team uses various data science and research methods to develop reporting tools and papers—driven by the recommendations, experiences, and perspectives of the region's most-impacted communities.



### Community Center for Education Results

1200 12th Avenue South, Suite 701  
Seattle, WA 98144

[info@ccedresults.org](mailto:info@ccedresults.org)

206-838-6610



[roadmapproject.org](http://roadmapproject.org)



@RoadMapProject

### SUGGESTED CITATION

*Yoshizumi, A., Yohalem, N., & Cooley, S. (2020). More than Dropping Out: Understanding Factors Related to Student Disengagement in South Seattle and South King County, Seattle, WA: Community Center for Education Results.*

# CONTENTS

---

- 3** Disengagement from school Road Map Project Region
- 4** Mobility and Disengagement
- 6** Why Students Disengage
- 8** Who Disengages and When?
- 10** What Predicts Disengagement?
- 12** Many Students Reengage
- 14** References
- 15** Technical Appendix

## ACKNOWLEDGEMENTS

*This report would not be possible without the collaboration, input, and feedback from our colleagues throughout the Road Map Project region and Community Center for Education Results. The authors would like to thank our colleague Dr. Jose Hernandez from UW eScience Institute; Jeff Chiu, Brian Chu, Julie Feng, Monali Patel, Carlina Brown-Banks, and Natasha Rosenblatt from the Community Center for Education Results as well as members of our larger Road Map Project community: the fifteen young adults that shared their telling and resilient stories of reengagement in the Creating Paths for Change report; Danika Martinez, Jeff Corey, and Kanza Hamidani of Seattle Education Access; Dr. Charles Lea and Henry Joel Crumé; Dr. Amy Sharp for their initial measurement work on this topic; the Washington State Board for Community and Technical Colleges, OSPI and the Washington State Research and Data Center (ERDC) who provide data critical for understanding issues in our region.*

# DISENAGEMENT IN THE ROAD MAP PROJECT REGION

Students in the Road Map Project region disengage from high school for many reasons. This data brief draws on administrative data and uses statistical analyses to explore factors that contribute to disengagement, in order to help improve how schools support young people.

While “dropping out” of the K-12 system is measured when students formally withdraw from school, these rates ultimately represent the culmination of many system, school, and individual factors impacting local youth. For this reason, the term *disengagement* rather than “droping out” will be used throughout this brief.

Since the 2010-11 academic year the rate of disengagement among the region’s high schoolers moved from 9% to 6% with still thousands of youth disengaging each year.

Today, 1 in 16 local high schoolers disengages from school.

Additionally, rates of students changing schools are highest in the high school years. This type of school change, or “school mobility” occurs during non-promotional years (i.e., excluding school changes from a middle to high school, see Cooley, 2016 for full definition). Research has found that students who formally disengage also change schools at higher rates than their peers (Rumberger & Larson, 1998).

With almost one-in-four high schoolers changing schools one or more times in an academic year, we must broaden what we consider indicators of disengagement to include school changes.

## ROAD MAP REGION HIGH SCHOOL DISENGAGEMENT RATES

|         | Number Disengaged | Total Students | Disengagement Rate |
|---------|-------------------|----------------|--------------------|
| 2009-10 | 4,338             | 55,523         | 9%                 |
| 2010-11 | 4,284             | 54,130         | 9%                 |
| 2011-12 | 3,546             | 50,889         | 8%                 |
| 2012-13 | 3,792             | 54,338         | 8%                 |
| 2013-14 | 3,639             | 58,225         | 7%                 |
| 2014-15 | 3,310             | 56,586         | 7%                 |
| 2015-16 | 3,801             | 57,189         | 7%                 |
| 2016-17 | 3,627             | 57,454         | 6%                 |
| 2017-18 | 3,405             | 57,310         | 6%                 |
| 2018-19 | 3,294             | 56,557         | 6%                 |

Source. CCER education data warehouse. OSPI CEDARS student-level data via ERDC.

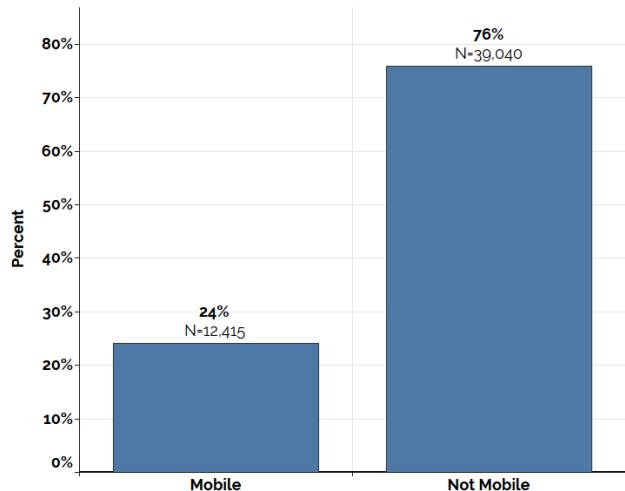
# MOBILITY AND DISENGAGEMENT

Young people change schools for a variety of reasons. For instance, changing schools can reflect a residential move. With regional economic shifts and rising rents driving gentrification, we know families are moving further south in search of affordable housing (Mayo & Turnbull, 2011). Changing schools can also be a function of individual choice, aspects of school environments, or challenges students experience in a given school.

Given student mobility's association with disengagement, it is critical that we deepen our understanding of this intersection to improve how our school systems identify risk factors and how we deliver supports to our region's young people and families. When examining school mobility rates, we begin to see how pervasive student movement is among our region's high schoolers, especially during 11<sup>th</sup> and 12<sup>th</sup> grades.

27% of Road Map Project region students changed schools just before or during senior year.

## ROAD MAP REGION HIGH SCHOOLERS THAT WERE MOBILE DURING ACADEMIC YEAR 2017-18



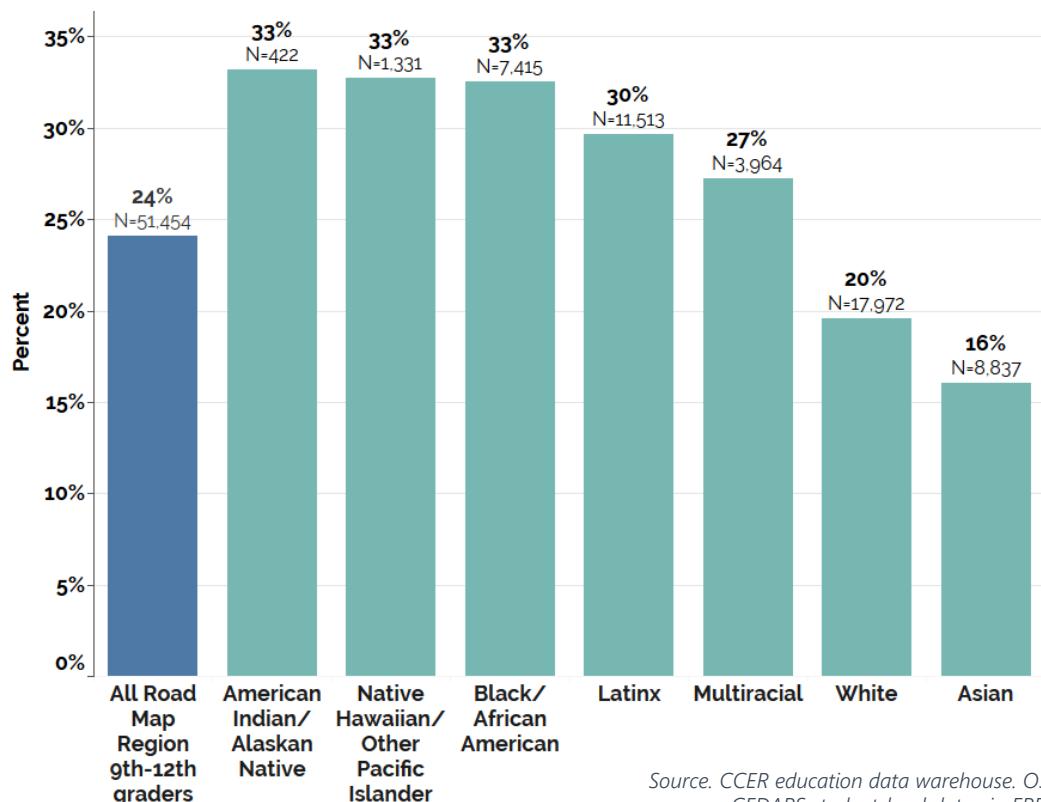
Source. CCER education data warehouse. OSPI CEDARS student-level data via ERDC.

## ROAD MAP REGION HIGH SCHOOL MOBILITY RATE BY GRADE LEVEL FOR ACADEMIC YEAR 2017-18

|                    | Mobile Students | Total Students | Mobility Rate |
|--------------------|-----------------|----------------|---------------|
| All High Schoolers | 12,415          | 51,471         | 24%           |
| 9th Grade          | 2,780           | 12,238         | 23%           |
| 10th Grade         | 2,374           | 12,197         | 19%           |
| 11th Grade         | 3,314           | 12,598         | 26%           |
| 12th Grade         | 3,947           | 14,438         | 27%           |

Source. CCER education data warehouse. OSPI CEDARS student-level data via ERDC.

## MOBILITY RATE BY RACE FOR ACADEMIC YEAR 2017-18 (GRADES 9-12)



Source. CCER education data warehouse. OSPI CEDARS student-level data via ERDC.

Additionally, when we further examine mobility data, we see higher rates among students of color. Specifically, one-in-three Black, Native American, and Pacific Islander high schoolers experienced one or more school changes in 2017-18. While there are myriad reasons for these changes, such disparities suggest the need for targeted supports.



# WHY STUDENTS DISENGAGE

While disengagement rates in our region are decreasing, they still represent many youth. Over 3,000 youth left our region's high schools in 2017-18. Being disconnected from education places young people at risk for many negative economic and health outcomes (Patton, Liu, Ford Shah, Felver, Lucenko, & Huber, 2015). It is important to understand what leads to disengagement in order to retain more students in our schools.

Disengagement often occurs over multiple years and is reflective of many barriers faced by youth (Lessard, Butler-Kisber, Fortin, Marcotte, & Royer, 2008). Viewing school disengagement as a process can help us understand push-and-pull factors and shed light on how schools and programs could keep students engaged and supported. Additionally, it is important to challenge deficit-based assumptions that student behavior or characteristics, such as low assessment scores or motivation, drive disengagement and instead

**turn a critical lens on adult mindsets, school environments, and systems that create these conditions.**

A recent mixed-methods study analyzed intake data from a local direct service provider to understand why students had formally left high school. Student-reported reasons for leaving included falling behind in credits, lack of adult

support, negative school climate, immigration and transitions, foster care or juvenile system involvement, homelessness and housing stability (Crumé, Martinez, Yohalem, & Yoshizumi, 2020). It is important to note that these issues are often interrelated and that sometimes the reasons students give for leaving high school may be symptoms rather than causes of disengagement.

These reasons contrast with how Washington State K-12 districts report enrollment changes. Statewide withdrawal codes, defined by the Washington State Office of Superintendent of Public Instruction (OSPI), offer limited insights into the actual causes. The current "D codes" (or "dropout" codes) do not reflect the complex reasons why young people disengage. For example, the OSPI code "Lack of academic progress or poor grades" can include a variety of different kinds of academic challenges, and its framing places the onus on the student.

Qualitative student data, such as that in the study by Crumé, et al., (2020), allow for a more complex picture of academic struggles, including students experiencing a lack of transparency and information about credit accrual and academic standing. Student-sourced reasons can offer a starting point for a more comprehensive set of factors that could be considered in efforts to understand and prevent disengagement.

## REASONS FOR LEAVING SCHOOL

### What Students Say

#### Racial Bias & Negative School Climate

- Low adult expectations
- Lack of racial representation among teachers
- Exclusionary discipline
- Bullying and peer conflict

#### Insufficient Academic Supports

- Lack of transparency regarding academic standing
- Lack of support for students' individual learning needs
- Lack of support when a student changes schools

#### Unmet Basic Needs

- Lack of mental health services
- Family instability and trauma
- Navigating parenthood
- Lack of support for medical issues

Source. Crumé, et al., 2020

#### Creating Paths for Change

[rdmap.org/creating-paths-for-change](http://rdmap.org/creating-paths-for-change)

### What is Recorded in State Withdrawal Data

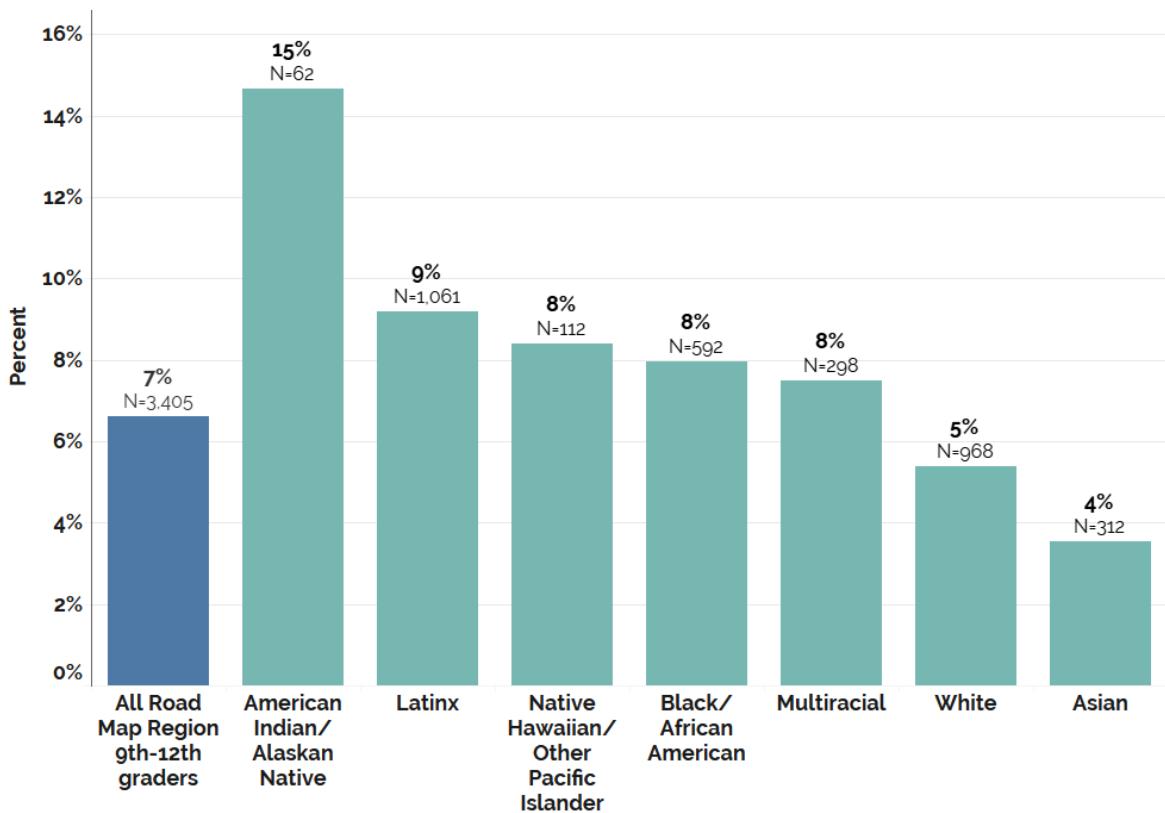
|    |   |
|----|---|
| D1 | Expelled or suspended and did not return  |
| D2 | Attended 4 years or more and did not graduate (student drops or ages out)       |
| D3 | Lack of academic progress or poor grades  |
| D4 | School not for me   |
| D5 | Married or needs to support family  |
| D6 | Pregnant or had baby  |
| D7 | Offered training or chose to work   |
| D8 | Chose to stay home  |
| D9 | Drugs or alcohol related  |
| D0 | Other (dropped out, but reason unknown)   |
| DM | Student exited school to medical reasons, is not receiving educational services |
| U1 | Unknown   |
| U2 | Enrolled in prior year, but no show this year                                   |
| U3 | Transfer reported by student (not confirmed)                                    |

Source. OSPI CEDARS Manual 2018-19

Students move from and formally leave school for reasons and experiences that an oversimplified withdrawal code cannot accurately describe. Because higher rates of school moves can be an observable indicator of

student disengagement, every school move is an opportunity for districts and schools to talk to their student and ask what about their school environment influenced the decision to transfer or leave.

## DISENGAGEMENT RATE BY RACE FOR ACADEMIC YEAR 2017-18 (GRADES 9-12)



Source. CCER education data warehouse. OSPI CEDARS student-level data via ERDC. Note. "Not Provided" student responses for race/ethnicity were excluded from figure above due to low rates.

## WHO DISENGAGES AND WHEN?

Disengagement is a racial equity concern, as students of color and low-income students are overrepresented among mobile and disengaged students and face more barriers to reengagement than their classmates (Patton, et al., 2015).

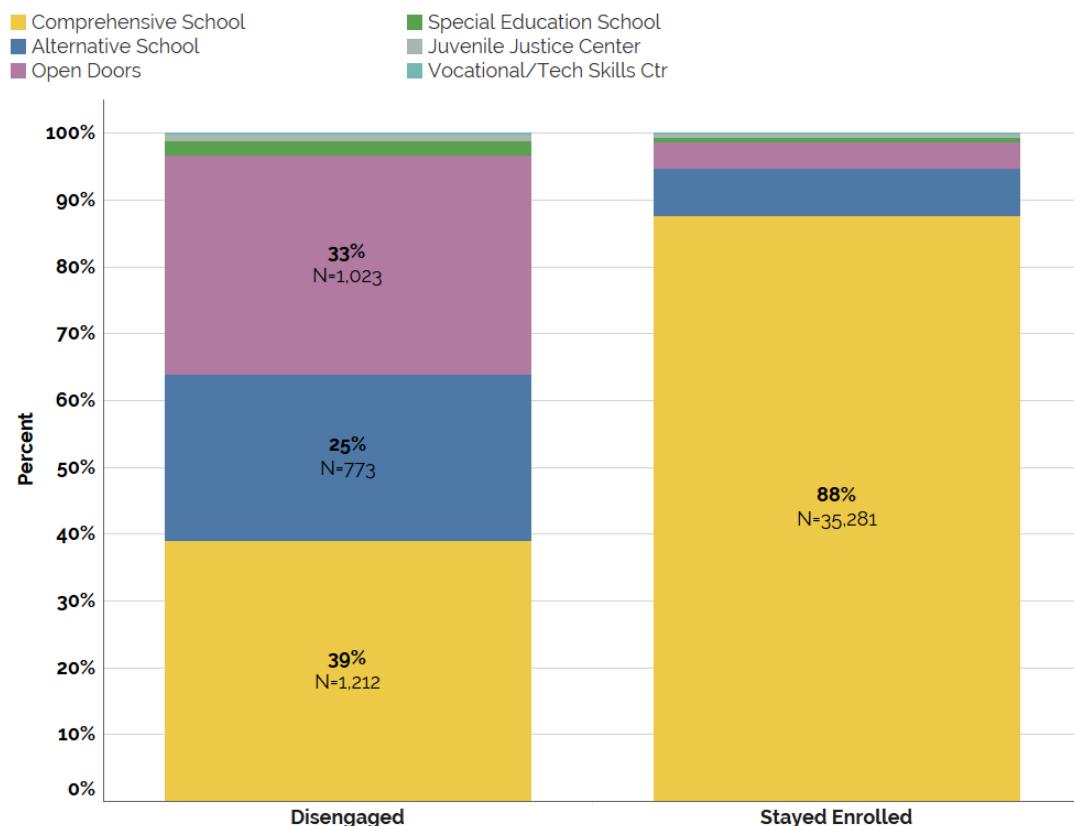
Looking at enrollment by school type offers another window into understanding who disengages and when. Our students are enrolled in a range of high school types. While most of the region's students attend comprehensive high schools, others attend alternative schools, reengagement schools (Open Doors programs), vocational schools, programs for students with special needs, or juvenile justice centers.

Over time, our region has seen a broader distribution of students enrolled across different types of high schools. Most entering 9th graders begin at a comprehensive high school. There is more variation in terms of the types of schools that students enroll in later in high school.

Enrollment in non-comprehensive high schools is rarely continuous from 9th-12th grade and students move in and out of various types of schools for many reasons.

Students who disengage are more likely than their peers to have attended more than one school type prior to leaving. In the 2017-18 academic year, over half of students that disengaged enrolled in a non-comprehensive school prior to disengaging. Students not only enrolled in more than one school in the academic year but many times before formally leaving. Of students who did not disengage, only 12 percent enrolled in a non-comprehensive school.

### **STUDENT ENROLLMENTS BY SCHOOL TYPES FOR HIGH SCHOOLERS THAT DISENGAGED AND STAYED ENROLLED FOR ACADEMIC YEAR 2017-18**



Source. CCER education data warehouse. OSPI CEDARS student-level data via ERDC. Note. "Not Provided" student responses for race/ethnicity were excluded from figure above due to low rates.

# WHAT PREDICTS DISENGAGEMENT?

Students who formally leave high school do so for many reasons. As discussed earlier, mobility and its potential relationship to disengagement represents an opportunity for schools and districts to be more intentional about asking questions and providing support. Information from previous sections gives us a descriptive snapshot of disengagement, mobility, and school types.

Descriptive analyses, however, do not tell us if there is a positive or negative relationship between school and student-level factors for disengaging from high school, while accounting for differences in student characteristics and school policies and practices.

A hierarchical logistic regression model was run to identify school- and student-level factors associated with disengagement. This analysis examined the probability of a student disengaging from school (i.e., student withdraws from school with any "D" code) controlling for variables such as student or school characteristics, coursetaking, and enrollment. This analysis tests the impact of a specific variable on student disengagement (e.g., impact of taking a dual credit course in high school) while controlling for all other factors in the model.

Due to constraints such as data availability and sample sizes, we were unable to include school mobility in this analysis. Future work is needed to improve this measure and understand its relationship to other disengagement risk factors.

## MEASURES INCLUDED IN LOGISTIC REGRESSION

### *Academic Measures*

Repeating a grade  
Exclusionary discipline  
Dual-credit coursetaking

### *Demographics*

Student of color  
Gender  
504 status  
Special education  
College Bound sign-up  
Long-term ELL (more than 5 years)

### *School Level*

School long-term ELL  
School discipline rate  
School free and reduced lunch rate

*Note:* See Appendix for measure definitions.

The following analysis included seven cohorts of Road Map Project ninth graders ( $N=66,998$ ). When following cohorts through their high school years, and controlling for several academic, student demographic, and school characteristics (see table on page 10 for variables included in this analysis), the following factors were identified as contributing to disengagement:

- **Exclusionary discipline.** On average, students who had ever experienced exclusionary discipline in high school (out-of-school suspension or expulsion) were 15 times as likely to disengage than their peers who never experienced exclusionary discipline.
- **Repeating a grade.** On average, students who repeated a grade in high school were 5 times as likely to disengage than their peers who never repeated a grade.
- **Alternative school enrollment.** On average, students who had ever enrolled in an alternative school were 3 times as likely to disengage than students who never enrolled in an alternative school.

The first two factors—exclusionary discipline and repeating a grade—are indicators commonly found to be associated with disengagement (e.g., Subedi & Howard, 2013). These findings underscore the importance of school interventions such as restorative justice approaches and early warning systems and supports. Enrolling in an alternative school is an important factor to unpack further as it could

also be a proxy for highly mobile students. Future work will engage alternative schools. Additional factors that were significant, with smaller effect sizes, were: being a student of color, being male, receiving special education services.

Controlling for all other factors, these student traits suggest how systemic biases and resources alone can impact opportunities and outcomes. Results showed that attending a school with higher free and reduced lunch rates slightly reduces the likelihood of disengagement. Also, students who took a dual credit course during high school are slightly less likely to disengage than their peers who did not. Lastly,

**attending a school with higher discipline rates increases the likelihood of disengagement for all students, not just those who experienced discipline.**

Other variables included in the model (504 determination, College Bound sign-up, homeless, long-term English language learner status, school homelessness rate, school long-term English language learner rate) were not statistically significant. While these variables are important, and many are associated with disengagement, they were not significant predictors of disengagement when controlling for all other factors in the model.

# MANY YOUNG PEOPLE REENGAGE

Disengaging from high school is not the endpoint of a student's educational trajectory. It is important to note that many students who formally leave high school prior to receiving their diploma do in fact return to education. This can include re-enrolling in the K-12 system or enrolling in community and technical college (CTC) and pursuing high school and/or college level courses.

Each year, about 50% of previously disconnected youth reconnect to education.

Reengagement rates have hovered around 50 percent since 2011-12. This rate could be an underestimate as some students who left school may have moved out of the region to complete secondary or postsecondary. Additionally, with each new year of data, our picture of reengagement improves.

This initial look at reengagement rates raises multiple questions and lines of future inquiry. Another area for exploration is what factors enable young people to reconnect into the K-12 and CTC systems, and understand which students are more likely to reengage, and with what supports.

## RATES OF HIGH SCHOOLERS REENGAGING WITH K-12, CTC, OR BOTH WITHIN TWO YEARS OF LEAVING A ROAD MAP PROJECT REGION SCHOOL

| Year of Disengagement | Number of Youth Who Disengaged | Total Reengaged |                      |
|-----------------------|--------------------------------|-----------------|----------------------|
|                       |                                | Total Reengaged | Rate of Reengagement |
| 2011-12               | 1,906                          | 1,009           | 53%                  |
| 2012-13               | 1,727                          | 859             | 50%                  |
| 2013-14               | 1,676                          | 830             | 50%                  |
| 2014-15               | 1,585                          | 804             | 51%                  |
| 2015-16               | 1,706                          | 899             | 53%                  |

Source. CCER data warehouse: OSPI CEDARS and State Board of Community and Technical Colleges (SBCTC) student-level data and via ERDC. Note. Reengagement in CTC and/or K-12 after two academic years of leaving schools (e.g., leaving in 2015-16 and re-engaging by 2017-18). Using OSPI's primary school enrollment definition, not all Alternative, Open Doors, Juvenile Justice Center, and Vocational/Technical Skills Center enrollments are included in the denominator.

# CONCLUSION

## CREATING PATHS FOR CHANGE

Disengagement is a complex experience that is often the result of multiple interrelated school and individual factors together that, over time, push students out of school.

This brief summarized administrative data related to student disengagement and reengagement and identifies several variables that districts and schools can focus on in their efforts to prevent disengagement. While not included in the logistical model, school mobility has been found to be associated with later disengagement. Given the high mobility rates of high schoolers in our region, schools and districts should provide intentional support during times of school transitions and for newly enrolled transfer students.

Also, factors such as exclusionary discipline, repeating a grade, and enrolling in an alternative school all significantly increase the likelihood that students will disengage. These factors point to opportunities for school and district policies and practices to be examined and improved in order to ensure more students are successful. Our educators and systems should consider a comprehensive range of factors in efforts to understand and prevent disengagement.

*Timothy celebrates his high school graduation from Interagency Academy. Timothy is working with Seattle Education Access to earn a postsecondary credential.*



# REFERENCES

- Bolker, B., Robinson, D. (2019). broom.mixed: Tidying Methods for Mixed Models. R package version 0.2.4. <https://CRAN.R-project.org/package=broom.mixed>
- Cooley, S. (February 2016). Student Mobility in the Road Map Project Region. Seattle, WA: Community Center for Education Results.
- Crumé, H. J., Martinez, D., Yohalem, N., Yoshizumi, A. (2020). Creating Paths for Change: Understanding Student Disengagement and Reengagement. Seattle, WA: Community Center for Education Results.
- Bates, D., Maechler, M., Bolker, B., Walker, S. (2015). Fitting Linear Mixed-Effects Models Using lme4. *Journal of Statistical Software*, 67(1), 1-48. doi:10.18637/jss.v067.i01.
- Lessard, A., Butler-Kisber, L., Fortin, L., Marcotte, D., Royer, E.. (2008). Shades of disengagement: High school dropouts speak out. *Social Psychology of Education*, 11(1). 25-42. 10.1007/s11218-007-9033-z.
- Lüdecke D (2020). sjstats: Statistical Functions for Regression Models (Version 0.17.8). <https://CRAN.R-project.org/package=sjstats>.
- Mayo, J., Turnbull, L. (2011). Shifting population changes face of South King County. Seattle Times. <https://www.seattletimes.com/seattle-news/shifting-population-changes-face-of-south-king-county/>
- Patton, D., Liu, Q., Ford, M. S., Felver, B. E. M., Lucenko, B., & Huber, A. (2015). Opportunity Youth: Young People Disengaged from School and Work in South Seattle and South King County. Olympia, WA.
- R Core Team (2018). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. <https://www.R-project.org/>.
- Rumberger, R. W., & Larson, K. A. (1998). Student Mobility and the Increased Risk of High School Dropout. *American Journal of Education*, 107(1), 1-35. <https://doi.org/10.2307/1085729>
- Subedi, B.R., Howard, M. (2013). Predicting High School Graduation and Dropout for At-Risk Students: A Multilevel Approach to Measure School Effectiveness. *Advances in Education*, 2(1), 11-17.
- Washington Office of Superintendent of Public Instruction. (2019). Comprehensive Education Data and Research System (CEDARS) Data Manual. <https://www.k12.wa.us/sites/default/files/public/cedars/pubdocs/2019-20CEDARSDataManual.pdf>
- Wickham et al., (2019). Welcome to the tidyverse. *Journal of Open Source Software*, 4(43), 1686. <https://doi.org/10.21105/joss.01686>



Seattle Education Access staff

# TECHNICAL APPENDIX

## DATA SOURCES

This analysis used CCER's longitudinal education data warehouse which combines K-12 student-level data. This includes student demographics, enrollment, educational and discipline outcomes, and school level information. Data is provided by the Office of Superintendent of Public Instruction (OSPI) via the Education Research and Data Center (ERDC). This data include student records in Road Map Region project public schools. Descriptive analysis used student records from 2010 to 2018.

## COHORT DEFINITION

Cohorts in the logistic hierarchical regression model includes high schoolers who began 9th grade in any Road Map region high school from 2010 to 2016. Cohorts after 2016 were excluded from the model. We currently have six cohorts of students that we can measure their high school outcomes (i.e., disengaging) during their high school years (classes of 2013-2019).

## OUTCOME MEASURE

### Disengaged

A student meets this indicator if they had a withdrawal code in their enrollment record for a given academic year containing "D" for "dropping out" or "U" for unknown reasons, at any point during their high school years,

- *Numerator.* The number of students that disengaged during their high school years
- *Descriptive denominator.* All high school students in cohorts 2010-2018.
- *Logistic regression denominator.* All high school students in cohorts 2010-2016.

# TECHNICAL APPENDIX

## MODEL PARAMETERS AND SPECIFICATION

High school disengagement was assessed using a logistic regression model, which looked at the probability that a student would disengage from high school, conditional on a set of indicators below.

$$\frac{P}{1-P} = \begin{cases} 1 & \text{Student disengages during high school} \\ 0 & \text{Student is still enrolled, graduated, or has left the Road Map region} \end{cases}$$

$$\log\left(\frac{P}{1-P}\right)_{ij} = \beta_0 + \beta_1 * StudentofColor_{ij} + \beta_2 * Male_{ij} + \\ \beta_3 * EverSpecEd_{ij} + \beta_4 * EverS504_{ij} + \beta_5 * EverAlternative_{ij} + \\ \beta_6 * EverSignCB_{ij} + \beta_7 * EverHomeless_{ij} + \beta_8 * RepeatGrade_{ij} + \\ \beta_9 * LTEL_{ij} + \beta_{10} * EverDiscipline_{ij} + \beta_{11} * EverDualCreditHs_{ij} + \\ \beta_{12} * SchoolLTEL_{ij} + \beta_{13} * SchoolEverDiscipline_{ij} + \\ \beta_{14} * SchoolFRPL_{ij} + u_{ij}$$

## HIERARCHICAL REGRESSION RESULTS

The table on the next page uses Odds Ratios (OR) to measure the degree of association between disengaging in high school and student and school level outcomes, race/ethnicity, and gender of the student. Values greater than 1 show stronger associations and values less than 1 show less association.

## HIERARCHICAL LINEAR MODEL SUMMARY TABLE

Student- and school- level factors associated with student disengaging from high school.

| Predictors           | Odds Ratios | CI            |
|----------------------|-------------|---------------|
| (Intercept)          | 0.08 ***    | 0.07 – 0.10   |
| StudentOfColor_stu   | 1.19 ***    | 1.12 – 1.26   |
| Male_stu             | 1.16 ***    | 1.11 – 1.22   |
| EverSpecEd_stu       | 0.86 ***    | 0.80 – 0.92   |
| EverS504_stu         | 0.90        | 0.78 – 1.04   |
| EverAlternative_stu  | 2.61 ***    | 2.45 – 2.77   |
| EverSignCB_stu       | 0.99        | 0.94 – 1.05   |
| EverHomeless_stu     | 4.29        | 0.06 – 332.16 |
| RepeatGrade_stu      | 4.67 ***    | 4.42 – 4.94   |
| LTEL_stu             | 4.23        | 0.04 – 419.54 |
| EverDisciplineHs_stu | 14.60 **    | 2.60 – 82.09  |
| EverDualCreditHs_stu | 0.06 ***    | 0.06 – 0.07   |
| EverHomeless_cm      | 0.45        | 0.01 – 34.67  |
| LTEL_cm              | 0.27        | 0.00 – 26.64  |
| EverDisciplineHs_cm  | 0.14 *      | 0.02 – 0.77   |
| dSchoolFRPL_cm       | 0.18 ***    | 0.14 – 0.24   |

BIC = 41429

Source: CCER Education Data Warehouse. OSPI CEDARS student-level data. Notes: The reference category for disengaging is a student did not disengage, graduated, or still enrolled. Statistical Significance Codes: \*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ . BIC = Bayesian Information Criterion.

## VARIABLE DEFINITIONS

| <i>Variable</i>  | <i>Definition</i>  |
|--|--|
| <i>Repeating a Grade</i>                                     | Student had repeated the same grade level in their enrollment record at any point during or after their 9th grade year.  |
| <i>Ever Discipline</i>                                       | Student experienced exclusionary discipline or the removal of a student from school grounds as a result of a behavior that results in intervention codes for : expulsion, long-term, or short-term suspension at any point during or after their 9th grade year. This does not include "in-school suspension." |
| <i>Dual-Credit Coursetaking</i>                              | Student completes a dual credit course at any point during or after their 9th grade year.  |
| <i>Student of Color</i>                                      | Student reported race/ethnicity where 'White' in the reference category.   |
| <i>Male</i>  | Student reported gender where 'Female' in the reference category.  |
| <i>S504 Status</i>   | Students with disabilities who qualify for accommodations, aids, or services under Section 504 of the Rehabilitation Act of 1973. Accommodations, aids, and services are typically included in a Section 504 plan.   |
| <i>Receiving Special Education Services</i>                  | Students who need any level of special education services as indicated by an individual education plan.  |
| <i>College Bound Sign-Up</i>                                 | Student identified signing up for College Bound in 7th grade or student has a 12th grade record in college bound.  |
| <i>Long-term English Language Learner (LTEL)</i>             | Student receiving ELL services (OSPI ELL Status) greater than or equal to 5 years and did not exit program.  |
| <i>School Long-Term English Language Learner Rate (LTEL)</i> | School rate of students receiving ELL services greater than or equal to 5 years and did not exit program. School long-term ELL is anchored on the students' first high school they attended in ninth grade.  |
| <i>School Discipline Rate</i>                                | School rate of exclusionary discipline. School discipline is anchored on the students' first high school they attended in ninth grade.   |
| <i>School Free and Reduced Lunch Rate (FRPL)</i>             | School rate of students receiving free and reduced lunch. School FRPL is anchored on the students' first high school they attended in ninth grade.   |

*Additional technical notes, code, and information is available upon request.*



#### **WAS THIS BRIEF HELPFUL?**

Let us know how you've used data in  
this brief at [info@ccedresults.org](mailto:info@ccedresults.org)

📍 **Community Center for Education Results**  
1200 12th Avenue South, Suite 701  
Seattle, WA 98144  
206-838-6610

🌐 [roadmapproject.org](http://roadmapproject.org)

ƒ [facebook.com/roadmapproject/](https://facebook.com/roadmapproject/)

🐦 [twitter.com/RoadMapProject](https://twitter.com/RoadMapProject)