Transition Age Foster Care Youth and Homelessness: Methods

Methodology Brief

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This document summarizes research methods used for the [Transition Age Foster Care Youth and Homelessness](#) integrated data report. This study used integrated data from the Charlotte Regional Data Trust (Data Trust). The Data Trust is a community-university partnership that links administrative data across service and organizational systems to provide the community with actionable information. The term "integrated data" is used to describe how individual-level data can be linked across these sources of knowledge. Integrated data can be used to illuminate service gaps as well as highlight connections across disparate groups, organizations, and/or systems.

Research Questions

RQ1. Describe the demographic characteristics or direct experiences of youth in the study population.

RQ2: What proportion of foster-care youth experience homelessness in the 3 years following their 18th birthday? Where do they enter homelessness from?

RQ3. What are the risk factors for homelessness among emerging adults with prior involvement in the foster care system?

Data Sources and Criteria

The current study uses administrative data from the Mecklenburg County Department of Social Services - Children in Custody (CiC), Mecklenburg County Department of Social Services - Abuse and Neglect Investigations (ANI), Mecklenburg County Sheriff's Office (MCSO) and the Homeless Management Information System (HMIS). Table 1 provides descriptions of each dataset.

Table 1: Administrative data used for the study

Admin Data	Description	Years Included
CiC	CiC data is administrative data collected by Child, Family and Adult Services. Data includes client-level information about Mecklenburg County youth who have been placed by the state in foster care.	2000 thru 2022
ANI	ANI data is administrative data collected by Child, Family and Adult Services Data includes client-level information about abuse and neglect investigations for youth who may have been exposed to abuse and neglect in their home.	2000 thru 2019
MCSO	Administrative data from MCSO includes records of individuals who were booked in a Charlotte-Mecklenburg County detention center.	2014 thru 2022
HMIS	HMIS is a federally mandated local information technology database managed by Mecklenburg County Community Support Services. HMIS contains client-level and service-level data from over twenty-five local homeless services organizations regarding the provision of shelter, housing and services to individuals and families experiencing housing instability and homelessness.	2011 thru 2022

The sample for Transition Age Foster Care Youth and Homelessness was identified by determining who within the CiC data met the eligibility criteria for older youth who experienced foster care. The eligibility criteria were the following:

- All youth who exited foster care (excluding exits from extended foster care[1]) between 1/1/2009 and 12/31/2019.
- Include youth ages 13 to 17 when they exited foster care.

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[1] See Transition Age Foster Care Youth and Homelessness Integrated data report for definitions.

After filtering for the above criteria, 673 youth who exited foster care were identified to be included in the sample. All exits starting in 2000 for those identified were retained so that age at first custody and the number of custody episodes over a youth's childhood could be determined. In addition to individual identifiers, age at the time of last exit and date of last exit, the data also included age and date at the time of the beginning of the custody episode, the description of where the youth exited to (i.e. emancipated, reunified, custody with another relative, etc.), and the reason for the exit (i.e. aged out, services no longer needed, etc.).

The identified sample was then matched to the MCSO data to determine whether any youth in the sample had experienced a booking when they were 16 or 17. The sample was also matched to the HMIS data to determine whether, as young adults (ages 18 through 20), individuals in the sample had used any type of homeless services. For this report, homelessness was defined as use of any homeless service given young adults are more likely to rely on alternatives to traditional homeless services when they do not have a permanent home (Morton et al., 2018).

> Homelessness was defined as having used any service provided by HMIS - shelter, transitional housing, outreach, housing prevention, permanent supportive housing/Rapid Re-housing or Other.

In addition, the sample was matched to the ANI dataset to determine the reason for the first foster care custody episode. To identify the appropriate investigation that led to the foster care placement, we did the following:

- Identified the first custody episode for each youth in the sample.
- Sorted the ANI data by individual identifier and the date an investigation was closed.
- Determined the time from when an ANI investigation was closed until the beginning of the first custody episode.
- Identified the investigation closest in time to the first custody episode. The investigation could occur before or after the beginning of a custody episode – there are times when an investigation stays open for a period following the beginning of custody episode.

After consulting with the child welfare team, and other people familiar with the child welfare processes, the research team determined that any custody episode that began 30 days prior to or up to 90 days after the investigation was closed (allows time for in-home family services to be provided) was an appropriate match with a custody case. If the investigation occurred outside of this time frame, it was unclear if the investigation was the appropriate match and, therefore, the custody episode was excluded in terms of determining reasons for the custody episode (see Figure 1). In addition, custody episodes that occurred in the appropriate time frame, but the reason was not consistent with a removal from the home, were also considered excluded (see Table 2).

Between inconsistent timing and inconsistent reasons, the research team was unable to determine the reason for removal for almost 25% of the sample (n=167, 24.8%).

Figure 1: Closing of ANI investigation should occur from 90 days prior to or up to 30 days after a custody episode begins

Table 2: Reasons considered consistent and not consistent with a custody episode

Reasons consistent with a removal episode	Reasons not consistent with a removal episode
Abuse	Missing
Abuse & Neglect	Child protective services not needed
Child protective services needed	Services provided, CPS services no longer
Dependency	Services Recommended
Neglect	Unsubstantiated
Physical abuse	

Child Welfare Data Limitations

During the research phase of the study, the research team uncovered some obstacles with the child welfare data. Documenting issues with data is an important part of working with administrative data and can assist internal and external researchers with understanding the limitations of the data. It also offers constructive feedback for those collecting and managing data systems. We highlight the issues to provide a basis for understanding what was included and where the data may not be complete.

The data used for this study is administrative data, and was not developed for research, therefore, items described in this section are not uncommon. During the research phase of this report, the Institute team identified certain data limitations that made it difficult to assess predictors of homelessness related to child welfare investigations and foster care for young adults who had experienced foster care, such as placement history and reason for placement.

Table 1 reviews the specific variables, the relevance of the variable, and impact on this study (and potentially future studies). The variables/data noted are likely collected within the child welfare system, but they may not be easily extracted, and, therefore, are not included in the data provided to the Data Trust.

Table 1: Child Welfare and Children in Custody data limitations

Data	Description	Concern/Issue	Effect on current study
Initiation of a new custody episode *(Children in custody data variables names: custody_begin)*	Indicates a new custody episode	When a young adult begins a VPA custody episode, based on directives from the state, the date of the initial custody becomes the date the VPA began. All earlier custody episodes are deleted for those individuals who begin a VPA. This removes historical custody episodes for those individuals. The child welfare data team can manually pull the initial custody case, but this is not included in Data Trust data. In addition, to the extent there are subsequent custody episodes they are not available.	• Average number of custody episodes is under-estimated. • Young adults with a VPA represent 10% of the sample • **Overall impact: Minor** (the data provided upon follow up with the child welfare team was adequate, and it only affected a small portion of the data).
Placement *(variable not included)*	A placement is where the youth is placed when removed from the family home. For various reasons there can be multiple placements for a given custody episode.	This data is not included in the Data Trust data. Number of placements indicates housing instability. Placement instability has been found to be associated with homelessness for youth experiencing foster care (Crawford et al., 2015; Dworsky et al., 2013; Farmer et al., 2021; Huang et al., 2022; Lee et al., 2022; Orsi-Hunt et al., 2024).	• Unable to provide information on the number of placements and its association with homelessness. • **Overall impact: Significant**
Initiation of an investigation and the resulting reason assessed for the investigation *(Abuse and neglect investigations data variable names: custody_transfer & type_found)*	This information provides the reason the youth was removed from the family home.	For 25% of the sample, the research team was unable to match custody cases with either an investigation that occurred in the appropriate time frame or had an appropriate reason for a transfer into custody (e.g unsubstantiated would not lead to a transfer), indicating that information is missing. It is unclear whether actual investigations are missing, or additional information related to a specific investigation is missing, or likely a mixture of both.	• Given there could be other factors, not included in this study, related to why the information is missing it is difficult to determine if the missing is occurring at random or not. • If the missing information is not random then analysis may provide inaccurate results associated with this variable. • Differing categories of reasons for removal have been associated with increased risk of homelessness, in particular physical and sexual abuse (Bender et al., 2015; Dworsky & Courtney, 2009; Dworsky et al., 2013). • **Overall impact: unknown**

Analysis

The research team used descriptive statistics to answer research questions 1 and 2. The team used chi-square analysis to answer research question 3. Appendix A includes the results of the descriptive statistics, and the results of the chi-square analysis.

Limitations:

The number for the outcome event of homelessness was limited: Only 50 of the young adults who exited foster care experienced homelessness. The small number for the outcome made it difficult to use preferred inferential statistics such as logistic regression. Even when incorporating specific versions of logistic regression analysis (Firth's Logistic Regression) to account for rare events, standard errors were large limiting confidence in the outcomes. This restricted the research team's ability to analyze predictors of homelessness to using chi-square analysis and made it difficult to analyze variables with multiple levels that resulted in small cell sizes (e.g. reason for custody and type of exit) or examine interactions between variables (e.g. race and gender).

Missing consistent reason for removal for 25% of the sample: As discussed, the research team was unable to identify the reason for a custody episode for almost 25% of the sample. In reviewing how the missing was distributed across certain variables, the main variation was across years with the largest number (and frequency) occurring in 2007[2], although there were missing values almost every year. However, other variables could be contributing to the missingness. For example, it is not clear whether the missing is related to a missing investigation (perhaps for custody episodes where the timing of the investigation is the issue), or whether it is further information relating to the investigation (the reason for removal is inconsistent with a removal from the home).

All the data used for this study is administrative data which is collected for operational purposes and often relies on evolving systems. Similar to other states, the data systems for child welfare in North Carolina are legacy systems that may not meet current standards provided by the Administration for Children and Families (Varley et al., 2024). These legacy systems may make it difficult to extract comprehensive data related to child welfare investigations. North Carolina is currently working to update its data practices in order to serve families better and meet the needs of its stakeholders (NC DHHS, 2019).

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[2] In 2007 there was a systems change related to the ANI data which could be a factor in the data limitations identified in this study.

References:

Bender, K., Yang, J., Ferguson, K., & Thompson, S. (2015). Experiences and needs of homeless youth with a history of foster care. *Children and Youth Services Review*, *55*, 222-231. https://doi.org/10.1016/j.childyouth.2015.06.007

Crawford, B. L., McDaniel, J., Moxley, D., Salehezadeh, Z., & Cahill, A. W. (2015). Factors Influencing Risk of Homelessness among Youth in Transition from Foster Care in Oklahoma: Implications for Reforming Independent Living Services and Opportunities. *Child Welfare*, *94*(1), 19-34. <Go to ISI>://WOS:000394559600005

Dworsky, A., & Courtney, M. E. (2009). Homelessness and the transition from foster care to adulthood [Journal Article]. *Child Welfare*, *88*(4), 23-56. https://doi.org/10.2105/AJPH.2013.301455

Dworsky, A., Napolitano, L., & Courtney, M. (2013). Homelessness during the transition from foster care to adulthood. *American journal of public health*, *103*(1541-0048 (Electronic)). https://doi.org/10.2105/AJPH.2013.301455

Farmer, G. L., Heyman, J. C., Kelly, P. L., & Leaman, T. L. (2021). Prevalence of Risk and Protective Factors for Homelessness among Youth in Foster Care. *Child Welfare*, *99*(1), 1-23. <Go to ISI>://WOS:000837265300002

Huang, H., Li, Y., & Campbell, J. M. (2022). Do independent living services protect youth aging out foster care from adverse outcomes? An evaluation using national data. *Child Maltreatment*, *27*(3), 444-454. https://doi.org/10.1177/1077559521992119

Lee, J. S., Gimm, G., Mohindroo, M., & Lever, L. (2022). Assessing homelessness and incarceration among youth aging out of foster care, by type of disability. *Child and Adolescent Social Work Journal*. https://doi.org/10.1007/s10560-022-00817-9

Morton, M. H., Dworsky, A., Matjasko, J. L., Curry, S. R., Schlueter, D., Chávez, R., & Farrell, A. F. (2018). Prevalence and correlates of youth homelessness in the United States. *Journal of Adolescent Health*, *62*(1), 14-21. https://doi.org/https://doi.org/10.1016/j.jadohealth.2017.10.006

NC DHHS. (2019). *North Carolina Child and Family Services plan*. Raleigh, NC Retrieved from https://www.ncdhhs.gov/documents/files/dss/statistics/2020-2024-child-and-family-services-plan-final-2-2020/download

Orsi-Hunt, R., Clemens, E. V., Thibodeau, H., & Belcher, C. (2024). Young adults with lived experience who later experience houselessness: An exploratory latent class analysis. *International Journal on Child Maltreatment*, *7*, 35-59.

US Census Bureau. (2023). *Exploring age groups in the 2020 census*. https://www.census.gov/library/visualizations/interactive/exploring-age-groups-in-the-2020-census.html

Varley, B., Lee, J., & Bradley, M. C. (2024). *A snapshot of state's Child Welfare data systems of record*. R. Office of Planning, and Evaluation. https://www.acf.hhs.gov/sites/default/files/documents/opre/opre-snapshot-of-states-june2024.pdf

Appendix A – Data tables

Table 1: Demographic information

Characteristic	Category	Count	Frequency
Race/Ethnicity			n=673
	Black	441	65.5%
	One or more races	100	14.9%
	White	76	11.3%
	Hispanic	45	6.7%
	Other	11	1.6%
Sex			n=673
	Female	324	48.1%
	Male	349	51.9%
Age at first custody			n=672
	age 3 to 5	19	2.8%
	Age 6 to 9	60	8.9%
	Age 10 to 12	114	17.0%
	Age 13 to 17	479	71.3%

Table 2: Child welfare experiences

Characteristic	Category	Count	Frequency
Number of custody episodes per a youth			n=672
	One episode	608	90.5%
	Two or more episodes	64	9.5%
Reasons for initial removal from parent			n=499*
	Neglect	168	33.7%
	Child Protective Services Needed	168	33.7%
	Dependency	91	18.2%
	Abuse or Abuse & Neglect	45	9.0%
	Other	27	5.4%
Experienced physical or sexual abuse at some point			n=673
	Abuse found	593	88.1%
	Abuse not found	80	11.9%
Reason for exiting custody			n=663**
	Emancipation	238	35.9%
	Reunification	220	33.2%
	Custody/Guardianship	109	16.4%
	Adoption	69	10.4%
	Other	27	4.1%

* As discussed above approximately 25% of custody episodes did occur in an appropriate time frame and/or did not have a reason consistent with a removal.
** Excludes youth who were missing information concerning their last custody episode n=10.

Table 3: Bookings and use of homeless services

Characteristic	Category	Count	Frequency
Booked from age 16 through age 17			n=673
	Yes	197	29.3%
	No	476	70.7%
Accessed homeless services from ages 18 thru 20			n=673
	Yes	50	7.4%
	No	623	92.6%

Table 4: Youth who accessed homeless services stratified by reason for last exit

Characteristic	Category	Count	Frequency
Access homeless services by reason for last exit			n=50
	Emancipation	29	58.0%
	Reunification	10	20.0%
	Other*	11	22.0%

*Other consists of Guardianship/Custody by relative, Authority Revoked, Adoption, Runaway & Other.

Table 5: Distribution of race/ethnicity for youth in the sample as compared to youth in Mecklenburg County(US Census Bureau, 2023)

Race/Ethnicity	% of Study Sample	% of youth ages 5 to 17 in Mecklenburg County
Black	65.5%	30.9%
More than one race	14.9%	5.5%
White	11.3%	33.6%
Hispanic	6.7%	22.3%
Other	1.6%	7.7%

Table 6: Chi-square analysis for demographics*

Category	Frequency	Chi-square
		n=50
Female (v. Male)	64.0%	**0.0197**
Black (v. Not Black)	unable to report	**0.0165**
Age 12 or older (v. under 12) at first Custody	unable to report	0.0922

*Bold indicates differences were statistically significant. If frequencies would yield a count of less than 10 for any cell than we are unable to report the data. Unable to report due to small sample sizes.