CT Youth Homelessness System Dynamics Modeling Project

Executive Summary

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This report highlights the key insights gained from Phase 1 of the Connecticut Youth Homelessness System Dynamics Modeling Project, a part of the Reaching Home Campaign to end homelessness.

Project Goal

The goal of this project is to build a system dynamics simulation model to be used by stakeholders in the Reaching Home Campaign to identify leverage points in the homelessness system where interventions will produce the greatest impact for ending youth homelessness in Connecticut by the end of 2020.

What is a System Dynamics Simulation Model?

A system dynamics simulation model is a computer model built by stakeholders that represents a map of the underlying dynamics that drive a problem such as homelessness. The model is built by integrating data from different sources (Homeless Management Information System [HMIS], child welfare, corrections, education, etc.), and then used by stakeholders as a simulation tool to make decisions about where in the system to invest limited resources and to monitor system performance over time.

A system dynamics model offers a tool to understand how young people flow through the system (Figure 1) and the barriers that impede progress toward ending youth homelessness. The goals are to identify strategies to decrease the flow rate of young people becoming unstably housed and to increase the rate of unstably housed youth becoming stably housed.

Process

There are two major phases in this project.

We have completed Phase 1, which convened approximately 100 system stakeholders across the state—including 30 young people who have experienced housing instability/homelessness (14-24 years old)—in 12 separate workshops to build and validate a map of the underlying system structure that drives youth homelessness. This map has been used in the HUD Youth Homelessness Demonstration Project planning phase to develop Connecticut's goals, objectives, and action steps in the Coordinated Community Plan.

In Phase 2, we will build the computational system dynamics simulation model. A change in the project timeline occurred due to a significant delay in obtaining HUD planning funds. As a result, Phase 2 is starting later than originally anticipated.
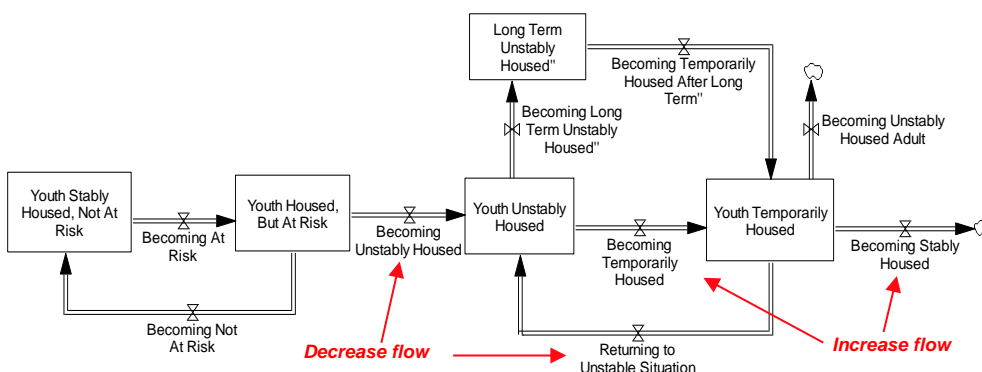

Figure 1. An overview of how young people flow through the system

Stakeholders / Partners

The following organizations participated in this project:

- Capital Community College
- Center for Children's Advocacy
- Community Renewal Team, Inc.
- Compass Youth Collaborative
- Court Support Services Division
- CT Coalition to End Homelessness
- CT Department of Children and Families
- CT Department of Corrections
- CT Department of Education
- CT Department of Housing
- CT Department of Mental Health and Addiction Services
- CT Housing Coalition
- Corporation for Supportive Housing
- Chrysalis Center
- DOMUS Academy
- Farmington Community & Youth Services
- Hartford Foundation for Public Giving
- Hartford Public Schools
- Institute for Community Research / Youth Action Hub
- Institute of Living
- Job Corps
- Journey Home
- Kids in Crisis
- Love146
- Manchester Community College
- Melville Charitable Trust
- My People Clinical Services
- New Britain Public Schools
- New Reach
- Our Piece of the Pie
- Partnership for Strong Communities
- Salvation Army
- Shelter NOW
- Supportive Housing Works
- Thames River Community Service
- True Colors
- The Connection, Inc.
- Village for Families & Children
- Waterbury Youth Service System
- Windham Public Schools
- Windham Region No Freeze Project
- Women & Families Center
- Youth Build
- Youth Continuum

System Insights from Phase 1

Timing of interventions is critical.

A violent, abusive, or "toxic" home environment was seen as a primary driver of young people's housing instability, causing young people to leave home in order to flee the situation. If the young person is under age 18, the Department of Children and Families (DCF) can intervene to assist the young person and the family. DCF staff described several effective evidence-based interventions that are commonly used with families to improve the home environment (e.g., Functional Family Therapy, Multidimensional Family Therapy). **However, families in need of such interventions tend to be identified too late, making the damage to the family nearly irreparable** (Figure 2).
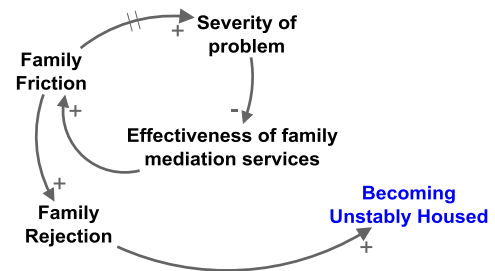

Figure 2. Causal loop diagram created and validated by stakeholders.

The intercepted line between 'family friction' and 'severity of the problem' represents a delay that occurs when the problem is escalating. This escalating feedback loop results in families being identified when the problem is severe. A stakeholder working in the child welfare system explains:

> "There are programs that we sanction, but a lot of the time the relationships are so damaged that there is not a lot of motivation by the parent or young person, and the parents just want them out."

Young people supported this account and described how family services that are required can tend to backfire and actually make things worse, increasing the negative impact on the young person – the risk of more rejection and escalation of problems that become more hidden from child welfare staff.

This highlights the importance of early identification of families in need of services and of using effective methods to assess family readiness for therapy, with the understanding that interventions can worsen outcomes if the timing is not right.

In another example, the system dynamics map indicated that the transition to "adulthood" is a critical time period when young people are vulnerable to housing instability. Society, and sometimes family, expects that 18-year-olds

should be prepared to be financially independent. However, research shows that the majority of young people in CT aren't living independently.[1] This is a critical time period for youth to achieve financial independence, but some young people may be more vulnerable to housing instability during this time if they don't have a safety net. For example, young people who "age out" of child welfare at 18 years old are at increased risk of transitioning to unstable housing.[2] Young people in foster care most likely have lacked the supports and guidance that other young people may have received to support their transition. There are practices in place to improve the transition from child welfare; however, stakeholders described the timing of transition planning as beginning too late and observed a lack of consistency in young people receiving transition planning.

Stakeholders recommend beginning this process as early as possible, and enhancing the monitoring of the implementation of transition planning to ensure that all young people receive it. The goal is to increase the quality of the transition from child welfare and facilitate the young person's development of a larger network of healthy relationships that can become a support and safety net throughout their lives.

Service access delays have severe impact on the system and on the young person.

In a short period of time (defined by stakeholders as less than a week), the consequences of housing instability rapidly escalate into severe and potentially long-term detrimental effects on young people's well-being and future stability. Research shows that the risks and consequences of housing instability increase the longer a young person remains unstably housed.[3-11] Young people begin to feel stuck and lose hope (Figure 3). This despair brings with it increased mental health problems, suicide, substance use, victimization and criminal activity, unsafe sexual practices, and barriers to education and employment.[12-13] A 2016 study in San Francisco found that homeless youth experience a mortality rate in excess of ten times that of the general youth population.[14] These dynamics highlight the significant impact of service access delays on young people, on stakeholders' capacity and resources to respond to the need, and on the cost for society to provide long-term support services for individuals. This demonstrates the need for early intervention during a youth's homeless experience to mitigate against devastating consequences.

In this dynamic system, it doesn't take long for a waiting list to become long and unwieldy. The inability of services to meet the overall need and a delay in young people's access to resources significantly increase the number of housing-unstable young people and the length of time that they experience housing instability.

Without the capacity and resources to respond immediately and adequately to the numbers of young people experiencing homelessness, the system becomes overloaded, increasing the delay for young people to receive help. Young people perceive this delay as "uncaring" and they quickly lose hope for receiving help from the system and turn to other means as a way to survive (Figure 3). These other means are typically illegal and have the effect of increasing young people's length of time in unstable housing, thus increasing the harmful consequences of trying to survive this tumultuous period in their lives.
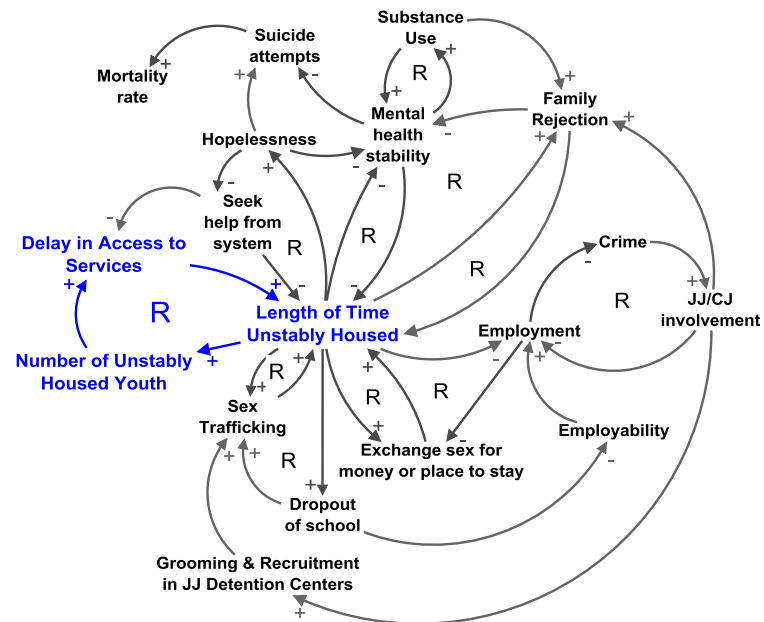

Figure 3. Causal loop diagram of consequences of delayed access to services that escalate over time. "R" refers to a reinforcing feedback loop.

In addition, both youth/young adults and service providers explained that the longer that young people stay unstably housed, the more likely family reunification efforts fail and result in more family rejection and more mental health and substance use issues. Also, a longer time out of home may lead to the inability to fit back into home (youth may self-select to stay away). Thus, safety mechanisms (attempting to reunify with family) can feed back into more rejection. This echoes the same question above related to the readiness of the family for reunification, and the importance of timing to reduce escalating the problem and its impact on young people's mental health.

Service providers and young people consider "couch surfing" or "house hopping" to always be unsafe because these young people move around a lot, often vacillating between sleeping in places where they are vulnerable and places where they may be temporarily safe. Couch surfing youth experience long delays in accessing housing services due to the current definition of homelessness that does not include couch surfing as part of the definition (unless the circumstances are deemed unsafe or

additional criteria are met). Stakeholders believed that our current assessments are in need of improvement in order to accurately assess a young person's level of safety. For example, an accurate assessment would take into account the dynamics of their different housing situations and the level of safety or risk associated with the young person's social networks in the places where they are staying. Because resources are limited and prioritized for young people who are literally homeless and/or unsafe, and because there is need for improving our assessment of safety in association with couch surfing, stakeholders believe that young people who are couch surfing are less likely to receive housing assistance and more likely to become more long-term unstably housed. A recent pilot study conducted in CT provides some evidence to support this theory of considerable risks associated with couch-surfing mostly due to the reliance on high risk social networks as the primary support for housing.[15]

Unintended Consequences of Using Hotels to Address the Delay in Obtaining Housing Services
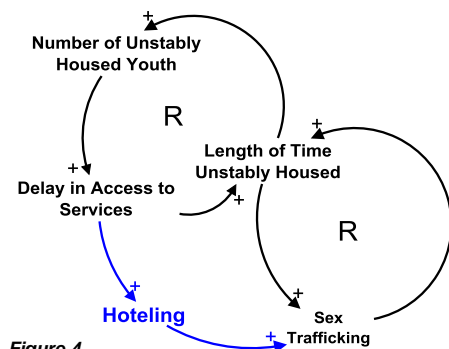
Figure 4

During the group model building sessions, stakeholders learned that a common practice that was intended as a "quick fix" to keep young people safe while waiting to access housing resources was actually increasing their risk (Figure 4). Service providers had been providing hotel stays for highly vulnerable young people in order to keep them safe while they waited for longer term housing supports to become available. Experts in the sex trafficking field highlighted that this practice, coined "hoteling," can increase the risk of young people becoming involved in sex trafficking. This system insight was immediately utilized to inform best practices for young people.

Current policies impede the efforts of young people's extended family/kin/friends to help them with temporary or long-term housing.

In the context of a state budget deficit and limited resources for housing, there is recognition that our system will not be able to keep up with need and that a pragmatic and effective response to youth homelessness will build upon community assets and the support of family/kin. However, service providers and young people call attention to several barriers that impede the

capacity of family/kin to temporarily house young people (Figure 5).

Many young people who had participated in the modeling process discussed having at least one family member who tried to help them when they needed a place to stay. They described these environments as safe and supportive but very temporary because their families did not have the financial resources to continue to support them in their home and because of public housing restrictions related to the limited number of days for visitors. Some family members took risks to help but had to stop when it became too much of a risk that they might lose their own housing. This results in young people having fewer options for a place to stay and an increased burden on the housing system. A service provider explained that she has observed this so many times that there is a saying among staff:

"Section 8 is thicker than blood."

She poses the question: *"The problem is… how do we help our families when there are so many rules?"*

A young person who experienced housing instability stated:

"I couldn't stay there for more than a month because she had Section 8 and she was planning on moving, and for her to move, the landlord had to see the house and he couldn't have seen my stuff in the room. She could have been kicked out. Yeah, so she took a big risk in helping me."
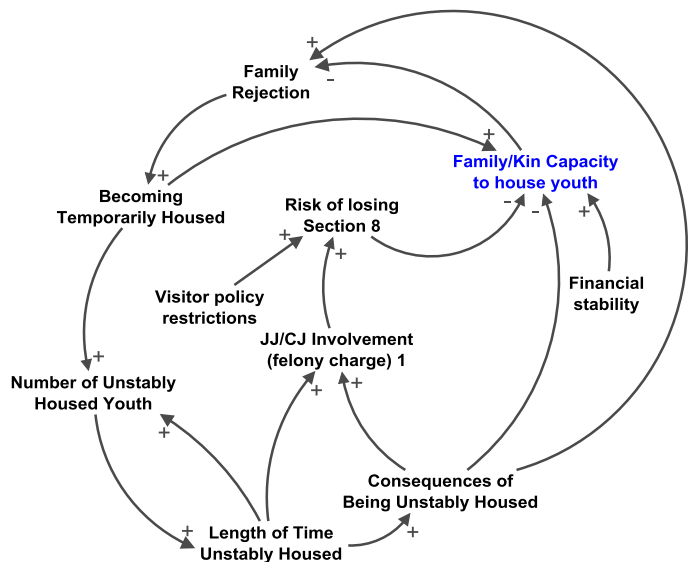
Figure 5. Causal loop diagram of some of the barriers that impede efforts of family/kin to house young people.

Both service providers and young people highlighted the importance of family/kin support in preventing housing instability, preventing future episodes of housing instability, and in reducing the length of time that young people remain housing unstable. These family/kin support networks were seen

as important to young people's ability to stay engaged in school and feel a sense of belonging with the broader community.

Early intervention and prevention efforts will produce the "biggest bang for the buck."

During analysis of the system map, stakeholders identified prevention and early intervention as critical to reducing the inflow of youth becoming unstably housed. Prevention strategies target at-risk young people and their families in order to reduce the number of young people becoming unstably housed. Early intervention reduces the inflow of young people becoming more chronically homeless by reducing their length of time in a housing crisis and the severity of the consequences from experiencing such a crisis. Targeting upstream inflows reduces the expensive downstream costs while at the same time increasing the well-being and stability of young people.
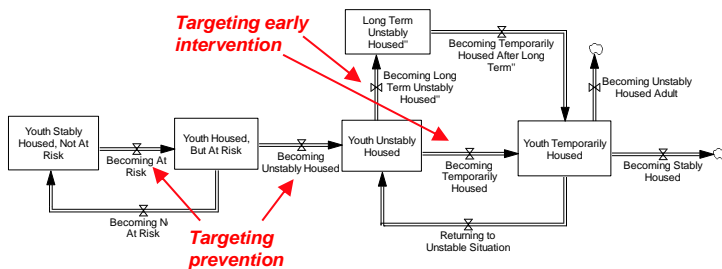

Figure 6. Targeting prevention and early intervention in the system

Stakeholders stressed that a gap in communication and coordination between education, housing, juvenile/criminal justice and child welfare systems is a significant barrier to implementing effective prevention and early intervention efforts. All system actors across different sectors that intersect with young people's lives have a role to play in prevention and early intervention efforts, and alignment of these efforts is essential to increasing the effectiveness of the system in responding to the need and thus reducing the number of unstably housed youth. A young person's housing instability and conflictual family dynamics start early in their lives and escalates through adolescence. Youth who are unstably housed are in turn more likely to drop out of school. Stakeholders described the critical need for increased identification, cross-sector communication and prevention efforts to support youth at risk of housing instability in schools, and to connect them and their families to a system of care/services before it becomes too late for family interventions to be effective (Figure 6).

Opportunities for job training, mentorship and employment were identified as instrumental to effectively prevent youth homelessness. The system map highlighted the interrelatedness between employment and housing stability, and the importance of coordination between systems and programs that assist young people in obtaining employment and housing services.

Next Steps

The next step is to use the system map that was created by stakeholders to build a computational system dynamics simulation model. The research team will reach out to stakeholders for additional data to be used to build and validate the computational model.

References

[1] Updegrove, N, Ruth, L. The time to grow: Meeting the needs of Connecticut youth aging out of foster care. Connecticut Voices for Children Report. December 2016.

[2] Courtney, ME, Dworsky, A, Brown, A, Cary, C, Love, K, Vorhies, V. Midwest Evaluation of the Adult Functioning of Former Foster Youth: Outcomes at Age 26. Chicago: Chapin Hall at the University of Chicago, 2011.

[3] Slesnick N, Dashora P, Letcher A, Erdem G, Serovich J. A review of services and interventions for runaway and homeless youth: Moving forward. Children and youth services review. 2009;31(7):732-742.

[4] Cauce AM, Paradise M, Ginzler JA, et al. The Characteristics and Mental Health of Homeless Adolescents Age and Gender Differences. Journal of Emotional and Behavioral Disorders. 2000;8(4):230-239.

5 Salomonsen-Sautel S, Van Leeuwen JM, Gilroy C, Boyle S, Malberg D, Hopfer C. Correlates of substance use among homeless youths in eight cities. The American Journal on Addictions. 2008;17(3):224-234.

6 Mallett S, Rosenthal D, Keys D. Young people, drug use and family conflict: Pathways into homelessness. Journal of Adolescence. 2005;28(2):185-199.

7 Coates J, McKenzie-Mohr S. Out of the frying pan, into the fire: Trauma in the lives of homeless youth prior to and during homelessness. J. Soc. & Soc. Welfare. 2010;37:65.

8 Buckner JC, Bassuk EL, Weinreb LF. Predictors of academic achievement among homeless and low-income housed children. Journal of School Psychology. 2001;39(1):45-69.

9 Shinn M, Schteingart JS, Williams NC, et al. Long-term associations of homelessness with children's well-being. American Behavioral Scientist. 2008;51(6):789-809.

10 Schwartz M, Sorensen HK, Ammerman S, Bard E. Exploring the relationship between homelessness and delinquency: A snapshot of a group of homeless youth in San Jose, California. Child Adolesc Soc Work J. 2008;25(4):255-269.

11 Votta E, Manion I. Suicide, high-risk behaviors, and coping style in homeless adolescent males' adjustment. Journal of Adolescent Health. 2004;34(3):237-243.

12 Gordon, DM, Hunter, BA. Invisible no more: Creating opportunities for youth who are homeless. The Consultation Cente , Yale University School of Medicine. 2013 Report.

13 Connecticut Counts: Report on Homelessness in Connecticut. Connecticut Coalition to End Homelessness. May 2017.

14 Auerswald, CL, Lin, JS, Parriott, A. Six-year mortality in a street-recruited cohort of homeless youth in San Francisco, California. PeerJ, 2016: DOI 10.7717/peerj.1909

15 Mosher, H, Plourd, K, Garcia, N. Comparing the risk and resilience of homeless and couch surfing youth. Unpublished/In progress.