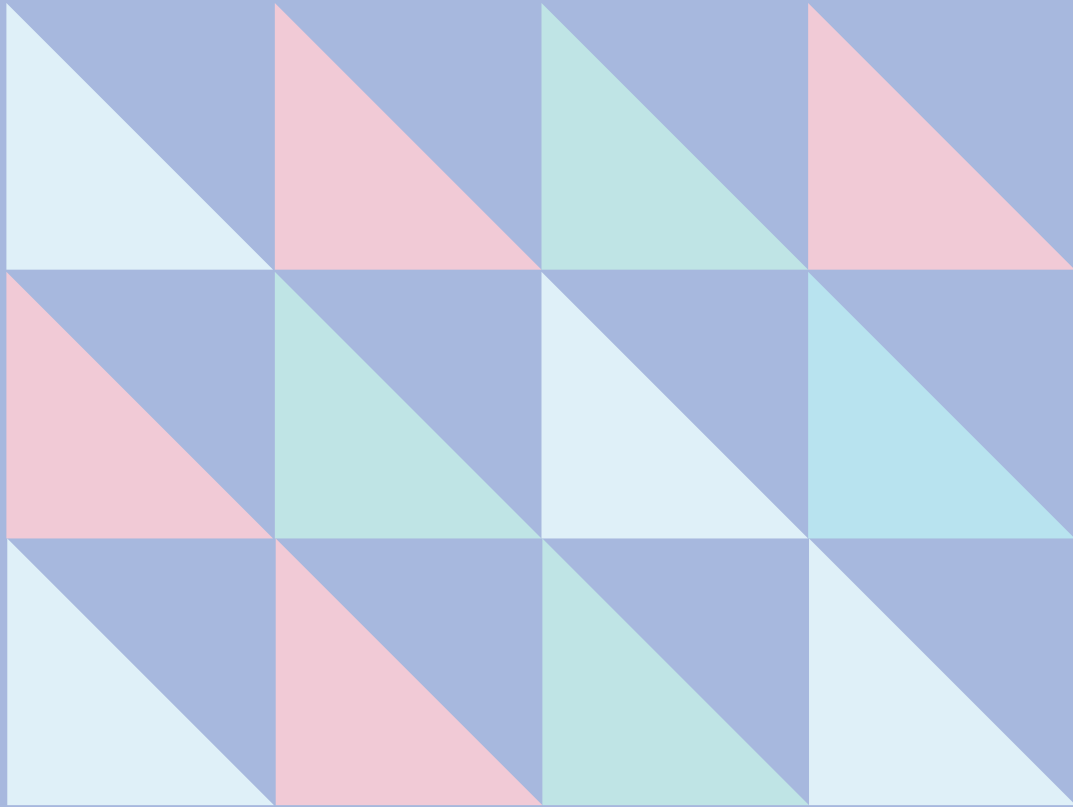


FOSTER CARE TRAJECTORIES AND HIGH SCHOOL GRADUATION



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The City of New York
Mayor Zohran Mamdani

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Center for Innovation
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ABOUT

The Center for Innovation through Data Intelligence (CIDI) is a research and policy center located in the office of the Mayor of New York City, reporting directly to the Deputy Mayor for Health and Human Services. CIDI fosters collaboration with all Health and Human Services agencies to promote citywide policy changes toward the goal of improving the effectiveness of New York City government. CIDI embraces the Mayor's goal of delivering cross-agency solutions to big, bold issues that impact the health and well-being of the city's most vulnerable people.

To learn more about CIDI, please visit www.nyc.gov/cidi

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With much gratitude,
Maryanne Schretzman, DSW
Executive Director
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01

Executive Summary

BACKGROUND

This report builds upon previous Center for Innovation through Data Intelligence (CIDI) research, which documented significant gains in high school graduation rates among high school students experiencing foster care in New York City. During this period of in-depth analysis, graduation rates for 9th grade entry cohorts increased from 25 percent in 2011 to 46 percent in 2020 (Center for Innovation through Data Intelligence, 2025). The current report will further analyze individual students' foster care trajectories and the association with educational outcomes. For example, youth in kinship care tend to have better educational outcomes than their peers in other types of placements (Sandh et al., 2020). Furthermore, achieving permanency through reunification, adoption, or guardianship provides crucial stability that supports educational success (Berger et al., 2018).

High school students experiencing foster care often confront structural and societal barriers such as poverty, housing, and school instability along with family and systemic challenges. Youth experiencing foster care are disproportionately Black and Latina/o/x, and approximately one in three youth ages 13 to 20 identify as lesbian, gay, bisexual, transexual, and queer/questioning (LGBTQ) (NYC Administration for Children's Services, 2025a). These identities often intersect and put youth at risk for prejudice, discrimination, and violence (NYC Administration for Children's Services, 2018). Moreover, youth in foster care are at higher risk for continued system involvement, including future engagement in justice and homeless systems (Prince et al., 2019).

Building on prior CIDI research, which identified educational and foster care characteristics such as placement type, school attendance, and 8th grade proficiency as key predictors of graduation (Center for Innovation through Data Intelligence, 2022, 2025), this report extends the analysis to examine how the timing, order, and duration of foster care experiences are associated with educational attainment. This new study aims to move beyond static factors to illuminate how the dynamic patterns of these experiences shape a youth's educational trajectory. The purpose is to understand these patterns so that New York City can refine its efforts and continue to increase the number of high school graduates.

METHODOLOGY

The sample consisted of youth in NYC Administration for Children’s Services (ACS) foster care who were placed for a minimum of seven days during high school, attended a high school in the New York City Public Schools (NYCPS) system for at least one year, had a known graduation status, and were able to be followed for 72 months (six years) after starting 9th grade. This resulted in a sample of 5,859 students from the 2011 through 2018 9th grade entry year cohorts who graduated between the 2014-2015 and 2023-2024 academic years.

Sequence analysis was employed to visualize, describe, and group patterns of foster care experiences over the six years following high school entry. Each student was assigned a mutually exclusive state for each month, beginning in September of 9th grade and continuing for 72 months. The states were defined by the students’ type of foster care placement or discharge status. Placement types included preplacement, kinship care, foster home, or residential care. Discharge status captured the type of exit from foster care: absent without leave (AWOL); adoption; reunification with family of origin; KinGAP (a program that provides support to relatives who become legal guardians for children exiting foster care); or Another Planned Permanent Living Arrangement (APPLA), a designation for older youth and young adults who plan to age out of the foster care system between their 18th and 21st birthdays.

The resulting sequences of monthly states were grouped using cluster analysis to identify distinct trajectories. Demographic and educational characteristics and outcomes—specifically high school graduation—were examined across clusters to identify trajectories associated with successful graduation.

FINDINGS

The analysis identified 11 distinct foster care trajectory clusters. As illustrated in Table 1, clusters are listed in descending order by high school graduation rate.

Table 1. Clusters of Foster Care Sequences and Graduation Rates

FOSTER CARE SEQUENCES	HIGH SCHOOL GRADUATION RATE (%)
Kinship Care Later in High School	78.9
Adoption after Kinship Care or Foster Home	69.7
Kinship Care to KinGAP	67.6
Kinship Care with Mixed Discharge Status	55.9
Foster Home throughout High School	55.6
Reunification in Early High School with Family of Origin from Any Type of Care	35.8
Other Discharge Status	29.9
Preplacement and Residential Care	26.2
Residential Care throughout High School	22.9
Residential Care with Reunification with Family of Origin	11.3
Foster Home with Discharge to APPLA	7.3

The clusters exhibited significant differences not only in types of foster care placements and discharges but also in demographic and educational characteristics. Even among clusters with the highest or lowest graduation rates, demographic and educational characteristics varied considerably.

Kinship Care Later in High School and *Kinship Care to KinGAP* clusters had the highest educational outcomes.

Students in clusters with among the highest graduation rates—*Kinship Care Later in High School* and *Kinship Care to KinGAP*—had the highest rates of 8th grade Math and English Language Arts (ELA) proficiency and some of the lowest proportions of students with disabilities. These students also had low rates of chronic absenteeism in 8th grade. In contrast, students in the *Adoption after Kinship Care or Foster Home* cluster, despite having among the highest graduation rates, had the lowest rate of 8th grade Math proficiency and the highest proportion of students with disabilities.

Residential Care with Reunification with Family of Origin and *Foster Home with Discharge to APPLA* clusters faced the greatest educational challenges.

Students in the clusters with the lowest graduation rates—*Residential Care with Reunification with Family of Origin* and *Foster Home with Discharge to APPLA*—faced the greatest educational challenges. These students had the highest rates of chronic absenteeism in 8th grade, low rates of 8th grade Math and ELA proficiency, and a high proportion were students with disabilities.

Demographic differences also emerged. Compared to students in other clusters, students in the *Residential Care with Reunification with Family of Origin* cluster were most likely to be male, while those in the *Foster Home with Discharge to APPLA* cluster were more likely to be female.

The 11 clusters were grouped into four categories: (1) those with highest graduation rates, (2) above average graduation rates, (3) average graduation rates, and (4) below average graduation rates.

CONCLUSIONS

The results of this study align with previous findings (Center for Innovation through Data Intelligence, 2022, 2025), revealing a strong association between a student’s foster care experience and their educational outcomes. Students in clusters that include kinship care and discharges to KinGAP and adoption were associated with higher graduation rates. Conversely, lower graduation rates are observed among student clusters characterized by residential care with reunification during high school and in foster home settings discharged to APPLA.

It is critical to interpret these findings as descriptive patterns, not as proof that the placement or discharge type itself causes the outcome. Rather, these placement and discharge categories serve as indicators of broader systemic and individual factors at play. The clusters associated with low graduation rates suggest an interplay of external challenges, including the impacts of poverty and racism on access to resources. In addition, individual-level adversities such as behavioral and mental health challenges along with inconsistent family and educational support shape a student's path to graduation.

The path to improved educational outcomes, therefore, is not simply to change a student's placement or discharge goal but to establish a unified approach with a cross-agency response that addresses the systemic issues at their core. A key component is ensuring access to an array of financial, mental health, and educational services that follow the child or young adult, whether they are at home, in foster care, or have exited care on their own between the ages of 18 and 21.

This approach is particularly critical for youth in or exiting residential placements and those discharged to APPLA. For these youth and their families, a multi-agency response can include a range of tailored supports—such as coaches, employment services, direct cash grants, health and mental health services, and mobile crisis teams that can provide immediate, trauma-informed support. Given the complexity of these situations, a cross-agency response is essential to seamlessly align mental health, juvenile justice, and educational support systems.

Finally, it is important to recognize that prioritizing one form of permanency over another is a complex legal decision. Reunification remains the primary goal of the foster care system. The findings of this report regarding reunification from residential care should not be interpreted as a reason to deprioritize reunification, but rather as a call to strengthen the support system for families during and after the reunification process.

Similarly, APPLA discharges are pursued after all family-based permanency options have been thoroughly explored and documented as not in the youth's best interest. Therefore, for youth transitioning to adulthood under APPLA, the goal is to ensure that the "planned permanent living arrangement" is one filled with targeted, ongoing support—including housing, education, and employment assistance—to provide the stability and connection necessary for their success.

02

Background

EDUCATIONAL OUTCOMES OF YOUTH IN FOSTER CARE

High school graduation is a critical milestone in a young person's life, impacting future social mobility and economic stability. A high school diploma opens doors to higher education and to future employment opportunities. Individuals who graduate from high school earn higher wages, are less likely to be unemployed, and experience better health outcomes compared to those who do not graduate from high school (Bailey et al., 2017). High school graduates also demonstrate a greater ability to form independent households and greater civic engagement over the course of their lifetime (Sum et al., 2009).

Research suggests that students experiencing foster care face challenges that impact their ability to earn a high school diploma, including frequent changes in foster care placement (Clemens et al., 2018); changing schools, resulting in missed days and learning gaps (Fawley-King et al., 2017); trauma resulting from early mistreatment and changing caregivers (Bronsard et al., 2016; Dye, 2018; Zlotnick et al., 2012); and a limited number of secure relationships with adults they can turn to for guidance and support (Okpych & Courtney, 2018; Samuels & Pryce, 2008; Somers et al., 2020). Students experiencing foster care often identify as persons of color (Dettlaff & Boyd, 2020), LGBTQIA+ (Fish et al., 2019), and/or come from low socioeconomic status backgrounds (Zilberstein, 2016). The compounded effects of these challenges make it difficult for students in foster care to graduate from high school. Despite these challenges, students in foster care demonstrate great resilience and perseverance to achieve a high school diploma (Shpiegel et al., 2022).

FACTORS IMPACTING EDUCATIONAL OUTCOMES

Factors such as the type of foster care placement and the circumstances of a young person's discharge from care can impact educational outcomes. Youth with any history of congregate or residential care consistently have among the lowest levels of academic attainment, including lower rates of on-time high school graduation (Winokur et al., 2014). This may reflect both their higher preplacement treatment needs and the greater placement and school instability they often experience (Annie E. Casey Foundation, 2015).

Permanency outcomes—specifically, whether a young person is reunified with their family of origin, adopted, or placed with kin—affect a youth's stability and well-being, including educational attainment. Adolescents who are adopted or placed with kin after time in foster care experience significantly better behavioral and academic outcomes compared to those who are reunified with their parents, particularly during adolescence (Winokur et al., 2014; Koh, 2010). Reunified youth face higher risks of subsequent maltreatment and reentry into care (Connell et al., 2009). Longitudinal analyses indicate elevated vulnerability to emotional and behavioral challenges when reunification occurs after long periods in foster care (Wulczyn, 2004). Kinship placements and adoptions tend to provide more support, fewer placement disruptions, and a sense of continuity, all of which correlate with improved educational outcomes and more positive adult trajectories. When efforts at family reunification are pursued, comprehensive support to families—such as trauma-informed services, educational guidance, and long-term follow up—can help mitigate some of the risks associated with reunification during the adolescent years (Connell et al., 2009). These findings reinforce the importance of policy and practice interventions that maximize placement stability and supportive relationships for youth in foster care, particularly by promoting kinship care and adoption when safe and appropriate (Winokur et al., 2014; Koh, 2010). In addition, trauma informed care is a critical framework for addressing the complexity of trauma exposure and related mental health struggles (Greeson et al., 2011).

PREVIOUS CIDI RESEARCH

CIDI's recent research (Center for Innovation through Data Intelligence, 2025) found that four-year graduation rates for New York City Public Schools (NYCPS) students in foster care increased from 25.2 percent to 46 percent over the past 10 years. More than half (52.7 percent) of students in foster care who entered 9th grade in the 2019-2020 academic year graduated in five years. Fifty-five percent of students who entered high school in the 2018-2019 academic year graduated in six years. Graduation rates among students in foster care have vastly improved over the past 10 years, yet they lag when compared to overall NYCPS graduation rates: 46 percent of foster care students compared to 83 percent for all students in the 2023-2024 academic year (New York State Education Department, 2024).

CIDI's research has identified both foster care and educational characteristics associated with high school graduation among NYCPS students in foster care (Center for Innovation through Data Intelligence, 2022, 2025). Positive characteristics include being in kinship care, attending the same high school from entry to completion, proficiency in the New York State 8th grade Math and English Language Arts (ELA) exams, and higher 8th grade attendance. Negative characteristics include experiencing residential care, chronic absenteeism in 8th grade, lack of proficiency in 8th grade Math and/or ELA, and repeating 9th grade. CIDI's research also underscored the value of ongoing multi-agency efforts by NYCPS, the NYC Administration for Children's Services (ACS), and the NYC Department of Youth & Community Development (DYCD) to support students in foster care. Efforts include the Summer Youth Employment Program (SYEP), free afterschool programs, prioritization of kinship care, and mentorship programs like Fair Futures and Road to Success.

SEQUENCE ANALYSIS

CIDI's previous analyses identified factors associated with high school graduation among foster care youth, but it is unknown whether the timing, order, and duration of these experiences have an impact on graduation. This new report builds upon CIDI's previous analyses and leverages its rich administrative data sources, employing a technique called sequence analysis to better understand how the timing, order, and duration of foster care experiences are associated with educational outcomes. The insights generated are critical for informing child welfare policy and practice and improving outcomes for this population.

Sequence analysis, developed by the American sociologist Andrew Abbott, enables social scientists to answer research questions related to the order of events or processes such as occupational histories or organizational career trajectories (Liao et al., 2022). Sequence analysis turns life stories into ordered steps or states (like working, entering a shelter, or going back to school), compares these sequences, and looks for patterns across them. The sequences are illustrated using stacked bars of lines, with different colors representing different states. This helps researchers find patterns—sequencing, timing, duration—in seemingly random data. The aim of sequence analysis is to examine the pathways taken by individuals by assessing the timing of the different conditions experienced, transitions between conditions, and their duration (Abbott & Tsay, 2000).

In child welfare research, sequence analysis is used to identify distinct patterns or trajectories of a child's involvement with the child welfare system, such as foster care entry and exit, changes in placement type, and interactions with other systems (e.g., the justice system and cash assistance programs). For example, Herz et al.'s 2025 study analyzed child welfare administrative data to identify and understand how Child Protective Services (CPS) pathways are associated with juvenile justice involvement. The study produced four distinct CPS pathways and found the “persistent” pathway (involvement from childhood through adolescence) to be associated with higher rates of juvenile justice involvement. In a previous study, CIDI employed sequence analysis to identify patterns of system involvement for youth who exited foster care or shelter (Center for Innovation through Data Intelligence, 2018).

Understanding the sequence of child welfare-related events during a child's stay in foster care helps researchers and child welfare professionals understand how the timing, duration, and nature of CPS experience create different pathways that affect youth outcomes. The insights generated are critical for informing child welfare policy and practice and improving outcomes for young people who experience foster care. Prior efforts have been made to identify and understand pathways through the child welfare system, but no study to date has attempted to identify these pathways throughout high school and their association with high school graduation. This study generates typologies of child welfare pathways during high school utilizing administrative data from NYCPS and ACS.

RESEARCH QUESTIONS

1. How do the timing, order, and duration of type of care and discharge location from foster care relate to high school graduation rates?
2. Are educational characteristics different among students with different patterns of care?

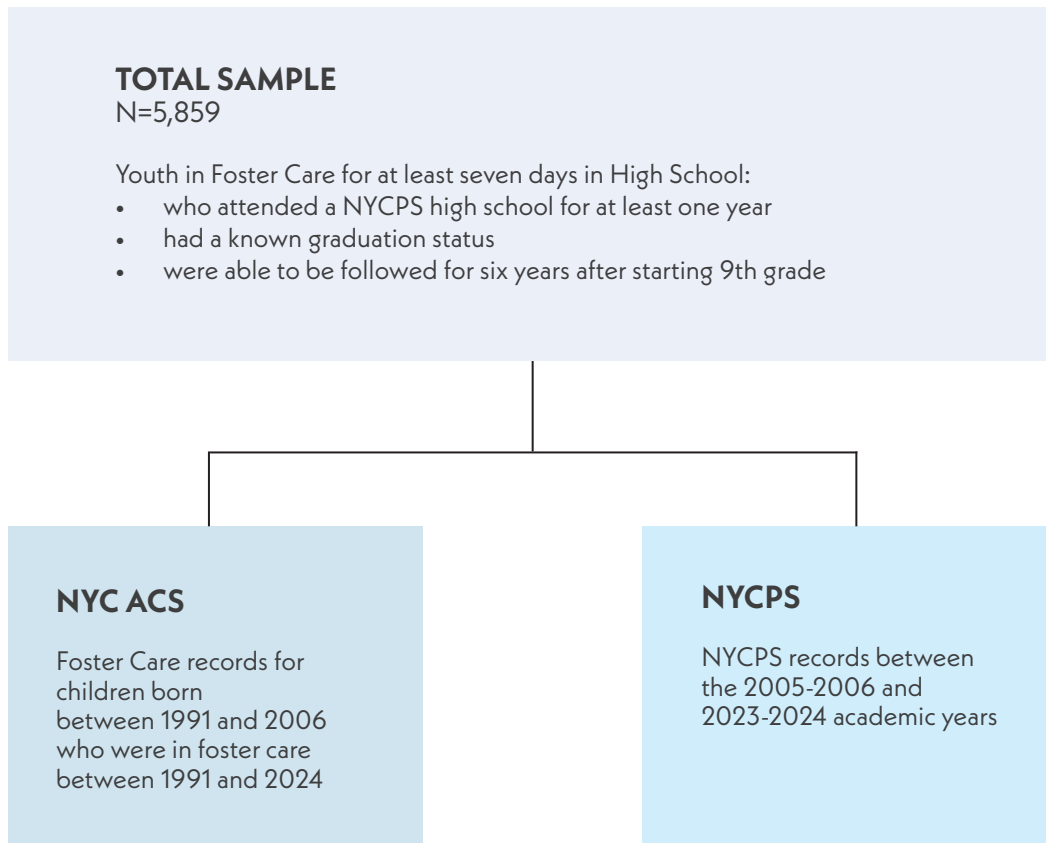
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Methodology

SAMPLE

This study leveraged data from New York City administrative sources. ACS provided foster care records for children born between 1991 and 2006 who were in foster care between 1991 and 2024. These records were linked to NYCPS records between the 2005-2006 and 2023-2024 academic years. The sample included youth in ACS foster care for at least seven days during high school who attended a NYCPS high school for at least one year, had a known graduation status, and were able to be followed for six years after starting 9th grade. The final sample included 5,859 students in the 2011 through 2018 9th grade entry year cohorts who graduated between the 2014-2015 and 2023-2024 academic years.

Figure 1. Sample Design



METHODS

Sequence Analysis

Sequence analysis was used to visualize, describe, and group patterns of foster care experiences for the six years following their entry into high school. Outcomes and student characteristics were then examined by groupings of experiences, or clusters. The analysis was conducted using the TraMineR package¹ in the R statistical computing environment (Gabadinho et al., 2011). Sequence analysis provides a more nuanced understanding of a student's foster care experiences over time than time-aggregated measures, such as total days in care and the placement type at which the student spent the most time. It incorporates three dimensions of the student's foster care experiences in order to distinguish patterns: the order, the duration, and the timing (Studer & Ritschard, 2016).

Each student was assigned a mutually exclusive state for each month, beginning with September of 9th grade and ending 72 months (six years) later. The states were determined by the placement type and discharge status of the students (Table 2).

Table 2. States of Foster Care for Sequence Analysis

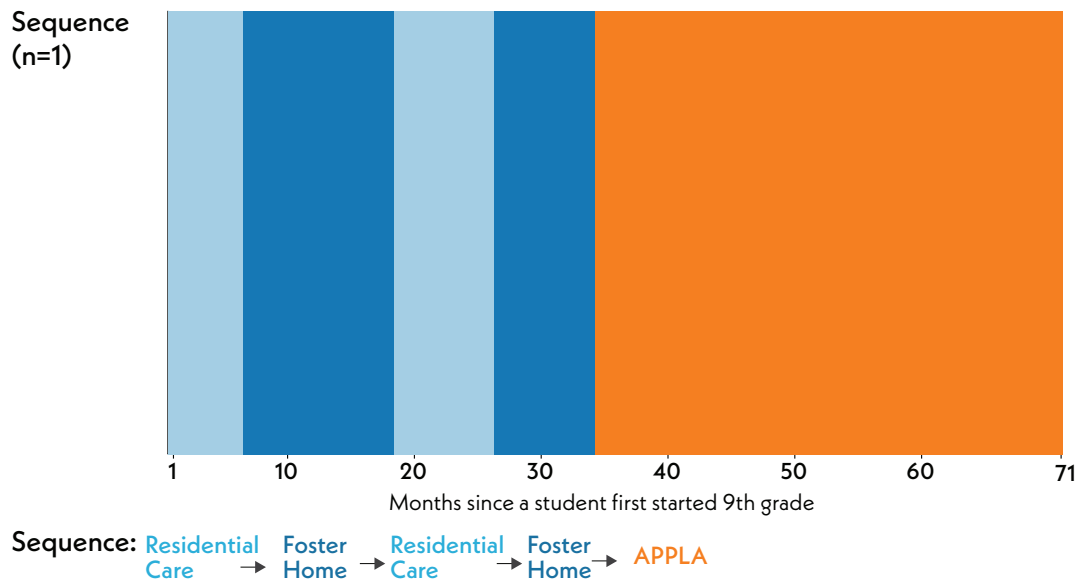
State 1	Discharged to KinGAP
State 2	Discharged to AWOL
State 3	Discharged to APPLA
State 4	Discharged to Reunification
State 5	Discharged to Adoption
State 6	Other Discharge Status
State 7	Preplacement
State 8	Kinship Care
State 9	Foster Home
State 10	Residential Care

A student could only be in one mutually exclusive state each month. When a student was in multiple states in a single month, they were assigned to the state higher on the list. For example, if a student was in both residential care and preplacement in a single month, they were assigned to the residential care state.

¹ The TraMineR package was developed at the Institute of Demography and Socioeconomics (IDESO), University of Geneva, Switzerland. It has functions for manipulating, describing, visualizing, and analyzing sequences of states or events. <https://traminer.unige.ch/>

Figure 2 shows an example of a single student's pathway through foster care since beginning 9th grade.

Figure 2. Example Pathway through Foster Care



In the Figure 2 example, the student was in residential care for the first seven months of high school, then in a foster home through month 18, then returned to residential care through month 26, then again in a foster home through month 34 before being discharged to APPLA.

Cluster Analysis

The differences between patterns among students were calculated using a distance metric in order to group students based on their trajectories. Youth who had similar experiences in the six-year follow-up period were considered “closer” to each other than they would be to youth who had vastly different trajectories. The distance metric chosen for this study was Dynamic Hamming distance, which emphasizes differences in timing of service use slightly more than the sequence or overall duration of different services (Studer & Ritschard, 2016).

The distance metric was used in a clustering algorithm to create groups of students with similar foster care experiences. A cluster dendrogram—a visualization of hierarchical clustering—was used to identify the optimal number of clusters based on what is of relevance to practice and policy. Once the clusters were determined, descriptive profiles of each group were developed. They included visualizations and statistics about the groups, such as six-year high school graduation rates, demographics, and educational characteristics (e.g., chronic absenteeism in 8th grade, disability status).

DEFINITIONS/GLOSSARY

The following definitions were used for this study.

FOSTER CARE CHARACTERISTICS

Adoption	The process by which a foster parent(s) or other guardian becomes the permanent legal guardian of a child in foster care.
APPLA	Another Planned Permanent Living Arrangement (APPLA) is a permanency goal for older foster care youth who do not have a goal of reunification, KinGAP, or adoption.
AWOL	Absent without leave (AWOL) is defined as when a child in foster care leaves their assigned facility, foster home, or supervision without permission. For nonsecure placement, it may include being missing for 24 hours (NYC Administration for Children’s Services, 2025b).
Foster Home	Placement with families who are paid to provide a home environment, with quality care where caregivers meet the child/youth’s physical, emotional, and developmental needs (NYC Administration for Children’s Services, 2025b).
KinGAP	A permanency program that provides financial aid and medical coverage to relatives (grandparents, aunts, etc.) who become legal guardians for children exiting the foster care system, offering a permanent home when adoption is not feasible (NYC Administration for Children’s Services, 2025b).
Kinship Care	Placement with relatives, such as grandparents, aunts, uncles, siblings, extended family, or family friends who are paid to provide a home environment, with quality care where caregivers meet the child/youth’s physical, emotional, and developmental needs (NYC Administration for Children’s Services, 2025b).
Preplacement	A temporary foster care placement prior to being placed in either kinship, foster home, or residential care.
Residential Care	Placement in a therapeutic treatment setting, including a group home or a facility with other children/youth who are in foster care and are cared for by professionally trained childcare staff (NYC Administration for Children’s Services, 2025b). This excludes preplacement, which is short-term congregate care for children prior to their foster care placement.
Reunification	The process by which a child in foster care returns to their family of origin. New York City focuses on safely reunifying children with their families through tailored support services, parent advocacy, and housing assistance

EDUCATIONAL CHARACTERISTICS

Chronic Absenteeism	A student misses more than 10 percent of school days in an academic year.
Cohort	The year a student enters 9th grade for the first time. For example, a student in the 2018 cohort who began 9th grade in the fall of 2018 would be expected to graduate in four years in June 2022, five years in June 2023, or six years in June 2024.
Graduation	High school graduation or earning a high school degree (not GED) within six years of beginning 9th grade.
Proficiency	A student scores at Level 3 or 4 on the New York State Math or ELA exam.
SWD	Student with a disability (SWD) is a student with an Individualized Education Program (IEP) to address learning differences or disabilities.

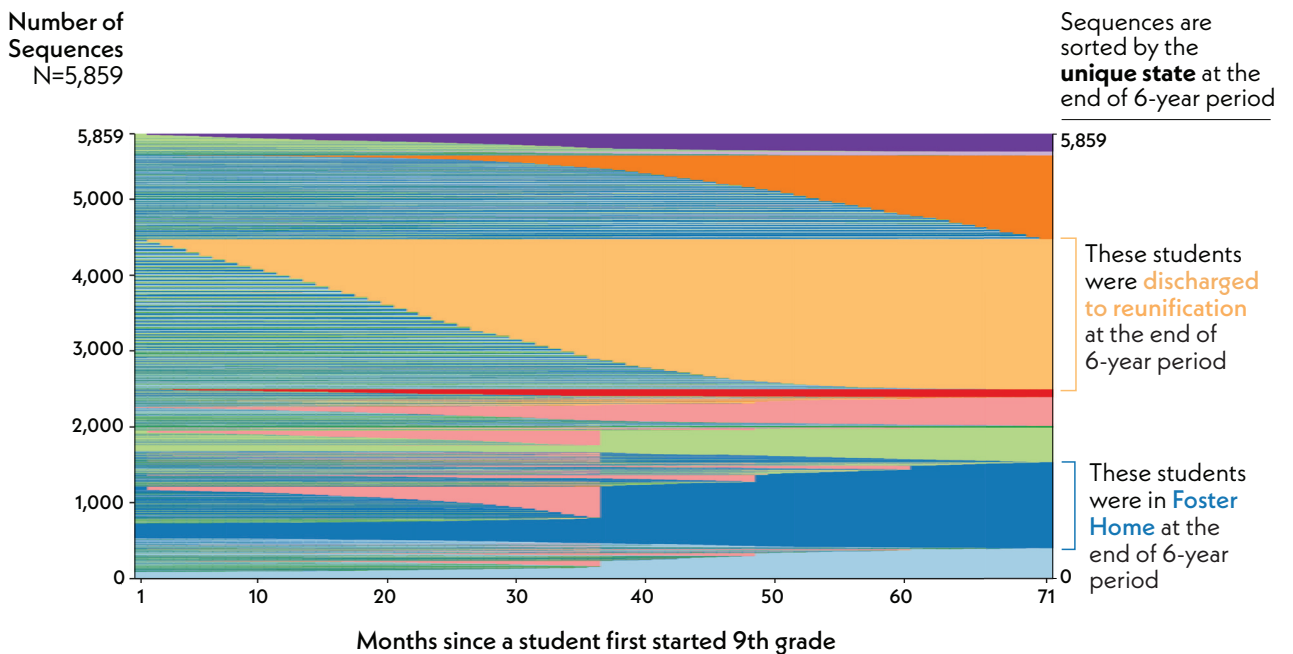
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Findings

OVERVIEW OF SEQUENCES

Figure 3 shows the individual sequences of all 5,859 students in the sample. There were 3,022 unique sequences of foster care experiences from month 0 to month 71 since the students began 9th grade.

Figure 3. Individual Sequences of Foster Care Experiences

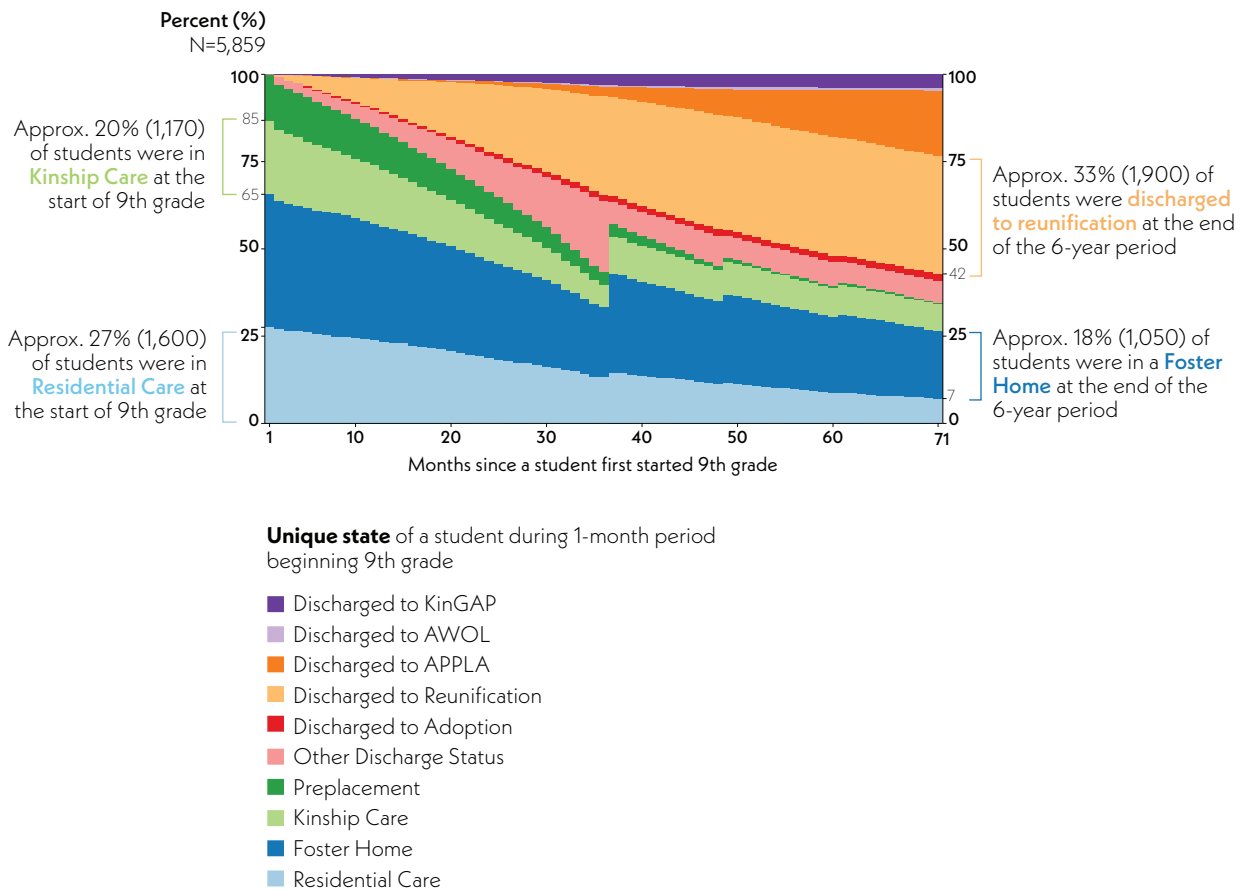


Unique state of a student during 1-month period beginning 9th grade

- Discharged to KinGAP
- Discharged to AWOL
- Discharged to APPLA
- Discharged to Reunification
- Discharged to Adoption
- Other Discharge Status
- Preplacement
- Kinship Care
- Foster Home
- Residential Care

Another way of looking at individual sequences is to use a density plot. Figure 4 shows the proportion of students in each state (sequence density), by month, from the beginning of 9th grade. Approximately 25 percent of students were in residential care during month 0 (state 1). By month 71, more than 50 percent of students were discharged from care (states 5 through 10), with approximately 30 percent discharged to reunification permanency by month 71.

Figure 4. Sequence Density by Month

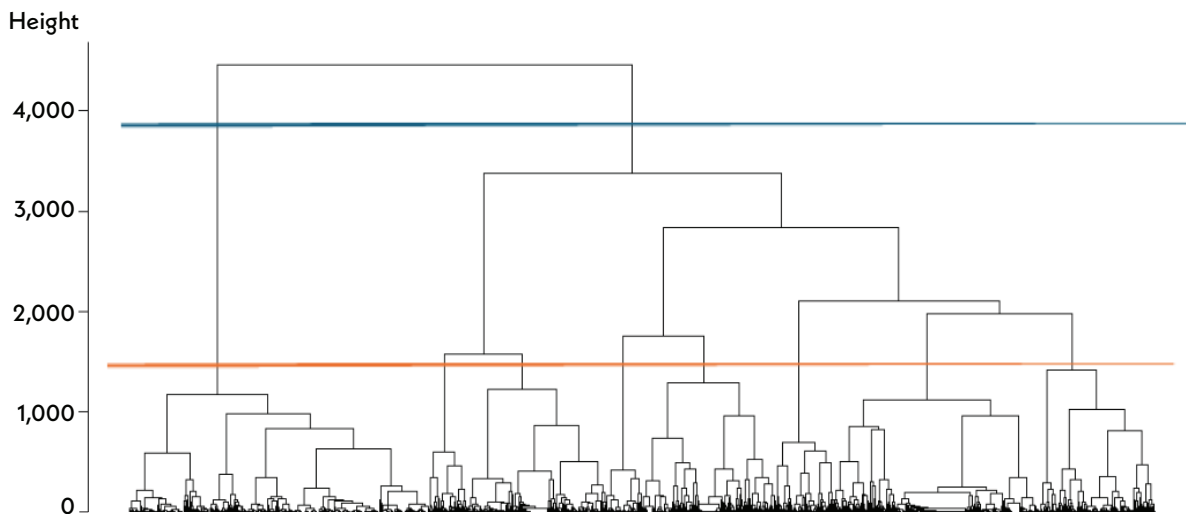


Clusters

When conducting cluster analysis, the analyst must carefully select an optimal number of clusters. While a small number of clusters is desirable, too few may result in groups containing sequences that are very different from one another. Choosing too many clusters may result in small groups that are not meaningfully different from one another. It is important to choose a number of clusters that ensures members within each group are relatively similar and ensures the clusters themselves are meaningfully distinct.

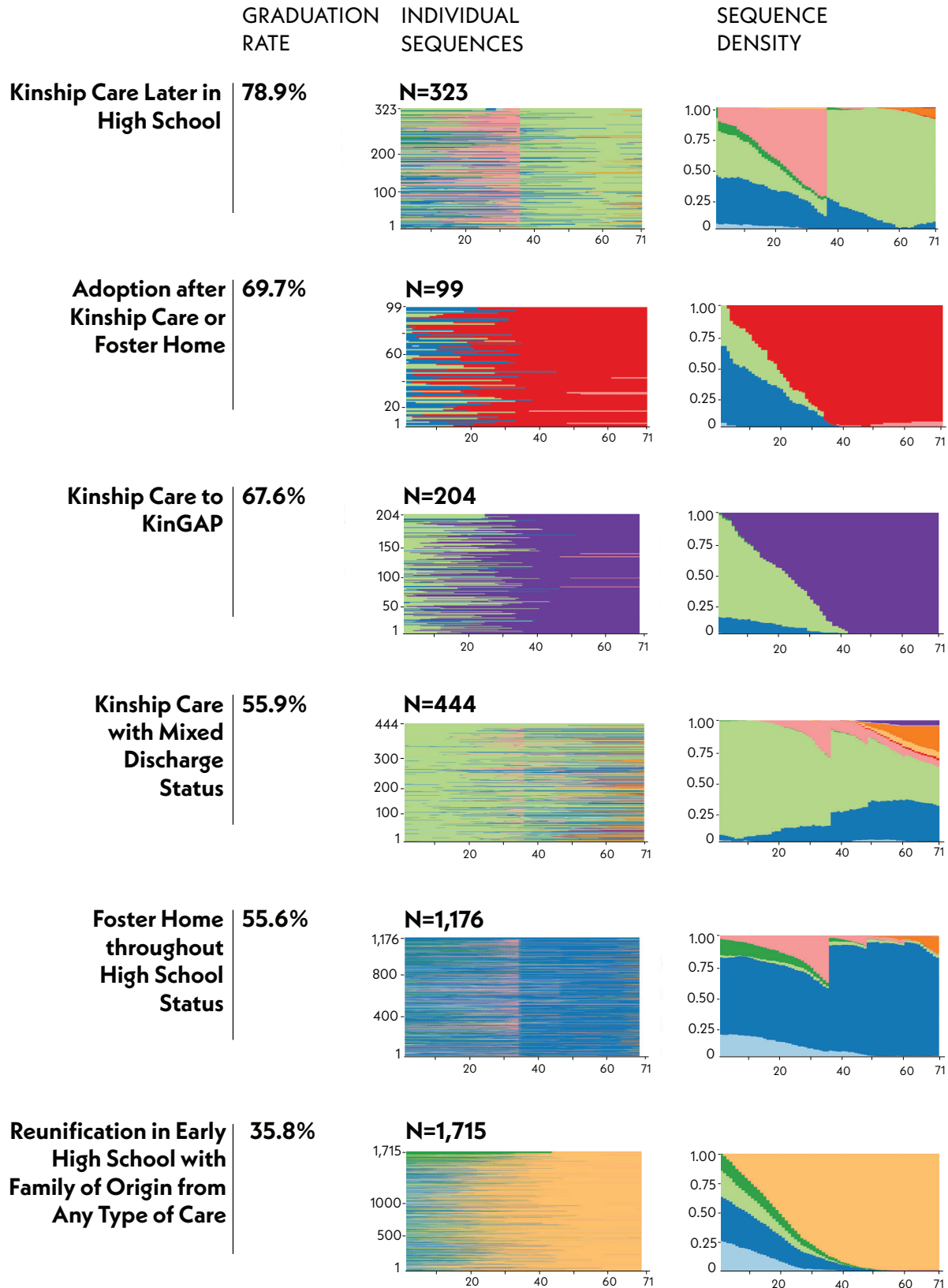
The cluster dendrogram (Figure 5) was used to help determine the optimal number of clusters. The bottom of the dendrogram shows all sequences in relationship to one another. For example, the sequence on the far left is most dissimilar to the sequence on the far right. The number of clusters was chosen to maintain adequate sample size in each cluster and group the most similar sequences together. Had the analysis only included two clusters (blue line, Figure 5), the dendrogram would have been cut off at the blue line. All members in the left branch would have been in one cluster and everyone in the right branch in another. This cutoff would have grouped dissimilar students together into one cluster, based on how far away they were on the bottom axis. After an iterative process of choosing various cutoffs, the final analysis included 11 clusters, as shown by the orange line.

Figure 5. Cluster Dendrogram of Sequences



The 11 clusters vary by type of care, duration of care, discharge status, and timing of care and discharge in relation to entering 9th grade. Figure 6 shows all 11 clusters in descending order by six-year graduation rate.

Figure 6. Clusters of Foster Care Sequences



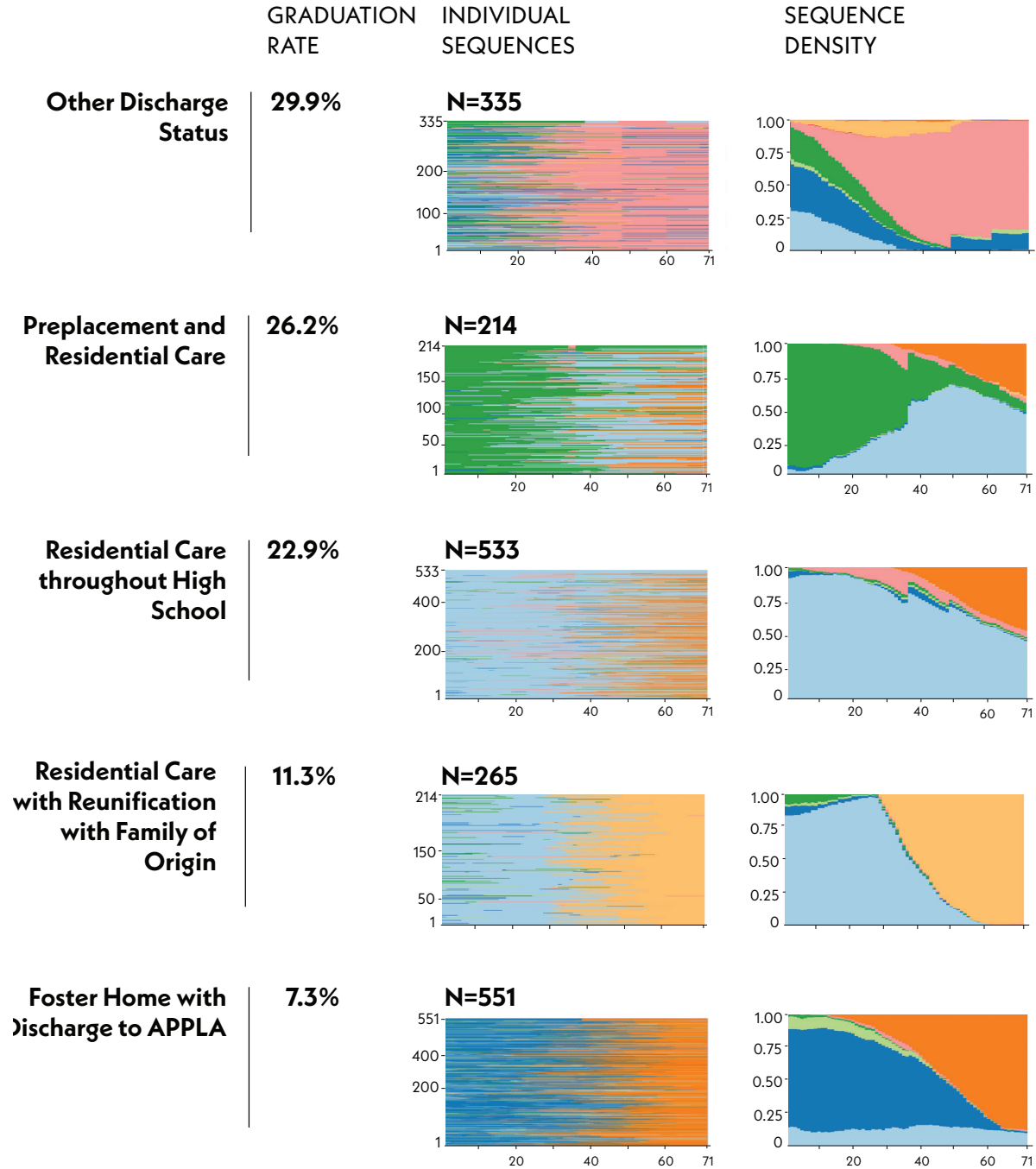


Table 3. Demographic and Educational Characteristics by Cluster

		Graduation Rates (%)	Female (%)	Race/Ethnicity				Educational Characteristics			Student with Disability (%)
				Asian (%)	Black (%)	Hispanic/Latina/o/x (%)	White (%)	Chronically Absent in 8th Grade (%)	Proficient in 8th Grade ELA (%)	Proficient in 8th Grade Math (%)	
1 Clusters with Highest Graduation Rates	Kinship Care Later in High School N=323	78.9	65.0	3.4	57	33.7	5.3	43.8	24.5	16.9	33.7
	Adoption after Kinship Care or Foster Home N=99	69.7	49.5	2.0	65.7	23.2	7.1	30.1	10.6	3.9	65.7
	Kinship Care to KinGAP N=204	67.6	52.5	2.5	59.3	32.8	3.9	42.5	18.3	10.5	41.2
2 Clusters with Above Average Graduation Rates	Kinship Care with Mixed Discharge Status N=44	55.9	64.0	2.9	52.5	36.9	6.3	51.1	17.3	13.5	32.9
	Foster Home throughout High School N=1,176	55.6	65.6	3.8	59.1	32.3	3.8	46.2	16.1	14.9	43.1
3 Clusters with Average Graduation Rates	Reunification in Early High School with Family of Origin from Any Type of Care N=1,715	35.8	55.5	2.6	48	41.9	5.8	61.2	15.8	13.4	45.5
	Other Discharge Status N=335	29.9	47.8	2.1	51.6	39.4	5.1	66.2	9.8	6.7	55.8
	Preplacement and Residential Care N=214	26.2	57.0	2.3	56.1	35	6.1	53.9	8.2	7.9	51.9
	Residential Care throughout High School N=533	22.9	57.4	2.3	54.2	40.2	2.3	63.8	7.6	9.5	56.8
4 Clusters with Below Average Graduation Rates	Residential Care with Reunification with Family of Origin N=265	11.3	43.4	1.5	50.9	41.5	6.0	67.5	9.3	9.6	64.5
	Foster Home with Discharge to APPLA N=551	7.3	57.5	3.1	50.5	42.5	3.1	70.3	7.8	5.3	54.6

The clusters exhibited significant differences not only in type of foster care placements and discharges but also in demographic and educational characteristics. Even among clusters with the highest or lowest graduation rates, demographic and educational characteristics varied greatly.

Students with the highest graduation rates—*Kinship Care Later in High School* and *Kinship Care to KinGAP*—had the highest rates of 8th grade ELA and Math proficiency and some of the lowest proportions of students with disabilities.

Meanwhile, students in the *Adoption after Kinship Care or Foster Home* cluster, who also had one of the highest graduation rates, had the lowest rate of 8th grade Math proficiency and the highest proportion of students with disabilities.

All students in the clusters with the highest graduation rates had low rates of chronic absenteeism in 8th grade.

Students in the clusters with the lowest graduation rates—*Residential Care with Reunification with Family of Origin* and *Foster Home with Discharge to APPLA*—had the highest rates of chronic absenteeism in 8th grade, low rates of 8th grade ELA and Math proficiency, and high proportions of students with disabilities.

Students in the *Residential Care with Reunification with Family of Origin* cluster were most likely to be male, while those in the *Foster Home with Discharge to APPLA* cluster were more likely to be female compared to students in other clusters.

The following section describes all 11 clusters, grouped by those with **highest** graduation rates, **above average** graduation rates, **average** graduation rates, and **below average** graduation rates.

1 Foster Care Experiences with Highest Graduation Rates

Kinship Care Later in High School

Students in the *Kinship Care Later in High School* cluster graduated at a rate of 78.9 percent. They were mostly female (65 percent), had the highest rates of 8th grade ELA and Math proficiency (24.5 and 16.9 percent, respectively), one of the smallest proportions of students with disabilities (33.7 percent), and one of the lowest rates of chronic absenteeism in 8th grade (43.8 percent) compared to students in other clusters.

Adoption after Kinship Care or Foster Home

Students in the *Adoption after Kinship Care or Foster Home* cluster graduated at a rate of 69.7 percent. Students in this cluster were more likely to be Black (65.7 percent), had the lowest rate of chronic absenteeism in 8th grade (30.1 percent), the highest proportion of students with disabilities (65.7 percent), and the lowest rate of 8th grade Math proficiency (3.9 percent).

Kinship Care to KinGAP

Students who were in *Kinship Care to KinGAP* cluster graduated at a rate of 67.6 percent. Students in this cluster had one of the lowest rates of chronic absenteeism in 8th grade compared to students in other clusters (42.5 percent), the highest rate of 8th grade ELA proficiency (18.3 percent), and the lowest proportion of students with disabilities (41.2 percent).

2 Foster Care Experiences with Above Average Graduation Rates

Kinship Care with Mixed Discharge Status

Students in the *Kinship Care with Mixed Discharge Status* cluster graduated at a rate of 55.9 percent. Students in this cluster were more likely to be female (64 percent), more likely to be proficient in 8th grade ELA (17.3 percent), and less likely to have a disability (32.9 percent) than students in other clusters.

Foster Home throughout High School

A large proportion of students in the sample were in the *Foster Home throughout High School* cluster (1,176 out of 5,859, or approximately 20 percent). These students graduated at a rate of 55.6 percent. Students in this cluster were more likely to be female (65.6 percent). They also had higher levels of proficiency in ELA (16.1 percent) and 8th grade Math (14.9 percent) than students in many of the other clusters.

3 Foster Care Experiences with Average Graduation Rates

Reunification in Early High School with Family of Origin from Any Type of Care

The largest proportion of students were reunified with their family of origin during high school after experiencing a mixture of levels of care (1,715 out of 5,859, or approximately 29 percent). Students in this cluster graduated at a rate of 35.8 percent. They were least likely to be Black (48 percent). A higher proportion of students in this cluster were chronically absent in 8th grade (61.2 percent) than students in other clusters.

Other Discharge Status

Students who were in the *Other Discharge Status* cluster graduated at a rate of 29.9 percent. These students were less likely to be female (47.8 percent), had a higher rate of chronic absenteeism in 8th grade (66.2 percent), and had lower rates of proficiency in 8th grade Math (6.7 percent) compared to students in other clusters.

Preplacement and Residential Care

Students who were in the *Preplacement and Residential Care* cluster graduated at a rate of 26.2 percent. These students had an average rate of chronic absenteeism in 8th grade (53.9 percent), average proficiency in 8th grade ELA and Math (8.2 and 7.9 percent, respectively), and an average proportion of students with disabilities (51.9 percent) compared to students in other clusters.

Residential Care throughout High School

Students in the *Residential Care throughout High School* cluster graduated at a rate of 22.9 percent. These students had a higher rate of chronic absenteeism in 8th grade (63.8 percent), a lower rate of 8th grade ELA proficiency (7.6 percent), and a higher proportion of students with disabilities (56.8 percent) compared to students in other clusters.

4 Foster Care Experiences with Below Average Graduation Rates

Residential Care with Reunification with Family of Origin

Students who were in the *Residential Care with Reunification with Family of Origin* cluster graduated at a rate of 11.3 percent. Students in this cluster comprised the lowest proportion of females (43.4 percent) and the second-highest proportion of students with disabilities (64.5 percent). They also had one of the highest rates of chronic absenteeism in 8th grade (67.5 percent).

Foster Home with Discharge to APPLA

Students in the *Foster Home with Discharge to APPLA* cluster had the lowest graduation rate among all student clusters (7.3 percent). This group of students was the third largest cluster, with 551 students out of 5,859 (approximately 9 percent of all students). Students in this group were most likely to be chronically absent in 8th grade (70.3 percent). They also had lower rates of 8th grade ELA and Math proficiency compared to students in other clusters (7.8 and 5.3 percent, respectively).

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Conclusions

This study employed sequence analysis to examine how the timing, order, and duration of foster care placement and discharge location during high school are associated with graduation. Analyzing 5,859 students across 11 distinct placement trajectories, the findings reveal that trajectories that are characterized by stability and supportive adult relationships—particularly through kinship care, KinGAP, and adoption—are strongly associated with high school completion, while trajectories characterized by residential care and discharge to APPLA are linked to poor educational outcomes.

Key Findings

Highest Graduation Rates

The following student clusters were associated with the highest graduation rates:

- ***Kinship Care Later in High School:*** 78.9 percent graduated. This group had the highest 8th grade proficiency rates and a percentage of students with disabilities.
- ***Adoption after Kinship Care or Foster Home:*** 69.7 percent graduated. Despite having the highest rate of students with disabilities (65.7 percent) and the lowest 8th grade Math proficiency rate, students in this cluster achieved strong graduation outcomes, underscoring the protective effect of permanency.
- ***Kinship Care to KinGAP:*** 67.6 percent graduated. This group experienced low chronic absenteeism in 8th grade and likely fewer behavioral issues.

Lowest Graduation Rates

The following student clusters were associated with the lowest graduation rates:

- ***Residential Care with Reunification with Family of Origin:*** 11.3 percent graduated. Students experienced a high disability rate (64.5 percent), chronic absenteeism in 8th grade, and likely loss of therapeutic support post discharge.
- ***Foster Home with Discharge to APPLA:*** 7.3 percent graduated, which was the lowest graduation rate. This group had the highest rate of chronic absenteeism in 8th grade (70.3 percent) and poor academic proficiency, reflecting the instability of APPLA as a last-resort permanency goal.

POLICY IMPLICATIONS

The findings from this study carry specific cross-agency implications for policy and practice across child welfare and its partner systems. Below are specific policy implications, some of which are already in place and should continue:

1 Placements: Continue to Prioritize Kinship Care when Possible

Given the strong association between trajectories that include kinship care and higher graduation rates, policies should continue to prioritize the placement of children with relatives when they must enter foster care.

2 Permanency Planning: Continue to Support KinGAP Access

Ensuring support and streamlined processes for the KinGAP program is essential to promoting easy access for relative caregivers seeking legal permanency.

3 Strengthen the Residential Care Continuum with an Educational Focus

The lower graduation rates for youth in trajectories that include residential care highlights the need for a stronger, more supportive continuum, including for youth with disabilities. Policy that ensures residential treatment is not an isolating endpoint but a therapeutic step toward stability.

This involves:

- **Educational Advocacy:** Providing support dedicated to educational liaisons or advocates within residential facilities to ensure academic progress, credit accrual, and IEP (Individualized Education Program) fidelity.

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- **Pathway to Family-Based Settings:** Incentivizing and supporting programs that create a clear, supported pathway from residential care to less restrictive, family-based settings (such as therapeutic foster homes) when clinically appropriate, ensuring that educational records and supports seamlessly transition with the youth.
 - **Employment and Education Pathways:** Continuing to support programs that connect youth with educational and career opportunities and building bridges between all educational opportunity programs, scholarship resources, guidance counseling, and internship opportunities. Programs include Fair Futures, Road to Success, Transition to Employment, Summer Youth Employment Program.

4 Continued Coordination and Improvement to Strengthen Access to Both Prevention and Intensive Services for Youth and Children with Mental Health Needs

This involves:

- **City/State Collaboration:** Continued coordination between New York State and New York City is essential to improve access to prevention and intensive mental health services for children and youth. State and City focus on timeliness and quality of care by removing barriers to high-level mental health treatment is especially critical for children and young people in foster care, particularly those in residential settings who have greater mental health needs.
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- **Focus on Trauma-Based Practices:** Building on the New York State Office of Mental Health’s settlement agreement, efforts to invest in evidence-based practices—including trauma-focused interventions such as Eye Movement Desensitization and Reprocessing (EMDR) and Functional Family Therapy (FFT)—could improve pre-reunification work. Individual, family, and group therapy should be recognized as key supports during educational transitions, as anxiety around the school year end or return home can impact educational outcomes. Allowing greater flexibility to deliver family therapy during placement, while preserving telehealth and peer-based interventions such as group therapy, may ensure timely access to high-quality, intensive home- and community-based mental health services. The process should also address existing service gaps and implement standard mental health screenings with multiple pathways to access and refer children and youth to needed services.

5 Strengthen Reunification with Post-Reunification Services

The finding regarding lower graduation rates for youth in trajectories characterized by reunification from residential care does not diminish reunification as the primary goal; rather, it underscores the need to extend support beyond the date of return. Policy implications include:

- **Post-Reunification Support:** Allocating dedicated services for post-reunification support services, including in-home coaching, mental health care for both the youth and their family members, and educational monitoring for at least 12 months after the youth returns home.
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- **Cross-Agency Case Planning:** Ensuring that reunification case plans explicitly involve the education system to address potential learning disruptions and ensure the receiving school is prepared to support the youth’s academic and emotional needs.

6 Coordinated and Robust Support for Youth with an APPLA Discharge

APPLA discharges are the exception and are pursued only after all family-based options have been ruled out. However, when APPLA is the appropriate goal, recommendations include:

- **Extended Foster Care and Aftercare:** Continuing to strengthen and promote policies that allow youth to remain connected to supportive services, housing assistance, and educational grants.
- **Cross-System Transition Plans:** Ensuring that APPLA case plans are developed through a cross-agency process—including education, mental health, and housing authorities—to create a concrete, funded plan for housing, employment, and continued education.

7 Enhance Collaboration between Foster Care System and Schools

Strengthen coordination between schools and the foster care system to provide personalized and holistic supports for students in foster care, in partnership with ACS and foster care providers.

Limitations and Future Directions

Several limitations should be considered when interpreting these findings. As with all research using administrative data, this study cannot fully capture the lived experiences of students in foster care. Additionally, the period of analysis overlapped with the COVID-19 pandemic, which introduced unprecedented disruptions to child abuse reporting, learning conditions, graduation policies, mental health, and service deliveries. These factors may have influenced the outcomes and foster care trajectories in ways not fully accounted for here.

Changes in federal foster care policy also may have caused shifts in foster care utilization that this study is unable to capture. For example, a key aspect of the 2018 Families First law is its emphasis on reducing the length of the time young people spend in congregate care and the development of stricter guidelines for the use of residential treatment programs. This included restricting residential care to only those youth with severe mental health, trauma, or behavioral challenges—and for shorter durations. The compounded effect of the COVID-19 mental health crisis, the subsequently limited mental health services, and the Families First law's stricter residential care criteria means that youth experiencing residential treatment may have more severe mental health and behavioral needs than similar youth in the past. Consequently, they face greater educational difficulties, including lower high school completion rates.

There is a critical need for future research focused on students in residential care and those discharged to APPLA. Subsequent studies should focus on understanding the distinct experiences of these youth with particular attention to their initial reasons for placement and their involvement across multiple public systems, including mental health services, homeless services,

and the juvenile justice system. Developing a clearer picture of these cross-system experiences will be essential to informing more coordinated, effective interventions for this vulnerable group of students.

It is important to also consider the relationship between poor educational outcomes and the severity of trauma, adversity, and developmental challenges that often precede child welfare involvement and movement to higher levels of care. Cognitive functioning may also be an important factor to examine. For example, a significant portion of youth in residential treatment settings present with intellectual and developmental disabilities or cognitive limitations that may independently impact educational achievement and graduation rates, regardless of their child welfare history.

Finally, students in foster care have distinct needs. Effective, evidence-based practices—like positive youth development and restorative justice—can turn their unique challenges into strengths. Realizing this potential will require new designs, effort, time, and resources, and must include the adolescents themselves, service providers, researchers, the Administration for Children’s Services, and NYC Public Schools. Trust and positive relationships among these groups are the foundation of these solutions.

Every student deserves every opportunity to pursue and achieve their dreams. This report contributes to the City’s plans to make that goal a reality. The aim is to radically improve young people’s opportunities to ensure an equitable, resilient city. CIDI’s research commitment is supported by cross-agency collaboration and embodies the City’s compassion, commitment, and accountability to these students.

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APPENDIX & REFERENCES

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