

## Connecticut's Unspoken Crisis Supplemental Analysis: At-Risk



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#### Context for these materials

BCG was commissioned by Dalio Education and the Connecticut Opportunity Project to conduct a set of supplemental analyses to the BCG report, Connecticut's Unspoken Crisis: Getting Young People Back on Track. These materials aim to dive deeper into some of the risk factors most strongly associated with disconnection to help point stakeholders to the specific young people (aged 14-26) who are most vulnerable and enable them to develop targeted interventions to better support them.

Our analysis utilizes an individual-level, integrated, longitudinal database made possible by Connecticut's P20 WIN system and data from the following entities: Connecticut Coalition to End Homelessness (CCEH), Department of Children and Families (DCF), Department of Labor (DOL), Department of Mental Health and Addiction Services (DMHAS), State Department of Education (SDE). The findings of this study do not necessarily reflect the opinions of the State of Connecticut or the organizations and agencies contributing data; the views and opinions expressed are those of the authors.

In addition, this analysis is meant to inform future efforts to better identify and support vulnerable young people; it is not meant to:

- Be a judgment of the individuals themselves or determinative of their educational or employment outcomes
- Make a claim about the level of need in this population, given data captures only a portion of young people in need of support services
- Make a claim about the effectiveness of services provided, given the data does not capture young people who need services but do not receive it

#### Methodology

#### Key analytical questions:

- What are the associations between being "at-risk" in high school and longer-term educational and wage outcomes?
- How do these associations differ across the three metrics that "at-risk" is comprised of (attendance, behavior, credits)?
- How does the timing and duration of being at-risk impact outcomes (e.g., grade 9 vs. later, multiple years vs. just one)?

#### High-level overview of analyses:

- For each individual in population, for each grade of high school, use attendance, behavior, and credit data to identify relevant sub-groups, including: ever at-risk in high school, at-risk for each grade 9<sup>th</sup>-12<sup>th</sup>, at-risk for the first-time in each grade 9<sup>th</sup>-12<sup>th</sup>, ever experienced an attendance, behavior, or credits flag in high school, duration of being at-risk- see glossary for specific definitions
- Follow longitudinal journeys of these sub-groups by looking at (1) their educational outcomes, including high school graduation, postsecondary enrollment and completion (2) their wage outcomes, in aggregate and controlling for educational attainment

#### Scope of populations studied:

- To understand the factors that impacted our population during high school and track longer-term outcomes, we primarily studied two longitudinal cohorts across 2013-2022; these struck a balance between providing enough data on their high school years and tracking them longer term
  - Young people aged 14 years-old in 2013, through 22 years-old in 2022 (N = 42,096 individuals)
  - Young people aged 15 years-old in 2013, through 22 years-old in 2021 (N = 43,159 individuals)
  - Note: : 9th grade credits data is partially missing for these cohorts, limiting ability to compare across attendance, behavior, and credit flags by grade.

    Due to this, we also ran select analyses for those who attended 9th grade for the first-time in 2014 and 2017

#### Data considerations:

- These analyses should be used for relative comparisons between sub-groups and not interpreted as exact figures due to the various data considerations listed below and nuances in our scope of data (e.g., high school graduation rates will not exactly match those reported by SDE)
- The oldest age that most of our analysis was able to extend to was age 22, an age at which many young people have not yet finished their postsecondary program and more broadly are still maturing into adulthood
- The data allows for more precise measurement of educational attainment and wage level outcomes, but does not allow for a very precise measurement of labor participation (because often difficult to glean whether a young person is unemployed or left CT)
- The cohorts studied in our analyses are not "representative" in the sense that they had their education / employment journeys impacted by the COVID-19 pandemic (though this will not impact relative comparisons of sub-groups within these cohorts)
- All reported data had an N of 10 individuals or greater

#### **Executive Summary**

At-Risk - Overall: There is an association between being at-risk in high school and adverse educational and employment outcomes later in life, even for high school graduates, showcasing the value of at-risk as an early risk indicator

- Those at-risk in high school are 2.8x more likely to be disconnected upon high school exit than those who were never at-risk
- Even high school graduates who were ever at-risk in high school see significantly worse long-term educational outcomes vs. those who were never at-risk; those never at-risk in high school are 2x more likely to graduate from postsecondary vs. those at-risk
- Individuals flagged for attendance have the lowest ed attainment compared to those with other at-risk flags ~1/3 of those with attendance flags ever enroll in postsecondary, similarly those with an attendance flag in high school see greater risk of disconnection

At Risk - By Grade: Being at-risk in ninth grade leads to far worse education and employment outcomes vs. other grades; practitioners should continue focusing on interventions to support at-risk ninth graders

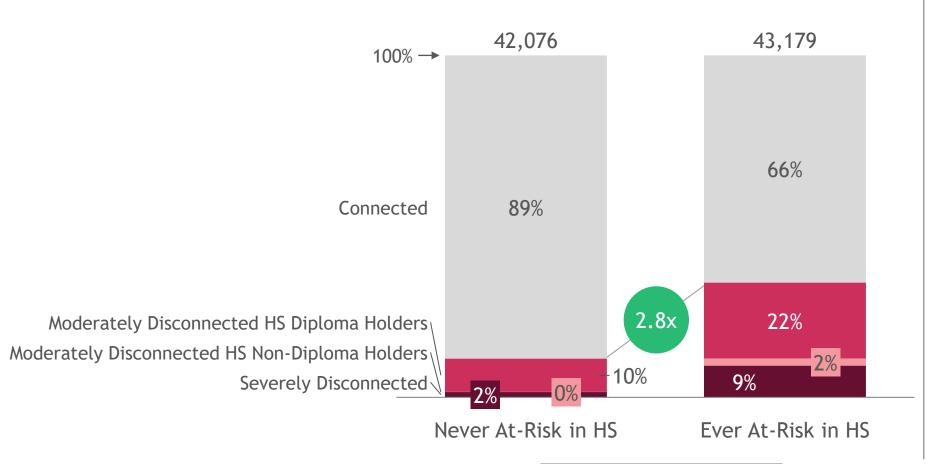
- Those at-risk in 9th grade see the most severe educational attainment outcomes of all grades
- Of the at-risk flags studied, absenteeism most impactful on long-term outcomes for 9th-11th grade, while credits most impactful for 12<sup>th</sup> grade; findings emphasize need to address the root causes of chronic absenteeism

At Risk - Duration: Being at-risk for multiple years in high school has significant effects on long-term outcomes, even for students who persist through high school and graduate, shedding light on need for heightened identification and supports for this group

- Number of years a young person is at-risk in high school has significant impact on longer-term educational outcomes (e.g., ~80% of those at-risk for 1-year enroll in postsecondary education vs. only ~30% of those at-risk for all 4 years)
- The longer someone was at-risk in high school, the lower their wages are regardless of educational attainment (e.g., postsecondary grad at-risk for 4-years makes ~\$4K less in median annual wages vs. postsecondary grad at-risk for only 1-year)

### At-risk overall

## At-risk: Young people who are at-risk in high school are 2.8x more likely to be disconnected upon high school exit than those who were never at-risk



#### Key takeaways

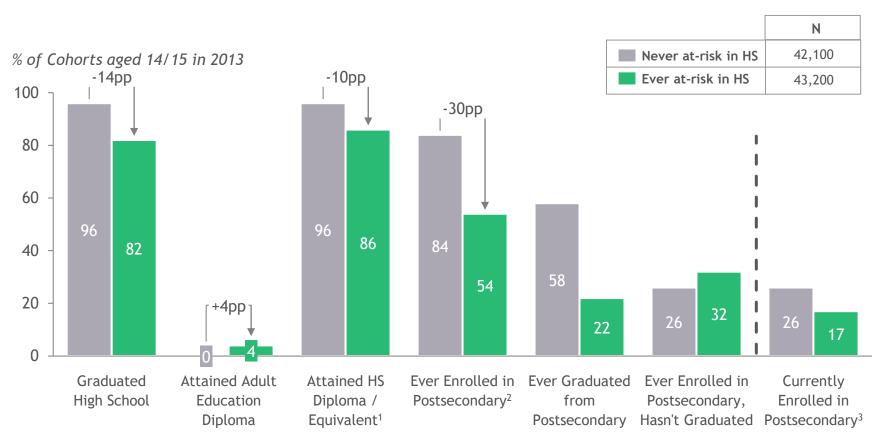
34% of individuals who were ever at-risk in high school end up disconnected one year after high school exit, vs. 12% of those who were never at-risk

There is more than a 4x association with severe disconnection with those who were at-risk in high school vs. those who were never at-risk

Cohorts aged 14/15 in 2013

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### At-risk: Individuals who were ever at-risk in high school see significantly worse educational outcomes vs. those who were never at-risk, even past high school



#### Key takeaways

Young people ever at-risk in high school have an 82% likelihood of graduating high school vs. 96% for those who were never at-risk

This gap in educational attainment persists and grows over time, with those never atrisk in high school being 2-3x more likely to graduate from postsecondary vs. those at-risk

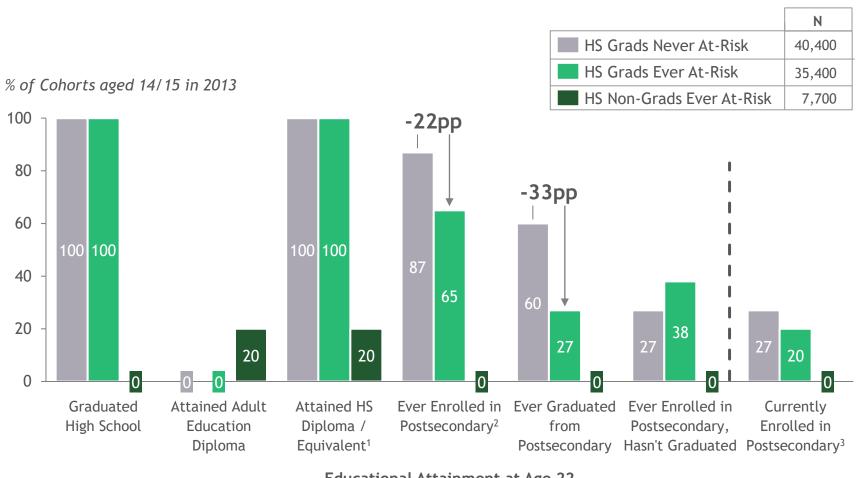
Being at-risk in high school is an important factor in predicting longer-term educational outcomes

Educational Attainment at Age 22

<sup>1.</sup> Sum of those who ever graduated high school and those who attained an adult education diploma; 2. Sum of those who ever graduated, and those who have enrolled but have not graduated; 3. Population includes those who previously graduated and are currently enrolled in a new program Note: Metrics should be understood more for the relative comparison across categories vs. exact figures (e.g., "graduated high school" may not exactly align with SDE's graduation rates); Source: P20 WIN data 2013-2022, BCG analysis

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## At-risk, HS grads: Even for high school graduate population, being ever at-risk in high school leads to lower rates of postsecondary enrollment and completion



#### Key takeaways

High school graduates who were ever at-risk in high school see significantly lower levels of enrollment in postsecondary education (-22 percentage points)

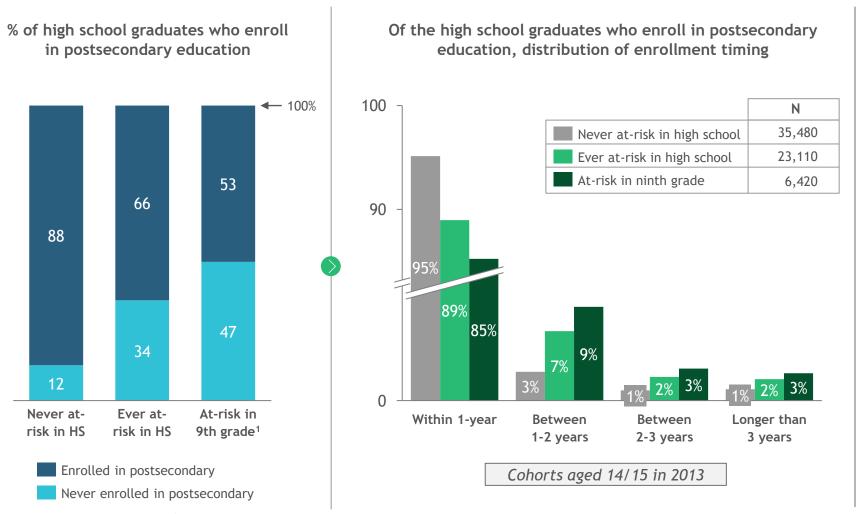
This gap grows even larger when looking at postsecondary graduation rates, with high school grads who were never atrisk being more than 2x more likely to graduate

**Educational Attainment at Age 22** 

<sup>1.</sup> Sum of those who ever graduated high school and those who attained an adult education diploma; 2. Sum of those who ever graduated, and those who have enrolled but have not graduated; 3. Population includes those who previously graduated and are currently enrolled in a new program Note: Metrics should be understood more for the relative comparison across categories vs. exact figures (e.g., "graduated high school" may not exactly align with SDE's graduation rates); Source: P20 WIN data 2013-2022, BCG analysis

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### **At-risk:** At-risk population more likely to delay postsecondary enrollment vs. those never at-risk



#### Key takeaways

Those who are at-risk in high school are less likely to enroll in postsecondary, even if they graduated high school

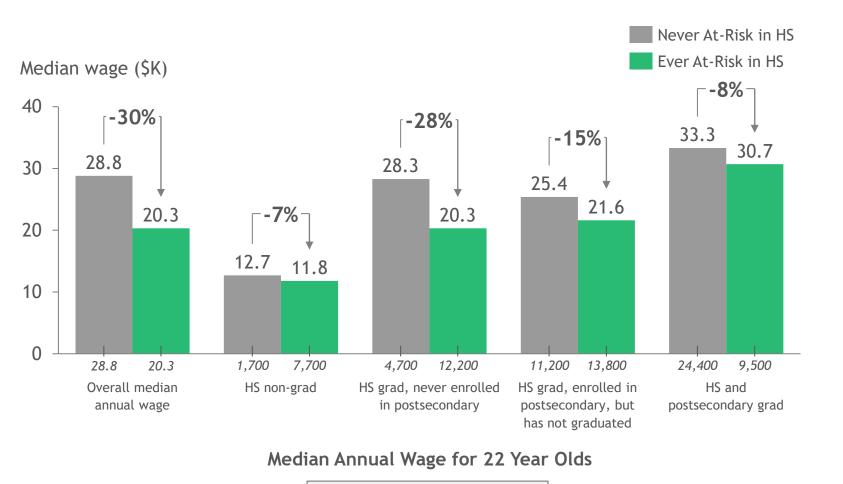
At-risk population also more likely to delay postsecondary enrollment vs. those never at-risk (89% enroll within 1-year of graduation vs. 95% of never at-risk population)

Those at-risk in 9<sup>th</sup> grade least likely to enroll in postsecondary, with only 53% ever enrolling, 15% of whom enroll after the first year

<sup>1.</sup> Incidence of at-risk in 9<sup>th</sup> grade is likely an underestimate due to partially missing credits data, though outcome percentages and trends likely minimally affected; Note: Analysis covers individuals in P20 WIN database aged 14 or 15 in 2013; Metrics should be understood more for the relative comparison across categories vs. exact figures (e.g., "graduated high school" may not exactly align with SDE's graduation rates); Source: P20 WIN data 2013-2022, BCG analysis

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### At-risk: Even among high school graduates, wage disparities persist between at-risk and never at-risk populations over time



#### **Key takeaways**

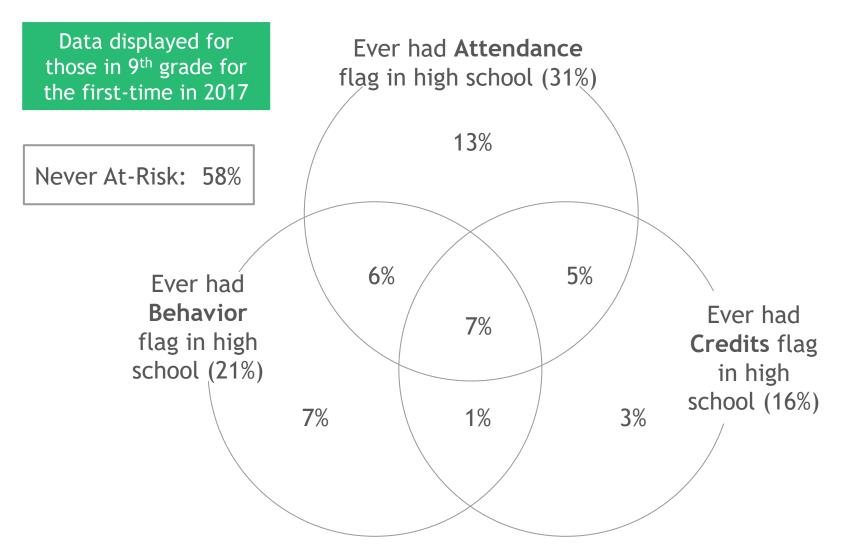
Overall, those who have ever been at-risk in high school have lower wages than those who were never at-risk, regardless of educational attainment

These wage gaps are smaller, however, than those that appear from other factors studied, such as race/ethnicity and experiences with out-of-school factors such as homelessness

Cohorts aged 14/15 in 2013

## At-risk by attendance, behavior, credit flag

## At-risk, by flag: Attendance flags, alone or in combination, are most prevalent in at-risk population; nearly 1 in 5 students have more than one flag



#### Key takeaways

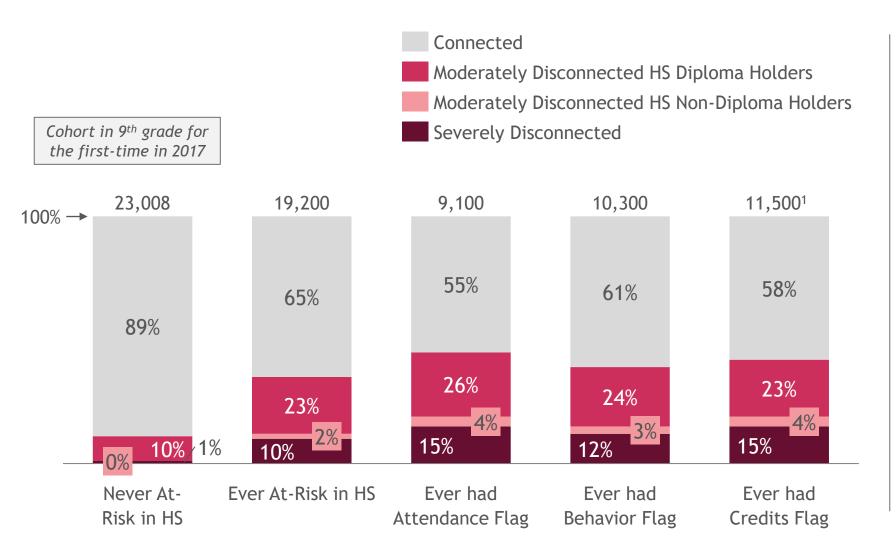
Attendance flags are the most prevalent among the at-risk population, both when comparing amongst single flags, and when comparing flag combinations

19% of at-risk students have more than one flag vs. 23% of students who have a single risk flag

7% of students are flagged for all three risks at some point in their high school career

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## At-risk, by flag: Young people with an attendance flag in high school see greater risk of disconnection (45%) vs. behavior and credit flags (~40%)

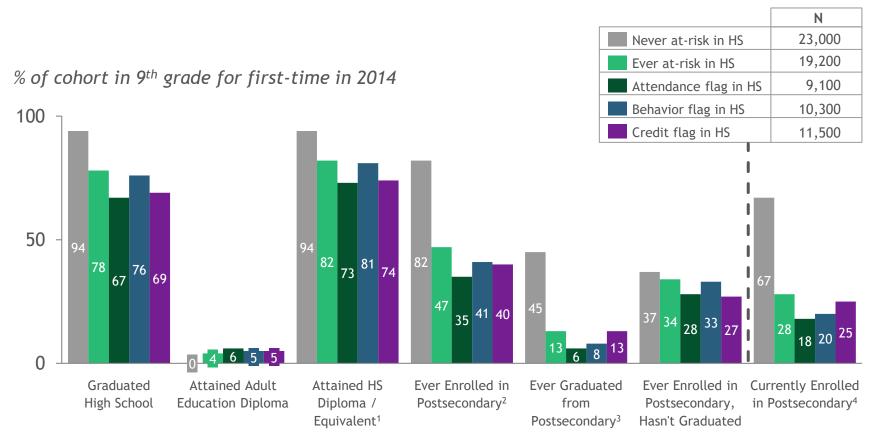


#### Key takeaways

45% of young people with an attendance flag in high school end up disconnected, compared to ~40% of those with a behavior or credit flag, and 35% of those who were ever at-risk in HS

The percentage of those severely disconnected is roughly similar across risk groups, ranging from 10-15%

### At-risk, by flag: Those who were flagged for attendance risk have the lowest educational attainment compared to those with other at-risk flags



#### Key takeaways

Young people who had any atrisk flags in high school have lower educational attainment than those who were not at-risk, particularly when it comes to postsecondary enrollment

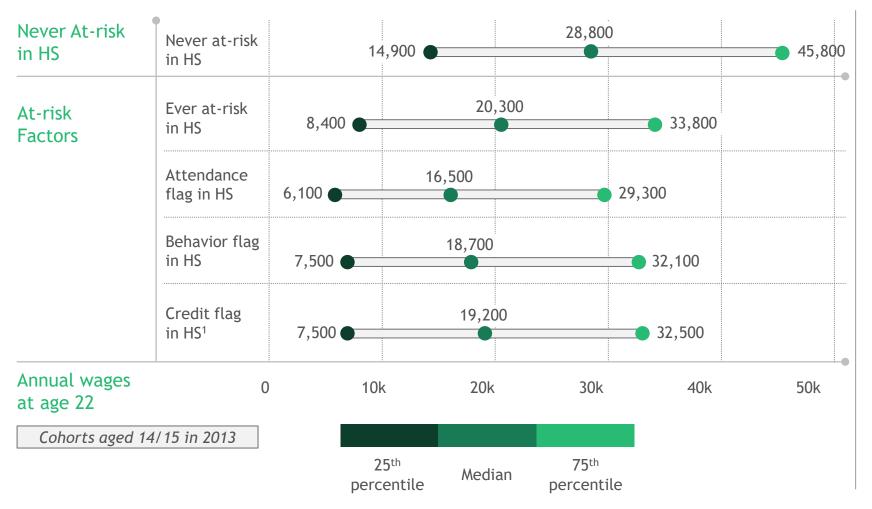
Those who were flagged for attendance have slightly lower outcomes across levels vs. those flagged for behavior and credits

#### Educational Attainment by School Year '21-'22

<sup>1.</sup> Sum of those who ever graduated high school and those who attained an adult education diploma; 2. Sum of those who ever graduated, and those who have enrolled but have not graduated; 3. Students represented are generally 21 years old, which may lead to lower graduation rates in postsecondary; 4. Population includes those who previously graduated and are currently enrolled in a new program; Note: Metrics should be understood more for the relative comparison across categories vs. exact figures (e.g., "graduated high school" may not exactly align with SDE's graduation rates); Individuals may have more than one flag, categories are not mutually exclusive; Source: P20 WIN data 2014-2022

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### At-risk, by flag: Those who were at-risk in HS have lower annual wages than those who were not; those with attendance flag have lowest outcomes



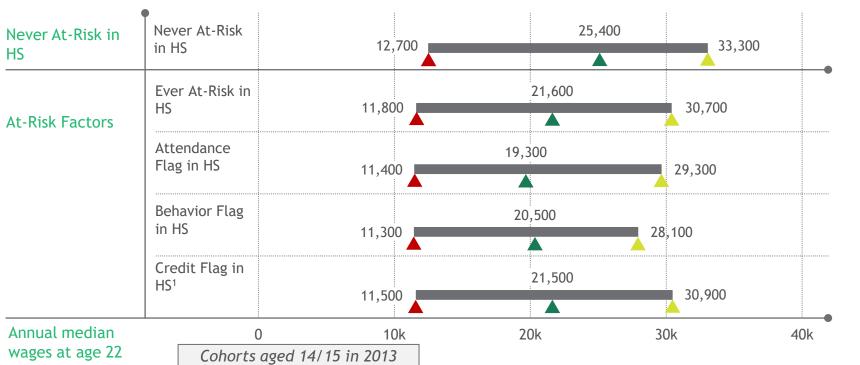
#### Key takeaways

Those who were at-risk in high school have lower annual wages across percentiles and narrower ranges than those who were not at risk

When comparing across risk flags, those who were flagged for attendance have lower wages at each percentile when compared to those with behavioral or credit flags

<sup>1.</sup> Due to partially missing 9<sup>th</sup> grade credits data for this population, credit flag likely slightly overstates wages; Note: Wage analysis only includes individuals with >0 wages in year of study and excludes individuals currently enrolled in postsecondary education; Individuals may have more than one flag, categories are not mutually exclusive; Metrics should be understood more for the relative comparison across categories vs. exact figures; Source: P20 WIN (2013-2022)

#### At-risk, by flag: Individuals ever at-risk in high school have slightly lower median annual wages than those never at-risk, after controlling for education



Sample Size (N)

**HS Non Grad** HS Grad, No Post-Secondary Post-Secondary Grad Never At-Risk in HS 1,700 4,700 24,400 Ever At-Risk in HS 7,700 12,200 9,400 Attendance Flag in HS 5,800 5,900 2,200 Behavior Flag in HS 5,100 7,100 2,600 Credit Flag HS 8,400 6.600 6,600

#### **Key takeaways**

Compared to the population who was never at-risk in high school, ever at-risk populations have slightly lower median annual wages at each educational milestone (~ 1-5k lower)

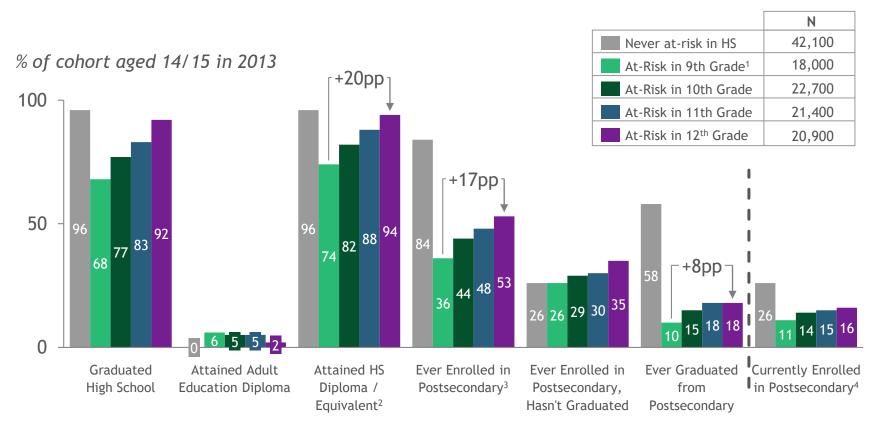
When comparing between at-risk flags, wage differences vary slightly. Those flagged for behavior have the lowest wages, followed by those who were flagged for attendance

Of college graduates, those who were flagged for behavior issues in high school have a median annual wage that is ~5k lower than the never at-risk population

<sup>1.</sup> Due to partially missing 9th grade credits data for this population, credit flag likely slightly overstates wages; Note: Wage analysis only includes individuals with >0 wages in year of study and excludes individuals currently enrolled in postsecondary education; Individuals may have more than one flag, categories are not mutually exclusive; Metrics should be understood more for the relative comparison across categories vs. exact figures; Source: P20 WIN (2013-2022)

## At-risk by grade

## At-risk, by grade: Those at-risk in 9<sup>th</sup> grade see the most severe outcomes of all grades, with each consecutive grade's outcomes improving



#### Educational Attainment at Age 22

1. Incidence of at-risk in 9<sup>th</sup> grade is likely underestimate due to partially missing credits data, though outcome percentages and trends likely minimally affected; 2. Sum of those who ever graduated high school and those who attained an adult education diploma; 3. Sum of those who ever graduated, and those who have enrolled but have not graduated; 4. Population includes those who prev. graduated and are currently enrolled in a new program; Note: At-risk data includes those who repeated grade in high school. Metrics should be understood more for the relative comparison across categories vs. exact figures (e.g., "graduated high school" may not exactly align with SDE's graduation rates); Source: P20 WIN data 2013-2022, BCG analysis

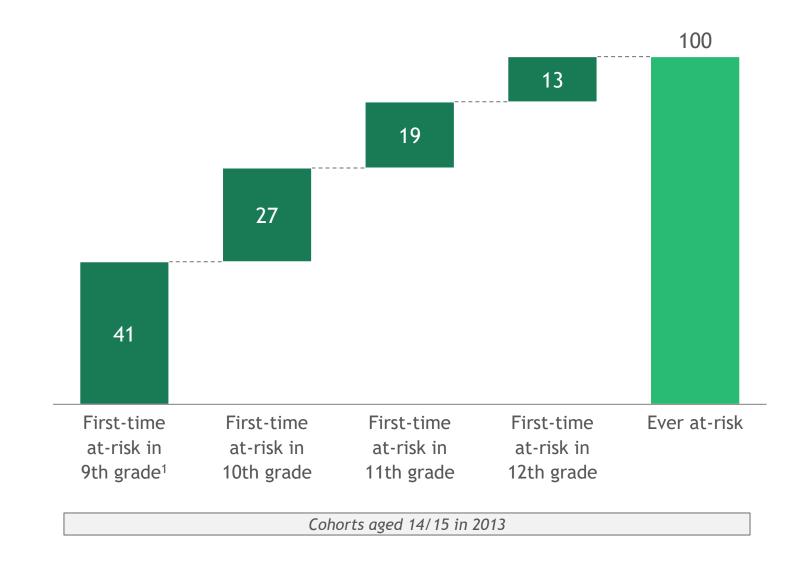
#### Key takeaways

Those who are at-risk in 9<sup>th</sup> grade have lowest educational attainment compared to other grades - only 10% of these students graduate from post-secondary

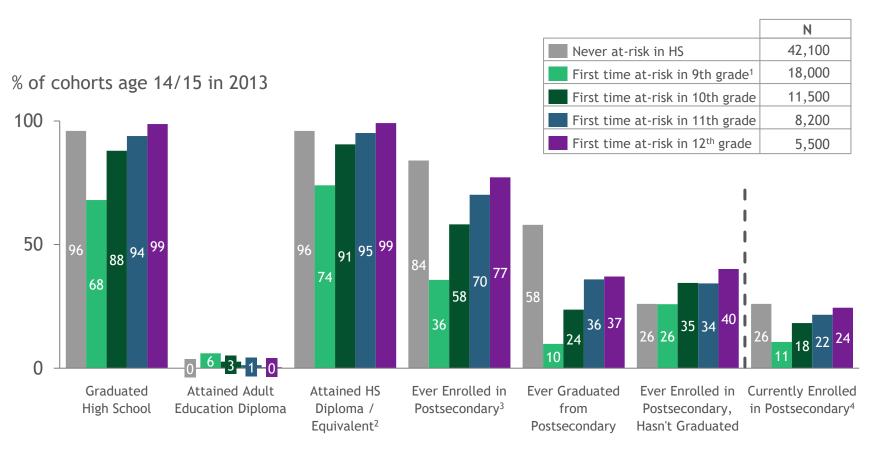
The later in a high school journey a student is at-risk, the better their long-term educational outcomes

The differences between grades decreases with each milestone - shrinking from a 20pp difference HS graduation for those at risk in 9<sup>th</sup> grade vs. 12<sup>th</sup> grade to an 8pp difference for postsecondary graduation - though gap from those never at-risk increases

First-time at-risk, by grade: 41% of the at-risk population is at-risk for the first time in 9<sup>th</sup> grade



## First-time at-risk, by grade: Those at-risk for the first time in 9<sup>th</sup> grade have more severe education outcomes than those at-risk later in high school



#### **Key takeaways**

Those at-risk for the first time in 9<sup>th</sup> grade have the most severe outcomes of this group, with only 1 in 10 graduating postsecondary

Those who were at risk for the first time at 10-12 grade are still highly likely to attain an HS diploma/equivalent, but their outcomes diverge from those never at-risk the further they get into postsecondary

#### Educational Attainment at Age 22

<sup>1.</sup> Incidence of at-risk in 9<sup>th</sup> grade is likely underestimate due to partially missing credits data, though outcome percentages and trends likely minimally affected; 2. Sum of those who ever graduated high school and those who attained an adult education diploma; 3. Sum of those who ever graduated, and those who have enrolled but have not graduated; 4. Population includes those who prev. graduated and are currently enrolled in a new program; Note At-risk data includes those who repeated grade in high school. Metrics should be understood more for the relative comparison across categories vs. exact figures (e.g., "graduated high school" may not exactly align with SDE's graduation rates); Source: P20 WIN data 2013-2022, BCG analysis

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## At-risk by grade: Absenteeism most impactful on long-term educational outcomes for 9-11<sup>th</sup> grades; credit flag most impactful for 12<sup>th</sup> graders

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Cohort in 9<sup>th</sup> grade for first-time in 2014

Grade	Flag	% Graduated high school	% Enrolled in postsecondary
	Attendance	57%	28%
9 <sup>th</sup>	Behavior	64%	31%
	Credits <sup>1</sup>	68%	39%
	Attendance	67%	33%
10 <sup>th</sup>	Behavior	73%	35%
	Credits	70%	36%
	Attendance	69%	29%
11 <sup>th</sup>	Behavior	81%	41%
	Credits	72%	32%
	Attendance	89%	41%
12 <sup>th</sup>	Behavior	92%	49%
	Credits	84%	34%

#### Key takeaways

For those who were at risk in 9<sup>th</sup>, 10<sup>th</sup> or 11<sup>th</sup> grade, attendance is the most impactful on long-term educational outcomes, emphasizing the need to address the root causes of chronic absenteeism in Connecticut high schools

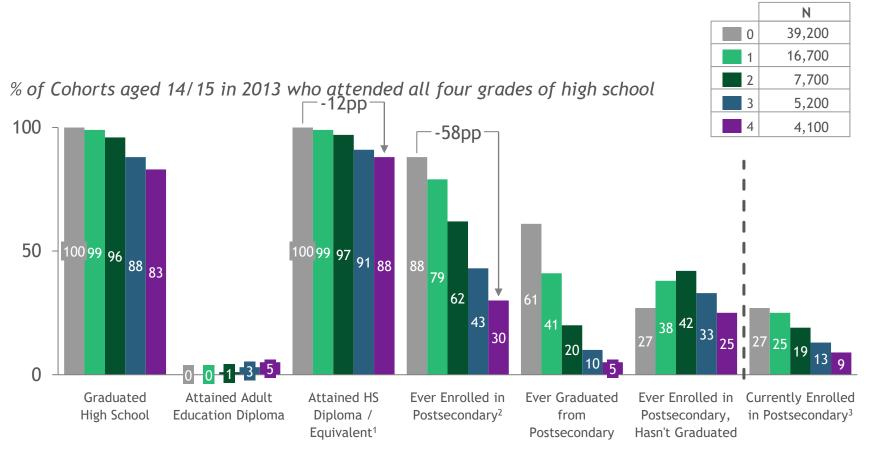
For 12<sup>th</sup> graders, credits lead to slightly more severe educational outcomes as compared to other flags

Indicates, within a grade, which flag results in the lowest attainment

### At-risk - duration

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## At-risk, duration: Number of years a young person is at-risk in high school has significant impact on longer-term educational outcomes



#### Key takeaways

While duration of at-risk impacts high school graduation rates, 83% of young people who are at-risk all 4 years graduate successfully

At-risk duration has greater impact for higher education; with each incremental year of being at-risk, postsecondary enrollment and graduation decrease by 10-20pp

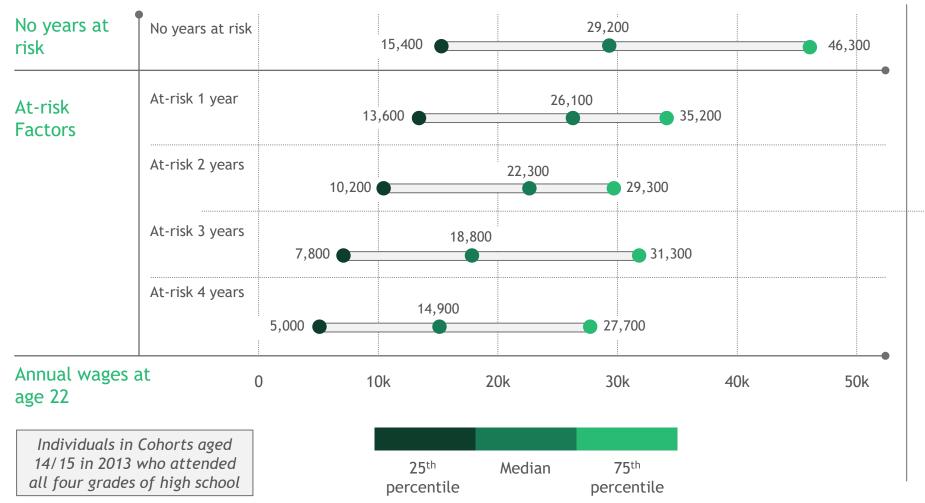
Only 3 in 10 students who were at-risk all four years in HS will enroll in post secondary, and fewer than 1 in 10 will graduate

#### **Educational Attainment at Age 22**

<sup>1.</sup> Sum of those who ever graduated high school and those who attained an adult education diploma; 2. Sum of those who ever graduated, and those who have enrolled but have not graduated; 3. Population includes those who previously graduated and are currently enrolled in a new program Note: This analysis only includes individuals who remained in high school for all four grades; Source: P20 WIN data 2013-2022, BCG analysis

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### At-risk, duration: The more years someone is at-risk during HS, the lower their median annual salary is



#### Key takeaways

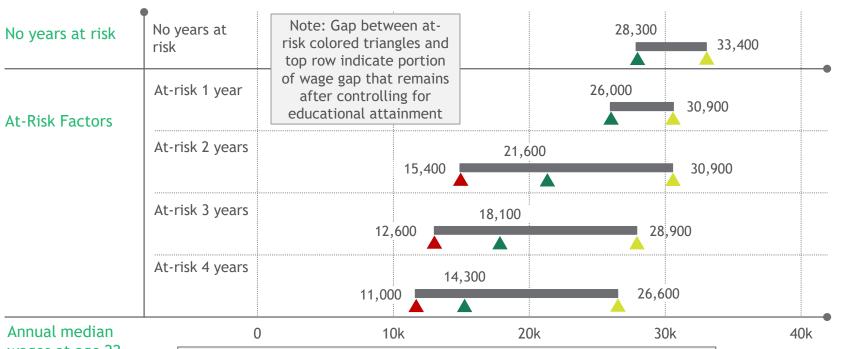
At the 25<sup>th</sup> percentile and median, annual salaries are lower for each subsequent year a high school student spent at-risk

For a student who spent 4 years at risk, their median annual salary is ~50% of the median annual salary of someone who spent no years at-risk

At the 75<sup>th</sup> percentile, the trend is less clear, though those who were at-risk for 1+ years have a median annual salary that is more than \$10k lower than those who spent no years at-risk

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### At-risk, duration: The longer someone was at-risk in high school, the lower their wages are regardless of educational attainment



wages at age 22

Sample Size (N)

Individuals in Cohorts aged 14/15 in 2013 who attended all four grades

	HS Non Grad	HS Grad, No Post-Secondary	Post-Secondary Grad
Never at-risk in HS	70¹	4,500	23,800
At-risk 1 year	140¹	3,300	6,800
At-risk 2 years	310	2,600	1,600
At-risk 3 years	620	2,400	500
At-risk 4 years	680	2,100	200

Generally, the more years someone was at-risk in high school, the lower their median annual wages are regardless of educational attainment

Wages vary the most for risk intensity at the high school graduate, no post-secondary level, with those who are at-risk for 4 years making about half as much as those who were never at risk

Key takeaways

<sup>1.</sup> Due to small sample size, cannot show wage outcomes; Note: Wage analysis only includes individuals with >0 wages in year of study and excludes individuals currently enrolled in postsecondary education; Metrics should be understood more for the relative comparison across categories vs. exact figures; Source: P20 WIN (2013-2022), BCG analysis

## Implications of work

## Implications of our findings

Validates report findings on the association between being at-risk in high school and experiencing disconnection upon high school exit, showing the continuum of risk many young people experience over time

Shows that being at-risk in high school, both in aggregate and via individual flags of attendance, behavior, and credits, can serve as powerful indicators beyond high school graduation and stresses the need for supports for the atrisk population even beyond high school

Reveals the relative importance of attendance (vs. behavior and credits) as an indicator for worse long-term education and wage outcomes for Grades 9-11, emphasizing the need to address the root causes of chronic absenteeism in schools and identify ways to increase student desire to be in the classroom

Highlights importance of 9<sup>th</sup> grade as a critical intervention point in a student's high school journey, validating practitioner focus on helping 9<sup>th</sup> graders get back on track

Identifies that being flagged with multiple at-risk indicators in the same year, and being at-risk for multiple years, both have significant effects on long-term outcomes, even for students who persist through high school and graduate, illustrating need for heightened identification and supports for this group

## Potential future areas of study

Better understand young people's lives by integrating data from **more agencies** (e.g., social services data from DSS, Office of Early Childhood, justice data from CSSD + DOC)

Conduct further analysis of **high school experience** and associated outcomes (e.g., vocational and technical schools)

Conduct further analysis of **postsecondary outcomes** (e.g., differentiate outcomes by degree level and program)

Conduct further analysis of **workforce outcomes** (e.g., analyze industry of employment at subsector level, i.e. 3-digit NAICS code level)

Further understand life trajectories of young people from **earlier ages** (e.g., bring in DCF data prior to age 14)

**Study policies and programs** that impact at-risk and disconnected young people, starting with participation reach and dosage, but also gleaning efficacy and outcomes where possible (e.g., how much target population participation is there in workforce programs)

Improve current **analytical gaps** (e.g., improve understanding of self-employment and gig economy participation of target population, better account for which young people move out of state vs. are disconnected)

## Appendix - Definitions of terms

#### Definitional framework for at-risk and disconnected young people



Young people aged 14-26 who are engaged in prosocial institutions and on-track for gainful employment

High school students who are at risk of not graduating and, therefore, also at risk for eventual disconnection. Category has three sub-populations:

- Off-track<sup>1</sup>: Students who do not meet state credit attainment requirements
- At-risk due to other factors: Students who exhibit concerning rates of absenteeism and/or behavioral issues
- Severely off-track: Students who are both off-track and at risk due to other factors

Note: Though framework focuses on education and workforce, important to recognize that other factors and systems also play a role in connection and disconnection

Young people aged 14-26 who are not engaged in prosocial institutions and/or not on-track for gainful employment. Category has two sub-populations:

- Moderately disconnected: (1) High school diploma holders who are neither employed nor in postsecondary and (2) high school non-graduates who are employed
- Severely disconnected: Young people who are not employed, have not attained a high school diploma/equivalent and/or are incarcerated

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#### Descriptions of data fields used: At-risk

Term	Definition	Notes	
At-risk	<ul> <li>At-risk young people are the population of high school students who are at heightened risk of not graduating, combines students who are off-track, severely off-track, and at-risk due to other factors:         <ul> <li>Off-track: Students not on track to graduate due to low credit attainment (as defined by the Connecticut State Department of Education)</li> <li>Severely off-track: Students off-track due to low credit attainment and displaying additional risk factors of absenteeism and/or behavioral incidents</li> <li>At-risk due to other factors: Students on-track with credit attainment, but displaying concerning trends in attendance and/or behavioral incidents</li> </ul> </li> </ul>	<ul> <li>This analysis segments at-risk in a few different ways:         <ul> <li>Ever at-risk in high school - individual qualifies as at-risk during any year of their high school journey</li> <li>At-risk in X grade - individual qualifies as at-risk for a given grade, independent of whether they were at-risk in prior years</li> <li>First-time at-risk in X grade - individual becomes at-risk for the first-time in a given grade and was not at-risk in prior years</li> </ul> </li> </ul>	
Attendance flag	Attendance is defined as the percentage of available days a student attends school; Students are considered chronically absent if their attendance is below 90% for 9th and 10th grade, and below 85% for 11th and 12th grade		
Behavior flag	Whether a student has been suspended one or more times and/or expelled		
Off-track / credits flag	Each student's cumulative credit attainment compared with what they need to graduate, as defined by the Connecticut State Department of Education (CSDE); If a student is not on-track to graduate from a credit perspective, they are considered "off-track." All students who repeated a grade in high school were also characterized as "off-track"  The analysis was conducted in line with the state's evolving graduation requirements—setting graduation requirement at 20 credits for classes prior to class of 2023, and then increasing graduation requirement to 25 credits starting with class of 2023	The analysis where possible looked at credit accumulation at each grade level and set the on-track threshold as: 5 credits at 9th grade, 10 credits at 10th grade, 15 credits at 11th grade, and 20 credits at 12th grade (for classes prior to the class of 2023), and as 6 credits at 9th grade, 12 credits at 10th grade, 18 credits at 11th grade, and 25 credits at 12th grade (for the class of 2023 onward)	
		For students for whom the data set did not have credit data for all grades (e.g., students who have transferred in from out of state), the analysis defined on-track/off-track by whether the student had earned 5 credits that year (prior to class of 2023) and 6 credits that year (class of 2023 onward)	
		This analysis does not account for district-level credit requirements, which vary by district and are often higher than the state requirements	

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#### Descriptions of data fields used: Other

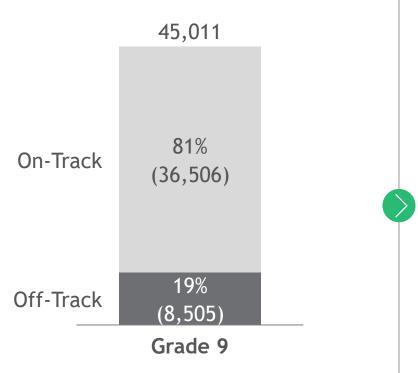
Category	Term	Definition	Notes
In-school factors	Has ever <b>attended a high poverty school</b> in high school	Whether an individual attends a high school where more than 75% of its students are eligible for a free/reduced-price lunch	Definition used widely in education research, including at the National Center for Education Statistics (NCES)
	Has ever been <b>enrolled in special education</b> in high school	Whether an individual has ever participated in a special education high school program since age 14	
	Has ever been <b>enrolled in alternative education</b> in high school	Whether an individual has ever participated in an alternative education program in high school (e.g., alternative, dropout diversion/credit recovery, expulsion program, public transition program) or an alternative school	
	Transient	Whether an individual has moved high schools more than two times	
Other	Wages earned	Includes data on wages recorded by the Department of Labor's unemployment insurance data set for the target age range and years. To keep the data set size manageable, the research team received wage data only for individuals who were captured in one of the other data sets  Employment was defined for this analysis as having wages earned equal to or greater than \$7,000 in a given year (roughly equivalent to working full-time at ALICE wages for one-quarter of the year)	include self-employment, independent contractor work (e.g., gig economy), or informal economy work
	Disconnected	<ul> <li>Combined population of 14- to 26-year olds who are experiencing either moderate or severe disconnection, defined as:         <ul> <li>Moderately disconnected: Includes high school diploma holders, both traditional graduates and those who have attained an adult education diploma/ equivalent, who are neither employed nor enrolled in postsecondary education, as well as high school non-graduates who are employed</li> <li>Severely disconnected: Includes individuals neither employed nor holding a high school diploma, as well as incarcerated individuals</li> </ul> </li> </ul>	32

## Appendix - Supplemental analysis

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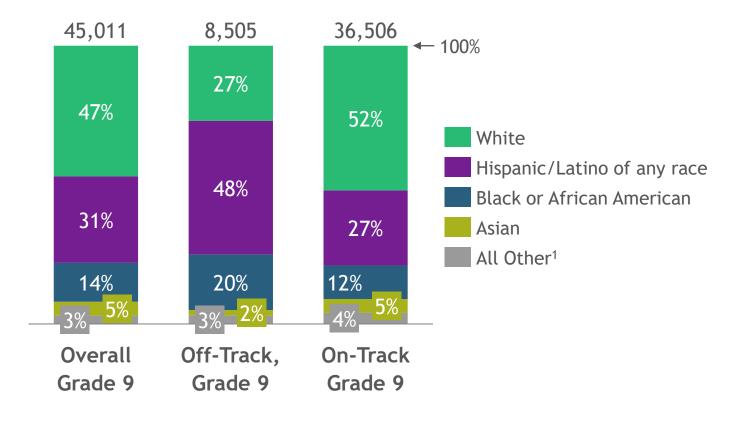
## Off-track, Grade 9: In 2021-2022 school year, 19% of Grade 9 students were off-track; population disproportionately Black and Hispanic/Latino

In 2021-2022 school year, 19% of Grade 9 population was off-track



Note: Off-track is a subset of the at-risk population who have fallen behind on credits attained

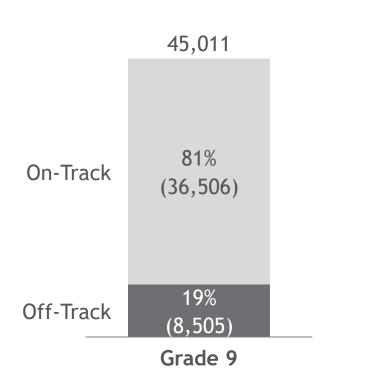
Off-track Grade 9 population is disproportionately Black and Hispanic/Latino (68% of population)



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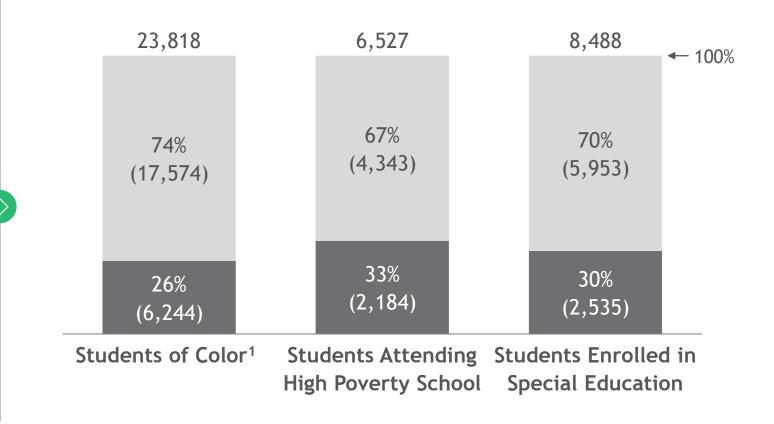
### Off-track, Grade 9: Certain groups of students more likely to be off-track vs. overall population, including students of color and those in special education

In 2021-2022 school year, 19% of Grade 9 population was off-track



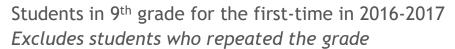
Note: Off-track is a subset of the at-risk population who have fallen behind on credits attained

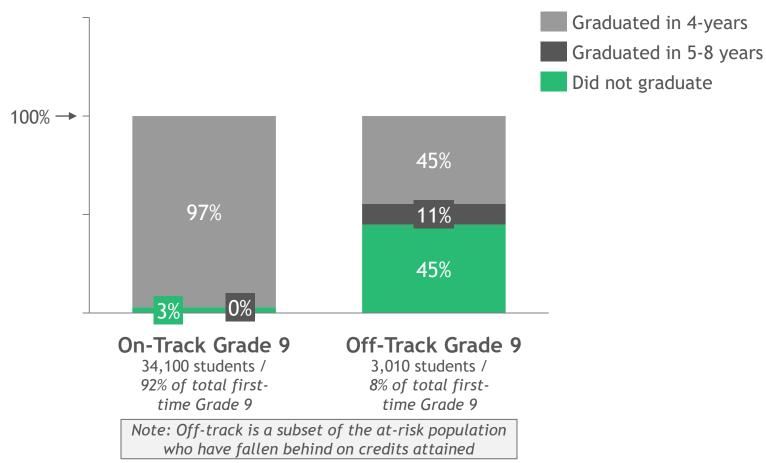
Students of color, students attending high poverty schools, and those enrolled in special edu all more likely to be off-track vs. overall pop.



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## Off-track, Grade 9: Nearly all (97%) on-track 9th graders graduated in 4-years, whereas roughly half (45%) of off-track 9th graders did not





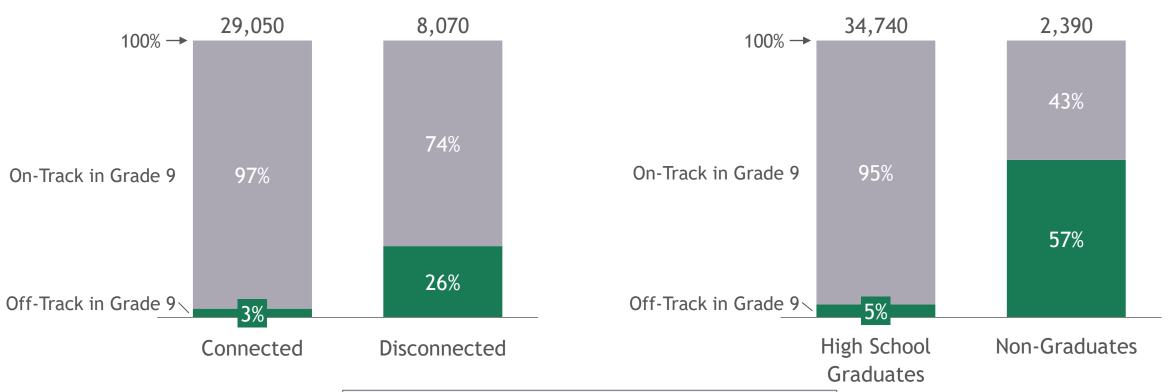
#### **Key takeaways**

45% of off-track first-time 9<sup>th</sup> graders do not graduate high school vs. only 3% of on-track 9<sup>th</sup> graders

Off-track first-time 9<sup>th</sup> graders are also more likely to take more than 4 years to graduate high school vs. ontrack 9<sup>th</sup> graders (11% vs. 0%, respectively)

## *Off-track, Grade 9:* 57% of individuals who did not graduate high school were off-track the first time they attended 9<sup>th</sup> grade

26% of disconnected young people were offtrack in Grade 9 vs. 3% of connected population 57% of non-graduate population was off-track in Grade 9 vs. 5% of high school graduates

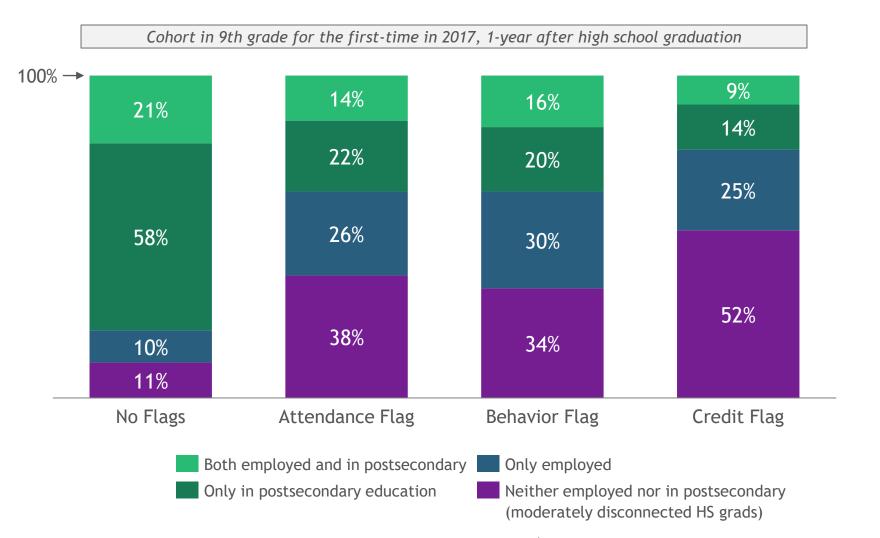


Note: Data captures students who were in Grade 9 for the firsttime in 2016-2017, excluding those who repeated 9<sup>th</sup> grade

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## At-risk by flag: High school graduates who experienced attendance, behavior, credits flag are 20-40% more likely to be disconnected vs. those with no flags



#### Key takeaways

High school graduates who experienced attendance, behavior, or credits flag are 20-40% more likely to be neither enrolled in postsecondary nor employed one-year after high school graduation vs. those with no flags

Of at-risk high school graduates, those with credit flags have the most severe outcomes, with more than half not employed or enrolled in postsecondary within one-year of high school graduation

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