



Connecticut's Unspoken Crisis
Supplemental Analysis:
Transiency

NOVEMBER 2023

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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 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. This set of materials focuses on transiency, or students changing schools within high school, either within their town or to another town in the state.

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.

Methodology - Transiency analyses

Key analytical questions:

- What are **transiency rates across Connecticut**, and where are there concentrations of **"within town" and "across town" transfers**? Where are young people transferring from and to?
- Do "within town" vs. "across town" transfers have different **associations with disconnection**?

High-level overview of analyses:

- For each town in Connecticut, identified the number of high school student transfers overall, within the town, and to another town in Connecticut for each year from 2017-2021; within town and across town transfers determined by identifying whether (1) school code changed and (2) town name (for school) changed for each student for each year they attended high school
- Calculated transiency rates overall, within town, and across town by dividing total number of transfers for a given year by the total number of high school students in that year; then took weighted average of metrics from 2017-2021 to increase sample size and strengthen reliability
- For various combinations of count of within / across town transfers (e.g., 0/1, 1/1), determined what percentage of students end of disconnected one-year after high school exit; re-ran analysis after removing alternative education students to validate trends

Scope of populations studied:

- Individuals enrolled in the State Department of Education from 2017-2021

Data considerations:

- These analyses should be used for relative comparisons between groups and not interpreted as exact figures due to the various data considerations listed below and nuances in our scope of data
- Transfer totals and rates may be an undercount due to inability to identify whether a student transferred to multiple high schools within the same school year (data shows starting school and ending school for each year, but not all schools attended in between)
- Analysis excludes out-of-state student transfers
- The cohorts studied in our analyses are not "representative" in the sense that they had their education journeys impacted by the COVID-19 pandemic (though this will not impact relative comparisons of sub-groups within these cohorts)
- Any cells less than or equal to 10 individuals were suppressed and reported as 5 transfers for visualization purposes

Summary of findings

Recall: Transiency is a key risk factor for disconnection; 1 in 5 Connecticut high school students transfer schools 1+ times during high school

Roughly 20% of Connecticut high school students transfer schools at least once during their tenure

- 11% of Connecticut's high school students transfer schools once during their tenure, and another 9% of high school students transfer schools at least twice
- Transiency is associated with higher rates of disconnection (52% of high school students who transfer high schools at least twice experience disconnection one year after high school versus 19% of students who never transfer high schools)
- This data illustrates how both the underlying unstable living conditions of some families and the disruptive act of changing schools can contribute to disconnection



High school transfers occur both across town lines and within a single town

70% of school transfers happen across town lines

- Particularly high rates of school transfers across town lines can be seen in Connecticut's smaller rural towns such as Sprague and Hampton
- These figures point to the importance of a coordinated approach across the state to identify, monitor, and support young people at risk of disconnection

30% of school transfers happen between high schools within a single town

- Particularly high rates of school transfers within town lines were observed in Hartford, New Britain, and East Hartford
- These transfers can also be quite disruptive and are seen most often in Connecticut's larger cities and towns

Executive summary of findings

The report, *Connecticut's Unspoken Crisis*, revealed that roughly 20% of Connecticut high school students transfer schools at least once during their tenure and that transiency is associated with higher rates of disconnection (52% of high school students who transfer high schools at least twice experience disconnection one year after high school versus 19% of students who never transfer)

Our most recent analysis of the P20 WIN data shows that the negative impact of transiency extends longer-term to the educational attainment and wage outcomes of young people at age 22

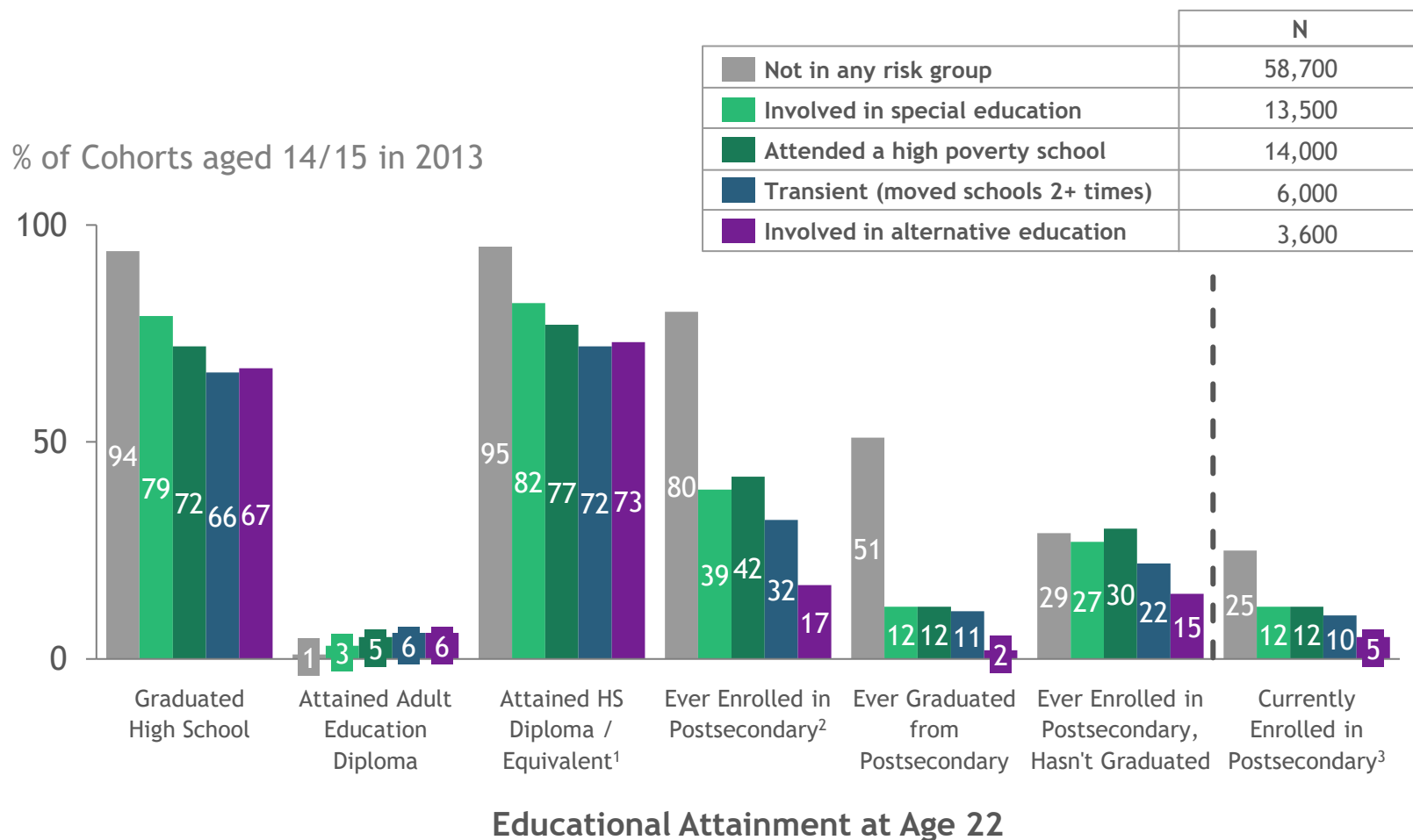
- Transient young people experience nearly the same high school graduation rates as those in alternative education (~66% graduate high school); only 11% of transient young people graduate from postsecondary vs. 51% of those who do not experience any in-school factor
- Even controlling for educational attainment, transient young people see significantly worse wage outcomes vs. individuals who do not experience any in-school factor (e.g., transient high school non-graduate makes ~7.5K vs. 15K for control group)

We identified two types of transiency that is prevalent in Connecticut, across town lines and within a single town:

- Within town transfers are more common for the larger cities, such as Hartford and New Haven; many of these transfers are driven by alternative education students (alt ed students 2x times more likely to transfer within towns)
- Across town transfers are more common for smaller, rural towns, such as Sprague and Hampton
- Within town transfers are associated with higher disconnection risk than across town transfers (~2.4x for within town transfer vs. ~1.8x for across town transfer), though both types of transiency should be of concern to practitioners
 - This can be partially explained by the prevalence of transfers to alternative education (alt ed students transfer within towns 2x as much as overall pop.), which we know is a risk factor for disconnection
 - Even excluding alternative education, however, we see higher disconnection rates for within town transfers (42% vs. 35%), suggesting that within town transfers may be more disruptive / reflective of unstable living conditions vs. "just moving"

Education and wage outcomes

Education: Relative educational outcomes across in-school factors studied emphasize the severity of experiencing transiency in high school



Key takeaways

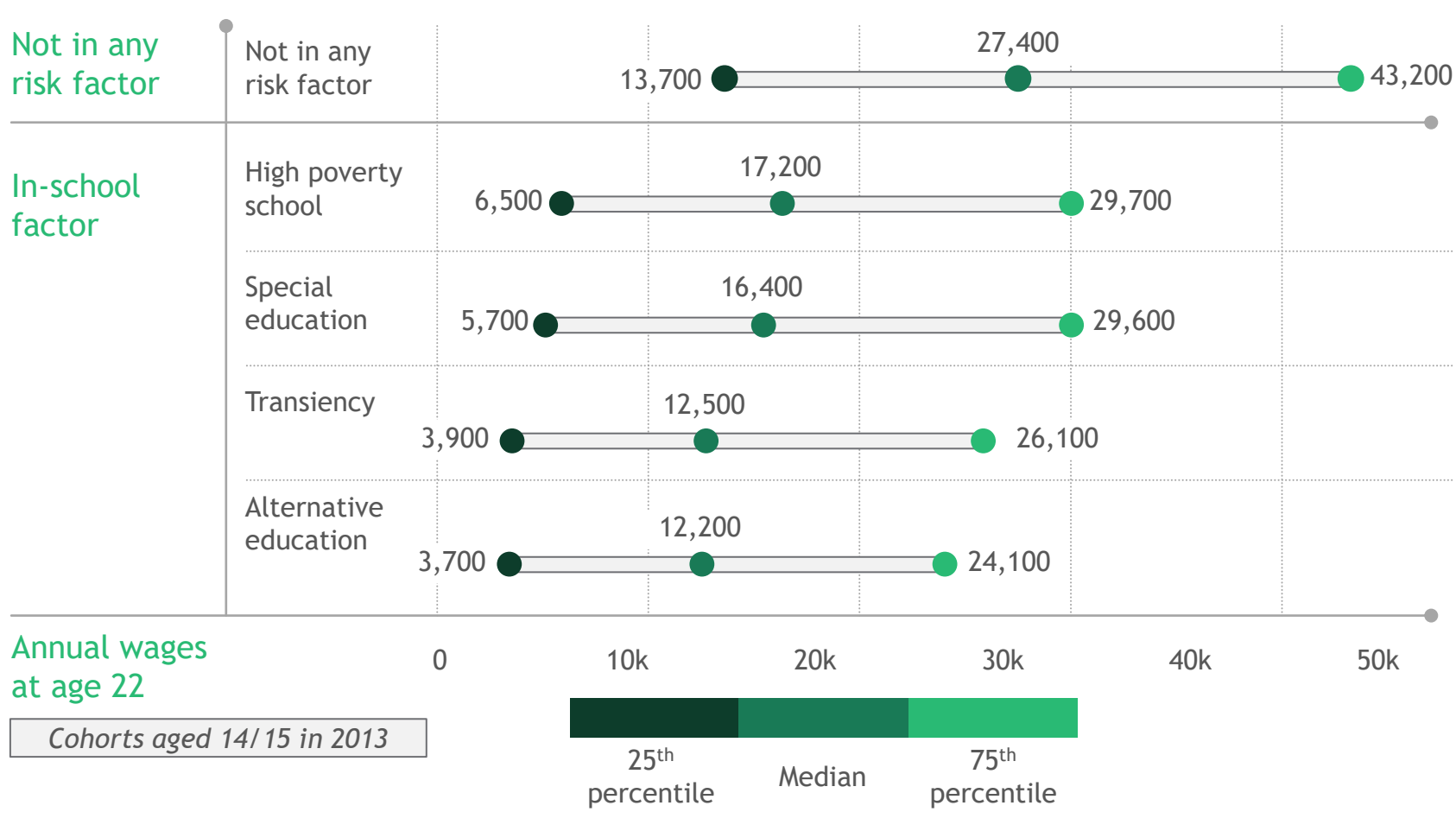
Young people who were involved in special education have the greatest relative likelihood of high school graduation; however, attainment drops off significantly at postsecondary

Transient young people experience nearly the same high school graduation rates as those in alternative education, indicating the severe impact of moving high schools

Mirroring disconnection trends, young people involved in alternative education see the worst postsecondary outcomes

1. 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

Wages: Young people who were transient in high school saw over ~50% lower median annual wages vs. overall population



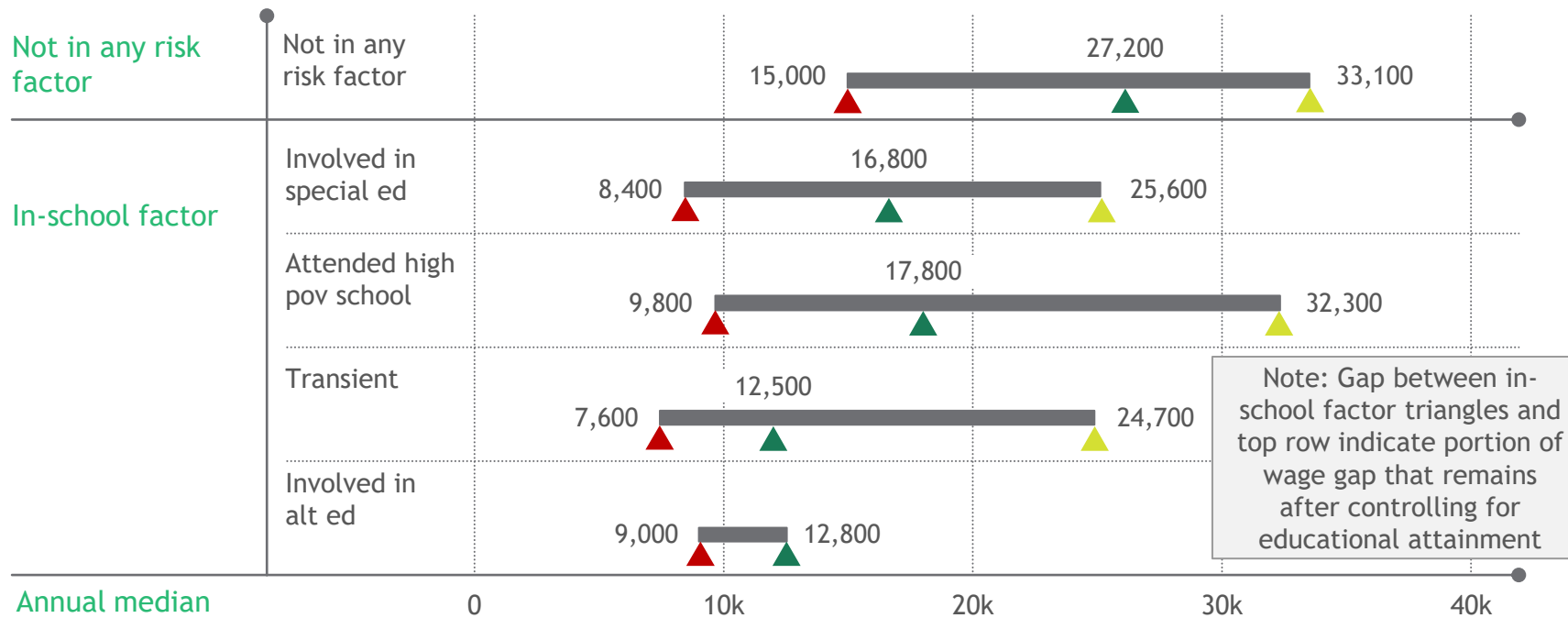
Key takeaways

Across percentiles, populations with in-school risk factors earn significantly lower annual wages than those who did not have these risk factors

Young people involved in alternative education in high school see the lowest wage outcomes, closely followed by young people who experienced transiency in high school

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)

Wages: Transient population earn significantly lower annual wages across educational attainment levels vs. those not in any in-school risk group



Note: Gap between in-school factor triangles and top row indicate portion of wage gap that remains after controlling for educational attainment

Key takeaways

Generally, populations with in-school risk factors earn significantly lower median annual wages than those who did not have these risk factors

The bright spot in the data is young people who attended a high poverty school close the wage gap after graduating from postsecondary education

Transient and alternative ed populations have the lowest median wages in the group, particularly for those who did not graduate post-secondary school

Annual median wages at age 22

Sample Size (N)

Cohorts aged 14/15 in 2013

	HS Non Grad	HS Grad, No Post-Secondary	Post-Secondary Grad
Non in-school factor	3,400	8,100	30,200
Involved in special ed	2,800	5,400	1,600
Attended high pov school	3,900	4,300	1,300
Transient	2,100	2,000	650
Involved in alt ed	1,200	1,800	70 ¹

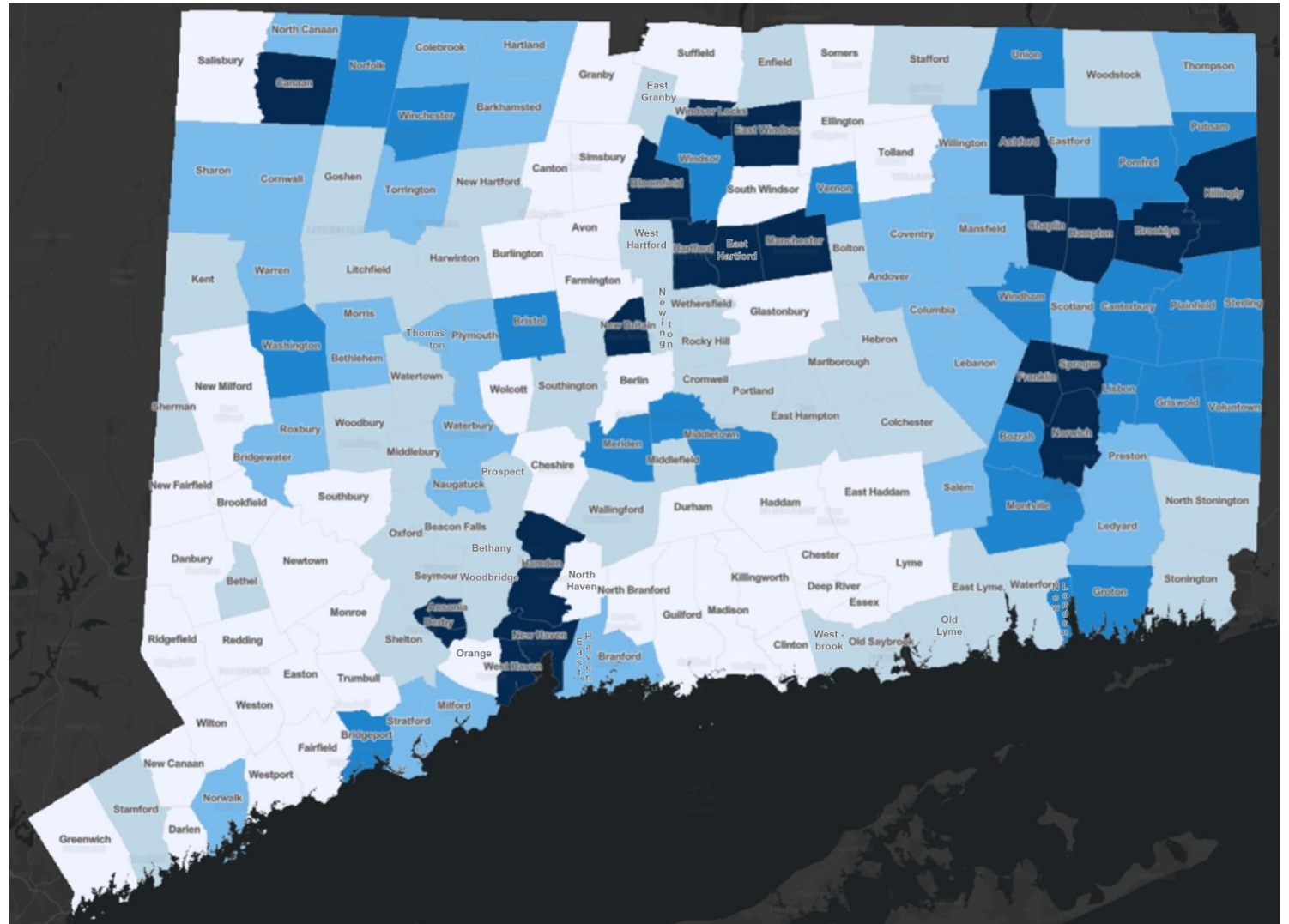
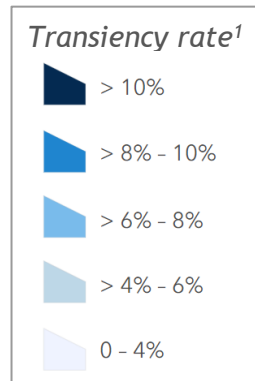
1. Due to small sample size, cannot show wage outcomes; Note: Wage analysis only includes individuals with >0 wages in year of study and excludes individuals currently enrolled in postsecondary education; Metrics should be understood more for the relative comparison across categories vs. exact figures;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

Transiency rates across CT

Transiency - Overall: Transient young people can be found in every CT town

Key takeaways:

- Major cities such as New Haven and Hartford and neighboring towns see higher concentrations of transiency
- Eastern Connecticut generally has higher rates of transiency, particularly in the smaller towns of Sprague and Hampton

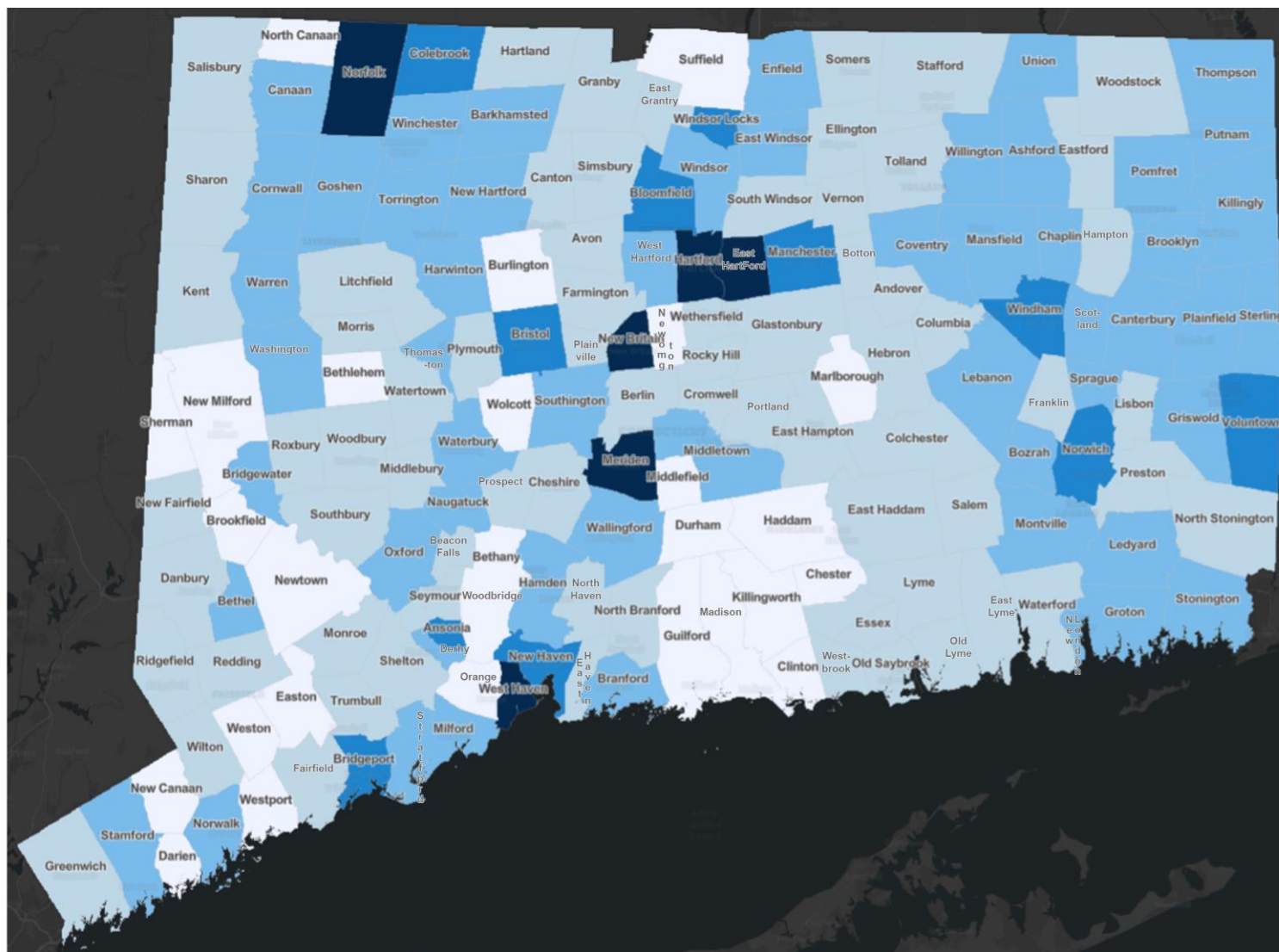
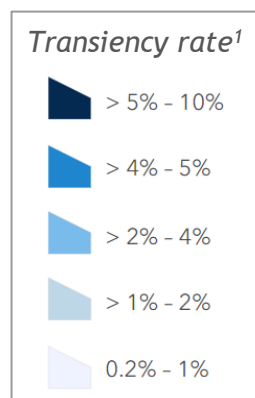


1. Calculated as the percentage of high school students who transfer in a given school year, as a blended average across data from 2017-2021; any cells with data with less than 10 individuals have been suppressed and reported as 5 transfers; Notes: Analysis does not include across town transfers out of state; Data only captures one school transfer per school year, so may undercount the total number of transfers ; Source: P20 WIN (2017-2021), BCG analysis

Transiency - Within Towns: Within town transfers most likely to occur in the state's largest cities

Key takeaways:

- Hartford sees the highest rate of within town transiency, with ~10% of students transferring high schools at least once
- Other towns with high rates of within town transfers include East Hartford, New Britain, Meriden, West Haven, and Norfolk

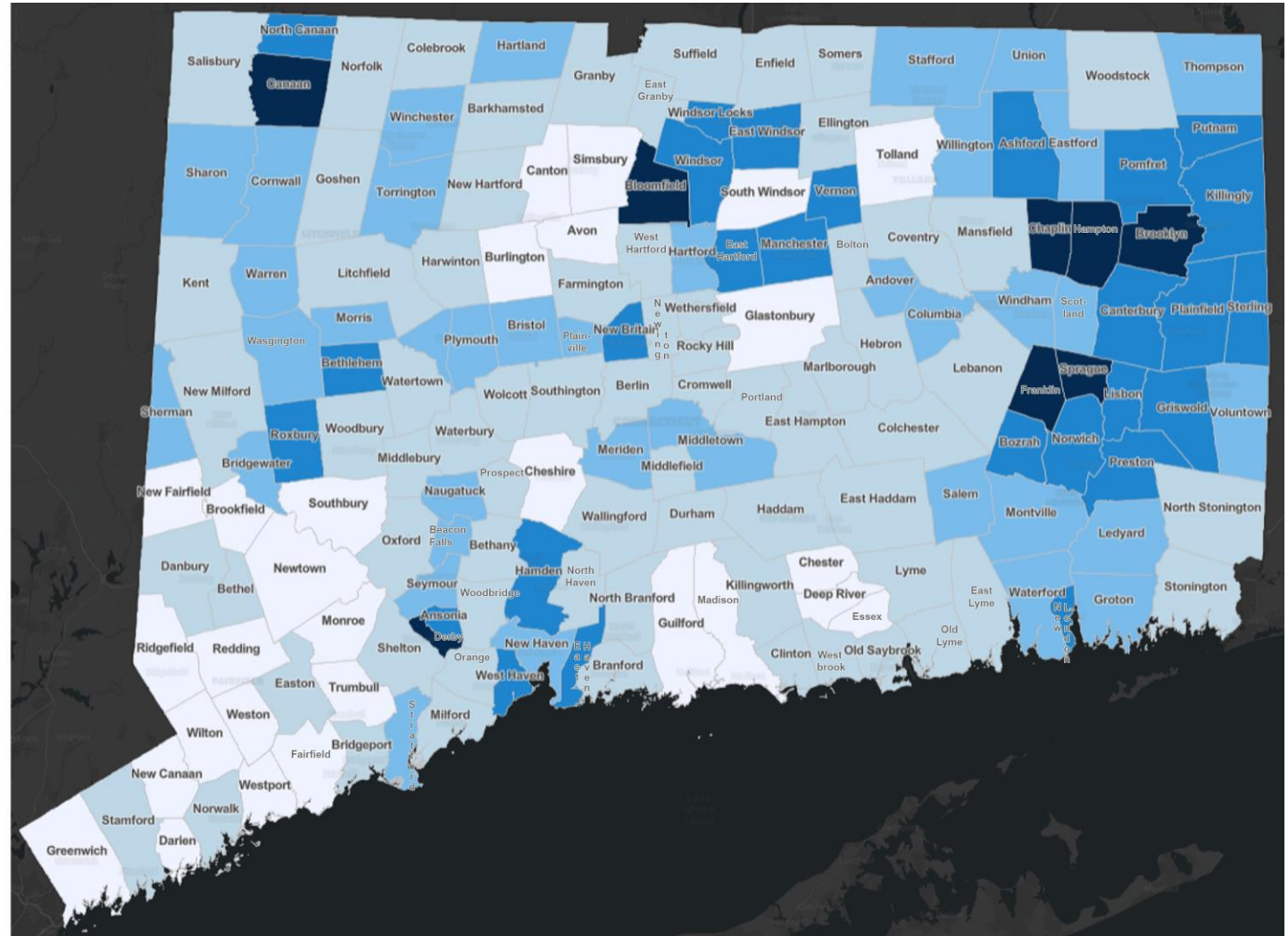
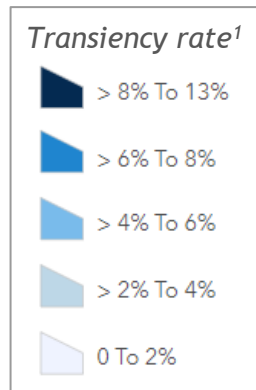


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Transiency - Across Towns: Across town transfers most likely to occur in the state's smaller towns and eastern portion

Key takeaways:

- Small, rural towns, such as Sprague and Hampton most likely to see high rates of across town transfers
- Clear concentrations of across town transfers in eastern part of the state



1. Calculated as the percentage of high school students who transfer in a given school year, as a blended average across data from 2017-2021; any cells with data with less than 10 individuals have been suppressed and reported as 5 transfers; Notes: Analysis does not include across town transfers out of state; Data only captures one school transfer per school year, so may undercount the total number of transfers; Source: P20 WIN (2017-2021), BCG analysis

Disconnection outcomes

Transiency: Moving within towns has stronger association with disconnection than moving across towns, though all types of transfers are cause for concern

Number of Transfers	Within town	Across towns	% of students with this factor	% of students who ended up disconnected	Likelihood of disconnection vs. not experiencing this factor
0	0	0	85%	20%	1.0
1	0	1	4%	36%	1.8x
	1	0	7%	49%	2.4x
2	1	1	1%	59%	2.9x
	0	2	1%	49%	2.4x
	2	0	1%	63%	3.1x

Key takeaways

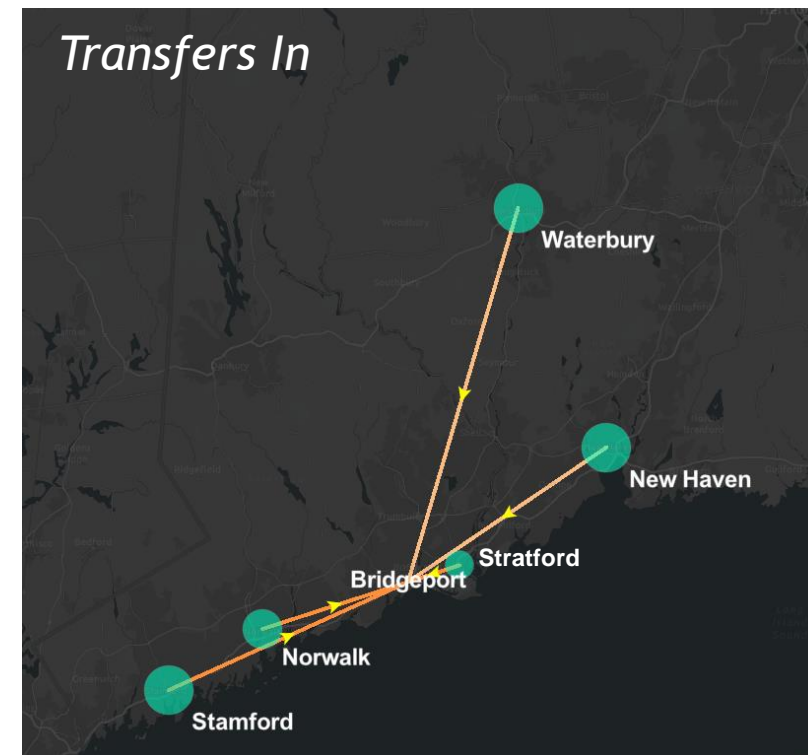
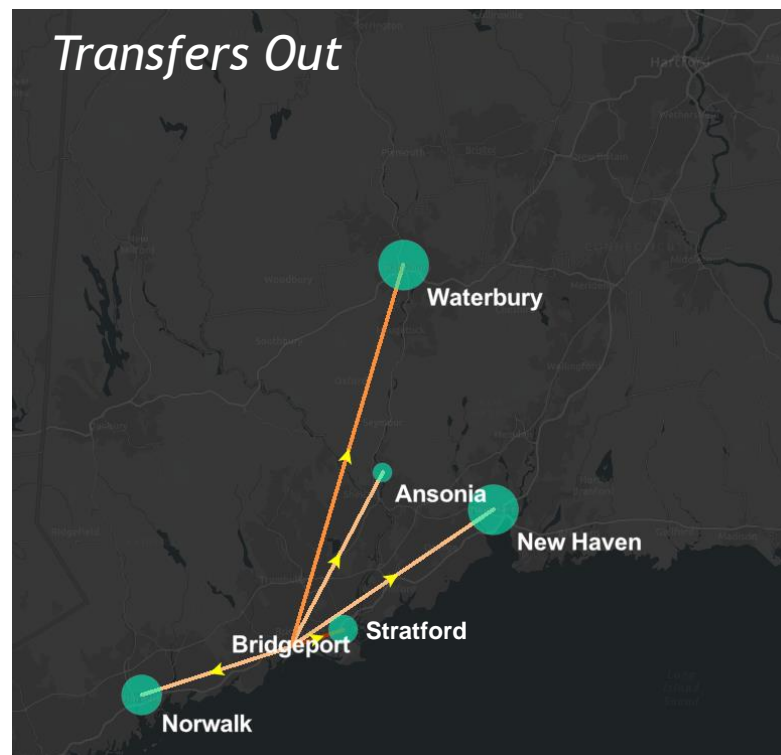
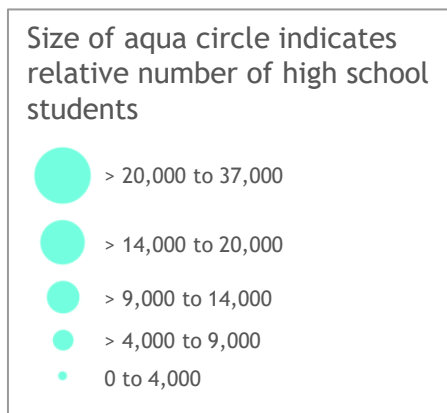
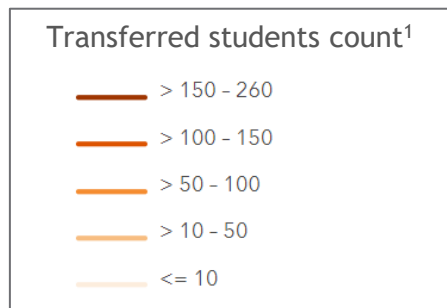
The more transfers a young person experiences, the stronger their association with disconnection

Within town transfers are associated with higher disconnection risk than across town transfers; this can be partially explained by the prevalence of transfers to alternative education (alt ed students transfer within towns 2x as much as overall pop.), which we know is a risk factor for disconnection

Even excluding alternative education, however, we see higher disconnection rates for within town transfers (42% vs. 35%), suggesting that within town transfers may be more disruptive / reflective of unstable living conditions vs. "just moving"

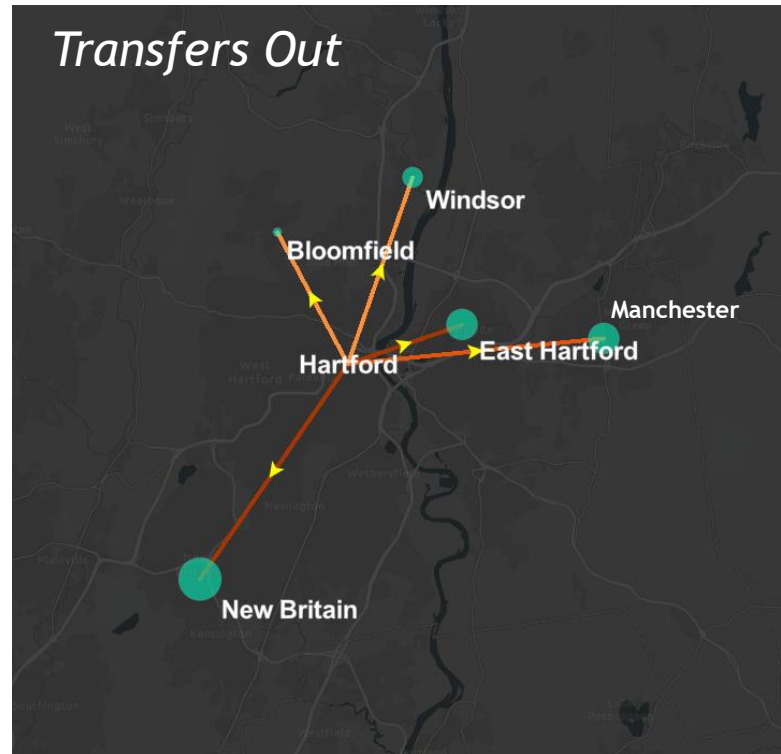
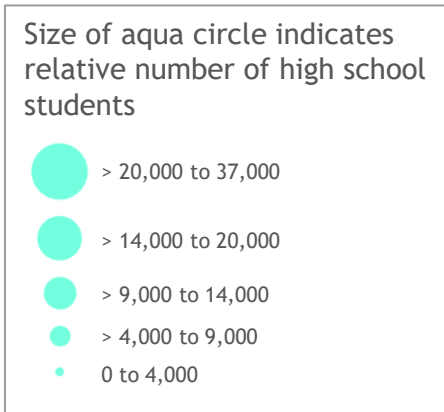
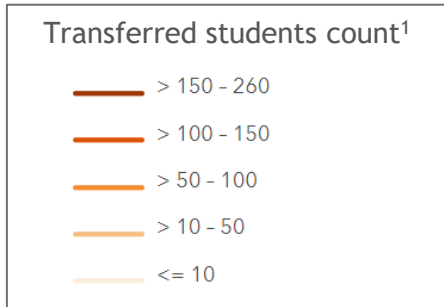
Top city/town transiency patterns

Bridgeport: Highest number of transfers out of town to Waterbury and into town from Norwalk, Stamford



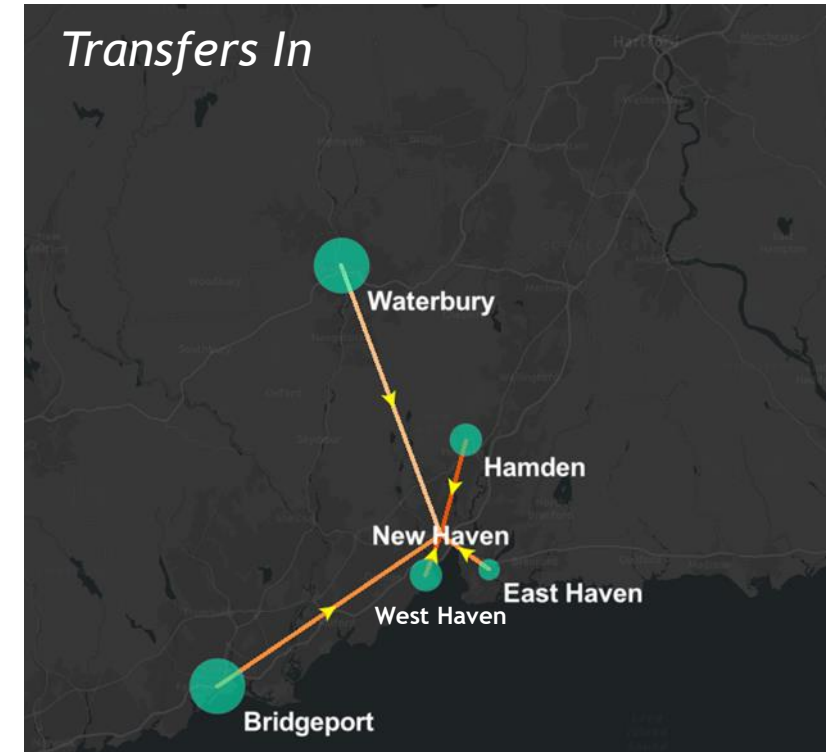
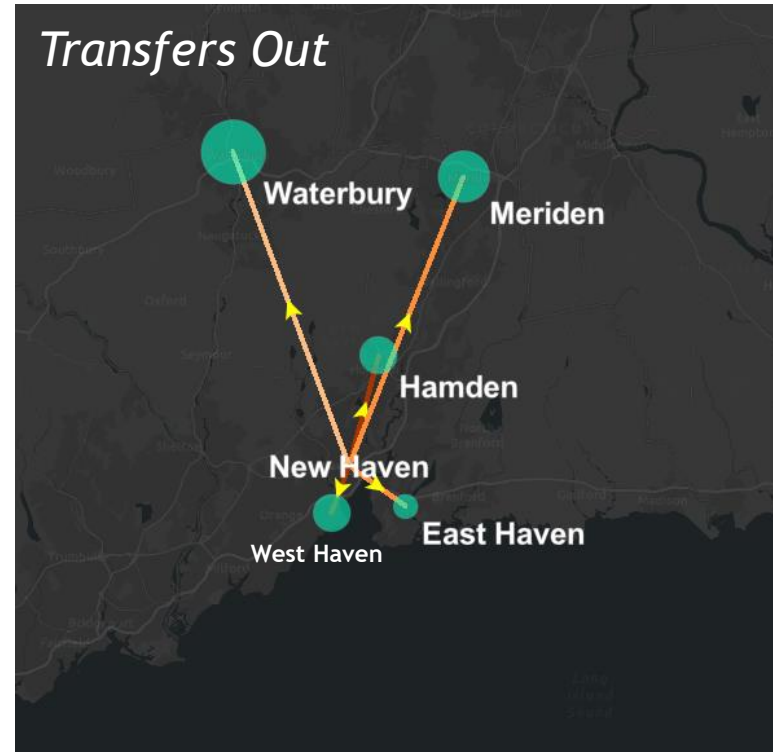
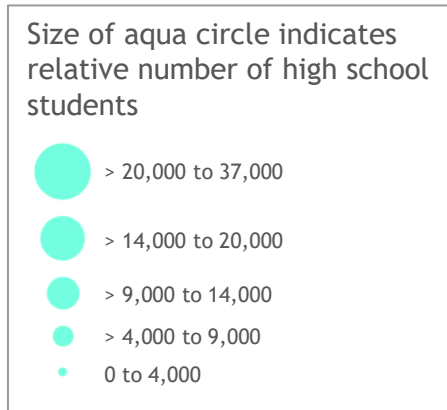
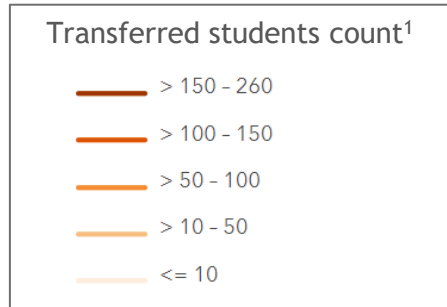
1. Total number of transfers from 2017-2021; Source: P20 WIN (2017-2021)

Hartford: Transfers out of Hartford mirror transfers into Hartford, with highest outflows to New Britain and East Hartford and highest inflow from East Hartford



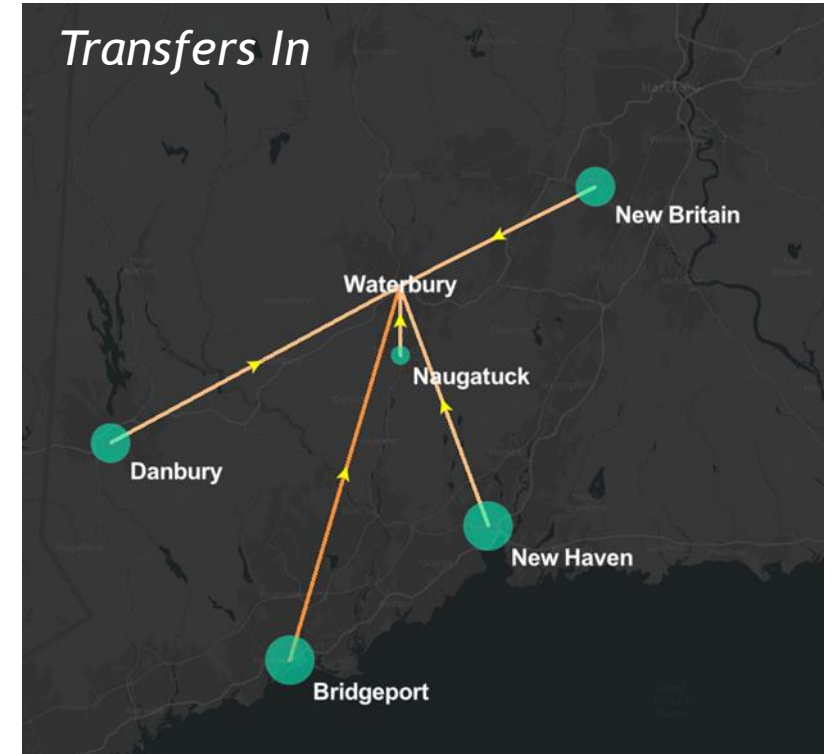
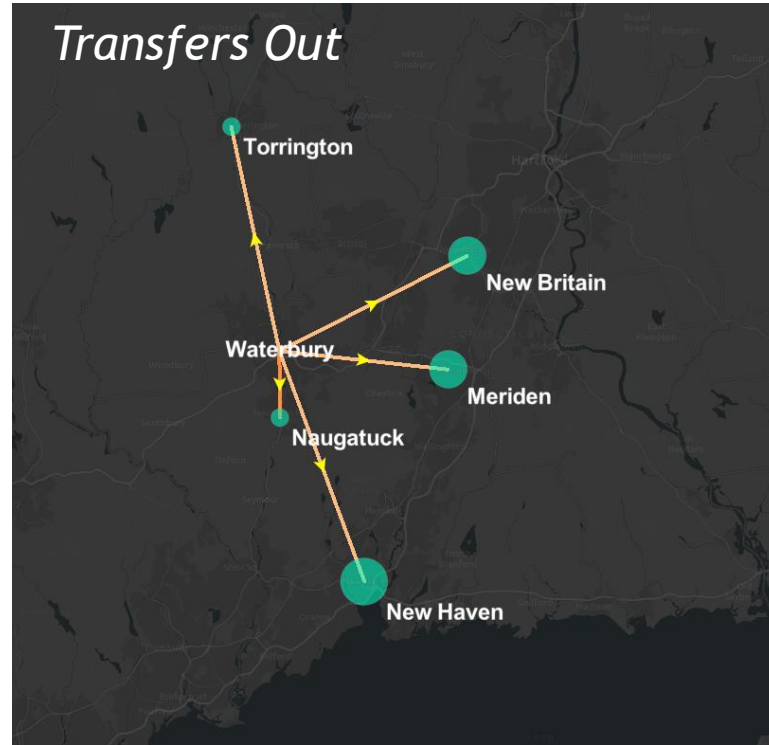
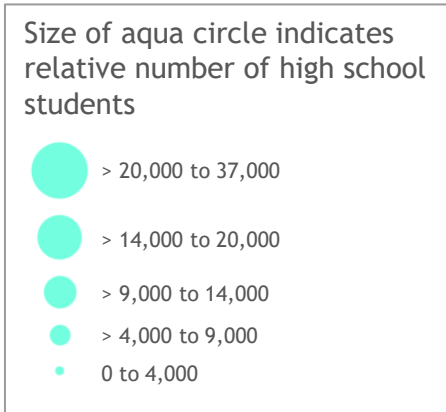
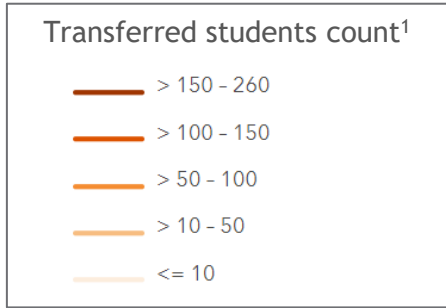
1. Total number of transfers from 2017-2021; Source: P20 WIN (2017-2021)

New Haven: Highest number of transfers out of and into New Haven from Hamden



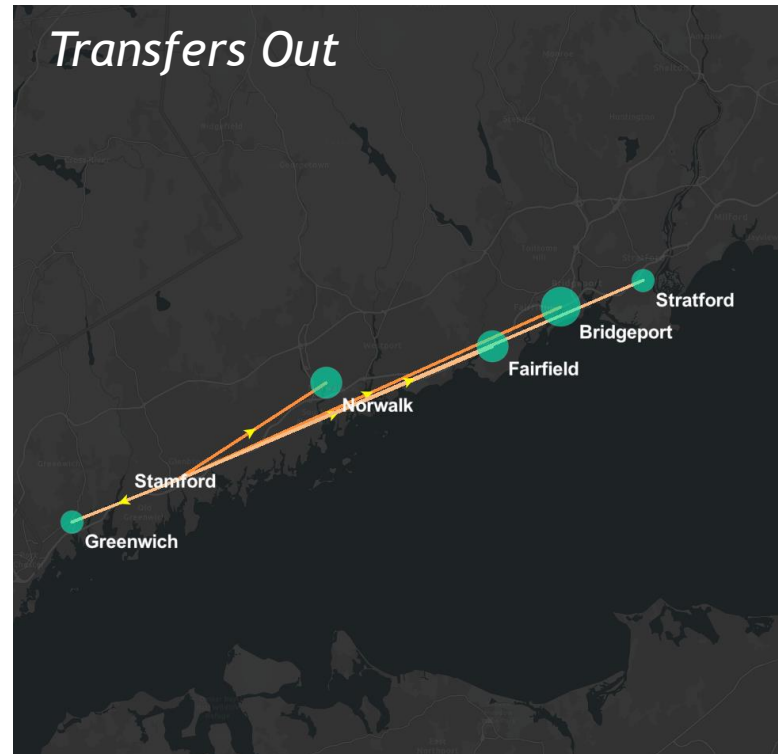
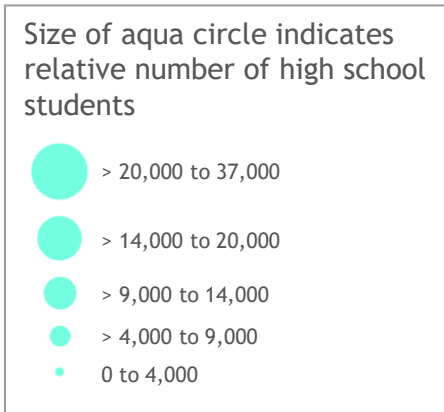
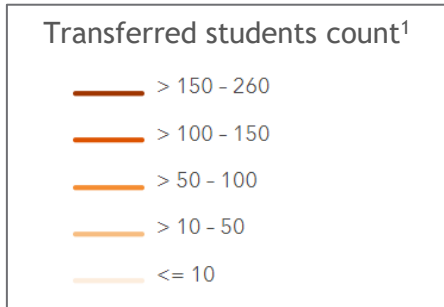
1. Total number of transfers from 2017-2021; Source: P20 WIN (2017-2021)

Waterbury: Naugatuck is the highest destination for transfers out of town, while Bridgeport is the highest source of transfers into Waterbury



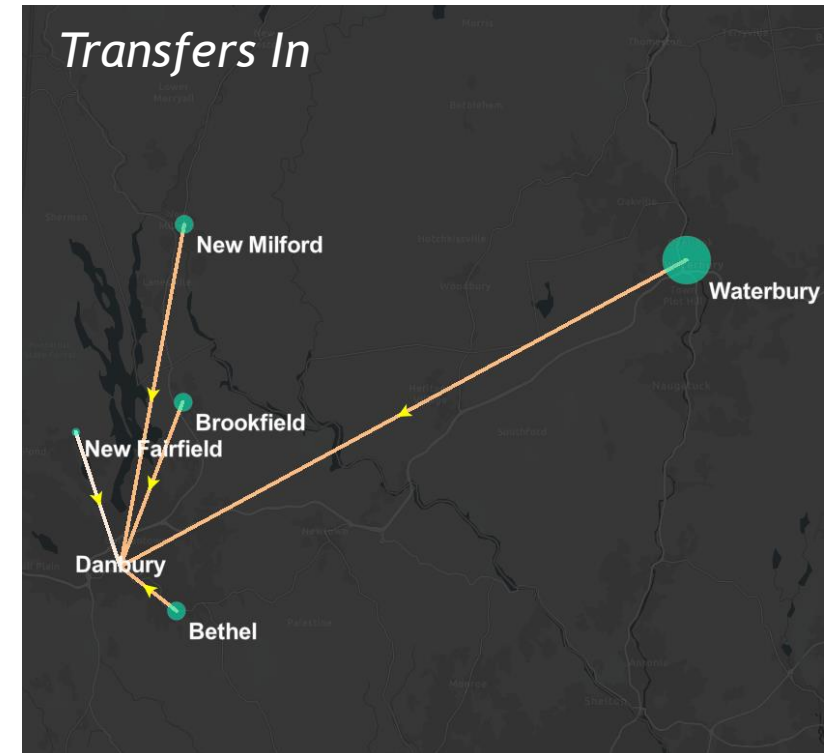
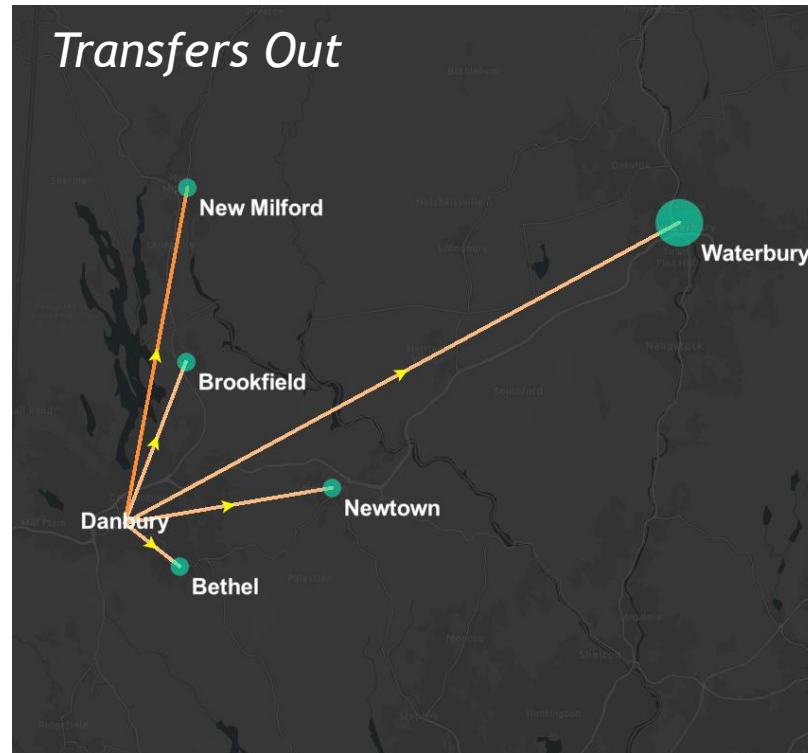
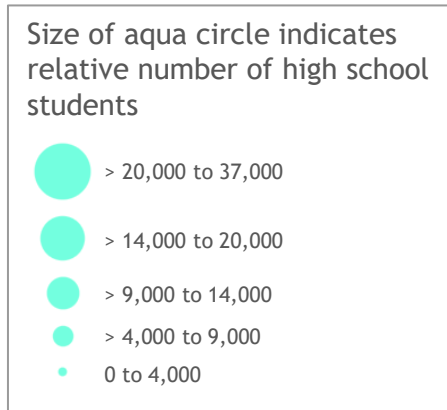
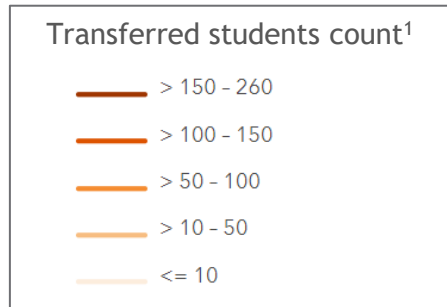
1. Total number of transfers from 2017-2021; Source: P20 WIN (2017-2021)

Stamford: Transfers into and out of Stamford occur primarily along the coast of the Long Island sound



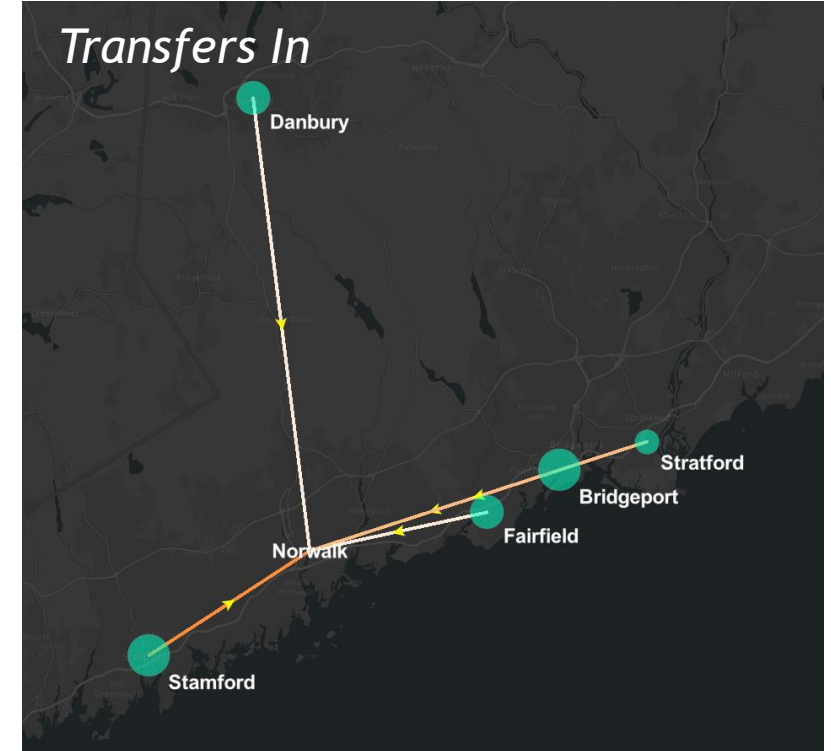
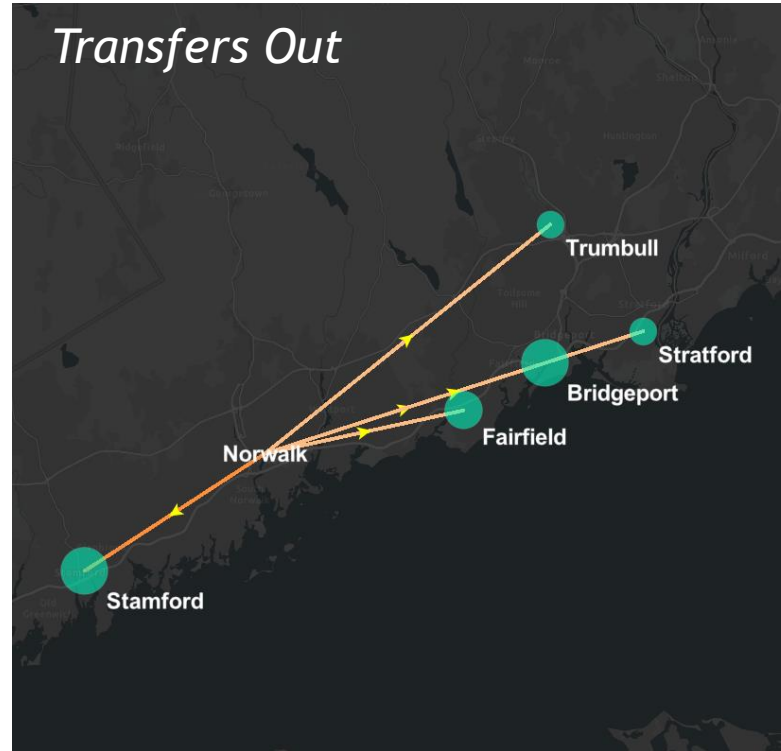
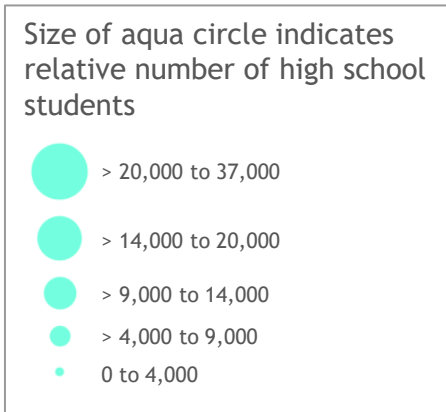
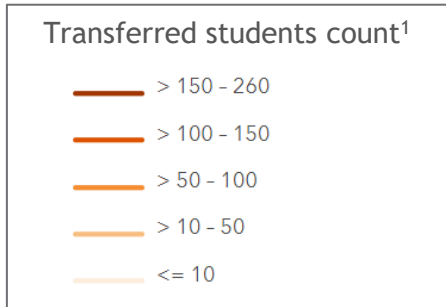
1. Total number of transfers from 2017-2021; Source: P20 WIN (2017-2021)

Danbury: Transfer origins into Danbury mirror transfer destinations out of Danbury, with New Milford receiving the most transfers from town



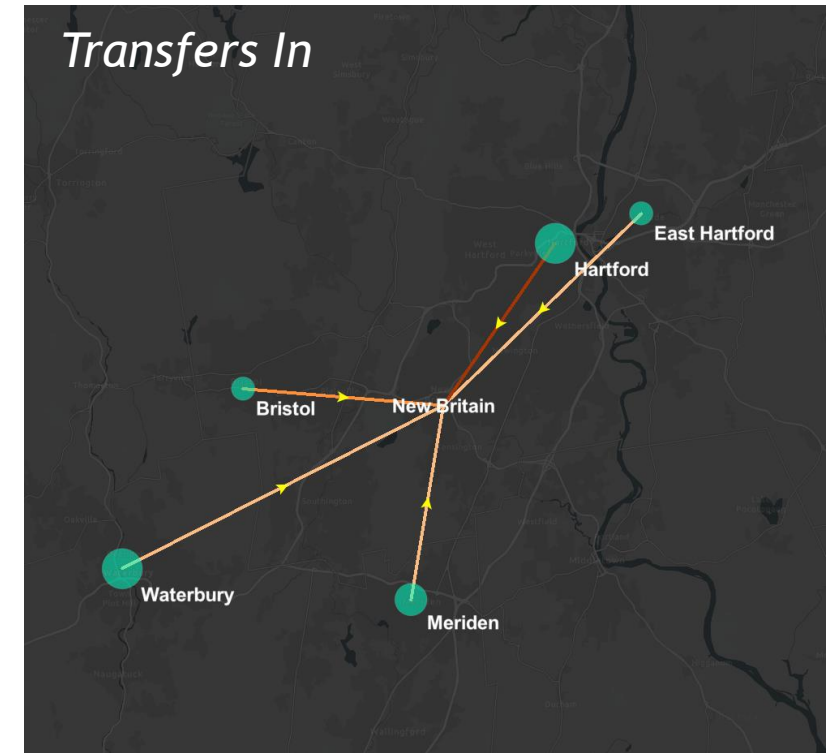
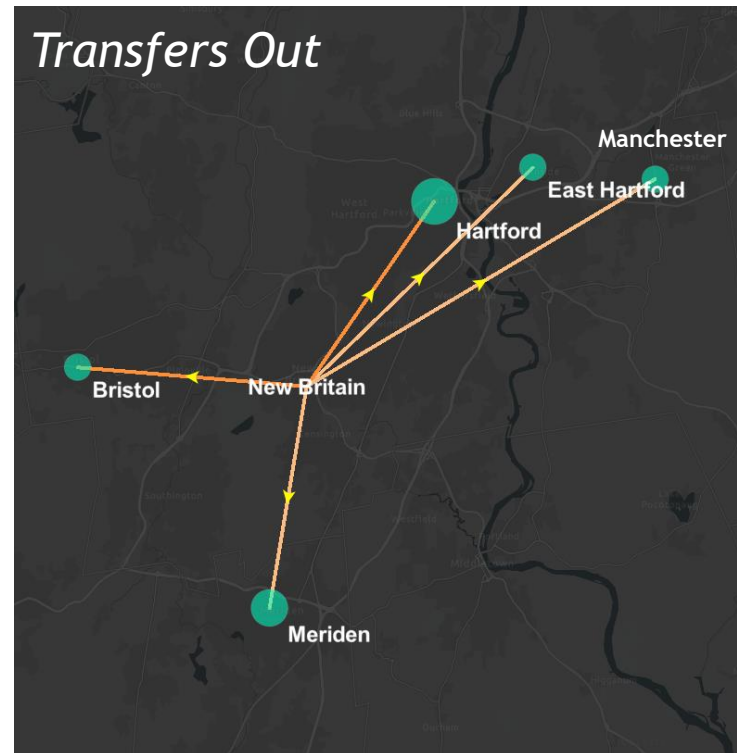
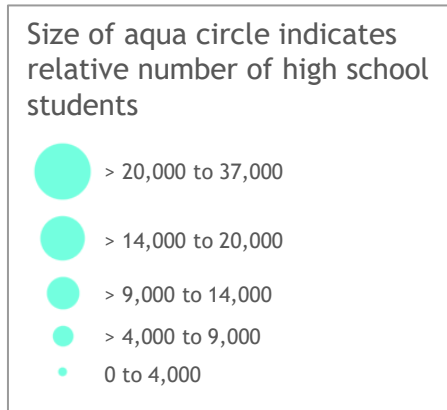
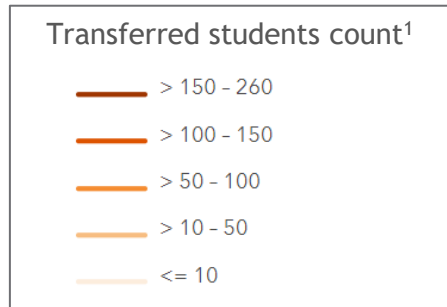
1. Total number of transfers from 2017-2021; Source: P20 WIN (2017-2021)

Norwalk: Stamford is the highest source and destination of transfers



1. Total number of transfers from 2017-2021; Source: P20 WIN (2017-2021)

New Britain: Transfers into and out of New Britain are primarily with Bristol and Hartford



1. Total number of transfers from 2017-2021; Source: P20 WIN (2017-2021)

Appendix

Definitional framework for at-risk and disconnected young people



ON-TRACK

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

AT-RISK

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

- Off-track¹: 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

DISCONNECTED

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

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

1. Inclusive of severely off-track population

Descriptions of data fields used

Category	Term	Definition	Notes
In-school factors	Has ever attended a high poverty school 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 enrolled in special education in high school	Whether an individual has ever participated in a special education high school program since age 14	
	Has ever been enrolled in alternative education 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	Due to data limitations, wage data does not include self-employment, independent contractor work (e.g., gig economy), or informal economy work
		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)	
	Disconnected	<p>Combined population of 14- to 26-year olds who are experiencing either moderate or severe disconnection, defined as:</p> <ul style="list-style-type: none"> • <u>Moderately disconnected</u>: 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 • <u>Severely disconnected</u>: Includes individuals neither employed nor holding a high school diploma, as well as incarcerated individuals 	

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