King County Housing Authority

March 2023

Moving to Work Annual Report Fiscal Year 2022

KING COUNTY HOUSING AUTHORITY

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2022 MOVING TO WORK ANNUAL REPORT

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Letter from the Executive Director/CEO

March 30, 2023

Dear Friends and Colleagues,

The mission of the King County Housing Authority (KCHA) is to set the standard of operational excellence in providing quality and affordable housing, creating viable and resilient neighborhoods, and encouraging upward mobility.

In 2022, KCHA continued to serve residents with that mission in mind while also protecting their health and safety during the COVID-19 pandemic. We modified our program operations in order to provide essential services, implementing regulatory waivers provided under the federal CARES Act and through Moving to Work (MTW) authority. This coordinated response ensured that critical core functions such as leasing, capital construction work, and re-certifications could remain "open for business" without impacting the 12,532 families that KCHA supported during 2022.

Also in 2022, KCHA implemented a "safe return to work" strategy to prioritize the safety and health of our outstanding employees. In the fall, in accordance with the State of Washington's declaring the end of the State of Emergency response to COVID-19, KCHA passed a resolution concluding all local emergency response efforts and corresponding COVID waivers, resuming normal business operations beginning in 2023.

Our region continued to weather low rental vacancies (below 5%) along with rental costs that are increasing faster than wage growth. Despite these challenges, **KCHA's tenant-based vouchers, public housing, and various local programs made possible through MTW flexibility have proven successful once again in providing affordable housing and maintaining housing stability** for King County's most vulnerable individuals and families.

The most recent 2022 point-in-time count confirms that King County is facing a homelessness crisis like never before, indicating 13,368 individuals were experiencing homelessness, a 14% increase from the 2020 count and the highest estimate since the count has been conducted. More than half (61%) of newly admitted KCHA families were experiencing homelessness before entering our housing programs in 2022. Even with these formidable challenges around homelessness, we are pleased that — in collaboration with local partner organizations — we were able to achieve a 100% lease-up rate for the 762 Emergency Housing Vouchers awarded through the American Rescue Plan Act of 2021. **KCHA's holistic approach to leveraging its MTW status made this possible;** EHV clients benefited from our ability to quickly build on existing relationships and investments in community-based housing navigation, a robust Resident Services Department that provided supplemental support services, and access to our own expansive housing stock through our workforce housing portfolio.

Advancing the agency's mission through our MTW status remains critical, now more than ever. While KCHA's mission remains the same, the 2022 MTW Annual Report provides HUD, KCHA residents, our community partners, and the general public information on KCHA programs and describes essential strategies undertaken through 2022. These include: building community; strengthening collaboration; adapting and improving how we work; evaluation for effectiveness and impact; answering the call to serve more community members in need; reducing administrative barriers to advance operational excellence; and advancing equity, diversity, and inclusion in our workplace and the communities we serve.

Each new day offers a chance for us to work together to pursue new opportunities, refine what works, and improve on the past. I hope we can achieve this work together, and I am confident that **KCHA's MTW flexibility will no doubt remain a key driver of our agency's ongoing success**.

Sincerely,

DocuSigned by:
Robin Walls
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Robin Walls

Executive Director/Chief Executive Officer

King County Housing Authority

SECTION I

INTRODUCTION

A. OVERVIEW OF SHORT-TERM MTW GOALS AND OBJECTIVES

In 2022, the King County Housing Authority (KCHA) continued to focus on maximizing Moving to Work (MTW) flexibilities to respond to the local impacts of the COVID-19 pandemic. In large part, due to our MTW status, KCHA remained in a solid position to respond to the needs of our lowest-income community members. MTW flexibility throughout the year enabled KCHA to maintain existing operations and forge innovative partnerships to serve the community in critical ways.

As 2022 continued to be a challenging year for many families, KCHA managed to sustain the success of local pandemic response measures established in 2020 to protect residents and employees from COVID-19's devastating health and economic consequences. Specifically, KCHA leveraged MTW flexibilities to: connect federal resources to households facing the most significant barriers to access; expand the supply of affordable housing; utilize staff capacity and leadership skills to quickly adopt novel ways of administering programs; pair housing assistance with supportive services; and implement social impact initiatives to advance positive life outcomes for KCHA residents. In 2022, KCHA:

SUPPORTED RESIDENT HEALTH, STABILITY, AND WELL-BEING. In 2022, KCHA continued to address our residents' wide-ranging health and wellness needs, and strengthened our agency's capacity to mitigate current and future health and wellness obstacles that KCHA residents face. Poor health and wellness outcomes can seriously impede a family's ability to maintain housing and reach even modest goals aimed to encourage economic independence. To this end, KCHA continued to offer unique site-based wellness activities such as exercise classes and wellness-related activities, COVID-19 vaccine events, and delivery of food and fresh produce to mitigate instances of food insecurity for residents served through the agency's federal housing programs.

In 2022, KCHA's partnership with UnitedHealthcare established an action plan to be implemented in 2023 that aims to provide opportunities for diabetes screening and diabetes self-management support to select KCHA communities, with the prospect of program growth and replication in future years. To develop and implement a comprehensive and responsive health and wellness strategy that thoughtfully involves the health experiences of residents, KCHA established and hired a new position to embed this work into agency operations: Health Initiatives Program Manager.

STREAMLINED OPERATIONS, POLICIES, AND PROCEDURES TO SUPPORT RESIDENTS AND STAFF DURING THE COVID-19 PANDEMIC. As the pandemic progressed, we maintained streamlined and modified processes, policies, and strategies to meet resident needs, ease administrative burdens, remove barriers to efficiently administer federal housing assistance, and assure resident and staff safety. Since KCHA's March 2020 COVID-related emergency declaration, we have utilized MTW flexibility and HUD waivers to limit inspection frequency, adopt streamlined verification processes, modify client review schedules, and ease program eligibility requirements. We also increased non-contact options available to residents through the expanded use of online rent payments and DocuSign for document processing. In the fall of 2022, in accordance with the State of Washington's declaring the end of the State of Emergency response to COVID-19, KCHA passed a resolution concluding all local emergency response efforts and corresponding COVID waivers, recommencing the agency's normal operations and policies beginning in 2023.

ADVANCED RACIAL EQUITY AND SOCIAL JUSTICE IN THE COMMUNITIES WE SERVE. The effects of historical and institutional racism remain pervasive and continue to be evidenced in housing outcomes, including disproportionate rates of homelessness, displacement, and neighborhood access. In response, KCHA has doubled down on efforts to embed equity, diversity, inclusion, and belonging into every aspect of our work, acknowledging a range of intersectional identities and placing an intentional emphasis on racial equity.

In 2022, agency efforts included convening KCHA's Board of Directors and the Executive Leadership Team to complete an Equity, Diversity, Inclusion, and Belonging (EDIB) workshop. They established three EDIB priorities:

- Revamp the engagement structure for the Board of Commissioners around EDIB topics, themes, commitments, programs, activities, and initiatives.
- Strengthen KCHA's communications strategy and capabilities.
- Focus on the process by which KCHA leaders integrate EDIB into their leadership, team, and unit and the ways they connect with residents and partners (internal and external).

KCHA also launched *Inclusion Now*, a behavior-based (mandatory) training program to address today's relevant issues and spotlight significant business imperatives for leveraging the cultural backgrounds, personal characteristics, and unique experiences of all employees to truly promote and benefit from an inclusive workplace. At the close of 2022, KCHA launched the *Inclusive Culture and EDIB Definitions Survey* to gauge employee perceptions of current KCHA culture to help develop KCHA's EDIB definitions and the new three-year EDIB strategy (2024-2027). Finally, the inaugural staff of the Office of EDIB increased its capacity by hiring two full-time employees who through 2022 advanced their expertise through the *Courageous Conversations About Race (CCAR) Practitioner Certification* and *Diversity Professional Certification* to maximize the use of *The Courageous Conversation*® protocol and EDIB best practices to move this work forward.

INCREASED THE NUMBER OF EXTREMELY LOW-INCOME HOUSEHOLDS WE SERVE. A sufficient supply of affordable housing is an essential underlying determinant of social justice and key to our region's strategies to combat related issues of poverty, public health, community displacement, and homelessness. While federal resources have not kept pace with our community's need for affordable housing, KCHA continues to pursue every available opportunity to expand our housing assistance for low-income households. Extremely-low income (ELI) households (those making 30% or less than area median income) represent 80% of KCHA households, and the number of ELI households served by KCHA increased by 4% in 2022. Specific efforts to support ELI households included: applications for new special purpose vouchers; property acquisitions and new development to preserve and increase the overall supply of affordable multifamily housing in the region; the use of banked Annual Contributions Contract (ACC) authority to expand housing options for extremely low-income households; project-basing voucher rental assistance to help

increase the supply of Permanent Supportive Housing (PSH); over-leasing of our Housing Choice Voucher (HCV) program; and the use of locally designed innovative subsidy programs to house and support diverse populations.

In 2022, KCHA continued working in close collaboration with our local Continuum of Care partners to successfully complete the lease-up of 762 new Emergency Housing Vouchers for households experiencing or at risk of homelessness. Throughout the year, developing and sustaining strong partnerships with other local agencies remained more critical to successfully pair rental assistance with applicable supportive services and ultimately improve outcomes in reducing homelessness in King County. KCHA reached full utilization of the 762 Emergency Housing Vouchers, a leasing rate that is one of the best in the nation and nearly double that of peer jurisdictions.[1] KCHA's holistic approach to leveraging its MTW status made this possible; EHV clients benefited from our ability to quickly build on existing relationships and investments in community-based housing navigation, a robust Resident Services Department that provided supplemental services, and access to our own expansive housing stock through our workforce housing portfolio.

LEVERAGED PARTNERSHIPS TO ADDRESS THE MULTI-FACETED NEEDS OF THE INDIVIDUALS AND FAMILIES EXPERIENCING HOMELESSNESS IN OUR REGION.

Among the households entering KCHA's federally subsidized programs in 2022, 61% reported that they were experiencing homelessness prior to receiving housing assistance. These households include diverse populations with varying needs: veterans with complex health challenges; individuals living with behavioral health issues; those involved with the criminal justice system; young adults experiencing homelessness and/or transitioning out of foster care; families fleeing domestic violence; non-elderly individuals with disabilities; individuals exiting chronic homelessness; and families involved with the child welfare system. The need to reduce homelessness is even more urgent in our current context as King County continues to grapple with a high prevalence, ranking fourth in the nation in the number of individuals experiencing

[1] HUD press release, Dec 9, 2022; HUD No. 22-250. www.hud.gov/press/press_releases_media_advisories/HUD_No_22_250

homelessness.[2] In 2022, KCHA continued to partner with King County government, public and behavioral health care systems, local service provider partners, the Veterans Affairs Puget Sound Health Care system, the region's Continuum of Care, the King County Regional Homelessness Authority, educational institutions (K-12 and community colleges), and the Washington State Department of Children, Youth, and Families to provide supportive housing and advance regional efforts to address homelessness. Highlights from these ongoing and future efforts include:

- **Innovative Partnerships.** Launched in 2021 in partnership with King County Veterans Program (KCVP), the innovative Collaborative Case Management program continues to expand access to up to 15% of KCHA's Veterans Affairs Support Housing (VASH) vouchers through community-based referral and case management pathways. By the end of 2022, 94 veterans had successfully moved into housing, with an additional 35 active in their housing search. In mid-2022, KCVP provided KCHA with grant funding, allowing KCHA to hire two VASH Housing Navigators on staff to provide hands-on housing search assistance to veterans.
- **Adding Incremental Vouchers to our Portfolio.** KCHA actively pursues new incremental special purpose vouchers as HUD makes them available. In 2022, KCHA applied for HUD's new Stability Voucher program and an additional allocation of Foster Youth to Independence (FYI) vouchers. KCHA also was awarded 50 new Mainstream and 100 new VASH vouchers issued in 2022.
- **Streamlining Referrals and Entry Pathways.** As our portfolio grows, KCHA has a renewed focus on streamlining referral pathways to special purpose vouchers from our regional partners, simplifying KCHA's application and briefing materials, and lowering process barriers to ensure efficient and equitable access to housing subsidies. In 2022, KCHA and the Seattle Housing Authority implemented a universal application packet aimed to streamline the application process for VASH, FYI, Family Unification Program (FUP), and Emergency Housing Voucher applicants and referring agencies. KCHA also implemented a

[2] U.S. Department of Housing and Urban Development (March 2021). The 2020 Annual Homeless Assessment Report to Congress. www.huduser.gov/portal/sites/default/files/pdf/2020-AHAR-Part-1.pdf

Secure File Transfer Protocol to receive referrals from community-based organizations that refer their clients through KCHA's special-purpose voucher programs.

- **Project-Basing Assistance.** We made good on our commitment of 213 project-based vouchers in 2022 to develop permanent supportive housing (PSH) for individuals experiencing chronic homelessness.

DEEPENED PARTNERSHIPS WITH LOCAL SCHOOL DISTRICTS TO IMPROVE EDUCATIONAL OUTCOMES. In 2022, 15,507 children called KCHA's subsidized housing home. KCHA sees the academic success of these youth as an integral element of our core mission to prevent multi-generational cycles of poverty and promote economic mobility. This aim has been ever more challenging in the context of the COVID-19 pandemic that exacerbated economic and educational disparities. KCHA continues to prioritize students' educational success through partnerships with local education stakeholders, including school districts, out-of-school time and early learning providers, and parents. In 2022, this included expanding access to meals, addressing in-home broadband connectivity issues, and offering virtual programming and online learning support for school-aged children.

KCHA continued implementation of the Early Learning Connectors program, which was co-designed in partnership with KCHA residents and launched in 2021. The program helps to ease residents' capacity to support healthy child development and increase social capital among residents with young children. In 2022, additional part-time resident support staff was hired to further the successful implementation of the pilot, bringing the total of resident support staff to nine for the program. The part-time resident support staff, known as Early Learning Connectors, reflect the culture and linguistic makeup of the families they serve through the program. In close partnership with Eastside Baby Corner, now KidVantage, an incredible number of supplies were provided to families in 2022, including over 45,000 diapers, 4,000 essential clothing orders, and 1,000 sets of back-to-school supplies, totaling approximately $159,000 of essentials that were delivered to KCHA resident-children through the Early Learning Connectors program. After a year of modified programming due to the COVID-19 pandemic, program administrators and resident

support staff have advanced critical working relationships to serve over 124 KCHA families and 238 children in 2022.

INCREASED GEOGRAPHIC CHOICE. After multiple years of rapid growth in the King County rental market, the onset of the COVID-19 pandemic led to dramatic changes to the area's rental market, which are still being felt today. In 2022, King County continued to experience population growth, low vacancy rates, and escalating rental prices. The resulting competition among renters for a limited supply of affordable units created leasing challenges for those using tenant-based vouchers and individuals experiencing significant barriers to housing stability. To address these challenges and to increase access and expand geographic choice for our residents, KCHA in 2022 continued to deploy a variety of interventions, including but not limited to: the use of a six-tier, ZIP Code-based payment standard system; outreach and engagement efforts by dedicated landlord liaisons; expedited inspections; deposit assistance; targeted new property acquisitions; housing search assistance to Special Purpose Voucher holders; and project-basing subsidies in high-opportunity communities. Given the unique challenges brought on by the COVID-19 pandemic, this multipronged approach continued to offer increased benefits to KCHA tenant-based families and to the 2,279 housing providers that partnered with KCHA throughout 2022.

KCHA's multi-tiered approach to setting payment standards based on location has continued expanding geographic choice for families, as 35% of tenant-based households now live in neighborhoods identified as high or very high opportunity. In 2022, we continued our practice of examining rental market trends along with a host of other vital market indicators to determine success and modifications to established amounts throughout the year.

INVESTED IN THE ELIMINATION OF ACCRUED CAPITAL REPAIR AND SYSTEM REPLACEMENT NEEDS IN OUR FEDERALLY SUBSIDIZED HOUSING INVENTORY. In 2022, KCHA invested nearly $17.25 million in major repairs to our federally subsidized housing stock to ensure that quality housing options remain available to low-income families for years to come. These investments completed in 2022 improved resident safety, reduced maintenance costs and energy consumption, and improved the quality of our housing stock.

B. OVERVIEW OF LONG-TERM MTW GOALS AND OBJECTIVES

- **STRATEGY 1:** Continue strengthening the physical, operational, financial, and environmental sustainability of our portfolio of 12,481 affordable housing units.
- **STRATEGY 2:** Increase the supply of affordable housing in the region to extremely low-income households — those earning below 30% of Area Median Income (AMI) — through developing new housing, preserving existing housing, and expanding the size and reach of our rental subsidy programs.
- **STRATEGY 3:** Advance racial equity and social justice within KCHA and in King County through staff training, continuous review of policies and programs to identify and address practices that disproportionately harm Black, Indigenous, and People of Color, and engaging in further partnership with the communities we serve.
- **STRATEGY 4:** Affirmatively further the policies and purposes of the Fair Housing Act and provide greater geographic choice for low-income households — including residents with disabilities, elderly residents with mobility impairments, and families with children — so that more of our residents have the opportunity to live in neighborhoods with high-performing schools and convenient access to support services, transit, health services, and employment.
- **STRATEGY 5:** Coordinate closely with the behavioral health care and homeless systems to increase the supply of supportive housing for people who have been chronically homeless or have special needs, with the goal of dramatically reducing unsheltered homelessness.
- **STRATEGY 6:** Engage in the revitalization of King County's low-income neighborhoods, with a focus on housing and other services, amenities, institutions, and partnerships that empower strong, healthy communities and prevent displacement of existing communities.
- **STRATEGY 7:** Work with the King County government, regional transit agencies, and suburban cities to support sustainable and equitable regional development by integrating new — and preserving existing — affordable housing in regional growth corridors aligned with mass transit investments.

- **STRATEGY 8:** Expand and deepen partnerships with our residents, local school districts, Head Start programs, after-school program providers, public health departments, community colleges, and the philanthropic community with the goal of improving educational and life outcomes for the low-income children and families we serve.
- **STRATEGY 9:** Promote greater economic independence for families and individuals living in subsidized housing by addressing barriers to employment and facilitating access to training and education programs, with the goal of enabling moves to market-rate housing — including homeownership — at the appropriate time.
- **STRATEGY 10:** Continue to develop institutional capacities and operational efficiencies to effectively use limited federal resources and provide extraordinary service to our residents, communities, and partners.
- **STRATEGY 11:** Continue to reduce KCHA's environmental footprint through energy and water conservation, renewable energy generation, waste stream diversion, green procurement policies, waste reduction, and fleet management practices.
- **STRATEGY 12:** Develop our capacity as a learning organization that uses data, research, and evaluation to assess housing access, outcomes, and equity and to drive decisions that shape policies and programs.

SECTION II

GENERAL HOUSING AUTHORITY OPERATING INFORMATION

A. HOUSING STOCK INFORMATION

i. Actual New Project-based Vouchers

Property Name	Planned Number of Vouchers	Actual Number of Vouchers	Status at the end of 2022	RAD?	Description of Project
Andrew's Glen	0	20	Leased/Issued	No	KCHA amended our existing Project-based Voucher (PBV) HAP contract to add 20 Project-based HUD VASH vouchers.
Esterra Park	8	8	Leased/Issued	No	Carry-over from the 2019 MTW Plan, effective May 23, 2022. KCHA entered into a PBV HAP contract with Esterra Park to serve people exiting homelessness in a supportive housing environment.
Plymouth Eastgate	92	92	Committed	No	This project received a PBV award through the 2020 King County Combined Funders NOFA. The AHAP contract was executed on August 5, 2021. Project completion is scheduled for FY2023 Q2 and will serve people exiting homelessness in a Permanent Supportive Housing (PSH) environment.
Downtown Emergency Service Center Burien	95	95	Committed	No	This project received a PBV award through the 2020 King County Combined Funders NOFA. The AHAP contract was executed on December 15, 2022. Project completion is scheduled for Q1 2024 and will serve people exiting homelessness in a PSH environment.
Shoreline Permanent Supportive Housing (CHS Shoreline Modular)	80	80	Committed	No	This project received a PBV award through King County on March 10, 2020. Carry-over from the 2021 MTW Plan, the AHAP contract was executed on April 26, 2022. Project completion is scheduled for Q3 2023 and will serve people exiting homelessness in a PSH environment.

King County 2022 Combined Funders NOFA	150	0	Committed	No	As of the end of 2022, final award announcements were pending, with 66 PBVs likely to be committed through this round.
Planned Total Vouchers to be Newly Project-based	425	295			

ii. Actual Existing Project-based Vouchers

See Appendix B for a list of KCHA's existing project-based voucher contracts.

iii. Actual Other Changes to the Housing Stock in 2022

In 2022, KCHA acquired six units in one property, bringing unit inventory to 12,481 total units.

iv. General Description of Actual Capital Fund Expenditures During 2022

In 2022, KCHA spent approximately $17.25 million to complete capital improvements critical to maintaining our federally subsidized properties. As detailed in the agency's 2022 MTW Plan, these construction efforts continued to utilize agency COVID-19 safety protocols to ensure resident, worker, and community safety. Expenditures during 2022 included:

- **UNIT UPGRADES ($3.95 MILLION).** KCHA's ongoing efforts to significantly upgrade the interiors of our affordable housing inventory as units turn over continued in 2022. KCHA's in-house, skilled workforce performed the renovations, which included the installation of new flooring, cabinets, and fixtures to extend by 20 years the useful life of up to 135 additional units.
- **BUILDING ENVELOPE AND RELATED COMPONENTS UPGRADES ($7.1 MILLION).** In 2022, building envelope upgrades including new siding, windows, exterior doors, and roofing were completed at Gustaves Manor (Auburn) and Park Royal (Bothell). At Park Royal, the elevated walkways leading to unit entries were also replaced. Mardi Gras (Kent), and Southridge House (Federal Way) were re-roofed. Work at Southridge House to install new windows and sliding glass doors and to replace deck railings was deferred. Repairs of Lake House (Shoreline) decks and resurfacing, rescheduled from 2021, were completed.

- **SYSTEMS (HEATING, SEWER, ELEVATOR) AND SITE IMPROVEMENTS ($2.0 MILLION).** The Casa Juanita (Kirkland) heating system was improved by replacing the hydronic in-unit heaters and controls. Deteriorated water and sewer lines were either replaced or lined, as appropriate, at Mardi Gras (Kent). At Woodcreek Lane (Woodinville) site improvements included replacement of walkways, curbs, and speed bumps; parking lot resurfacing; and new site drainage facilities. Replacement of the rooftop equipment for the heating and cooling of the common areas at Mardi Gras was deferred. Due to supply chain issues, new jack, controls, and interior cab improvements to refurbish the elevator at KCHA's administrative office (Tukwila) will be completed in 2023.
- **"509" INITIATIVE IMPROVEMENTS ($2.2 MILLION).** Improvements planned for 2022 in the 509 scattered-site Public Housing properties converted in 2013 were completed except for the Eastridge House (Issaquah) elevator (electrical components, the jack, and cab modifications) were deferred due to supply chain issues but will be completed in 2023. The parking area at Kings Court (Federal Way) was overlaid with asphalt and restriped. In addition to selective roof repairs, the units at Young's Lake (Renton) received new windows and doors, and mains to each building at Young's Lake were lined.

B. LEASING INFORMATION

i. Actual Number of Households Served[3]

In 2022, KCHA used a combination of our traditional federal housing programs, Public Housing and HCV, and locally designed non-traditional programs to serve 12,532 households. Using MTW single-fund flexibilities, these local, non-traditional programs included services targeting people experiencing homelessness through KCHA's sponsor-based supportive housing model, stepped rent for young adults, short-term rental assistance targeting school-aged children and their families, as well as college students experiencing homelessness through the use of time-limited tenant-based voucher assistance.

[3] These numbers reflect a cumulative total of households served under the MTW block grant between January 1 and December 31, 2022. This number does not include the 3,306 port-in vouchers that were administered in 2022 or other non-block grant vouchers.

Number of Households Served Through 2022:	Number of Unit Months Occupied/Leased		Number of Households Served	
	Planned	Actual	Planned	Actual
MTW Public Housing Units Leased	29,280	31,908	2,440	2,659
MTW Housing Choice Vouchers (HCV) Utilized	102,636	116,688	8,553	9,724[4]
Local, Non-traditional: Tenant-based	1,848	1,788	154	149
Local, Non-traditional: Property-based	N/A	N/A	N/A	N/A
Local, Non-traditional: Homeownership	N/A	N/A	N/A	N/A
Planned/Actual Totals	**133,764**	**150,384**	**11,147**	**12,532**

Local, Non-traditional Category	MTW Activity Number/Name	Number of Unit Months Occupied/Leased		Number of Households Served	
		Planned	Actual	Planned	Actual
Tenant-based	Activity 2014-1: Stepped Down Assistance for Homeless Youth	264	108	22	9
Tenant-based	Activity 2013-2: Flexible Rental Assistance (SFSI & WISH)	720	744	60	62
Tenant-based	Activity 2007-6: Develop a Sponsor-based Housing Program	864	936	72	78
Planned/Actual Totals		**1,848**	**1,788**	**154**	**149[5]**

ii. Description of Any Issues and Solutions Related to Leasing

Housing Program	Description of Leasing Issues and Solutions
Public Housing	The program did not encounter leasing issues in 2022.
Housing Choice Vouchers (HCV)	In 2022, King County continued to experience unprecedented population growth, low vacancy rates, and rising rent prices. The resulting competition among renters for a limited supply of affordable units continues to create leasing challenges for those utilizing tenant-based vouchers and individuals with barriers to housing stability. The county is experiencing a significant rise in rents as Washington state's moratorium on rent increases during the pandemic expired through the year. To address these challenges, KCHA will continue to deploy a variety of interventions throughout the year, including: executing contracts and agreements with non-profit organizations to provide housing search services; a ZIP Code-based payment standard system that tracks changes

[4] In 2022, via HUD guidance, KCHA began including in this count only ACC block grant-eligible households. This count does not include 149 households served via "Local Non-Traditional Tenant-based" vouchers, other non-MTW block grant vouchers, non-MTW special purpose vouchers, or any port-in vouchers.

[5] The regional effects from the COVID-19 pandemic continued to pose substantial challenges to leasing in KCHA's local non-traditional programming through 2022. As these programs rely on in-person referrals and contacts, the remote operations of schools, colleges, and correctional facilities constrained program staff's ability to engage with potential participants.

	in market rents closely and adjusts payment standards on a semi-annual basis; landlord outreach and retention efforts; expedited inspection processes; security deposit assistance; and flexible client assistance funds to mitigate leasing barriers.
Local, Non-traditional	Successfully leasing an apartment and maintaining housing stability in a tight rental market is a challenge for King County households exiting homelessness with little or no income and some with complex physical and behavioral health needs. Program partners administering sponsor-based and short-term rental assistance are continuing to find it increasingly difficult to recruit and retain landlords willing to maintain affordable, accessible rents for these programs. The COVID-19 Pandemic has only heightened these challenges. KCHA and its partners continue to work together to develop strategies to support housing access and stability for populations served through local, non-traditional programs.

C. WAITING LIST INFORMATION

i. Actual Waiting List Information

Waiting List Name	Description	Number of Households on the Waiting List	Waiting List Open, Partially Open, or Closed	Was the Waiting List Opened During 2022?
Housing Choice Voucher	Community-wide	1,350	Partially open (accepting targeted voucher referrals only)	No
Public Housing	Other: Regional	7,987	Open	Yes
Public Housing	Site-based	8,485	Open	Yes
Project-based	Other: Regional	6,237	Open	Yes
Public Housing - Conditional Housing	Program-specific	14	Open	Yes

ii. Changes to the Waiting List in 2022

KCHA did not make any changes to our waiting list policies in 2022.

D. INFORMATION ON STATUTORY OBJECTIVES AND REQUIREMENTS

i. 75% of Families Assisted Are Very Low-income

Income Level	Number of Local, Non-Traditional Households Admitted in 2022
50%-80% Area Median Income	3
30%-49% Area Median Income	11
Below 30% Area Median Income	31

ii. Maintain Comparable Baseline Mix of Family Sizes Served (Upon Entry to MTW)

Family Size	Occupied Public Housing Units	Utilized HCVs	Non-MTW Adjustments	Baseline Mix Number	Baseline Mix Percentage
1 Person	1,201	1,929	N/A	3,130	34.05%
2 Person	674	1,497	N/A	2,171	23.62%
3 Person	476	1,064	N/A	1,540	16.75%
4 Person	360	772	N/A	1,132	12.32%
5 Person	250	379	N/A	629	6.84%
6+ Person	246	344	N/A	590	6.42%
Total	3,207	5,985	N/A	9,192	100%

Explanation for Baseline Adjustments	KCHA did not make any adjustments to our baseline mix of family sizes served in 2022.

iii. Mix of Family Sizes Served[6]

	1 Person	2 Person	3 Person	4 Person	5 Person	6+ Person	Totals
Baseline Mix Percentage	34.05%	23.62%	16.75%	12.32%	6.84%	6.42%	100%
Number of Households Served in 2022	7,019	3,492	1,840	1,225	691	745	15,012
Percentages of Households Served in 2022	46.76%	23.26%	12.26%	8.16%	4.60%	4.96%	100%
Percentage Change	12.71%	-0.36%	-4.49%	-4.16%	-2.24%	-1.46%	

Justification and Explanation for Any Variances of Over 5% from the Baseline Percentages	For more than a decade, KCHA has been an active partner in addressing our region's homelessness crisis and has aggressively pursued new incremental special purpose vouchers being made available by HUD. A large portion of these vouchers targets specific vulnerable populations like veterans exiting homelessness and households headed by a person with a disability — populations largely comprised of single adults. 73% of people experiencing homelessness in King County were living in single-adult households,

[6] This table does not include the 149 households served through KCHA's local, non-traditional programs.

according to the 2022 Point-in-Time Count.[7] KCHA's family mix has shifted accordingly over time.

iv. Number of Households Transitioned to Self-sufficiency by Fiscal Year-end

Activity Name/#	Number of Households Transitioned	Agency Definition of Self-sufficiency
Stepped-down Assistance for Homeless Youth (2014-1)	9	Maintain housing
Passage Point Re-entry Housing Program (2013-1)	16	Positive move from incarceration to Public Housing or other independent housing
EASY & WIN Rent (2008-10, 2008-11)	144	Positive move from KCHA to unsubsidized housing
Develop a Sponsor-Based Housing Program (2007-6)	62	Maintain housing
Households Duplicated Across Activities/Definitions	0	
ANNUAL TOTAL NUMBER OF HOUSEHOLDS TRANSITIONED TO SELF-SUFFICIENCY	**231**	

In 2022, 231 households in KCHA's federally subsidized housing programs achieved self-sufficiency milestones. Of those, 144 achieved self-sufficiency by moving to non-subsidized housing, and 122 households maintained stable housing after experiencing homelessness or incarceration.

[7] 2007 - 2022 Point-in-Time Estimates by CoC (XLSX) downloaded from www.hudexchange.info/resource/3031/pit-and-hic-data-since-2007.

SECTION III

PROPOSED MTW ACTIVITIES

New activities are not being proposed in the 2022 MTW Annual Report.

SECTION IV

APPROVED MTW ACTIVITIES

A. IMPLEMENTED ACTIVITIES

The following table provides an overview of KCHA's implemented activities, the statutory objectives they aim to meet, and the page number in which more detail can be found for each.

Year-Activity #	MTW Activity	Statutory Objective(s)	Page Number
2019-1 & 2022-1	Acquire and Develop New Affordable Housing	Housing Choice	19
2018-1	Encouraging the Successful Lease-up of the Housing Choice Voucher Program	Housing Choice	20
2016-2	Conversion of Former Opt-out Developments to Public Housing	Cost-effectiveness	22
2015-2	Reporting on the Use of Net Proceeds from Disposition Activities	Cost-effectiveness	23
2014-2	Revised Definition of "Family"	Housing Choice	24
2013-1	Passage Point Re-entry Housing Program	Housing Choice	25
2013-2	Flexible Rental Assistance	Housing Choice	28
2009-1	Project-based Section 8 Local Program Contract Term	Housing Choice	29
2008-1	Acquire New Public Housing	Housing Choice	30
2008-10 & 2008-11	EASY and WIN Rent Policies	Cost-effectiveness Self-sufficiency	31
2008-21	Public Housing and Housing Choice Voucher Utility Allowances	Cost-effectiveness	34
2007-6	Develop a Sponsor-based Housing Program	Housing Choice	36
2007-14	Enhanced Transfer Policy	Cost-effectiveness	37
2005-4	Payment Standard Changes	Housing Choice	38
2004-2	Local Project-based Section 8 Program	Cost-effectiveness Housing Choice	40
2004-3	Develop Site-based Waiting Lists	Cost-effectiveness Housing Choice	43
2004-5	Modified Housing Quality Standards (HQS) Inspection Protocols	Cost-effectiveness	44
2004-7	Streamlining Public Housing and Housing Choice Voucher Forms and Data Processing	Cost-effectiveness	46
2004-9	Rent Reasonableness Modifications	Cost-effectiveness	48
2004-12	Energy Performance Contracting	Cost-effectiveness	49
2004-16	Housing Choice Voucher Occupancy Requirements	Cost-effectiveness	50

ACTIVITY 2019-1 & 2022-1: Acquire and Develop New Affordable Housing

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2019
IMPLEMENTED: 2019

A recent report estimates that over the last decade, King County has lost more than 112,000 units of housing affordable to households earning less than 80% of the area median income (AMI).[8]

CHALLENGE: King County continues to experience extraordinary population growth. With escalating rents — especially in historically more affordable neighborhoods — and with the failure of wages to keep pace with rising housing costs, many families are struggling to pay rent, and an unprecedented number are experiencing homelessness. KCHA is one of many entities working alongside federal, state, and local governments to address the heightened need for affordable housing, and we frequently work with community-based nonprofit developers to expand the supply of affordable housing.

SOLUTION: To expand agency and regional efforts, KCHA re-proposed and was granted approval to modify Activity 2019-1, in order to allow MTW funds to be used to support the development or acquisition of non-federally subsidized affordable housing, including properties owned or controlled by KCHA (already approved by HUD) and those owned or operated by nonprofit entities. Properties supported by this effort may include (but are not limited to) properties also leveraging Low-Income Housing Tax Credits (LIHTC) and other federal, state, and local funding sources. Funding provided under this activity may be structured as a loan (or internal loan when supporting a KCHA-owned property), an equity contribution to a development, or as a recoverable grant.

PROGRESS AND OUTCOMES: Waiver flexibility associated with this activity was not leveraged to support acquisition and/or development efforts in 2022.[9]

[8] Why does prosperous King County have a homelessness crisis? January 22, 2020. McKinsey & Company. www.mckinsey.com/industries/public-and-social-sector/our-insights/why-does-prosperous-king-county-have-a-homelessness-crisis#.

[9] In 2022, KCHA purchased the Village Plaza, adding six new units to our affordable housing inventory. No MTW block-grant funds were used for this acquisition.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase Housing Choice	HC #1: Additional units of housing made available	0 units	192 units	0 units	In Progress

ACTIVITY 2018-1: Encouraging the Successful Lease-up of the Housing Choice Voucher Program

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2018
IMPLEMENTED: 2018

CHALLENGE: King County's low rental vacancy rate (below 5% in 2022) coupled with the large in-migration of an affluent and skilled workforce, makes it difficult for KCHA's voucher holders to compete in the private market.

SOLUTION: KCHA is working to preserve and increase the number of housing options available by recruiting and retaining landlords in the HCV program. To secure units, KCHA is exploring the implementation of incentive payments to landlords who agree to lease a recently vacated unit to another voucher holder, not to exceed one month of the Housing Assistance Payment (HAP). These payments serve as an incentive for landlords to continue their participation in the HCV program by minimizing the owner's losses typically experienced during turnover. KCHA also streamlined our Housing Quality Standards (HQS) protocol even further by allowing landlords to inspect and self-certify that the unit passes HUD's standards. The program takes a phased-in approach and starts with newly constructed, not-previously-occupied units issued a Certificate of Occupancy or Temporary Certificate of Occupancy. The second phase extends the pilot to KCHA-owned properties built after 1978, and the third phase to non-KCHA affiliated LIHTC properties. In 2021, the plan was to ensure that these units met KCHA's high inspection standards: quality control audits were to be performed on no fewer than 20% of the self-certified units every 90 days of the two-year pilot. However, due to the COVID-19 pandemic safety and health protocols, audits were conducted virtually when feasible. These efficiencies have enabled faster lease-up times and caused less disruption for landlords while ensuring program compliance. In early 2020, in response

to the COVID-19 pandemic, KCHA implemented a catastrophe plan that extended self-certified inspections to all landlords who qualify.

In addition to strategies to improve landlord recruitment and retention, KCHA continued to invest in strategies to aid voucher holders in leasing a unit in the geographic location of their choice. Examples of previously implemented activities include: providing access to a security deposit assistance fund; the use of multi-tiered, ZIP Code-based payment standards; and continuing to focus on landlord customer service. Building on the associated streamlining measures adopted in response to the pandemic, KCHA may adopt additional measures to ease the lease-up process and streamline operations. Additional software methods were implemented to expedite the leasing process. More specific details will be outlined in the 2022 MTW Annual Plan.

PROGRESS AND OUTCOMES: Through 2022, KCHA kept in place local MTW waivers associated with the agency's *State of Emergency Response to COVID-19*. As of January 1, 2023, all associated waivers have ended, and KCHA has resumed normal, pre-pandemic operations and policies related to the lease-up process.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0 saved	$0 saved	$0 saved	Achieved
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours[10]	0 hours saved	0 hours saved	0 hours saved	Achieved
Increase housing choices	HC #7: Number of households receiving services aimed to increase housing choice	Shopping Success Rate: 70% at 240 days	80% at 240 days	68% at 240 days	In Progress

[10] This activity does not save staff hours or other resources.

ACTIVITY 2016-2: Conversion of Former Opt-out Developments to Public Housing

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2016
IMPLEMENTED: 2016

CHALLENGE: The process to convert a property's subsidy model from project-based Section 8 to Public Housing is slow, burdensome, and administratively complex. Under current federal guidelines, units convert only when the original resident moves out with a voucher. This transition is gradual, and at properties housing seniors or residents with disabilities, turnover of units tends to be particularly low. In the meantime, two sets of rules – project-based Section 8 and Public Housing – simultaneously govern the management of the development, adding to the administrative complexity of providing housing assistance.

SOLUTION: This policy allows KCHA to convert entire Project-based Section 8 opt-out properties to Public Housing at once while preserving the rights of existing tenants. This activity builds on KCHA's previously approved initiative (2008-1) to expand housing through the use of banked Public Housing ACC units. KCHA can convert former project-based "opt-out" sites to Public Housing through the development process outlined in 24 CFR 905 rather than through the typical gradual transition. As a result, this policy greatly streamlines operations and increases administrative efficiency. With the transition to Public Housing subsidy, current enhanced voucher participants retain protections against future rent increases in much the same manner previously provided. As Public Housing residents, these households pay affordable rent (based on policies outlined in KCHA's Public Housing Admissions and Continued Occupancy Policy) and thus remain protected from a private owner's decision to increase the contract rent. At the same time, KCHA's MTW-enhanced Transfer Policy ensures that former enhanced voucher recipients retain the same (if not greater) opportunity for mobility by providing access to transfer to other subsidized units within KCHA's portfolio or through the use of a general Housing Choice Voucher should the future need arise.

KCHA works with affected residents of selected former opt-out properties, providing ample notification and information (including the right to move using a general voucher for current

enhanced voucher participants) to ensure the development's seamless transition to the Public Housing program.

PROGRESS AND OUTCOMES: No conversions associated with conversions to Public Housing were made during 2022.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0 saved	$1,320[11] saved	Estimated $1,286 saved	Achieved
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	40 hours saved	Estimated 40 hours saved	Achieved

ACTIVITY 2015-2: Reporting on the Use of Net Proceeds from Disposition Activities

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2015
IMPLEMENTED: 2015

CHALLENGE: The reporting process for the use of net proceeds from KCHA's disposition activities is duplicative and burdensome. The reporting protocol for the MTW program aligns with the Section 18 disposition code reporting requirements, allowing for an opportunity to simplify this process.

SOLUTION: KCHA reports on the use of net proceeds from disposition activities in the annual MTW report. This streamlining activity allows us to realize time savings and administrative efficiencies while continuing to adhere to the guidelines outlined in 24 CFR 941 Subpart F of Section 18 demolition and disposition code.

We use our net proceeds from the last HOPE VI disposition, Seola Gardens, in some of the following ways, all of which are accepted uses under Section 18(a)(5):

1. Repair or rehabilitation of existing ACC units.
2. Development and/or acquisition of new ACC units.

[11] This figure was calculated by multiplying the median hourly wage and benefits ($33) of staff who oversee this activity by the number of hours saved. The number is a monetization of the hours saved through the implementation of this program.

3. Provision of social services for residents.

4. Implementation of a preventative and routine maintenance strategy for specific single-family scattered-site ACC units.

5. Modernization of a portion of a residential building in our inventory to develop a recreation room, laundry room, or daycare facility for residents.

6. Leveraging of proceeds to partner with a private entity to develop mixed-finance Public Housing under 24 CFR 905.604.

PROGRESS AND OUTCOMES: KCHA did not use any net proceeds in 2022.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0 saved	Estimated $11,840[12] saved	Estimated $11,539 saved	Achieved
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	Estimated 160 hours saved	Estimated 156 hours saved	Achieved

ACTIVITY 2014-2: Revised Definition of "Family"

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2014
IMPLEMENTED: 2014

CHALLENGE: According to King County Regional Homelessness Authority reporting, the county's homelessness response system served 2,272 families with children throughout 2022.[13] Thousands more seniors and people with disabilities, many with severe rent burdens, are experiencing homelessness or are on our waiting lists for housing.

SOLUTION: This policy directs KCHA's limited resources to populations facing the greatest need: elderly and near-elderly households, households with people with disabilities, and families with minor children. We modified the eligibility standards outlined in the Public Housing ACOP and HCV Administrative Plans to limit eligible households to those that include at least one senior or person with a disability or a minor/dependent child. The current policy affects only admissions and does

[12] This figure was calculated by multiplying the median hourly wage and benefits ($74) of the staff member who oversees this activity by the number of hours saved. This number represents a hypothetical estimate of the dollar amount that could be saved in staff hours by implementing this activity.
[13] King County Regional Homelessness Authority: Households Served. www.kcrha.org/households-served

not affect the eligibility of households currently receiving assistance. Exceptions will be made for participants in programs that target specialized populations, such as victims of domestic violence or individuals who have experienced chronic homelessness.

PROGRESS AND OUTCOMES: In 2022, 1,738 youth and young adults were identified as experiencing homelessness or housing instability in King County.[14] Understanding the housing challenges this population is facing, and with the goal of expanding housing choices for our community's most vulnerable, KCHA in 2022 — with the support of local service partners — expanded our family eligibility requirement to include heads of household who are under age 18 and are documented minors, pursuant to Washington State regulations (RCW 13.64). This modification can support increased access to housing among this group and supports KCHA's recent local efforts to increase housing stability among child welfare-involved youth and those aging out of the foster care system.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase housing choices	HC #3: Average applicant time on HCV waitlist (in months)	29 months	25 months	22 months	Exceeded
Increase housing choices	HC #4: Number of households at or below 80% AMI that would lose assistance or need to move	0 households	0 households	0 households	Achieved

ACTIVITY 2013-1: Passage Point Re-Entry Housing Program

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2013
IMPLEMENTED: 2013

CHALLENGE: In 2022, 1,065 people were counted as returning to King County after incarceration.[15] Nationally, more than half of all inmates are parents who will face barriers to securing housing and

[14] King County Regional Homelessness Authority: Households Served. www.kcrha.org/households-served
[15] 2022 Washington State Department of Corrections. Number of Prison Releases by County of Release.

employment upon release due to their criminal record or lack of job skills.[16] Without a home or employment, many of these parents are unable to reunite with their children.

SOLUTION: Passage Point is a unique supportive housing program in Maple Valley that serves parents trying to reunify with their children following a period of incarceration. KCHA provides 48 project-based Section 8 vouchers, while the YWCA Seattle | King | Snohomish provides property management and supportive services. The YWCA identifies eligible individuals through outreach to prisons and correctional facilities, and relationships with the local public child welfare agency. In contrast to typical transitional housing programs that have strict 24-month occupancy limits, Passage Point residents may remain in place until they have completed the reunification process, are stabilized in employment, and can succeed in a less service-intensive environment. Passage Point residents who complete the program and regain custody of their children may apply to KCHA's Public Housing program and receive priority placement on the waitlist.

KCHA continues to consider project-basing units at Passage Point as Family Unification Program (FUP) vouchers. This would allow us to repurpose vouchers currently in use at Passage Point to serve additional families from the HCV waiting list.

PROGRESS AND OUTCOMES: In 2022, KCHA did not transition any of the project-based vouchers to project-based FUP vouchers. Through 2022, challenges faced by program partners due to COVID-19 protocols restricted opportunities for referrals, limiting the standard practices of in-person briefings and direct outreach to local correctional facilities. To increase occupancy rates post-pandemic, KCHA collaborated with the YWCA and King County to expand outreach to additional re-entry pathways including King County's Department of Corrections, crisis diversion programs, hospital liaisons, veterans programs, and the state Department of Children, Youth, and Families.

www.doc.wa.gov/docs/publications/reports/200-RE001.pdf

[16] Glaze, L E and Maruschak, M (2008). Parents in Prison and Their Minor Children. www.bjs.gov/index.cfm?ty=pbdetail&iid=823

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2022 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #4: Amount of funds leveraged in dollars	$0	$500,000	$500,000	Achieved
Increase housing choices	HC #5: Number of households able to move to a better unit[17]	0 households	40 households	34 households	Partially achieved and in progress
Increase housing choices	HC #7: Number of households receiving services aimed to increase housing choice	0 households	40 households	34 households	Partially achieved and in progress
Increase self-sufficiency	SS #1: Average (median) earned income of households affected by this policy	$0	$3,584	$6,336	Achieved
Increase self-sufficiency	SS #3: Employment status for heads of household	(1) Employed Full-time 0	15	8	Partially Achieved
		(2) Employed Part-time 0	15	3	
		(3) Enrolled in an Educational Program 0	15	2	
		(4) Enrolled in Job Training Program 0	12	3	
		(5) Unemployed 0	0	1	
		(6) Other: engaged in services 0	0	2	
Increase self-sufficiency	SS #8: Number of households transitioned to self-sufficiency[18]	0 households	5 households	16 households	Exceeded

[17] "Better unit" is defined as stable housing.
[18] "Self-sufficiency" in this activity is defined as graduating to Public Housing or other independent housing.

ACTIVITY 2013-2: Flexible Rental Assistance

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2013
IMPLEMENTED: 2013

CHALLENGE: The one-size-fits-all approach of traditional housing programs does not provide the flexibility needed to quickly and effectively meet the needs of low-income individuals facing distinct housing crises. In many of these cases, a short-term rental subsidy paired with responsive, individualized case management can help a family out of a crisis and into safe and stable housing.

SOLUTION: This activity, developed with local service providers, offers tailored, flexible housing assistance to families and individuals in crisis. KCHA provides flexible financial assistance, including time-limited rental subsidies, security deposits, rent arrears, and funds to cover move-in costs, while local partners provide individualized support services. The Student and Family Stability Initiative (SFSI) pairs short-term rental assistance with housing navigation and employment services for families experiencing or on the verge of homelessness. School-based McKinney-Vento liaisons identify and connect these families with community-based service providers, while caseworkers have the flexibility to determine the most effective approach to quickly stabilize participants in housing. In 2021, KCHA worked with Highline College to successfully implement the While in School Housing (WISH) program, a time-limited rental subsidy using tenant-based vouchers to support students through the duration of their schooling and six months following graduation.

PROGRESS AND OUTCOMES: In 2022, KCHA's school-based housing programs began to rebound from the pandemic as schools and campuses resumed in-person operations. Utilizing the applied research study of the SFSI and WISH programs completed in 2021, KCHA made programmatic changes to the SFSI program to better meet the needs of families served. These modifications included increasing staffing levels within local nonprofit Neighborhood House and increasing the amount of financial assistance made available to families in support of long-term housing stabilization.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2022 Outcome	Benchmark Achieved?
Increase housing choices	HC #5: Number of households able to move to a better unit	0 households	80 households	86 households	Achieved
Increase housing choices	HC #7: Number of households receiving services aimed to increase housing choice	0 households	100 households	125 households	Achieved

ACTIVITY 2009-1: Project-based Section 8 Local Program Contract Term

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2009
IMPLEMENTED: 2009

CHALLENGE: Before 2009, our nonprofit development partners faced difficulties securing private financing for the development and acquisition of affordable housing projects. Measured against banking and private equity standards, the Housing Assistance Payments (HAP) contract term set by HUD is too short and hinders underwriting debt on affordable housing projects.

SOLUTION: This activity extends the allowable term for Project-based Section 8 contracts up to 30 years for the initial HAP term and a 30-year cumulative maximum contract renewal term not to exceed 60 years total. The longer-term assists our partners in underwriting and leveraging private financing for development and acquisition projects. At the same time, the longer-term commitment from KCHA signals to lenders and underwriters that proposed projects have the sufficient cash flow to take on the debt necessary to develop or acquire affordable housing units.

PROGRESS AND OUTCOMES: KCHA continued to save 20 hours of staff time per contract.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2022 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0 saved	$880 saved	$858 saved per contract[19]	Achieved

[19] This figure was calculated by multiplying the median hourly wage and benefits ($44) of the staff member who oversees this activity by the number of hours saved. The number is a monetization of the hours saved through the implementation of this program.

Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved per contract	20 hours saved per contract	20 hours saved per contract	Achieved

ACTIVITY 2008-1: Acquire New Public Housing

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2008
IMPLEMENTED: 2008

CHALLENGE: Approximately 47% of renter households in King County pay over 30% of their income in rent.[20] Relatedly, fewer than 10% of all apartments are considered affordable to households earning less than 30% of AMI.[21] In the context of these challenges, KCHA's Public Housing waitlists continue to grow. Given the gap between the availability of affordable housing and the number of low-income renters, KCHA must continue to increase the inventory of units that are affordable to extremely low-income households.

SOLUTION: KCHA's Public Housing Annual Contributions Contract (ACC) is currently below the Faircloth limit in the number of allowable units. These "banked" Public Housing subsidies allow us to add to the affordable housing supply in the region by acquiring new units. This approach is challenging, however, because Public Housing units cannot support debt. In 2022, we continued our innovative use of MTW working capital, with a particular focus on the creation or preservation of units in high-opportunity neighborhoods.[22]

We further simplify the acquisition and addition of units to our Public Housing inventory by partnering with the local HUD field office to streamline the information needed to add these units to the PIH Information Center (PIC) system and obtain operating and capital subsidies. We also use a process for self-certification of neighborhood suitability standards and Faircloth limits, necessitating the flexibility granted in Attachment D, Section D of our MTW Agreement.[23]

[20] US Census Bureau, ACS 2021 one-year estimate.
[21] US Census Bureau, ACS 2019 one-year estimate
[22] Neighborhood opportunity designations are from the Puget Sound Regional Council and Kirwan Institute's Opportunity Mapping index. www.psrc.org/opportunity-mapping.
[23] Some Public Housing units might be designated MTW Neighborhood Services units upon approval from the HUD field office.

Through this flexibility, KCHA will continue to seek opportunities to turn on banked ACC units in apartment buildings we own or acquire that meet the definition of physically obsolete and then convert the units through the Section 18 demolition and disposition process to facilitate the rehabilitation of the units.

PROGRESS AND OUTCOMES: While KCHA continues to gauge strategic opportunities to acquire existing private market properties and turn on banked public housing ACC, KCHA in 2022 did not leverage this activity to acquire or convert such properties.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2022 Outcome	Benchmark Achieved?
Increase housing choices	HC # 1: Number of new housing units made available for households at or below 80% AMI	0 units (2004)	700 units	482 cumulative units	In Progress
Increase housing choices	HC #2: Number of housing units at or below 80% AMI that would not otherwise be available	0 units	700 units	482 cumulative units	In Progress
Increase housing choices	HC #5: Number of households able to move to a high-opportunity neighborhood	0% of new units	50% of new units	0% of new units	In Progress

ACTIVITY 2008-10 and 2008-11: EASY and WIN Rent Policies

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2008
IMPLEMENTED: 2008

CHALLENGE: The administration of rental subsidies under existing HUD rules is overly complex and confusing to the households we serve. Significant staff time was being spent complying with federal requirements that do not promote better outcomes for residents, safeguard program integrity, or save taxpayer money. The rules regarding deductions, annual reviews, recertifications, and income calculations were cumbersome and often hard to understand. Many of our households live on fixed incomes that change only when there is a Cost of Living Adjustment (COLA), making annual reviews superfluous. For working households, HUD's rent rules include complicated earned-

income disregards that can manifest as disincentives to income progression and employment advancement.

SOLUTION: KCHA has two rent reform policies. The first, EASY Rent, simplifies rent calculations and recertifications for households with seniors and persons with disabilities that derive 90% of their income from a fixed source (such as Social Security, Supplemental Security Income [SSI], or pension benefits) and are enrolled in our Public Housing, HCV, or project-based Section 8 programs. Rents are calculated at 28% of adjusted income with deductions for medical- and disability-related expenses in $2,500 bands, with the cap on deductions at $10,000. EASY Rent streamlines KCHA operations and simplifies the burden placed on residents by reducing recertification reviews to a three-year cycle and rent adjustments based on COLA increases in Social Security and SSI payments to an annual cycle.

The second policy, WIN Rent, was implemented in FY 2010 to encourage increased economic self-sufficiency among households where individuals can work. WIN Rent is calculated on a series of income bands, and the tenant's share of the rent is calculated at 28.3% of the lower end of each income band. This tiered system — in contrast to existing rent protocols — does not punish increases in earnings, as the tenant's rent does not change until household income increases to the next band level. Additionally, recertifications are conducted biennially instead of annually, allowing households to retain all increases in earnings during that period without an accompanying increase to the tenant's share of the rent. The WIN Rent structure also eliminates flat rents, income disregards, and deductions (other than childcare for eligible households) and excludes the employment income of household members under age 21. Households with little or no income are given a six-month reprieve during which time they can pay a lower rent or, in some cases, receive a credit payment. Following this period, a WIN Rent household pays a minimum rent of $25 regardless of income calculation.

In addition to changes to the recertification cycle, we also have streamlined processing and reviews. For example, we limit the number of tenant-requested reviews to reduce the rent to two occurrences in a two-year period in the WIN Rent program. We estimate that these policy and

operational modifications have reduced the relevant administrative workloads in the HCV and Public Housing programs by 20%.

PROGRESS AND OUTCOMES: KCHA will continue to realize significant savings in staff time and resources through the simplified rent calculation protocol. In response to the pandemic, KCHA introduced temporary changes to the rent policy, including allowing tenants to report income changes until the last day of the month, weighing all income verifications equally, and modifying the policy to allow pandemic-related decreases in rent to take effect the first day of the month following the date income decreased (rather than the first day of the month following the day reported). As of January 1, 2023, all associated COVID-19-related MTW waivers have ended, and KCHA has resumed normal, pre-pandemic operations and policies related to the agency's rent policy.

MTW Statutory Objective	Unit of Measurement	Baseline[24]	Benchmark	2022 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness.	CE #1: Total cost of task in dollars	$0 saved	$116,787 saved[25]	$204,088 saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	3,000 HCV staff hours saved; 450 PH staff hours saved	4,919 HCV staff hours saved; 1,231 PH staff hours saved	Exceeded
Increase self-sufficiency	SS #1: Average income of households (EASY)	HCV: $10,617 PH: $10,514	2% increase	HCV: $12,740 PH: $11,801	Exceeded
Increase self-sufficiency	SS #1: Average earned income of	HCV: $7,983 PH: $14,120	3% increase	HCV: $24,518 PH: $22,090	Exceeded

[24] 2010 earned income baseline from Rent Reform Impact Report, John Seasholtz.
[25] This figure was calculated by multiplying the median hourly wage and benefits ($33) of the staff members who oversee this activity by the number of hours saved. This number is a monetization of the hours saved through the implementation of this program.

	households (WIN)				
Increase self-sufficiency	SS #8: Households transition to self-sufficiency[26]	0 households	25 households	147 households	Exceeded

ACTIVITY 2008-21: Public Housing and Housing Choice Voucher Utility Allowances

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2008
IMPLEMENTED: 2010

CHALLENGE: KCHA was spending an estimated $20,000 or more annually in staff time to administer utility allowances under HUD's one-size-fits-all national guidelines. HUD's national approach failed to capture average consumption levels in the Puget Sound area.

SOLUTION: This activity simplifies the HUD rules on Public Housing and HCV Utility Allowances by applying a single methodology that reflects local consumption patterns and costs. Before this policy change, allowances were calculated for individual units and households using different rules under the various HUD programs. Additionally, HUD required an immediate update of the allowances with each cumulative 10% rate increase by utility companies. Now, KCHA provides allowance adjustments annually when the Consumer Price Index produces a cumulative change of more than 10% rather than every time an adjustment is made to the utility equation. We worked with data from a Seattle City Light study completed in late 2009 to identify key factors in household energy use and develop average consumption levels for various types of units in the Puget Sound region. We used this information to create a new utility schedule that considers multiple factors: type of unit (single vs. multi-family); the size of the unit; high-rise vs. low-rise units; and the utility provider. We modified allowances for units where the resident pays water and/or

[26] Self-sufficiency is defined as a positive move from subsidized housing.

sewer charges. KCHA's Hardship Policy, adopted in July 2010, also allows KCHA to respond to unique household or property circumstances and documented cases of financial hardship.

PROGRESS AND OUTCOMES: In 2020, through the COVID-19 emergency declaration, we implemented changes to simplify utility allowance reporting and requirements that continued to the end of 2022. Throughout the year, KCHA continued to examine the activity to determine possible modifications to the content, structure, and scope of our utility allowances and to ensure that this activity continues to meet the needs of KCHA-subsidized households. If KCHA pursues significant modifications to this activity, we will ensure that the proper public process, including re-proposing the activity in an MTW Annual Plan, is followed in advance of implementation.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2022 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0 saved	$22,116 saved[27]	$25,970 hours saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	291 hours saved	316 hours saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 minutes saved per HCV file and 0 minutes saved per PH file	2.5 minutes saved per HCV file and 5 minutes saved per PH file	2.5 minutes saved per HCV file and 5 minutes saved per PH file	Achieved

[27] This figure was calculated by multiplying the median hourly wage and benefits ($76) of the staff member who oversees this activity by the number of hours saved. The number is a monetization of the hours saved through the implementation of this program.

ACTIVITY 2007-6: Develop a Sponsor-based Housing Program

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2007
IMPLEMENTED: 2007

CHALLENGE: The 2022 Point-in-Time Count shows that 4,705 people were experiencing chronic homelessness in King County.[28]

SOLUTION: In the sponsor-based housing program, KCHA provides housing funds directly to our behavioral health care and nonprofit partners, including Sound Health, Navos, and Valley Cities Counseling and Consultation. These providers use the funds to secure private market rentals that are then subleased to program participants. The programs operate under the "Housing First" model of supportive housing, which couples low-barrier placement in permanent, scattered-site housing with intensive, individualized services that help residents maintain long-term housing stability. Recipients of this type of support are referred through the mental health system, street outreach teams, and the Coordinated Entry for All system in King County. Once a resident is stabilized and ready for a more independent living environment, KCHA offers a move-on strategy through a tenant-based non-elderly disability voucher.

PROGRESS AND OUTCOMES: As detailed in activity 2014-1: *Stepped-down Assistance for Homeless Youth*, associated partner agency Valley Cities Counseling and Consultation ended its sponsor-based housing program at the end of 2022. The targeted benchmarks were adjusted via the 2021 MTW Annual Plan due to provider partner challenges brought on by the pandemic.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase housing choices	HC #1: Number of new units made available for households at or below 80% AMI	0 units	72 units	74 units	Achieved
Increase housing choices	HC #5: Number of households able to move to a better unit	0 households	72 households	87 households	Exceeded

[28] 2007 - 2022 Point-in-Time Estimates by CoC (XLSX) downloaded from www.hudexchange.info/resource/3031/pit-and-hic-data-since-2007.

Increase self-sufficiency	SS #5: Number of households receiving services aimed to increase self-sufficiency	0 households	72 households	87 households	Exceeded
Increase self-sufficiency	SS #8: Number of households transitioned to self-sufficiency[29]	0 households	72 households	62 households	Partially Achieved. Closing of the 'Stepped' rent contract accounts for reduction.

ACTIVITY 2007-14: Enhanced Transfer Policy

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2007
IMPLEMENTED: 2007

CHALLENGE: HUD rules restrict a resident from moving from Public Housing to HCV, or from HCV to Public Housing, which hampers our ability to meet the needs of our residents. For example, Project-based Section 8 residents may need to move if their physical abilities change and they can no longer access their second-story, walk-up apartment. A Public Housing property may have an accessible unit available. Under traditional HUD regulations, this resident would not be able to move into this available unit.

SOLUTION: KCHA's policy allows a resident to transfer among KCHA's various subsidized programs and expedites access to Uniform Federal Accessibility Standards (UFAS)-rated units for mobility-impaired households. In addition to mobility needs, a household might grow in size and require a larger unit with more bedrooms. The enhanced transfer policy allows a household to move to a larger unit when one becomes available in either program. In 2009, KCHA took this one step further by actively encouraging over-housed or under-housed residents to transfer when an appropriately sized unit becomes available through incentive payments. The flexibility provided through this policy allows us to swiftly meet the needs of our residents by housing them in a unit that suits their situation best and enables KCHA to provide the most efficient fit of family and unit size, regardless of which federal subsidy is being received.

[29] Self-sufficiency for this activity is defined as securing and maintaining housing.

PROGRESS AND OUTCOMES: In 2022, 25 households that traditionally would not have been eligible for a change of unit were able to move to a more suitable unit.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase housing choices	HC # 5: Number of households able to move to a better unit and/or a high-opportunity neighborhood	0 households	10 households	25 households	Exceeded

ACTIVITY 2005-4: Payment Standard Changes

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2005
IMPLEMENTED: 2005

CHALLENGE: In 2022, 35% of all KCHA's tenant-based voucher households lived in high-opportunity neighborhoods of King County. These neighborhoods offer benefits to their residents, including improved educational opportunities, increased access to public transportation, and greater economic opportunities. Not surprisingly, high-opportunity neighborhoods have more expensive rents. To move to high-opportunity areas, voucher holders need higher subsidy levels, which are not available under traditional payment standards. Conversely, broadly applied payment standards that encompass multiple housing markets – low and high – result in HCV rents "leading the market" in lower-priced areas.

SOLUTION: This initiative develops local criteria for the determination and assignment of payment standards to better match local rental markets, with the goals of increasing affordability in high-opportunity neighborhoods and ensuring the best use of limited financial resources. We develop our payment standards through an annual analysis of local submarket conditions, trends, and projections. This approach means that we can provide subsidy levels sufficient for families to afford the rents in high-opportunity areas of the county and not have to pay market-leading rents in less expensive neighborhoods. As a result, our residents are less likely to be squeezed out by tighter rental markets and have a greater geographic choice. In 2007, we expanded this initiative and allowed approval of payment standards of up to 120% of Fair Market Rent (FMR) without HUD

approval. In early 2008, we decoupled the payment standards from HUD's FMR calculations entirely so that we could be responsive to the range of high rents in Puget Sound's submarkets. In 2021, HUD's published payment standards for two-bedroom apartments ranged from 86% to 126% of the regional HUD FMR, and in 2022, two-bedroom apartments ranged from 85% to 124% of the regional HUD FMR.

In 2016, KCHA implemented a five-tiered payment standard system based on ZIP Codes. We arrived at the five-tiered approach by analyzing recent tenant lease-up records, consulting local real estate data, holding forums with residents and staff, reviewing small area FMR payment standard systems implemented by other housing authorities, and assessing the financial implications of various approaches. In designing the new system, we sought to have enough tiers to account for submarket variations but not so many that the new system became burdensome and confusing for staff and residents. Outcomes thus far demonstrate a promising increase in lease-up rates in high-opportunity neighborhoods within the top two tiers. In 2018, we added a tier and instituted the practice of conducting a second market analysis and potential payment standard adjustment each year to account for the rapidly changing rental submarkets.

PROGRESS AND OUTCOMES: At the end of 2022, 35% of all KCHA tenant-based voucher households were living in high-opportunity neighborhoods. Despite the challenges caused by the pandemic, this represents an increase in households able to lease housing in high-opportunity neighborhoods when compared to previous years.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0	$0	$0	Achieved
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete the task in staff hours	0 hours	0 hours	0 hours[30]	Achieved

[30] This activity is net neutral in terms of hours or dollars saved. Workload remained the same; however, staff changed the timing of when they were applying payment standards.

Increase housing choices	HC #5: Number of households able to move to a high-opportunity neighborhood[31]	21% of HCV households live in high-opportunity neighborhoods	30% of HCV households live in high-opportunity neighborhoods	35% of HCV households live in high-opportunity neighborhoods	Exceeded

ACTIVITY 2004-2: Local Project-based Section 8 Program

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2004
IMPLEMENTED: 2004

CHALLENGE: Current project-basing regulations are cumbersome and present multiple obstacles to serving high-needs households, partnering effectively and efficiently with nonprofit developers, and promoting housing options in high-opportunity areas. Some private-market landlords refuse to rent to tenants with imperfect credit or rental history, especially in tight rental markets such as ours. Meanwhile, nonprofit housing acquisition and development projects that would serve extremely low-income households require reliable sources of rental subsidies. The reliability of these sources is critical for the financial underwriting of these projects and successful engagement with banks and tax-credit equity investors.

SOLUTION: The ability to streamline the Project-based Section 8 (PBS8) program is an important factor in addressing the distribution of affordable housing in King County and coordinating effectively with local initiatives. KCHA places PBS8 subsidies in high-opportunity areas of the county to increase access to these desirable neighborhoods for low-income households.[32] We also partner with nonprofit community service providers to create housing targeted to special needs populations, opening new housing opportunities for people experiencing chronic homelessness, behavioral health issues, or a disability, as well as young adults and families exiting homelessness traditionally not served through our mainstream Public Housing and HCV programs. Additionally, we coordinate with county government and suburban jurisdictions to underwrite a pipeline of new

[31] All tenant-based voucher households.
[32] Neighborhood opportunity designations are from the Puget Sound Regional Council and Kirwan Institute's Opportunity Mapping index. www.psrc.org/opportunity-mapping

affordable housing developed by local nonprofit housing providers. MTW flexibility granted by this activity has helped us implement the following policies.

CREATE HOUSING TARGETED TO SPECIAL-NEEDS POPULATIONS BY:

- Assigning PBS8 subsidy to a limited number of demonstration projects not qualifying under the standard policy to serve important public purposes. (FY 2004)
- Modifying eligibility and selection policies as needed to align with entry criteria for nonprofit-operated housing programs. (FY 2004)

SUPPORT A PIPELINE OF NEW AFFORDABLE HOUSING BY:

- Prioritizing assignment of PBS8 assistance to units located in high-opportunity census tracts, including those with poverty rates lower than 20%. (FY 2004)
- Waiving the 25% cap on the number of units that can be project-based on a single site. (FY 2004)
- Allocating PBS8 subsidy non-competitively to KCHA-controlled sites or other jurisdictions and using an existing local government procurement process for project-basing Section 8 assistance. (FY 2004)
- Allowing owners and agents to conduct their own construction and/or rehab inspections and having the management entity complete the initial inspection rather than KCHA, with inspection sampling at annual review. (FY 2004)
- Modifying eligible units and housing types to include shared housing, cooperative housing, transitional housing, and high-rise buildings. (FY 2004)
- Allowing PBS8 rules to defer to Public Housing rules when used in conjunction with a mixed-finance approach to housing preservation or when assigned to a redeveloped former Public Housing property. (FY 2008)
- Partnering with local municipalities to develop a local competitive process that pairs project-based assistance with local zoning incentives. (FY 2016)

IMPROVE PROGRAM ADMINISTRATION BY:

- Allowing project sponsors to manage project waitlists as determined by KCHA. (FY 2004)

- Using KCHA's standard HCV process for determining Rent Reasonableness for units in lieu of requiring third-party appraisals. (FY 2004)
- Allowing participants in "wrong-sized" units to remain in place and pay the higher rent if needed. (FY 2004)
- Assigning standard HCV payment standards to PBS8 units, allowing modification with approval of KCHA where deemed appropriate. (FY 2004)
- Offering moves to Public Housing in lieu of an HCV exit voucher (FY 2004), or allowing the offer of a tenant-based voucher for a limited period as determined by KCHA in conjunction with internal Public Housing disposition activity. (FY 2012)
- Allowing KCHA to modify the HAP contract. (FY 2004)
- Eliminating the procedure of temporarily removing units from the HAP contract in cases in which a PBS8 resident is paying full HAP. (FY 2004).
- Using Public Housing preferences for PBS8 units in place of HCV preferences. (FY 2008)
- Allowing KCHA to inspect units at contract execution rather than contract proposal. (FY 2009)
- Modifying the definition of "existing housing" to include housing that could meet Housing Quality Standards (HQS) within 180 days. (FY 2009)
- Allowing direct owner or provider referrals to a PBS8 vacancy when the unit has remained vacant for more than 30 days. (FY 2010)
- Waiving the 20% cap on the amount of HCV budget authority that can be project-based, allowing KCHA to determine the size of our PBS8 program. (FY 2010)

PROGRESS AND OUTCOMES: KCHA continued to see efficiencies through streamlined program administration and modified business processes, saving and redirecting an estimated 45.5 hours per contract for each issued Request for Proposal (RFP).

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve	CE #1: Total cost of task in dollars	$0 saved per contract	$1,980 saved per contract[33]	$1,949 saved per contract	Achieved

[33] This figure was calculated by multiplying the median hourly wage and benefits ($44) of the staff member who oversees this activity by the number of hours saved. The number is a monetization of the hours saved through the implementation of this program.

greater cost-effectiveness					
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved per contract for RFP	45 hours saved per contract for RFP	45.5 hours saved per contract for RFP	Achieved
Increase housing choices	HC #3: Average applicant time on the waitlist in months (decrease)	0 months	29 months	43 months[34]	In Progress
Increase housing choices	HC #5: Number of households able to move to a better unit and/or high-opportunity neighborhood	0 households	48% of project-based units in high-opportunity neighborhoods	49% of project-based units in high-opportunity neighborhoods	Exceeded

ACTIVITY 2004-3: Develop Site-based Waiting Lists

MTW STATUTORY OBJECTIVE: Increase Housing Choice
APPROVAL: 2004
IMPLEMENTED: 2004

CHALLENGE: Under traditional HUD waitlist guidelines, public housing residents have limited choices about where they live. They have to accept the first unit that comes available, which might not meet the family's needs or preferences, such as proximity to a child's school or access to local service providers.

SOLUTION: Under this initiative, we have implemented a streamlined waitlist system for our Public Housing program that provides applicants additional options for choosing the location where they want to live. In addition to offering site-based waitlists, we also maintain regional waitlists and have established a list to accommodate the needs of graduates from the region's network of transitional housing facilities for families experiencing homelessness. In general, applicants are selected for occupancy using a rotation between the site-based, regional, and transitional housing applicant

[34] This figure was derived by calculating the weighted average of the wait time for applicant households currently on these lists, by bedroom size. In the past, we calculated the wait time for those who entered housing in the fiscal year.

pools, based on an equal ratio. Units are not held vacant if a particular waitlist is lacking an eligible applicant. Instead, a qualified applicant is pulled from the next waitlist in the rotation.

PROGRESS AND OUTCOMES: This streamlined process saved an estimated 178 hours of staff time in 2022.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2022 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0 saved	$4,176 saved[35]	$4,833 saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE#2: Total time to complete task in staff hours	0 hours saved	144 hours saved	178 hours saved	Exceeded
Increase housing choices	HC #3: Average applicant time on the waitlist in months (decrease)	75 months	75 months	80.5 months	Exceeded
Increase housing choices	HC #5: Number of households able to move to a better unit and/or high-opportunity neighborhood	0% of applicants	100% of Public Housing and project-based applicants housed from site-based or regional waitlists	100% of Public Housing and project-based applicants housed from site-based or regional waitlists	Achieved

ACTIVITY 2004-5: Modified Housing Quality Standards (HQS) Inspection Protocols

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2004
IMPLEMENTED: 2004

CHALLENGE: HUD's HQS inspection protocols often require multiple trips to the same neighborhood, the use of third-party inspectors, and blanket treatment of diverse housing types,

[35] This figure was calculated by multiplying the median hourly wage and benefits ($29) of the staff member who oversees this activity by the number of hours saved. The number is a monetization of the hours saved through the implementation of this program.

adding more than $100,000 to annual administrative costs. Follow-up inspections for minor "fail" items impose additional burdens on landlords, who in turn may resist renting to families with HCVs.

SOLUTION: Through a series of HCV program modifications, we have streamlined the HQS inspection process to simplify program administration, improve stakeholder satisfaction, and reduce administrative costs. Specific policy changes include: allowing the release of HAP payments when a unit fails an HQS inspection due to minor deficiencies (applies to both annual and initial move-in inspections); geographically clustering inspections to reduce repeat trips to the same neighborhood or building by accepting annual inspections completed eight to 20 months after initial inspection, allowing us to align inspection of multiple units in the same geographic location; and self-inspecting KCHA-owned units rather than requiring inspection by a third party. KCHA also piloted a risk-based inspection model that places well-maintained, multi-family apartment complexes on a biennial inspection schedule.

After closely monitoring the outcomes from the risk-based inspection pilot, KCHA decided to expand the program and move all units in multi-family apartment complexes to a biennial inspection schedule. At the end of 2019, KCHA implemented an initial inspection pilot that allows landlords of new construction properties to self-certify their units to meet basic HQS requirements.

PROGRESS AND OUTCOMES: In 2022, KCHA resumed HQS Inspection standard procedures with an emphasis on health and safety. Pandemic-related challenges have included a shortage of materials for repairs, staffing shortages, and poor unit conditions with an increase in unit fails.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0	$58,000 saved[36]	$40,041 hours saved	Partially Achieved
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	1,810 hours saved	1,213 hours saved	Partially Achieved

[36] This figure was calculated by multiplying the median inspector hourly wage and benefits ($33) by the number of hours saved. These positions are not eliminated so this is a hypothetical estimate of the amount that could be saved in staff hours by implementing this activity. Inspectors will instead undertake more auditing and monitoring inspections, assist the fraud investigator, provide landlord trainings, and speed up the timeline for new move-in inspections. It is a monetization of the hours saved through the implementation of this program.

ACTIVITY 2004-7: Streamlining Public Housing and Housing Choice Voucher Forms and Data Processing

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2004
IMPLEMENTED: 2004

CHALLENGE: Duplicative re-certifications, complex income calculations, and strict timing rules cause unnecessary intrusions into the lives of the residents we serve and expend limited resources for little purpose.

SOLUTION: After analyzing our business processes, forms, and verification requirements, we have eliminated or replaced those with little or no value. Through the use of lean engineering techniques, KCHA continues to review office workflow and identify ways that tasks can be accomplished more efficiently and intrude less into the lives of program participants, while still assuring program integrity and quality control. Under this initiative, we have made several changes to our business practices and processes for verifying and calculating tenant income and rent.

CHANGES TO BUSINESS PROCESSES:

- Modify HCV policy to require notice to move before the 20th of the month to have the paperwork processed during the month (FY 2004).
- Allow applicant households to self-certify membership in the family at the time of admission (FY 2004).
- Modify HQS inspection requirements for units converted to project-based subsidy from another KCHA subsidy, and allow the most recent inspection completed within the prior 12 months to substitute for the initial HQS inspection required before entering the HAP contract (FY 2012).
- Modify standard PBS8 requirements to allow the most recent recertification (within the last 12 months) to substitute for the full recertification when the tenant's unit is converted to a PBS8 subsidy. (FY 2012)
- Allow Public Housing and HCV applicant households to qualify for a preference when household income is below 30% of AMI. (FY 2004)

- Streamline procedures for processing interim rent changes resulting from wholesale reductions in state entitlement programs. (FY 2011)
- Modify the HQS inspection process to allow streamlined processing of inspection data. (FY 2010)
- Establish a local release form that replaces HUD Form 9886 — clearly defining verifications that could be obtained and extending authorization for use to 40 months. (FY 2014)
- Implement emergency measures to streamline operations and ensure resident stability during the pandemic, including (but not limited to) suspending non-payment of rent notices, late rent fees, evictions and terminations (except those related to life/safety matters), and not processing contract rent increases that result in a gross rent above the payment standard. (FY 2020)

CHANGES TO VERIFICATION AND INCOME CALCULATION PROCESSES:

- Exclude state Department of Social and Health Services (DSHS) payments made to a landlord on behalf of a tenant from the income and rent calculation under the HCV program. (FY 2004)
- Allow HCV residents to self-certify income of $50 or less received as a pass-through DSHS childcare subsidy. (FY 2004)
- Extend to 180 days the term over which verifications are considered valid. (FY 2008)
- Modify the definition of "income" to exclude income from assets with a value less than $50,000 and income from Resident Service Stipends less than $500 per month. (FY 2008)
- Apply any change in Payment Standard at the time of the resident's next annual review or update, and for entering households, on the effective date. (FY 2004)
- Allow HCV residents who are at $0 HAP to self-certify income at the time of review. (FY 2004)
- Temporary changes to streamline verification processes during the pandemic under an emergency declaration, including (but not limited to) equally weighting all forms of verification, immediately processing interims upon resident notification of lost income, waiving the requirement that residents must report decreases in income before the 22nd of

the month, and allowing COVID-19-related rent decreases to take effect the first day of the month following the date income decreased. (FY 2020)

PROGRESS AND OUTCOMES: At the close of 2022, in accordance with the State of Washington's declaring the end of the State of Emergency response to COVID-19, KCHA passed a resolution concluding all local emergency response efforts and corresponding COVID waivers, and recommenced in January 2023 this activity's standard operations and policies.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2022 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0	$58,000 saved[37]	$59,636 hours saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete the task in staff hours	0 hours saved	2,000 hours saved	2,179 hours saved	Exceeded

ACTIVITY 2004-9: Rent Reasonableness Modifications

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2004
IMPLEMENTED: 2004

CHALLENGE: Under current HUD regulations, a housing authority must perform an annual Rent Reasonableness review for each voucher holder. If a property owner is not requesting a rent increase, however, the rent does not fall out of federal guidelines and does not necessitate a review.

SOLUTION: KCHA saves more than 1,000 hours of staff time annually by performing Rent Reasonableness determinations only when a landlord requests a rent increase. Under standard HUD regulations, a Rent Reasonableness review is required annually in conjunction with each recertification completed under the program. After reviewing this policy, we found that if an owner had not requested a rent increase, it was unlikely the current rent fell outside of established guidelines. In response to this analysis, KCHA eliminated an annual review of rent levels. By

[37] This figure was calculated by multiplying the median Property Management Specialist hourly wage and benefits ($29) by the number of hours saved. It is a monetization of the hours saved through the implementation of this program.

bypassing this burdensome process, we intrude less in the lives of residents and can redirect our resources to more pressing needs. Additionally, KCHA performs Rent Reasonableness inspections at our properties rather than contracting with a third party, allowing us to save additional resources.

PROGRESS AND OUTCOMES: With the elimination of this non-essential regulation, KCHA has been able to adopt a policy that is less disruptive to residents while saving hours in staff time.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0 saved	$33,000 saved[38]	$35,860 saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 staff hours saved	1,000 staff hours saved	1,086 staff hours saved	Exceeded

ACTIVITY 2004-12: Energy Performance Contracting

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2004
IMPLEMENTED: 2004

CHALLENGE: KCHA could recapture more than $3 million in energy savings per year if provided the upfront investment necessary to make efficiency upgrades to our aging housing stock.

SOLUTION: KCHA employs energy conservation measures and improvements through the use of Energy Performance Contracts (EPCs) — a financing tool that allows housing authorities to make needed energy upgrades without having to self-fund the upfront necessary capital expenses. The energy services partner identifies these improvements through an investment-grade energy audit that is then used to underwrite loans to pay for the measures. Project expenses, including debt

[38] This figure was calculated by multiplying the median Inspector hourly wage and benefits ($33) by the number of hours saved. These positions are not eliminated so this is a hypothetical estimate of the amount that could be saved in staff hours by implementing this activity. Inspectors will instead undertake more auditing and monitoring inspections, assist the fraud investigator, provide landlord trainings, and perform new move-in inspections. It is a monetization of the hours saved through the implementation of this program.

service, are then paid for out of the energy savings while KCHA and our residents receive the long-term savings and benefits. Upgrades may include: the installation of energy-efficient light fixtures, solar panels, and low-flow faucets, toilets, and showerheads; upgraded appliances and plumbing; and improved irrigation and HVAC systems.

In 2016, we extended the existing EPC for an additional eight years and implemented a new 20-year EPC with Johnson Controls for both incremental and existing Public Housing properties to make needed capital improvements.

PROGRESS AND OUTCOMES: In 2022, KCHA saw energy savings of an estimated $4 million due to EPC upgrade work.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2022 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0 saved	$800,000 saved	$4 million saved	Exceeded

ACTIVITY 2004-16: Housing Choice Voucher Occupancy Requirements

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2004
IMPLEMENTED: 2004

CHALLENGE: Moves can benefit the household if they lead to gains in neighborhood or housing quality, but moves can also be burdensome because they incur the costs of finding a new unit through application fees and other moving expenses. KCHA also incurs additional costs in staff time through processing moves and working with families to locate a new unit.

SOLUTION: Households may continue to live in their current unit when their family size exceeds the standard occupancy requirements by just one member. Under standard guidelines, a seven-person household living in a three-bedroom unit would be considered overcrowded and thus be required to move to a larger unit. Under this modified policy, the family may remain voluntarily in its current unit, avoiding the costs and disruption of moving. This initiative reduces the number of processed annual moves, increases housing choice among these families, and reduces our administrative and HAP expenses.

PROGRESS AND OUTCOMES: By eliminating this rule, KCHA saved more than 500 hours in staff time in 2022 while helping families avoid the disruption and costs of a move.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2022 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	$0	$8,613 saved[39]	$17,193 saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved per file	87 hours saved	521 hours saved	Exceeded
Increase housing choices	HC #4: Number of households at or below 80% AMI that would lose assistance or need to move	0 households	150 households	170 households	Exceeded

B. Not Yet Implemented Activities

Activities listed in this section are approved but still need to be implemented.

ACTIVITY 2015-1: Flat Subsidy for Local, Non-traditional Housing Programs

APPROVAL: 2015

This activity provides a flat, per-unit subsidy instead of a monthly Housing Assistance Payment (HAP) and allows the service provider to dictate the terms of the tenancy (such as length of stay and the tenant portion of the rent). The funding would be block-granted based on the number of units authorized under contract and occupied in each program. This flexibility would allow KCHA to better support a "Housing First" approach that places high-risk homeless populations in supportive housing programs tailored to nimbly meet an individual's needs.

[39] This dollar figure was calculated by multiplying the median Property Management Specialist hourly wage and benefits ($33) by the number of hours saved.

ACTIVITY 2010-1: Supportive Housing for High-need Homeless Families

APPROVAL: 2010

This activity is a demonstration program for up to 20 households in a project-based Family Unification Program (FUP)-like environment. The demonstration program is currently deferred, as our program partners opted for a tenant-based model. It might return in a future program year.

ACTIVITY 2010-9: Limit Number of Moves for an HCV Participant

APPROVAL: 2010

Reducing household and classroom relocations during the school year is addressed currently through a counseling pilot. This policy aims to increase family and student classroom stability and reduce program administrative costs by limiting the number of times an HCV participant can move per year or over a set time. This activity is currently deferred for consideration in a future year, if the need arises.

ACTIVITY 2010-11: Incentive Payments to HCV Participants to Leave the Program

APPROVAL: 2010

KCHA may offer incentive payments to families receiving less than $100 per month in HAP to voluntarily withdraw from the program. This activity is not currently needed in our program model but may be considered in a future fiscal year.

ACTIVITY 2008-3: FSS Program Modifications

APPROVAL: 2008

KCHA is exploring possible modifications to the Family Self-Sufficiency (FSS) program that could increase incentives for resident participation and income growth. These outcomes could pave the way for residents to realize a higher degree of economic independence. The program currently includes elements that unintentionally act as disincentives for higher income earners, the very residents who could benefit most from additional support to exit subsidized housing programs. This activity will be leveraged as part of a broader strategic planning process with local service providers, and will be implemented in 2023. As such, associated reporting and outcomes will be delivered via forthcoming MTW annual plans and reports.

ACTIVITY 2008-5: Allow Limited Double Subsidy between Programs (Project-based Section 8/Public Housing/Housing Choice Vouchers)

APPROVAL: 2008

This policy change facilitates program transfers in limited circumstances, increases landlord participation and reduces the impact on the Public Housing program when tenants transfer. Following the initial review, this activity was tabled for future consideration.

C. Activities on Hold

ACTIVITY 2014-1: Stepped-down Assistance for Homeless Youth

MTW STATUTORY OBJECTIVE: Increase Self-sufficiency
APPROVAL: 2014
IMPLEMENTED: 2014

CHALLENGE: By the end of 2022, 1,738 unaccompanied youth and young adults in King County were identified as experiencing homelessness, representing nearly 13% of the total number of individuals experiencing homelessness in King County.[40] Local service providers have identified the need for a short-term, gradually diminishing rental subsidy structure to meet the unique needs of these young people.

SOLUTION: KCHA has implemented a flexible, "stepped-down" rental assistance model in partnership with local youth service providers. Our provider partners find that a short-term rental subsidy paired with supportive services is an effective way to serve youth and young adults experiencing homelessness, as a majority of them do not require extended tenure in a supportive housing environment. By providing limited-term rental assistance and promoting graduation to independent living, additional youth and young adults subsequently can be served. KCHA is partnering with Valley Cities Counseling and Consultation (VCCC) to operate the Coming Up initiative. This program offers independent housing opportunities to young adults (ages 18 to 25) who are either exiting homelessness or currently living in service-rich transitional housing. With support from the provider, participants move into housing in the private rental market, sign a lease,

[40] King County Regional Homelessness Authority: Households Served. www.kcrha.org/households-served/

and work with a resource specialist who prepares them to take over the lease after a period of being stabilized in housing.

OUTCOMES AND CURRENT STATUS: VCCC intended to transition KCHA's Coming Up program to a project-based voucher model in 2022. Unfortunately, an owner/landlord could not be identified and VCCC elected to sunset the Coming Up Program effective December 31, 2022. The nine households served by the program through 2022 transitioned from the program through graduation to independent housing, or were offered alternative affordable/supportive housing opportunities by year's end. This MTW activity was put on hold as of December 31, 2022.

KCHA may elect to re-activate this program and associated MTW flexibility at a later date. If the future iteration of this MTW activity and local program require additional flexibilities, KCHA will re-propose the activity, per direction of Attachment B of the agency's MTW contract.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase self-sufficiency	SS #8: Households transition to self-sufficiency[41]	0 households	14 households	9 households	Partially Achieved

D. Closed-Out Activities

Activities listed in this section are closed out, meaning they never have been implemented, that we do not plan to implement them in the future, or that they are completed or obsolete.

ACTIVITY 2016-1: Budget-based Rent Model

APPROVAL: 2016
CLOSEOUT YEAR: 2018

This activity would have allowed KCHA to adopt a budget-based approach to calculating the contract rent at our Project-based Section 8 developments. Traditionally, HUD requires Public Housing Authorities to set rent in accordance with Rent Reasonableness statutes. These statutes

[41] Self-sufficiency for this activity is defined as securing and maintaining housing.

require that a property's costs reflect the average costs of a comparable building in the same geographic region at a particular point in time. However, a property's needs and purpose can change over time. This set of rules does not take into consideration variations in costs, which might include added operational expenses, necessary upgrades, and increased debt service to pay for renovations. This budget-based rent model would have allowed KCHA to create an appropriate annual budget for each property from which a reasonable, cost-conscious rent level would derive.

This policy is no longer under consideration.

ACTIVITY 2013-3: Short-term Rental Assistance Program

APPROVAL: 2013
CLOSEOUT YEAR: 2015

In partnership with the Highline School District, KCHA implemented a program called the Student and Family Stability Initiative (SFSI), a Rapid Re-housing demonstration program. Using this evidence-based approach, our program paired short-term rental assistance with housing stability and employment connection services for families experiencing or on the verge of homelessness. This activity is ongoing but has been combined with Activity 2013-2: Flexible Rental Assistance, as the program models are similar and enlist the same MTW flexibilities.

ACTIVITY 2012-2: Community Choice Program

APPROVAL: 2012
CLOSEOUT YEAR: 2016

This initiative was designed to encourage and enable HCV households with young children to relocate to areas of the county with higher achieving school districts and other community benefits. Through collaboration with local nonprofits and landlords, the Community Choice Program offered one-on-one counseling to households in deciding where to live, helped households secure housing in their community of choice, and provided ongoing support once a family moved to a new neighborhood. Lessons learned from this pilot informed Creating Moves to Opportunity, KCHA's recently completed research partnership that sought to expand geographic choice.

ACTIVITY 2012-4: Supplemental Support for the Highline Community Healthy Homes Project

APPROVAL: 2012
CLOSEOUT YEAR: 2012

This project provided supplemental financial support to low-income families not otherwise qualified for the Healthy Homes project but that required assistance to avoid loss of affordable housing. This activity is completed. An evaluation of the program by Breysse *et al* was included in KCHA's 2013 Annual MTW Report.

ACTIVITY 2011-1: Transfer of Public Housing Units to Project-based Subsidy

APPROVAL: 2011
CLOSEOUT YEAR: 2012

By transferring Public Housing units to Project-based subsidy, KCHA preserved the long-term viability of 509 units of Public Housing. By disposing these units to a KCHA-controlled entity, we were able to leverage funds to accelerate capital repairs and increase tenant mobility through the provision of tenant-based voucher options to existing Public Housing residents. This activity is completed.

ACTIVITY 2011-2: Redesign the Sound Families Program

APPROVAL: 2011
CLOSEOUT YEAR: 2014

KCHA developed an alternative model to the Sound Families program that combines HCV funds with state Department of Health and Human Services funds. The goal was to continue the support of at-risk, homeless households in a FUP-like model after the completion of the Sound Families demonstration. This activity is completed and the services have been incorporated into our existing conditional housing program.

ACTIVITY 2010-2: Resident Satisfaction Survey

APPROVAL: 2010
CLOSEOUT YEAR: 2010

KCHA developed our own resident survey in lieu of the requirement to comply with the Resident Assessment Subsystem portion of HUD's Public Housing Assessment System (PHAS). The Resident

Assessment Subsystem is no longer included in PHAS so this activity is obsolete. KCHA nevertheless continues to survey residents on a regular basis.

ACTIVITY 2010-10: Implement a Maximum Asset Threshold for Program Eligibility

APPROVAL: 2010
CLOSEOUT YEAR: 2016

This activity would limit the value of assets that can be held by a family in order to obtain (or retain) program eligibility. This policy is no longer under consideration.

ACTIVITY 2009-2: Definition of Live-in Attendant

APPROVAL: 2009
CLOSEOUT YEAR: 2014

In 2009, KCHA considered a policy change that would have redefined who is considered a "Live-in Attendant." This policy is no longer under consideration.

ACTIVITY 2008-4: Combined Program Management

APPROVAL: 2008
CLOSEOUT YEAR: 2009

This activity streamlined program administration through a series of policy changes that ease operations of units converted from Public Housing to Project-based Section 8 subsidy or those located in sites supported by mixed funding streams. This policy change is completed.

ACTIVITY 2008-6: Performance Standards

APPROVAL: 2008
CLOSEOUT YEAR: 2014

In 2008, KCHA investigated the idea of developing performance standards and benchmarks to evaluate the MTW program. We worked with other MTW agencies in the development of the performance standards. This activity is closed out as KCHA continues to collaborate with other MTW agencies on industry metrics and standards.

ACTIVITY 2008-17: Income Eligibility and Maximum Income Limits

APPROVAL: 2008
CLOSEOUT YEAR: 2016

This policy would cap the income that residents may have and also still be eligible for KCHA programs. KCHA is no longer considering this activity.

ACTIVITY 2007-4: Housing Choice Voucher Applicant Eligibility

APPROVAL: 2007
CLOSEOUT YEAR: 2007

This activity increased program efficiency by removing eligibility for those currently on a federal subsidy program.

ACTIVITY 2007-8: Remove Cap on Voucher Utilization

APPROVAL: 2007
CLOSEOUT YEAR: 2014

This initiative allows us to award HCV assistance to more households than permissible under the HUD-established baseline. Our savings from a multi-tiered payment standard system, operational efficiencies, and other policy changes have been critical in helping us respond to the growing housing needs of the region's extremely low-income households. Despite ongoing uncertainties around federal funding levels, we intend to continue to use MTW program flexibility to support housing voucher issuance levels above HUD's established baseline. This activity is no longer active as agencies are now permitted to lease above their ACC limit.

ACTIVITY 2007-9: Develop a Local Asset Management Funding Model

APPROVAL: 2007
CLOSEOUT YEAR: 2007

This activity streamlined current HUD requirements to track budget expenses and income down to the Asset Management Project level. This activity is completed.

ACTIVITY 2007-18: Resident Opportunity Plan (ROP)

APPROVAL: 2007
CLOSEOUT YEAR: 2015

An expanded and locally designed version of FSS, ROP's mission was to advance families toward self-sufficiency through the provision of case management, supportive services, and program incentives, with the goal of positive transition from Public Housing or HCV into private market rental housing or home ownership. KCHA implemented this five-year pilot in collaboration with community partners, including Bellevue College and the YWCA. These partners provided education and employment-focused case management, such as individualized career planning, a focus on wage progression, and asset-building assistance. In lieu of a standard FSS escrow account, each household received a monthly deposit into a savings account, which continued throughout program participation. Deposits to the household savings account were made available to residents upon graduation from Public Housing or HCV subsidy. After reviewing the mixed outcomes from the multi-year evaluation, KCHA decided to close out the program and re-evaluate the best way to assist families in achieving economic independence.

ACTIVITY 2006-1: Block Grant Non-mainstream Vouchers

APPROVAL: 2006
CLOSEOUT YEAR: 2006

This policy change expanded KCHA's MTW Block Grant by including all non-mainstream program vouchers. This activity is completed.

ACTIVITY 2005-18: Modified Rent Cap for Housing Choice Voucher Participants

APPROVAL: 2005
CLOSEOUT YEAR: 2005

This modification allowed a tenant's portion of rent to be capped at up to 40% of gross income upon initial lease-up rather than 40% of adjusted income. *Note: KCHA may implement a rent cap modification in the future to increase housing choice.*

ACTIVITY 2004-8: Resident Opportunities and Self-Sufficiency (ROSS) Grant Homeownership

APPROVAL: 2004
CLOSEOUT YEAR: 2006

This grant funded financial assistance through MTW reserves with rules modified to fit local circumstances, modified eligibility to include Public Housing residents with HCV, required minimum income and minimum savings prior to entry, and expanded eligibility to include more than first-time homebuyers. This activity is completed.

SECTION V

SOURCES AND USES OF MTW FUNDS

A. SOURCES AND USES OF MTW FUNDS

i. Actual Sources and Uses of MTW Funds

In accordance with the requirements of this report, KCHA has submitted our unaudited information in the prescribed FDS file format through the Financial Assessment System – PHA. The audited FDS will be submitted in September 2023.

ii. Activities That Used Only MTW Funds

KCHA is committed to making the most efficient, effective, and creative use of our single-fund flexibility while adhering to the statutory requirements of the MTW program. Our ability to blend funding sources gives us the freedom to implement new approaches to program delivery in response to the varied housing needs of low-income people in the Puget Sound region. With MTW flexibility, we have assisted more of our county's households — and among those, more of the most marginalized and lowest income households — than would have been possible under HUD's traditional funding and program constraints. Our single-fund flexibility also allowed us to provide a robust range of services to households during the COVID-19 pandemic.

KCHA's MTW single-fund activities, described below, demonstrate the value and effectiveness of single-fund flexibility in practice:

- HOMELESS HOUSING INITIATIVES. These initiatives address the varied and diverse needs of the most vulnerable populations experiencing homelessness: those living with behavioral health issues; individuals with criminal justice involvement; young adults experiencing homelessness; youth recently transitioned out of foster care; families involved with the child welfare system; students experiencing homelessness and their families; and veterans experiencing homelessness. The traditional housing subsidy programs have failed to reach many of these households and lack the supportive services necessary to meet their

complex needs. In 2022, KCHA invested over $83.7 million in initiatives serving these populations and will continue to grow this investment as new HCV resources are awarded to KCHA by HUD.

- HOUSING STABILITY FUND. This fund provided emergency financial assistance to qualified residents to cover housing costs, including rental assistance, security deposits, and utility support. Under the program design, a designated agency partner disburses funding to qualified program participants and screens for eligibility according to the program's guidelines. As a result of this assistance, all of these families were able to maintain their housing, avoiding the far greater safety net costs that could occur if they became homeless.
- EDUCATION INITIATIVES. KCHA continued to actively partner with local education stakeholders to improve outcomes for the 15,507 children who lived in our federally assisted housing in 2022. The results of these efforts — including improved ability to participate in remote school learning during the pandemic, improved attendance, increases in grade-level performance, and access to early learning opportunities — carry out an integral part of our core mission. By investing in the next generation, we are working to close the cycle of poverty that persists among the many families KCHA serves.
- INCREASE ACCESS TO HEALTHCARE THROUGH PARTNERSHIPS AND COLLABORATIVE PLANNING. KCHA continues to advance our health and housing strategy by improving service coordination for residents with complex health needs, increasing resident access to health services, and identifying opportunities to impact social determinants of health. Overall, this effort has enabled KCHA residents to access new health services made available through Medicaid waivers and expansion, funding opportunities from local sources, and philanthropic supports.
- ACQUISITION AND PRESERVATION OF AFFORDABLE HOUSING. We continued to use MTW resources to preserve affordable housing that is at risk of for-profit redevelopment and to create additional affordable housing opportunities in partnership with state and local jurisdictions. When possible, we have been acquiring additional housing adjacent to existing KCHA properties in emerging and current high-opportunity neighborhoods where banked public housing subsidies can be utilized. In 2022, KCHA purchased the Village Plaza

Apartments (Kirkland), adding six new units to our inventory of KCHA affordable housing. No MTW block-grant funds were used in this acquisition.

- LONG-TERM VIABILITY OF OUR GROWING PORTFOLIO. KCHA continues to leverage our single-fund flexibility to reduce outstanding financial liabilities and protect the long-term viability of our housing inventory. Single-fund flexibility allows us to make loans in conjunction with Low Income Housing Tax Credit financing to recapitalize properties in our federally subsidized inventory. MTW funds have also supported energy conservation measures as part of our Energy Performance Contracting project, with energy savings over the life of the contracts repaying the loan. MTW working capital also provides an essential backstop for outside debt, addressing risk concerns of lenders, enhancing our credit worthiness, and enabling our continued access to private capital markets.
- REMOVAL OF THE CAP ON VOUCHER UTILIZATION. This enables us to utilize savings achieved through MTW initiatives to over-lease and provide HCV assistance to more households than normally permissible under our HUD-established baseline. Our cost containment from a multi-tiered, ZIP Code-based payment standard system, operational efficiencies, and other policy changes have been critical in helping us respond to the growing housing needs of the region's extremely low-income households. Despite ongoing uncertainties around federal funding levels, we continue to use MTW program flexibility to support housing voucher issuance above HUD baseline levels.

B. LOCAL ASSET MANAGEMENT PLAN

Has the PHA allocated costs within statute during the plan year?	No
Has the PHA implemented a local asset management plan (LAMP)?	Yes
Has the PHA provided a LAMP in the appendix?	Yes

In FY 2008, as detailed in the MTW Annual Plan for that year and adopted by our Board of Commissioners under Resolution No. 5116, KCHA developed and implemented our own local funding model for Public Housing and HCV using our MTW block grant authority. Under our

current agreement, KCHA's Public Housing Operating, Capital, and HCV funds are considered fungible and may be used interchangeably. In contrast to 990.280 regulations, which require transfers between projects only after all project expenses are met, KCHA's model allows budget-based funding at the start of the fiscal year from a central ledger, not other projects. We maintain a budgeting and accounting system that gives each property sufficient funds to support annual operations, including allowable fees. Actual revenues include those provided by HUD and allocated by KCHA based on annual property-based budgets. As envisioned, all block grants are deposited into a single general ledger fund. KCHA's 2022 LAMP is attached to this document as Appendix D.

SECTION VI

ADMINISTRATIVE

A. HUD REVIEWS, AUDITS, OR PHYSICAL INSPECTION ISSUES

The results of HUD's monitoring visits, physical inspections, and other oversight activities have not identified any deficiencies.

B. RESULTS OF LATEST KCHA-DIRECTED EVALUATIONS

In 2022, KCHA continued to expand and enhance our internal program design and evaluation capacity while leveraging external research partnerships in support of achieving the MTW program's statutory goals to promote self-sufficiency, increase housing choice, and increase agency cost effectiveness. In 2022, KCHA's Research & Evaluation (R&E) team engaged with agency program staff, leadership, and residents to update KCHA's research agenda for 2023-28 and supported internal program design and evaluation efforts. The R&E team collaborated on two external research partnerships that completed their analytical work in 2022:

- POST-EXIT OUTCOMES FROM THE HUD HEARS (HEALTH, ECONOMIC, AND RESIDENTIAL STABILITY) STUDY. Public Health-Seattle/King County conducted this study in partnership with KCHA and Seattle Housing Authority (SHA). HUD's Office of Policy Development & Research in 2020 funded the study, which was submitted to HUD in December 2022. The HUD HEARS study team linked and analyzed cross-sector data[42] on households and individuals exiting from KCHA (2016-2019) and SHA (2012-2019) housing assistance to answer the following research questions: How do public housing authorities measure and define positive and negative exits? What factors are associated with positive and negative exits? Are positive exits associated with better health, economic, and housing outcomes? The study's final report and an accompanying summary are included within Appendix E.

[42] Data sources: KCHA and SHA 50058 and exit data linked with King County's Integrated Data Hub including Medicaid claims, Healthcare for the Homeless Network (HCHN), Behavioral Health and Recovery Division services (BHRD), and Homeless Management Information System (HMIS); and Washington State Employment Security Department (ESD) wage data. Specific sample size varies by each set of analyses, and generally includes 8,266 household exits.

- CREATING MOVES TO OPPORTUNITY (CMTO). In collaboration with research partners, KCHA and SHA developed and tested a set of services designed to support moves to high-opportunity neighborhoods for families with children. The program included three components: search assistance for families, landlord engagement, and short-term financial assistance. The full report entitled *Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice* was originally released in 2019, describing the design of the CMTO program and results from the randomized controlled trial (RCT). The program was found to be highly effective (53% of CMTO families moved to high opportunity areas, in comparison with 15% of the control group). In Phase 2 of the study (2019 until early 2020, when the pilot research program ceased as of the onset of the COVID-19 pandemic), the RCT examined impacts from scaled-back versions of the program and incorporated qualitative interviews with families. The 2023 update to the 2019 report is included in Appendix E and contains qualitative data and Phase 2 results. The full set of CMTO services was found to be the most effective. Also included in Appendix E is a recently released CMTO case study from Results for America.

C. MTW STATUTORY REQUIREMENT CERTIFICATION

Certification is attached as Appendix A.

D. MTW ENERGY PERFORMANCE CONTRACT (EPC) FLEXIBILITY DATA

EPC data is attached as Appendix G.

APPENDIX A

CERTIFICATION OF STATUTORY COMPLIANCE

Certification of Statutory Compliance

On behalf of the King County Housing Authority (KCHA), I certify that the Agency has met the three statutory requirements of the Restated and Amended Moving to Work Agreement entered into between the Department of Housing and Urban Development (HUD) and KCHA on March 13, 2009, and extended on September 19, 2016. Specifically, KCHA has adhered to the following requirements of the MTW demonstration during FY 2022:

- At least 75 percent of the families assisted by KCHA are very low-income families, as defined in section 3(b)(2) of the 1937 Act;
- KCHA has continued to assist substantially the same total number of eligible low-income families as would have been served absent participation in the MTW demonstration; and
- KCHA has continued to serve a comparable mix of families (by family size) as would have been served without MTW participation.

DocuSigned by:
Robin Walls
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Robin Walls
Executive Director/Chief Executive Officer
King County Housing Authority

3/31/2023
Date

APPENDIX B

PLANNED EXISTING PROJECT-BASED VOUCHERS

Project-based Voucher Contracts: 2022

Property Name	Number of Project-based Vouchers	Status as of End of 2022	Population Served	RAD?
30Bellevue	23	Leased	Homeless Non-Elderly Disabled	No
30Bellevue	8	Leased	Low Income Families	No
Alpine Ridge	27	Leased	Low Income Families	No
Andrew's Glen	30	Leased	Low Income Families; Homeless Veterans	No
Appian Way	3	Leased	Homeless Families	No
Athene	8	Leased	Low Income Seniors	No
August Wilson Place	8	Leased	Homeless Veterans	No
August Wilson Place	8	Leased	Homeless Families	No
Avondale Manor	20	Leased	Low Income Families, Elderly, or Disabled	No
Avondale Park	43	Leased	Homeless Families	No
Bellepark East	12	Leased	Low Income Families	No
Bellevue House # 1	1	Leased	Homeless Families	No
Bellevue House # 2	1	Leased	Homeless Families	No
Bellevue House # 3	1	Leased	Homeless Families	No
Bellevue House # 4	1	Leased	Homeless Families	No
Bellevue House # 5	1	Leased	Homeless Families	No
Bellevue House # 6	1	Leased	Homeless Families	No
Bellevue House # 7	1	Leased	Homeless Families	No
Bellevue House # 8	1	Leased	Homeless Families	No
Bellevue Manor	66	Leased	Low Income Seniors/Disabled	No
Birch Creek	262	Leased	Low Income Families	No
Burien Heights	15	Leased	Homeless Young Adults	No
Campus Court I	12	Leased	Low Income Families, Elderly, or Disabled	No
Campus Court II (House)	1	Leased	Low Income Families, Elderly, or Disabled	No
Carriage House	13	Leased	Homeless Veterans	No
Cedarwood	25	Leased	Low Income Families, Elderly, or Disabled	No
Chalet	4	Leased	Homeless Families	No
Chalet	5	Leased	Low Income Families	No
City Park Townhomes	11	Leased	Homeless Families	No
Compass Housing Renton	58	Leased	Homeless Veterans	No
Copper Lantern	4	Leased	Homeless Individuals	No
Copper Lantern	7	Leased	Low Income Families	No
Cove East Apartments	16	Leased	Homeless Veterans	No
Creston Point	4	Leased	Homeless Families	No
Eastbridge	31	Leased	Low Income Families	No
Eastridge House	40	Leased	Low Income Seniors/Disabled	No
Eernisse	13	Leased	Low Income Families	No

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2022	Population Served	RAD?
Enumclaw Fourplex	5	Leased	Homeless Families	No
Esterra Park	8	Leased	Homeless Families	No
Evergreen Court	30	Leased	Low Income Families, Elderly, or Disabled	No
Evergreen Court	15	Leased	Low Income Seniors	No
Family Village	10	Leased	Homeless Families	No
Family Village	26	Leased	Low Income Families	No
Federal Way House #1	1	Leased	Low Income Families, Elderly, or Disabled	No
Federal Way House #2	1	Leased	Low Income Families, Elderly, or Disabled	No
Federal Way House #3	1	Leased	Low Income Families, Elderly, or Disabled	No
Forest Grove	25	Leased	Low Income Families, Elderly, or Disabled	No
Foster Commons	2	Leased	Homeless Families	No
Francis Village	3	Leased	Low Income Families	No
Francis Village	10	Leased	Homeless Young Families	No
Francis Village	10	Leased	Homeless Veterans	No
Gilman Square	25	Leased	Low Income Families	No
Glenview Heights	10	Leased	Low Income Seniors/Disabled	No
Green Leaf	27	Leased	Low Income Families, Elderly, or Disabled	No
Green River Homes	59	Leased	Low Income Families, Elderly, or Disabled	No
Harrison House	48	Leased	Low Income Seniors	No
Heritage Park	15	Leased	Homeless Families	No
Heritage Park	36	Leased	Low Income Families	No
Hidden Village	78	Leased	Low Income Families, Elderly, or Disabled	No
Highland Village	8	Leased	Low Income Families	No
Houser Terrace	25	Leased	Homeless Veterans	No
Independence Bridge	24	Leased	Homeless Young Adults	No
Inland Empire Group Home	1	Leased	Disabled Individuals	No
Inland Empire Group Home	1	Leased	Disabled Individuals	No
Inland Empire Group Home	1	Leased	Disabled Individuals	No
Inland Empire Group Home	1	Leased	Disabled Individuals	No
Inland Empire Group Home	1	Leased	Disabled Individuals	No
Inland Empire Group Home	1	Leased	Disabled Individuals	No
Inland Empire Group Home	1	Leased	Disabled Individuals	No
Inland Empire Group Home	1	Leased	Disabled Individuals	No
Johnson Hill	8	Leased	Low Income Families	No
Joseph House	10	Leased	Low Income Seniors	No

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2022	Population Served	RAD?
Juanita Court	30	Leased	Low Income Families, Elderly, or Disabled	No
Juanita Trace I & II	39	Leased	Low Income Families, Elderly, or Disabled	No
Kensington Square	6	Leased	Homeless Families	No
Kings Court	30	Leased	Low Income Families	No
Kirkland Avenue	2	Leased	Homeless Veterans	No
Kirkwood Terrace	28	Leased	Low Income Families, Elderly, or Disabled	No
Landmark Apartments	28	Leased	Low Income Families	No
Laurelwood Gardens	8	Leased	Low Income Families	No
Lauren Heights	5	Leased	Homeless Families	No
Linden Highlands	2	Leased	Homeless Families	No
New Arcadia	5	Leased	Homeless Young Adults	No
Newport	23	Leased	Low Income Families, Elderly, or Disabled	No
Newporter Apartments	22	Leased	Low Income Families	No
NIA Apartments	42	Leased	Low Income Seniors	No
Northwood Square	24	Leased	Low Income Families, Elderly, or Disabled	No
Parkview Group Home	1	Leased	Disabled Individuals	No
Parkview Group Home	1	Leased	Disabled Individuals	No
Parkview Group Home	1	Leased	Disabled Individuals	No
Parkview Group Home	1	Leased	Disabled Individuals	No
Passage Point	46	Leased	Homeless Families/Re-entry	No
Patricia Harris Manor	41	Leased	Low Income Seniors/Disabled	No
Petter Court	4	Leased	Homeless Families	No
Phoenix Rising	24	Leased	Homeless Young Adults	No
Pickering Court	30	Leased	Low Income Families, Elderly, or Disabled	No
Plum Court	10	Leased	Low Income Families	No
Providence John Gabriel Ho	8	Leased	Low Income Seniors	No
Renton Commons	12	Leased	Homeless Families	No
Renton Commons	14	Leased	Homeless Veterans	No
Riverton Terrace I	30	Leased	Low Income Families	No
Ronald Commons	8	Leased	Homeless Veterans	No
Rose Crest	10	Leased	Homeless Families	No
Rose Crest	8	Leased	Homeless Families	No
Salmon Creek	9	Leased	Low Income Families	No
Seola Crossing I & II	63	Leased	Low Income Families	No
Shoreham	18	Leased	Low Income Families, Elderly, or Disabled	No
Shoreline Veteran's Center	25	Leased	Homeless Veterans	No
Somerset Gardens	8	Leased	Low Income Families	No

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2022	Population Served	RAD?
Sophia's Home - Bellepark	1	Leased	Homeless Individuals	No
Sophia's Home -	2	Leased	Homeless Individuals	No
Sophia's Home - Woodside	4	Leased	Homeless Individuals	No
Southwood Square	104	Leased	Low Income Families	No
Spiritwood Manor	128	Leased	Low Income Families, Elderly, or Disabled	No
Summerfield Apartments	13	Leased	Low Income Families	No
Summerwood	25	Leased	Low Income Families	No
The Willows	15	Leased	Homeless Families	No
Timberwood	20	Leased	Low Income Families	No
Timberwood Apartments	18	Leased	Homeless Veterans	No
Unity Village of White	6	Leased	Homeless Families	No
Valley Park East & West	12	Leased	Homeless Families	No
Valley Park East & West	16	Leased	Low Income Families	No
Valley Park East & West	2	Leased	Disabled Individuals	No
Vashon Terrace	16	Leased	Low Income Seniors/Disabled	No
Velocity Apartments	8	Leased	Homeless Families	No
Velocity Apartments	8	Leased	Homeless Veterans	No
Victorian Woods	15	Leased	Low Income Families, Elderly, or Disabled	No
Villa Capri	5	Leased	Homeless Families	No
Villa Esperanza	23	Leased	Homeless Families	No
Village at Overlake Station	8	Leased	Disabled Individuals	No
Village at Overlake Station	12	Leased	Low Income Families	No
Villages at South Station	20	Leased	Homeless Veterans	No
Vista Heights	30	Leased	Low Income Families, Elderly, or Disabled	No
Wellswood	30	Leased	Low Income Families, Elderly, or Disabled	No
William J. Wood Veterans	44	Leased	Homeless Veterans	No
Woodcreek Lane	20	Leased	Low Income Families, Elderly, or Disabled	No
Woodland North	10	Leased	Homeless Veterans	No
Woodland North	5	Leased	Low Income Families	No
Woodside East	23	Leased	Low Income Families	No
Young's Lake	28	Leased	Low Income Families	No

APPENDIX C

ANNUAL UNIT UPGRADE TRACKING REPORT

Unit Upgrade Tracking Report - 2022

	Fund	Property		Site	Unit #	Tenmast Unit #	Bed-room	Date Vacated	Date Complete	Total Hours	Labor Cost	Material Cost	Total Cost	Work Order #
1	123	105		Park Royal	208	00101051208	2	11/5/2021	1/14/2022	275	$17,683	$19,592	$37,275	127146
2	250	156		Westminster	113	00101560113	1	11/4/2021	1/19/2022	217	$14,051	$15,292	$29,343	127483
3	509	404		Pickering Ct	303	00504040303	3	9/27/2021	1/24/2022	468	$30,911	$24,153	$55,064	123901
4	146	450	EGIS	Mardi Gras	313	00404500313	1	10/25/2021	1/24/2022	232	$16,146	$13,573	$29,719	126909
5	188	390		Burien Pk	224	00303900224	1	10/1/2021	1/25/2022	274	$17,869	$13,985	$31,854	124018
6	122	101		Ballinger Homes	201	00101010201	2	7/6/2021	1/31/2022	375	$24,189	$27,344	$51,533	126453
7	122	101		Ballinger Homes	202	00101010202	3	5/3/2021	1/31/2022	375	$24,401	$28,401	$52,802	126155
8	169	296		Illahee	4	00202960004	1	11/1/2021	2/1/2022	314	$20,414	$22,336	$42,750	126676
9	509	405		Glenview	4	00404050004	2	10/4/2021	2/3/2022	336	$21,952	$22,618	$44,570	124181
10	188	390		Burien Pk	310	00303900310	1	10/1/2021	2/7/2022	224	$15,026	$13,755	$28,781	124171
11	112	292		Newport	6	00802920006	3	11/1/2021	2/8/2022	296	$19,384	$21,911	$41,295	127482
12	122	104		Pepper Tree	30	00101040030	2	12/6/2021	2/10/2022	273	$17,811	$18,391	$36,202	128365
13	142	403		Cascade Homes	F103	00404030086	3	10/5/2021	2/14/2022	332	$21,480	$17,718	$39,198	124250
14	509	204		Forest Grove	7	00202040007	2	12/14/2021	2/16/2022	272	$17,648	$18,206	$35,854	128631
15	164	365		Pacific Court	B3	00303650114	2	11/2/2021	2/18/2022	294	$19,327	$14,868	$34,195	125782
16	124	152		Briarwood	225	00101520225	1	12/3/2021	2/24/2022	220	$14,099	$14,860	$28,960	126998
17	127	203		College Place	9	00202030009	2	1/18/2022	2/28/2022	243	$15,785	$16,617	$32,402	129560
18	509	405		Glenview	2	00404050002	2	11/2/2021	2/28/2022	311	$20,476	$24,492	$44,968	125485
19	181	501	Tax Credit	Valley Park East	626	00505010049	2	12/15/2021	3/2/2022	272	$17,999	$15,358	$33,357	127404
20	168	553	EGIS	Casa Madrona	106	00505530106	2	12/21/2021	3/7/2022	299	$19,827	$11,515	$31,342	128334
21	122	104		Pepper Tree	18	00101040018	2	2/1/2022	3/7/2022	272	$17,712	$16,139	$33,851	130175
22	164	354	EGIS	Brittany Pk	214	00303540214	1	12/23/2021	3/10/2022	275	$18,672	$13,742	$32,414	128274
23	169	296		Illahee	21	00202960021	2	12/6/2021	3/14/2022	368	$24,016	$22,530	$46,546	126982
24	112	292		Newport	8	00802920008	2	2/2/2022	3/17/2022	300	$19,572	$20,858	$40,430	129757
25	163	352	EGIS	Munro Manor	11	00303520011	1	12/31/2021	3/17/2022	257	$16,902	$14,436	$31,338	128276
26	167	552		Southridge	608	00505520608	1	12/1/2021	3/18/2022	265	$17,826	$12,896	$30,722	127128
27	163	352		Yardley Arms	201	00303533201	1	12/17/2020	3/24/2022	255	$19,101	$13,823	$32,924	127132
28	149	550		Wayland Arms	418	00505500418	2	12/18/2021	3/29/2022	270	$17,550	$15,453	$33,003	127221
29	124	154		Lakehouse	304	00101540304	1	2/1/2022	3/31/2022	216	$13,992	$19,220	$33,212	131116
30	482	465	Tax Credit	Bellevue Manor	306	00404650306	1	2/16/2022	4/1/2022	217	$14,152	$15,000	$29,152	131354
31	124	154		Lakehouse	219	00101540219	1	1/14/2022	4/4/2022	219	$14,056	$18,547	$32,603	130672
32	509	351		Riverton Family	14465	00303510025	2	12/18/2021	4/4/2022	301	$19,846	$20,446	$40,292	127408
33	130	251		Casa Juanita	113	00202510113	1	2/1/2022	4/7/2022	215	$14,088	$15,510	$29,598	131117
34	509	405		Glenview	8	00404050008	2	1/31/2022	4/8/2022	216	$15,632	$16,909	$32,541	131355
35	188	390		Burien Pk	209	00303900209	1	12/31/2021	4/8/2022	271	$16,381	$13,106	$29,487	128220
36	142	403		Cascade Homes	S104	00404030045	3	12/31/2021	4/14/2022	373	$24,454	$20,712	$45,166	129258
37	142	403		Cascade	Z102	00404030019	2	2/7/2022	4/15/2022	315	$20,212	$19,434	$39,647	130593
38	150	551	EGIS	Plaza	403	00505510403	1	1/30/2022	4/18/2022	274	$18,201	$13,836	$32,037	129945
39	188	390		Burien Pk	201	00303900201	1	1/31/2022	4/21/2022	284	$18,211	$13,547	$31,758	129182
40	122	101		Ballinger Homes	155	00101010155	2	12/15/2022	4/26/2022	296	$18,664	$20,151	$38,815	130924
41	163	352	EGIS	Munro Manor	204	00303520204	1	2/14/2022	4/26/2022	255	$16,040	$15,172	$31,212	130300
42	124	154		Lakehouse	115	00101540115	1	2/10/2022	4/29/2022	240	$15,632	$19,437	$35,069	132309
43	169	296		Illahee	32	00202960032	1	2/25/2022	5/2/2022	352	$22,912	$21,627	$44,539	130897
44	148	503		Firwood	255	00505030022	2	1/4/2022	5/2/2022	387	$25,458	$16,829	$42,287	128796
45	122	101		Ballinger Homes	196	00101010196	3	3/1/2022	2/25/2022	344	$22,536	$27,114	$49,650	132997
46	125	153		Northridge 2	238	00101530238	1	2/28/2022	5/4/2022	220	$14,212	$18,383	$32,595	132310
47	188	390		Burien Pk	115	00303900115	1	1/31/2022	5/5/2022	232	$14,782	$13,104	$27,886	130223
48	482	465	Tax Credit	Bellevue Manor	307	00404650307	1	3/15/2022	5/10/2022	220	$14,308	$15,371	$29,679	132757
49	148	503		Firwood	221	00505030022	2	1/4/2022	5/12/2022	371	$25,363	$17,265	$42,628	129220
50	128	150	EGIS	Paramount House	112	00101500112	1	2/23/2022	5/16/2022	220	$14,340	$17,401	$31,741	132996
51	148	503		Firwood	239	00505030015	2	1/20/2022	5/18/2022	405	$25,854	$16,921	$42,775	129221
52	114	293		Hidden Village	B 102	00802930044	2	3/17/2022	5/20/2022	272	$17,520	$20,008	$37,528	131630
53	500	582		Campus Grn	21G	00505800010	1	1/11/2022	5/20/2022	307	$19,533	$17,378	$36,911	128687
54	181	501	Tax Credit	Valley Pk West	211	00505010007	2	2/28/2022	5/26/2022	228	$14,549	$17,013	$31,562	130884
55	169	158		Illahee	31	00202960031	2	5/13/2021	5/31/2022	344	$22,472	$21,522	$43,994	119291
56	500	582		Campus Grn	21A	00505800005	1	2/1/2022	6/1/2022	287	$18,352	$16,133	$34,485	129652
57	163	352	EGIS	Munro Manor	215	00303520215	1	3/17/2022	6/6/2022	270	$17,550	$15,307	$32,857	132304
58	165	504		Burndale	1728J	00505040045	2	1/31/2022	6/8/2022	329	$21,438	$20,188	$41,626	129513
59	165	504		Burndale	1728K	00505040034	3	2/15/2022	6/14/2022	372	$23,114	$19,246	$42,360	130295
60	142	403		Cascade Homes	S101	00404030042	3	4/25/2022	6/17/2022	377	$24,578	$24,864	$49,442	133152
61	509	404		Pickering Court	103	00504040103	3	3/31/2022	6/24/2022	324	$21,084	$23,480	$44,564	132404
62	124	154		Lakehouse	301	00101540301	1	4/5/2022	6/27/2022	217	$14,027	$18,971	$32,998	133490
63	165	504		Burndale	1720K	00505040034	3	4/28/2022	6/27/2022	341	$22,438	$19,075	$41,513	133222
64	509	204		Forest Grove	18	00202040018	3	4/22/2022	6/28/2022	272	$17,520	$18,222	$35,742	134284
65	169	296		Illahee	16	00202960016	1	4/14/2022	6/29/2022	200	$13,048	$11,003	$24,051	134283

Unit Upgrade Tracking Report - 2022

	Fund	Property		Site	Unit #	Tenmast Unit #	Bed-room	Date Vacated	Date Complete	Total Hours	Labor Cost	Material Cost	Total Cost	Work Order #
66	250	156		Westminster	410	00101560410	1	4/8/2022	6/30/2022	216	$14,120	$15,507	$29,627	133615
67	146	450	EGIS	Mardi Gras	218	00404500313	1	4/20/2022	6/30/2022	220	$14,669	$11,374	$26,043	133562
68	165	504		Burien Pk	200	00303900200	1	4/28/2022	7/7/2022	245	$14,536	$13,902	$28,438	133517
69	165	504		Burien Pk	328	00303900328	1	4/30/2022	7/11/2022	225	$12,538	$14,038	$26,576	133583
70	509	351		Riverton Family	14461	00303510021	2	4/21/2022	7/14/2022	340	$24,835	$21,355	$46,190	133561
71	509	351		Riverton Family	14463	003035100213	2	4/21/2022	7/18/2022	358	$27,723	$25,517	$53,240	134595
72	482	465	Tax Credit	Bellevue Manor	313	00404650313	1	4/29/2022	7/20/2022	216	$16,136	$15,419	$31,555	134789
73	114	293		Hidden Village	A-211	00802930025	3	6/1/2022	7/20/2022	272	$20,067	$18,042	$38,109	134880
74	250	156		Westminster	312	00101560312	1	5/31/2022	7/26/2022	216	$15,761	$15,615	$31,376	135519
75	169	296		Illahee	6	00202960006	1	2/7/2022	7/27/2022	368	$27,166	$23,401	$50,567	130896
76	500	485		Anita Vista	205	00404850012	1	5/31/2022	7/27/2022	350	$25,331	$20,745	$46,076	133703
77	164	358	EGIS	Riverton Senior	204	00303580204	1	5/23/2022	8/4/2022	222	$16,598	$18,461	$35,058	133840
78	125	151		Northridge 2	335	00101530335	1	6/10/2022	8/5/2022	218	$16,334	$19,353	$35,687	136059
79	142	403		Cascade Homes	AA101	00404030016	3	5/9/2022	8/8/2022	295	$25,041	$20,378	$45,419	133593
80	169	296		Illahee	27	00202960027	2	6/17/2022	8/1/2022	316.0	$23,398	$21,900	$45,298	137238
81	169	296		Illahee	35	00202960035	2	6/3/2022	8/11/2022	346.0	$25,919	$26,011	$51,929	134978
82	509	102		Greenleaf	A-3	00101020003	2	7/11/2022	8/16/2022	244.0	$18,642	$18,704	$37,346	137215
83	181	501	Tax Credit	Valley Pk	911	00505010026	3	5/26/2022	8/16/2022	311	$23,305	$22,747	$46,052	135255
84	164	365		Pacific CT	A15	00303650215	2	5/30/2022	8/17/2022	304	$22,607	$15,992	$38,599	134701
85	509	201		Avondale Manor	12	00202010012	2	6/30/2022	8/18/2022	274.0	$21,057	$17,144	$38,201	136942
86	150	551	EGIS	Plaza 17	110	00505510110	1	6/6/2022	8/22/2022	230	$17,100	$13,298	$30,398	135151
87	127	203		College Place	19	00202030019	2	7/24/2022	8/26/2022	251.0	$18,912	$16,950	$35,862	137445
88	148	503		Firwood	333	00505030045	3	6/30/2022	8/29/2022	256	$18,625	$17,167	$35,792	135150
89	500	582		Campus Grn	21E	00505800009	1	6/3/2022	8/31/2022	240	$17,671	$14,981	$32,652	135055
90	187	290		Northlake House	411	00202900411	1	7/11/2022	9/2/2022	212	$15,895	$15,425	$31,320	137216
91	124	152		Briarwood	321	00101520321	1	6/30/2022	9/12/2022	212	$15,569	$16,333	$31,902	137972
92	165	504		Burndale	1716K	00505040030	3	7/11/2022	9/12/2022	394	$28,321	$25,115	$53,436	136469
93	167	552		Southridge	312	00505520312	1	7/3/2022	9/12/2022	274	$20,559	$14,845	$35,404	136078
94	165	504		Burndale	1740I	00505040021	2	7/15/2022	9/19/2022	331	$22,607	$18,103	$40,710	136411
95	153	215		Houghton	202	00202150202	2	7/1/2022	9/20/2022	318	$23,392	$23,811	$47,203	137973
96	130	251		Casa Juanita	205	00202510205	1	7/12/2022	9/21/2022	208	$15,342	$14,680	$30,021	138486
97	146	450	EGIS	Mardi Gras	207	00404500207	1	7/11/2022	9/21/2022	235	$17,599	$11,984	$29,583	136726
98	122	104		Pepper Tree	22	00101040022	1	7/22/2022	9/23/2022	234	$16,527	$17,676	$34,203	138487
99	125	151		Northridge 2	330	00101530330	1	7/28/2022	9/30/2022	216	$15,819	$18,761	$34,580	138762
100	189	191		Northwood	310	00101910310	1	7/26/2022	10/3/2022	200	$15,952	$14,796	$30,748	139038
101	142	403		Cascade Homes	D102	00404030016	1	7/18/2022	10/5/2022	325	$23,104	$16,829	$39,933	133590
102	148	503		Firwood	355	00505030034	3	7/12/2022	10/6/2022	314	$23,010	$15,885	$38,895	136602
103	250	156		Westminster	110	00101560110	1	7/8/2022	10/10/2022	216	$15,816	$15,401	$31,217	138225
104	114	293		Hidden Village	A-105	00802930006	3	8/4/2022	10/18/2022	270	$19,813	$19,950	$39,764	137437
105	146	450	EGIS	Mardi Gras	319	00404500319	1	8/22/2022	10/19/2022	258	$19,273	$12,457	$31,730	137772
106	509	407		Vista Hts-7	18409	00404070007	3	7/18/2022	10/21/2022	424	$30,390	$24,084	$54,474	136718
107	509	208		Wellswood	G-2	00202080018	3	8/12/2022	10/24/2022	212	$16,085	$17,426	$33,511	139675
108	123	105		Park Royal	106	00101051106	2	8/12/2022	10/28/2022	236	$17,163	$22,486	$39,648	140009
109	130	251		Casa Juanita	321	00202510321	1	8/15/2022	11/1/2022	218	$16,014	$16,767	$32,781	140020
110	124	154		Lakehouse	106	00101540206	1	8/24/2022	11/2/2022	242	$17,594	$19,553	$37,147	140360
111	114	293		Hidden Village	B-209	00802930063	3	7/18/2022	11/3/2022	340	$26,618	$21,439	$48,057	138725
112	124	152		Briarwood	109	00101520109	1	8/31/2022	11/9/2022	212	$15,588	$18,580	$34,168	140362
113	165	504		Burndale	1731J	00505040034	5	8/18/2022	11/9/2022	440	$33,085	$27,213	$60,298	137996
114	181	501	Tax Credit	Valley Pk	215	00505010026	2	8/19/2022	11/10/2022	225	$16,860	$16,953	$33,813	138457
115	150	551	EGIS	Plaza 17	302	00505510302	1	8/22/2022	11/15/2022	247	$18,476	$12,186	$30,662	139070
116	509	102		Greenleaf	D-1	00101020013	2	9/26/2022	12/1/2022	296	$21,651	$21,934	$43,585	141822
117	124	154		Lakehouse	316	00101540316	1	9/21/2022	12/1/2022	220	$16,279	$18,449	$34,728	141374
118	146	450	EGIS	Mardi Gras	320	00404500319	1	9/19/2022	12/1/2022	231	$16,370	$13,797	$30,167	139156
119	124	154		Lakehouse	321	00101540321	1	9/20/2022	12/2/2022	214	$15,751	$18,219	$33,970	140991
120	181	501	Tax Credit	Valley Pk	922	00505010007	4	10/3/2022	12/7/2022	358	$25,073	$22,684	$47,757	139803
121	132	210		Kirkland Place	302	00202100302	2	6/8/2022	12/5/2022	252	$21,356	$22,553	$43,910	141827
122	250	156		Westminster	309	00101560309	1	9/1/2022	12/7/2022	220	$16,334	$15,855	$32,189	140703
123	148	503		Firwood	261	00505030034	3	10/4/2022	12/13/2022	369	$26,791	$19,998	$46,789	140196
124	122	104		Peppertree	38	00101040038	2	10/24/2022	12/19/2022	248	$18,058	$21,600	$39,658	142092
125	124	152		Briarwood	301	00101520301	1	10/14/2022	12/20/2022	226	$16,686	$18,215	$34,900	142091
126	125	151		Northridge 1	5	00101510005	1	11/1/2022	12/21/2022	220	$16,366	$16,352	$32,718	142736
127	164	354	EGIS	Brittany Pk	211	00303540211	1	10/4/2022	12/22/2022	371	$24,950	$15,059	$40,009	139891
128	162	350		Boulevard	214	00303500214	1	10/4/2022	12/28/2022	229	$16,994	$15,359	$32,353	140281
129	140	401		Valli Kee	59	00404010059	2	10/13/2022	12/29/2022	260	$18,709	$19,376	$38,085	139981

Unit Upgrade Tracking Report - 2022

	Fund	Property		Site	Unit #	Tenmast Unit #	Bed-room	Date Vacated	Date Complete	Total Hours	Labor Cost	Material Cost	Total Cost	Work Order #
129	Totals	**22**	EGIS &		**Avg**		**1.7**		**Average**	**279**	**$19,305**	**$18,128**	**$37,433**	
			Tax Credit											
Asset Management														
1	310	481		Vantage Glen	22	00704810022	2	5/19/2022	8/9/2022	467	$33,719	$23,794	$57,513	134743
130	**2022 Total Upgrade Production**													

APPENDIX D

KCHA'S LOCAL ASSET MANAGEMENT PLAN

As detailed in KCHA's FY 2008 MTW Annual Plan and adopted by the Board of Commissioners under Resolution No. 5116, KCHA has implemented a Local Asset Management Plan that considers the following:

- KCHA will develop its own local funding model for Public Housing and Section 8 using its block grant authority. Under its current agreement, KCHA can treat these funds and CFP dollars as fungible. In contrast to 990.280 regulations, which require transfers between projects after all project expenses are met, KCHA's model allows budget-based funding at the start of the fiscal year from a central ledger, not other projects. KCHA will maintain a budgeting and accounting system that gives each property sufficient funds to support annual operations, including allowable fees. Actual revenues will include those provided by HUD and allocated by KCHA based on annual property-based budgets. As envisioned, all block grants will be deposited into a single general ledger fund. This will have multiple benefits.

    - KCHA gets to decide subsidy amounts for each public housing project. It's estimated that HUD's new funding model has up to a 40% error rate for individual sites. This means some properties get too much, some too little. Although funds can be transferred between sites, it's simpler to determine the proper subsidy amount at the start of the fiscal year rather than when shortfalls develop. Resident services costs will be accounted for in a centralized fund that is a sub-fund of the single general ledger, not assigned to individual programs or properties.

    - KCHA will establish a restricted public housing operating reserve equivalent to two months' expenses. KCHA will estimate subsidies and allow sites to use them in their budgets. If the estimate exceeds the actual subsidy, the difference will come from the operating reserve. Properties may be asked to replenish this central reserve in the following year by reducing expenses, or KCHA may choose to make the funding permanent by reducing the unrestricted block grant reserve.

- Using this approach will improve budgeting. Within a reasonable limit, properties will know what they have to spend each year, allowing them autonomy to spend excess on "wish list" items and carefully watch their budgets. The private sector doesn't wait until well into its fiscal year to know how much revenue is available to support its sites.

- Reporting site-based results is an important component of property management and KCHA will continue accounting for each site separately; however, KCHA, as owner of the properties will determine how much revenue will be included as each project's subsidy. All subsidies will be properly accounted for under the MTW rubric.

- Allowable fees to the central office cost center (COCC) will be reflected on the property reports, as required. The MTW ledger won't pay fees directly to the COCC. As allowable under the asset management model, however, any subsidy needed to pay legacy costs, such as pension or terminal leave payments and excess energy savings from the Authority's ESCO, may be transferred from the MTW ledger or the projects to the COCC.

- Actual Section 8 amounts needed for housing assistance payments and administrative costs will be allotted to the Housing Choice Voucher program, including sufficient funds to pay asset management fees. Block grant reserves and their interest earnings will not be commingled with Section 8 operations, enhancing budget transparency. Section 8 program managers will become more responsible for their budgets in the same manner as public housing site managers.

- Block grant ledger expenses, other than transfers out to sites and Section 8, will be those that support MTW initiatives, such as the South County Pilot or resident self-sufficiency programs. Isolating these funds and activities will help KCHA's Board of Commissioners and its management keeps track of available funding for incremental initiatives and enhances KCHA's ability to compare current to pre-MTW historical results with other housing authorities that do not have this designation.

- In lieu of multiple submissions of Operating Subsidy for individual Asset Management Projects, KCHA may submit a single subsidy request using a weighted average project expense level (WAPEL) with aggregated utility and add-on amounts.

APPENDIX E
EVALUATIONS

Housing and Urban Development Health, Economic, and Residential Stability (HUD HEARS) Study

Final report

December 2022

Public Health
Seattle & King County

King County Housing Authority

Seattle Housing Authority

Chapter 1: Executive summary

Introduction

Housing affordability continues to be a significant challenge facing many American households. Nearly half of all renters are housing cost burdened, defined as spending 30% or more of income on housing costs (Martinez, 2022). Federal housing assistance, primarily in the form of tenant-based vouchers (TBVs), project-based vouchers (PBVs) or public housing (PH), reaches only 20-25% of eligible low-income households, leaving many people struggling to afford stable housing (Turner & Kingsley, 2008). One possible approach to ensuring as many people as possible get assistance is to create pathways for people receiving housing assistance to become economically self-sufficient and no longer require housing support. To that end, in 2019, the U.S. Department of Housing and Urban Development (HUD) set a goal of increasing the proportion of households that exit HUD-supported housing for positive reasons (e.g., homeownership) (U.S. Department of Housing and Urban Development, 2019).

Understanding which tenants are likely to leave for positive or negative reasons can inform policies and programs that aim to encourage positive exits. It is also imperative to ensure that a positive exit is likely to be beneficial to those exiting. In addition, a full understanding of the consequences of exiting allows for the identification of interventions that might mitigate the negative impacts.

However, little is known about factors related to different types of exits from housing assistance, and outcomes that follow from exiting are even less understood. To address, this, we sought to answer three key questions:

1. What constitutes a positive or negative exit from HUD-assisted housing?
2. What factors are associated with categories of exits (positive, neutral, negative)?
3. Is a positive exit from housing assistance associated with better post-exit outcomes than for residents who left for negative reasons?

Project setting

The project was a collaboration between Public Health – Seattle & King County (PHSKC), King County Housing Authority (KCHA) and Seattle Housing Authority (SHA). All three agencies have worked together for several years to bring housing and health data together to better understand the needs of housing assistance recipients in King County. Both SHA and KCHA are Moving to Work (MTW) PHAs that serve clients predominantly situated in an urban or suburban setting, though King County also encompasses a large rural area[1]. Seattle and the surrounding area has experienced a huge increase in population over the past decade, growing at 2–3 times the national average of 7.4% from 2010 to 2020 (Office of Planning & Community Development, 2021). The population boom has been accompanied by a large increase in wealth, with the median income increasing from $60k in 2010 to $102k in 2019 in Seattle and $66k to $102k in King County as a whole (not adjusted for inflation) (Public Health - Seattle & King County, 2022). Both population and income changes have put pressure on the housing market, leading to average rent prices increasing by 43% from 2012 to 2017 (Regional Affordable Housing Task Force, 2019).

The research was approved by the Washington State Institutional Review Board.

Existing knowledge

We first conducted a systematic literature review to examine what was already known about these questions. After reviewing over 7,000 titles and abstracts, only 26 documents were deemed relevant to topic. Younger age,

[1] MTW PHAs have greater flexibility in how they use Federal funding than other PHAs with the idea that they generate innovative ideas and programs that can be rolled out nationally.

male gender, White race, smaller household size, and economic and rental market conditions are all associated with exiting housing assistance. However, very few studies looked at the relationship between demographic or economic factors and positive and negative exits. Receiving housing assistance during childhood is associated with positive outcomes later in life (Andersson et al., 2016; Aratani, 2010; Chetty, Hendren, & Katz, 2016; Newman & Harkness, 2002). People who exit housing for any reason tend to be in a more precarious position in terms of residential stability and income (Gubits, Khadduri, & Turnham, 2009; Kang, 2020; Mcinnis, Buron, & Popkin, 2007). (Richter, Coulton, Urban, & Steh, 2021; Smith, Popkin, George, & Comey, 2014) Positive exits are associated with improved health and better housing situations (Smith et al., 2014).

Full details of the literature review are in Chapter 3 and Appendix B.

Data sources and linkage

To examine outcomes following exit across multiple domains, we drew on several different administrative datasets:

- PHA demographic data primarily came from data collected on the HUD Form 50058 Moving to Work, which collects data on households and individuals receiving federal housing assistance
- Exit reasons are collected on a separate form and stored by PHAs in a different data system
- Behavioral Health and Recovery Division (BHRD) service data that includes mental health and substance use claims
- Employment Security Department (ESD) wage data
- Healthcare for the Homeless Network (HCHN) data
- Homeless Management Information System (HMIS)
- Medicaid claims data

To link the data sources, we utilized an existing multi-sector data system. The King County Integrated Data Hub (IDH) combines identities across several data sets including BHRD, HCHN, HMIS, and Medicaid. The IDH uses a mix of probabilistic and deterministic methods to match individuals across data systems via a proprietary tool, Informatica. PHA data (50058 and exit data from both KCHA and SHA) were probabilistically linked on name, social security number, date of birth, and gender. IDH, ESD, and PHA data were then linked using the same probabilistic approach.

Of the 19,411 exit events, 19,008 (97.9%) were able to be matched to 50058 data, for a total of 36,170 individuals. KCHA exit reason data were incomplete prior to 2016 so KCHA exits were restricted to 2016–2018, while for SHA exits from 2012–2018 were included. For most analyses, we restricted to the study period, exits that led to a person leaving PHA support (as opposed to transfers between programs or other exits where a person remained in the housing data), the most recent exit per person, non-death exits, and complete demographics. After applying these restrictions, the basis for many analyses was 8,266 heads of households (1,118 (13.5%) positive, 4,538 (54.9%) neutral, and 2,610 (31.6%) negative) and 16,301 individuals (17.8% positive, 49.0% neutral, 33.2% negative). Additional details are in Chapter 4 and Appendix C.

Exits and types

In consultation with the PHAs, we standardized exit reasons and categories. Positive exits consisted of reasons that were perceived to be likely to be associated with self-sufficiency, for example increased income, homeownership, and moving to non-subsidized rentals. Negative exits such as eviction, lease violations, criminal activity, or abandoning the property, were those that were expected to be associated with adverse life events and poorer outcomes. Several exit reasons were not able to be clearly identified as positive or negative and were

classified as neutral. For example, exit for health reasons or moving in with friends and family could be associated with a positive or negative trajectory, depending on the circumstances. A full list of exit reasons and their categories is in Appendix D.

Deaths, voucher expiration, and moving to non-subsidized rentals were among the top causes of exit for both PHAs. Most other common exit reasons fell into the neutral category for both PHAs, though KCHA also had two positive reasons, being over income and homeownership, in its top 10.

Factors associated with exits from housing assistance

After adjusting for other factors, male gender, receiving a project-based voucher, homelessness within the previous three years, and having a behavioral health crisis event or emergency department (ED) visit were all associated with increased odds of exits of any type. Being over age 25, increased time in housing (6+ years), larger household size, having a single caregiver household, and having a disability or chronic conditions were all associated with decreased odds of exit. Race/ethnicity and experiencing a hospitalization were not associated with exiting.

Among those who exited, there was some commonality between positive and negative exits, as compared to neutral exits. Male gender and longer time in housing were both positively associated with both positive and negative exits, while senior age (62+) and receiving project-based voucher (PBV) assistance were negatively associated with both positive and negative exits.

There were also substantial differences in factors associated with positive and negative exits. Those who are American Indian/Alaskan Natives, Black, or Latina/o/x were more likely to have a negative exit when compared to Whites, and Asians were less likely to have a negative exit. Heads of households who were single caregivers, had a disability, experienced a behavioral health crisis event, or had a recent ED visit were all more likely to have a negative exit and less likely to have a positive exit, when compared against neutral exits. Those with recent homelessness were less likely to have a positive exit but there was no difference between negative and neutral exits. Full details can be found in Chapter 6 and Appendix E.

Outcomes following exit

We examined four primary outcomes following exit from housing assistance, all within one year of exit:

Outcome	Main findings
Residential stability (becoming homeless or unstably housed, referred to as homelessness in this report)	One in four people with negative exits experienced homelessness within one year of exit, compared with 3% of those with a positive exit.
Physical health (ED visits, hospitalizations, and well-child checks)	Positive exits led to lower levels of ED visits compared with negative exits or staying in housing assistance.
Behavioral health (experiencing an acute crisis event)	The biggest predictor of a behavioral health crisis post-exit was a crisis pre-exit. Even after adjusting for prior crises, negative exits were associated with double the risk of a post-exit crisis.
Wage income	Households with positive exits had ~$2k-2.5k higher quarterly wages both before and after exit.

Residential stability

Among all 16,666 people who exited housing assistance, 2,682 (16.1%) experienced homelessness within one year of leaving, with a mean time to homelessness of 321 days. The risk of homelessness was not spread evenly across exit types; only 3.1% of people with positive exits had a homelessness event, compared with 14.5% for neutral exits and 25.4% for negative exits. After adjustment, people with positive exits were 82% less likely to experience homelessness than those with neutral exits, while people with negative exits were 74% more likely than those with neutral exits.

Physical health

After adjustment, those with positive exits had 26% lower odds of having one or more ED visits in the year following exit than those with negative exits. Neither positive exits nor neutral exits were significantly different from negative exits in terms of hospitalizations. We did not observe significant differences in well child checks when comparing positive vs. negative or neutral vs. negative exits.

When comparing exit types to those who remained receiving housing assistance, positive exits were again associated with 20% lower odds of ED visits but were no different in terms of hospitalizations or well-child visits. Children exiting for neutral reasons had approximately 35% lower odds of having a well-child check than children who remained. There were no significant differences in ED visits or hospitalizations between neutral exits and remaining. Finally, people with negative exits had slightly higher but non-significant odds of one or more ED visits, were 26% more likely to be hospitalized, and were around 38% less likely to have a well-child visit than people who continued to receive housing assistance.

Behavioral health

The proportion having one or more behavioral health crisis events in the 12 months following exit was 0.8%, 2.8%, and 3.5% for those with positive, neutral, and negative exits, respectively. Among all study participants, a negative exit was associated with 110% higher odds of a behavioral health crisis event in the year following exit, compared to those with a neutral exit type. However, there was no significant difference in odds of behavioral health crisis event between those with neutral and positive exits. A similar trend was seen in the Medicaid subpopulation, where, relative to those with neutral exits, those with negative exits had 61% higher odds of behavioral health crisis events in the year following exit, and there was no significant difference in odds of behavioral health crisis among those with positive exits

Wage income

We described the relationship between exit type (positive or negative) and wages for the four quarters after the exit quarter. We also assessed wages four quarters prior to the exit quarter and during the exit quarter in order account for pre-existing trends.

There was substantial variance in wages at all time points and the mean wages among positive exits were higher than those among negative exits four quarters prior to exit, during the quarter of exit, and four quarters post exit. During the quarter of exit, those with positive exits had higher median wage earnings than those with negative exits ($7,763 vs $4,823), higher median work hours (480 vs 406), and higher median hourly wages ($18/hour vs $16/hour). Four quarters post exit, the mean wages among positive and negative exits were $8,495 and $6,146, respectively.

We fit a model predicting wages four quarters prior to exit, during the quarter of exit, and four quarters after exit. The model showed that, in the period before exit, wage increases were greater among positive exits, whereas after exiting, wage increases were greater among negative exits

Conclusion

The results from HUD HEARS show that there is some way to go to realizing the goal of increased exits from housing assistance due to self-sufficiency; positive exits made up only 13.5% of all non-death exits in the study. The findings also reinforce the idea that the goal is a worthy one because negative and neutral exits were associated with worse outcomes than positive exits.

Linking data across sectors offers a way to comprehensively describe the experience of people receiving housing assistance. It also enables PHAs and HUD to understand the trajectories of the people they serve all the way from the circumstances under which a person enters housing assistance through to their outcomes following exit from housing assistance. Results show that these circumstances are intertwined; prior homelessness, ED visits, and behavioral health crises are all associated with negative exits and are also all more likely to occur after negative exits, even after adjusting for baseline events. The exact direction of causation is unclear and may be circular in nature. Holistic interventions that encompass health, economic, and housing elements will require collaborations between PHAs and social service and economic organizations that have mutual interests in the wellbeing of the populations served by PHAs.

While the confluence of datasets used in this analysis is unique to the King County setting, the component datasets are either used nationally or have equivalents in other states. The 50058 MTW form is used by all MTW PHAs, HUD sets data standards for HMIS, and Medicaid claims look similar across states. Other jurisdictions are likely to have wage and behavioral health service data that could be linked for an equivalent initiative. Data from other sectors such as education and social services would add to the completeness of data on the experience of a person receiving housing assistance.

Finally, future work on exits and exit types should focus on the following:

- **HUD should consider how to build a standardized and comprehensive process for collecting exit information**. Consistency around when and how PHAs gather data on exits from housing assistance would allow for comparisons both across PHAs and over time. At the same time, lists of exit reasons should be flexible enough to address specific PHA needs. A standard way of mapping exit reasons to categories may be an appropriate middle ground. In addition, collecting information on when and why non-heads of households exit may yield additional insights about how to increase opportunities for positive exits.
- **Collect qualitative information about exit circumstances**. The scope of the HUD HEARS project did not allow for engaging with those who have exited from housing assistance. Gathering stories and other qualitative information from people exiting would add valuable context to the statistics and should be prioritized in future work.
- **Engage with current PHA housing recipients on linked data**. The consent process used by KCHA and SHA allows for the sort of work undertaken for HUD HEARS and the project was approved by an institutional/ethics review board. However, meaningful engagement with current housing recipients around data linkage and use offers several benefits. It provides a path to truly informed consent about how a person's data are collected, linked, and used. Adding community voices and sharing power around the decision-making process is an important element of increasing equity. Finally, the people who use the various services that collect their data are best placed to offer ideas for how the data could best be used to improve wellbeing.

Chapter 2: Introduction

Housing affordability continues to be a significant challenge facing many American households. Nearly half of all renters are housing cost burdened, defined as spending 30% or more of income on housing costs (Martinez, 2022). Federal housing assistance, primarily in the form of Housing Choice Vouchers (HCV) or public housing (PH), reaches only 20-25% of eligible low-income households, leaving many people struggling to afford stable housing (Turner & Kingsley, 2008). One possible approach to ensuring as many people as possible get assistance is to create pathways for people receiving housing assistance to become economically self-sufficient and no longer require housing support. To that end, in 2019, the U.S. Department of Housing and Urban Development (HUD) set a goal of increasing the proportion of households that exit HUD-supported housing for positive reasons (e.g., homeownership) (U.S. Department of Housing and Urban Development, 2019).

Understanding which tenants are likely to leave for positive or negative reasons can inform policies and programs that aim to encourage positive exits. It is also imperative to ensure that a positive exit is likely to be beneficial to those exiting. In addition, a full understanding of the consequences of exiting allows for the identification of interventions that might mitigate the negative impacts.

However, little is known about factors related to different types of exits from housing assistance, and outcomes that follow from exiting are even less understood. In response to funding opportunity FR-6400-N-58 (*Examining Long-Term Outcomes Following Exit from HUD-Assisted Housing*), we sought to answer three key questions:

1. What constitutes a positive or negative exit from HUD-assisted housing?
2. What factors are associated with categories of exits (positive, neutral, negative)?
3. Is a positive exit from housing assistance associated with better post-exit outcomes than for residents who left for negative reasons?

This report documents findings from our research and is organized in line with these questions. First, Chapter 3 summarizes the literature to date on the topic of exits from housing assistance. We discuss the data sources and linkage methods used to address the research question in Chapter 4. In Chapter 5, we address the first question of how to place each exit reason into positive, neutral, and negative categories. The factors associating with exiting from housing and with each exit type are described in Chapter 6. Chapters 7–10 each focus on a different outcome following exit, covering homelessness, physical and behavioral health, and wages. Finally, we summarize the research and consider next steps for this work in Chapter 11. We provide more details for each research question in a series of appendices.

Chapter 3: Literature review summary

Introduction

An exploratory review of the literature in response to funding opportunity FR-6400-N-58 revealed that there is no established consensus on factors related to exiting housing assistance and subsequent outcomes. We aimed to more systematically to summarize existing literature relevant to housing exits and identify the gaps in knowledge that the Housing and Urban Development Health, Employment, and Residential Stability (HUD HEARS) Study could fill. Specifically, the review addressed the following questions:

1. What constitutes a positive or negative exit from housing?
2. What factors are associated with positive or negative exits?
3. What health, economic, or housing outcomes are associated with exiting housing assistance (for positive or negative reasons)?

Due to the nature of the topic, we considered it likely that relevant information on housing exits would be contained in the grey literature, including reports from housing authorities and presentations. This review therefore relied on searches in both the published and grey literature. A full description of the methods used is in Appendix A.

Results

Our searches in April 2021 across all sources yielded 9,117 articles and reports, of which 1,936 were duplicates. After screening titles and abstracts, and adding in references found during a full-text review, 57 documents were selected for full-text review. Of those, 26 documents were deemed relevant to the HUD HEARS Study questions (Figure 3-1: Literature review search results). A summary of the selected documents is in Table B-1.

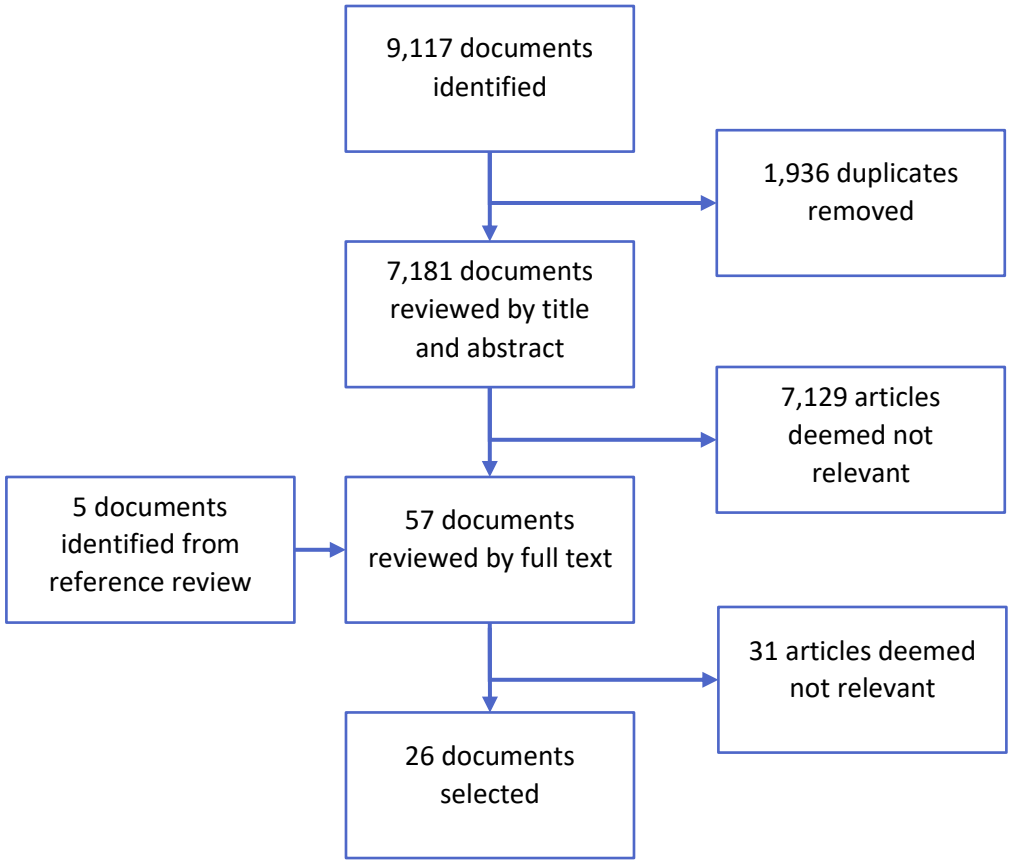

Figure 3-1: Literature review search results

Exit types

Only 7 studies described exit types, and just 3 attempted to categorize exits as positive or negative. Several studies did note limitations in national databases regarding reasons for exits, which presents an opportunity for improved data collection efforts.

There was not consistency in what was considered a positive exit; McInnis et al. (2007) suggest marriage or higher income, Smith et al. (2014) used home ownership or higher income, while Rohe et al. (2016) defined a positive exit as moving to private-market housing. Similarly, negative exits were defined slightly differently. McInnis et al. (2007) used the broadest definition and included breaking program rules, being evicted, being relocated from public housing and unable to move back, and rent and utility costs that were too high. Smith et al. (2014) included lease violations, evictions, or inability to lease up during the period in their definition of negative exits, while Rohe et al. (2016) defined them as failure to pay rent, violating lease terms, or moving without notice.

In their two studies of the U.S. Department of Housing and Urban Development-Veterans' Affairs Supportive Housing (HUD-VASH) Program, Montgomery et al. (2017; 2017) listed several reasons why veterans had left the program, including accomplishing goals, being evicted, no longer interested in the program, and death, though

these reasons were not explicitly categorized as positive or negative. In their evaluation of a Family Self-Sufficiency (FSS) program, Anthony (2005) noted that people who completed the FSS program (and exited) had higher incomes than the comparison group, but again did not classify that as a positive reason for exit.

In their evaluation of the Welfare to Work program, Gubits et al. (2009) noted that people who relinquished their voucher often did so inadvertently due to difficulty navigating the housing authority processes and rules but did not quantify the proportion who said this. Where studies did identify a breakdown of positive vs. negative exits, there was a range. Smith et al. (2014) found approximately 53% of leavers did so for positive reasons while McInnis et al. (2007) noted only that around 20% has positive reasons. Montgomery et al. (2017; 2017) found a proportion in between (33-42% had met the VASH program goals). However, it is important to note the difference in approach between Smith et al. and McInnis et al.'s classifications. Smith et al. used a hierarchy of data sources to assign all leavers to a positive or negative reason whereas McInnis et al. allowed for unclassified exits. For that reason, both articles found a similar proportion of people who had a negative exit (46% for McInnis et al., 47% for Smith et al.)

Summary: Few studies have explicitly classified exits types or quantified the proportion who exit for positive or negative reasons. Where classifications have been made, just under half of people receiving housing assistance exit for negative reasons, though it can be difficult to assign exits as positive or negative.

Factors associated with exits

A majority (18) of the articles and reports examined factors associated with exits from housing. Several studies used panel data or HUD data systems such as the Multifamily Tenant Characteristics System (MTCS) and Tenant Rental Assistance Certification System (TRACS) databases to explore the topic, typically using survival analysis methods (Ambrose, 2005; Cortes, Lam, & Fein, 2008; Dantzler & Rivera, 2019; Freeman, 2005; Geyer, Dastrup, & Finkel, 2019; Hungerford, 1996; Lubell, Shroder, & Steffen, 2003; McClure, 2018; Olsen, Tyler, King, & Carrillo, 2005). There was general agreement across these studies that increased age, being female, being non-White, being disabled, and tighter rental markets were all associated with a lower likelihood of exiting from housing. Larger households were generally found to be more likely to exit but there was mixed evidence on the presence of children; Ambrose (2005) found increased exits for larger households but only for project-based vouchers whereas Cortes et al. (2008) found decreased exits, especially if younger children were present. Geyer et al. (2019) found that the introduction of small-area fair market rents increased the probability of exit and shortened the median time to exit. Among VASH participants, women were more likely to still be housed after one year than men (Kasprow, Rosenheck, Frisman, & DiLella, 2000) but having a service-connected disability was associated with exiting (Montgomery et al., 2017).

Two studies used evaluations of FSS programs to look at exits. Anthony (2005) found that younger adults, single participants, those without children, those with a high school diploma, and those that acquired more skills during the training were all more likely to succeed at the FSS program and exit housing assistance. Rohe et al. (2016) found a small effect of completion of the program on positive exits. However, the sample sizes in both evaluations were small and the specific nature of the FSS programs in question limit generalizability to the wider population receiving housing assistance.

Another group of studies examined who was at risk of eviction or lease violations. Among residents of a large affordable housing organization (Mercy Housing), increased age, being Asian (vs. White), and living in senior or

supported housing (vs. family housing) were all associated with reduced risk of a lease violation, whereas being female, Black or Other race (vs. White), having a larger household, or increased income were all associated with increased risk of a lease violation (Brisson & Covert, 2015). Due to the counterintuitive nature of the finding regarding income, Brisson and Covert (2015) conducted further analyses and found that an increase in stable benefits was associated with decreased risk of a lease violation but increases in work income, variable benefits income, and other income were all related to a slightly higher likelihood of experiencing a lease violation. Richter et al. (2021) explored who received an eviction order compared to just an eviction filing. Though most of their findings were for all landlords combined, public housing and non-profit organizations were the landlords in over a quarter of all filings, and an unknown number of residents with private landlords would have been receiving an HCV. The authors found that being male, being White (vs. Black), having more children, and having had an eviction filing in the past were all associated with an eviction order vs. just having a filing. Having an eviction filing by a public housing entity or nonprofit organization carried a lower risk of getting an eviction order, relative to a filing by a private entity. Among VASH participants, being male, older, having alcohol or drug disorders, and having used acute care were all associated with increased levels of eviction (Montgomery & Cusack, 2017).

Just one study examined differences between those with positive and negative exits (Smith et al., 2014). There was no difference between positive and negative exits in terms of age, gender, or household size. Those with positive exits were more likely to be married at the end of the study, have ever been married, and Hispanic and those with negative exits were more likely to be non-Hispanic Black. Those with positive exits were less likely to have ever been homeless, less likely to live in overcrowded housing, and less likely to have a high housing cost burden.

Summary: certain demographic categories (younger age, male gender, White race, smaller household size) and economic and rental market conditions are all associated with exiting housing assistance. However, very few studies looked at the relationship between demographic and economic factors and positive and negative exits.

Outcomes following exits

Half of the selected studies examined outcomes in some way, though most compared the impact of housing assistance in general rather than due to positive or negative exits. Four considered the impact of receiving housing assistance as a child on future outcomes (Andersson et al., 2016; Aratani, 2010; Chetty et al., 2016; Newman & Harkness, 2002). More years receiving housing assistance as a child is associated with increased likelihood of working, increased income, and reduced incarceration. Evidence on high school completion and college attendance was more mixed, with Aratani (2010) finding no effect and Chetty et al. (2016) only finding a positive association among younger children.

There were mixed findings for people who leave housing for any reason. They tended to have increased mobility and were more likely to experience homelessness than those who remain in housing assistance (Gubits et al., 2009; Kang, 2020; Mcinnis et al., 2007). Some studies found higher earnings among leavers but a more precarious financial position, possibly due to reduced levels of public assistance (Gubits et al., 2009; Mcinnis et al., 2007). People who completed FSS programs tended to have higher income and reduced use of public assistance compared to those who did not complete the programs (Anthony, 2005; Rohe & Kleit, 1997).

Among the VASH population, most (over 90%) did not return to VA homeless programs in the observation period (Montgomery et al., 2017), but one study found that over 40% experienced one or more days of homelessness within 4.5 years of being housed (O'Connell, Kasprow, & Rosenheck, 2008). The difference between these two outcomes may be explained by the fact that the first study did not have access to other data related to homelessness (e.g., the local Homeless Management Information System).

Evictions were associated with increased mobility, shelter utilization, school absenteeism, and reduced blood lead testing (Richter et al., 2021). Those with negative exits in general were slightly more likely to feel safe in their neighborhood and less likely to say the neighborhood had alcohol problems; loitering problems; or trash, graffiti, and abandoned buildings, compared to those who continued to receive housing assistance (Smith et al., 2014). Positive exits were associated with living in better housing and neighborhoods, better self-reported health, and reduced use of welfare (Smith et al., 2014).

Summary: Receiving housing assistance during childhood is associated with positive outcomes later in life. People who exit housing for any reason tend to be in a more precarious position in terms of residential stability and income. Negative exits are associated with worse residential stability and health outcomes than positive exits, and generally compare poorly to those who remain receiving housing assistance. Positive exits are associated with improved health and better housing situations.

Conclusions

There is limited evidence in the literature regarding positive and negative exits from housing assistance. Very few studies had tried to define exit types, though several noted the need for improved data collection on this topic. Just one study comprehensively looked at exit types, and it was within the context of the Moving To Opportunity experiment so may not be generalizable to the wider population. There is almost no information regarding health following housing exits of any kind and limited data on the sorts of neighborhoods people move to and economic outcomes. Although several studies looked at outcomes following spending time in housing, not many comprehensively examined the short-term impact of leaving on health, economic factors, and residential stability.

Chapter 4: Data sources and linkage

To examine outcomes following exit across multiple domains, we drew on several different administrative datasets:

- PHA demographic data primarily came from data collected on the HUD Form 50058 Moving to Work, which collects data on households and individuals receiving federal housing assistance
- Exit reasons are collected on a separate form and stored in a different data system but were linked using the methods described below
- Behavioral Health and Recovery Division (BHRD) service data that includes mental health and substance use claims
- Employment Security Department (ESD) wage data
- Healthcare for the Homeless Network (HCHN) data
- Homeless Management Information System (HMIS)
- Medicaid claims data

Linking administrative data from other sectors leads to a better understanding of complex individual needs, provides insight into circumstances prior to exit and offers an opportunity to assess outcomes after exiting from housing assistance. Because administrative data are routinely collected, this approach has the potential to be more sustainable than one-off or project-driven data collection. Successful cross-sector data linkages related to housing have previously examined physical health, behavioral health, crime, and income (Actionable Intelligence for Social Policy, 2015; Albertson et al., 2020; Chetty et al., 2016; Ellen, Dragan, & Glied, 2020; Laurent, Matheson, Escudero, & Lazaga, 2020). However, most examples are limited in that they only linked across one non-housing sector or were one-off linkages of administrative data.

For this study, individuals were linked across datasets through a series of probabilistic and deterministic matches using a combination of Informatica and the RecordLinkage package in R. Full details for each data source and the linkage process are in *Appendix C: Data sources and linkage.*

Of the 19,411 exit events recorded by KCHA and SHA, 19,008 (97.9%) were able to be matched to 50058 data, for a total of 36,170 individuals (Figure 4-1). KCHA exit reason data were incomplete prior to 2016 so KCHA exits were restricted to 2016–2018, while for SHA exits from 2012–2018 were included. For most analyses, we restricted to the study period, exits that led to a person leaving PHA support (as opposed to 'false exits' where a person transferred programs, joined a different household that was receiving support, or otherwise remained in the housing data within 12 months of the exit date), the most recent exit per person, non-death exits, and complete demographics (Figure 4-1). After applying these restrictions, the basis for many analyses was 8,266 heads of households (1,118 (13.5%) positive, 4,538 (54.9%) neutral, and 2,610 (31.6%) negative) and 16,301 individuals (17.8% positive, 49.0% neutral, 33.2% negative). Exceptions to these restrictions are noted in each chapter.

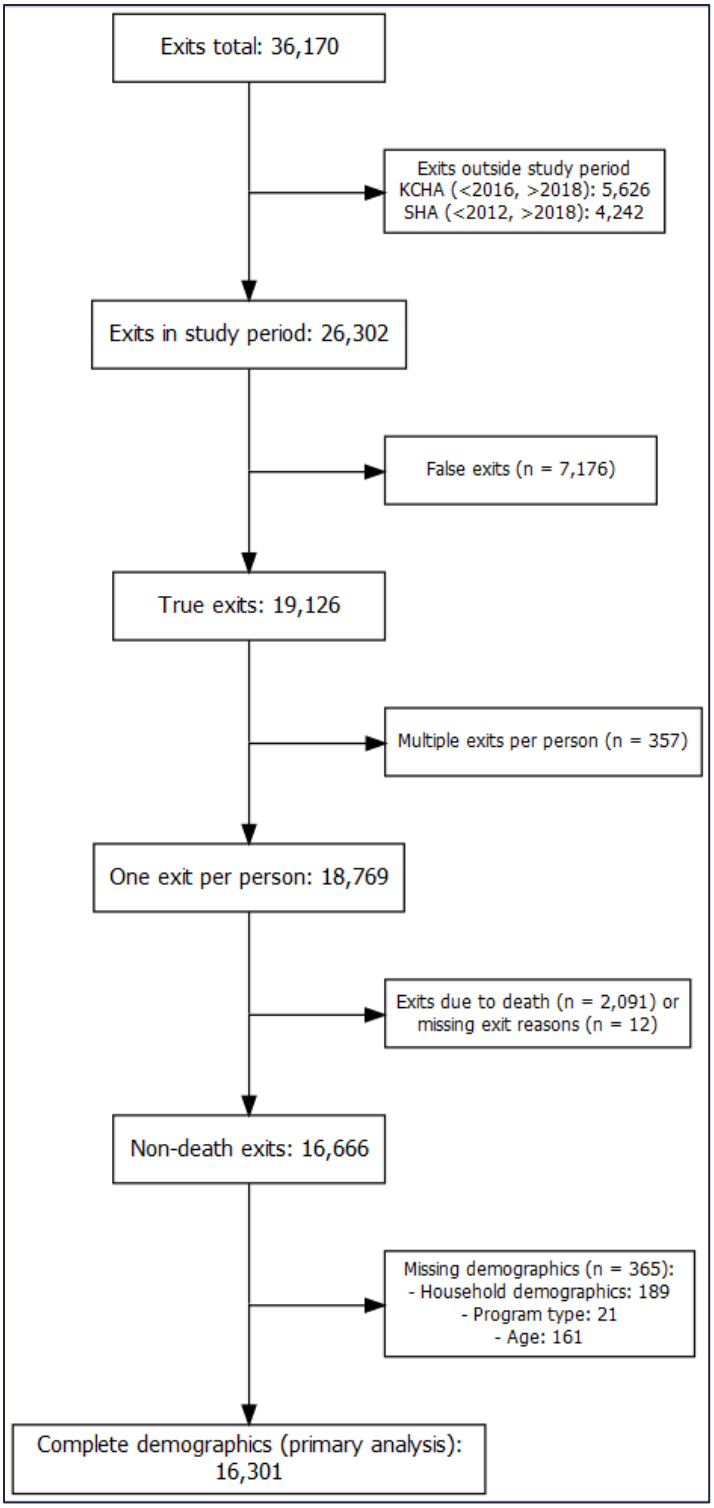

Figure 4-1: Number of people with exits during the study period

Chapter 5: Exits and exit types

Both KCHA and SHA had already classified their exit reasons into positive, neutral, and negative categories. In consultation with the PHAs, we standardized exit reasons and made minor modifications to the categories. Positive exits consisted of reasons that were perceived to be likely to associated with self-sufficiency, for example increased income, homeownership, and moving to non-subsidized rentals. Negative exits such as eviction, lease violations, criminal activity, or abandoning the property, were those that were expected to be associated with adverse life events and poorer outcomes. Several exit reasons were not able to be clearly identified as positive or negative and were classified as neutral. For example, exit for health reasons or moving in with friends and family could be associated with a positive or negative trajectory, depending on the circumstances. A full list of exit reasons and their categories is in Appendix D. To gain a fuller sense of exit time trends, data presented in this chapter are based on all available years of data (2016–2020 for KCHA, 2012–2020 for SHA).

Deaths, voucher expiry, and moving to non-subsidized rentals were among the top causes of exit for both PHAs (Table 5-1 and Table 5-2). Most other common exit reasons fell into the neutral category for both PHAs, though KCHA also had two positive reasons, being over income and homeownership, in its top 10.

Table 5-1: Top 10 reasons for exits from KCHA

Exit reason	Exit category	N
Deceased	Neutral	467
Moved in w/Family/Friends	Neutral	372
Voucher Expired	Negative	322
S8 Over Income	Positive	192
Landlord Eviction	Negative	166
Moved to Non-Subsidized Rental	Positive	133
S8 Incoming Portability Move Out	Neutral	131
Client would not disclose reason	Neutral	113
Client Location Unknown/Abandoned Unit	Negative	107
Homeownership	Positive	72

Table 5-2: Top 10 reasons for exits from SHA

Exit reason	Exit category	N
Project-based/Mod Rehab moved out location unknown	Neutral	1,746
Deceased	Neutral	1,485
Voluntary Self-Termination	Neutral	444
Health	Neutral	406
Project-based/Mod Rehab moved to hospital/assisted living	Neutral	316
Moved to Non-Subsidized Rental	Positive	286
Project-based/Mod Rehab moved to non-time limited subsidized housing	Neutral	251
Voucher Expired	Negative	243
Other	Neutral	231
Client would not disclose reason	Neutral	167

In any given year, approximately 4–5% of each PHA's residents exited, though the proportion was lower in 2020 due to the COVID-19 pandemic (Figure 5-1). At KCHA, the proportion of exits for positive reasons increased over time while the proportion for negative reasons decreased, regardless of whether or not deaths (neutral) were included (Figure 5-2 and Figure 5-3). For SHA, there was a slight increase in the proportion of positive exits over time but no clear change in the proportion of negative exits.

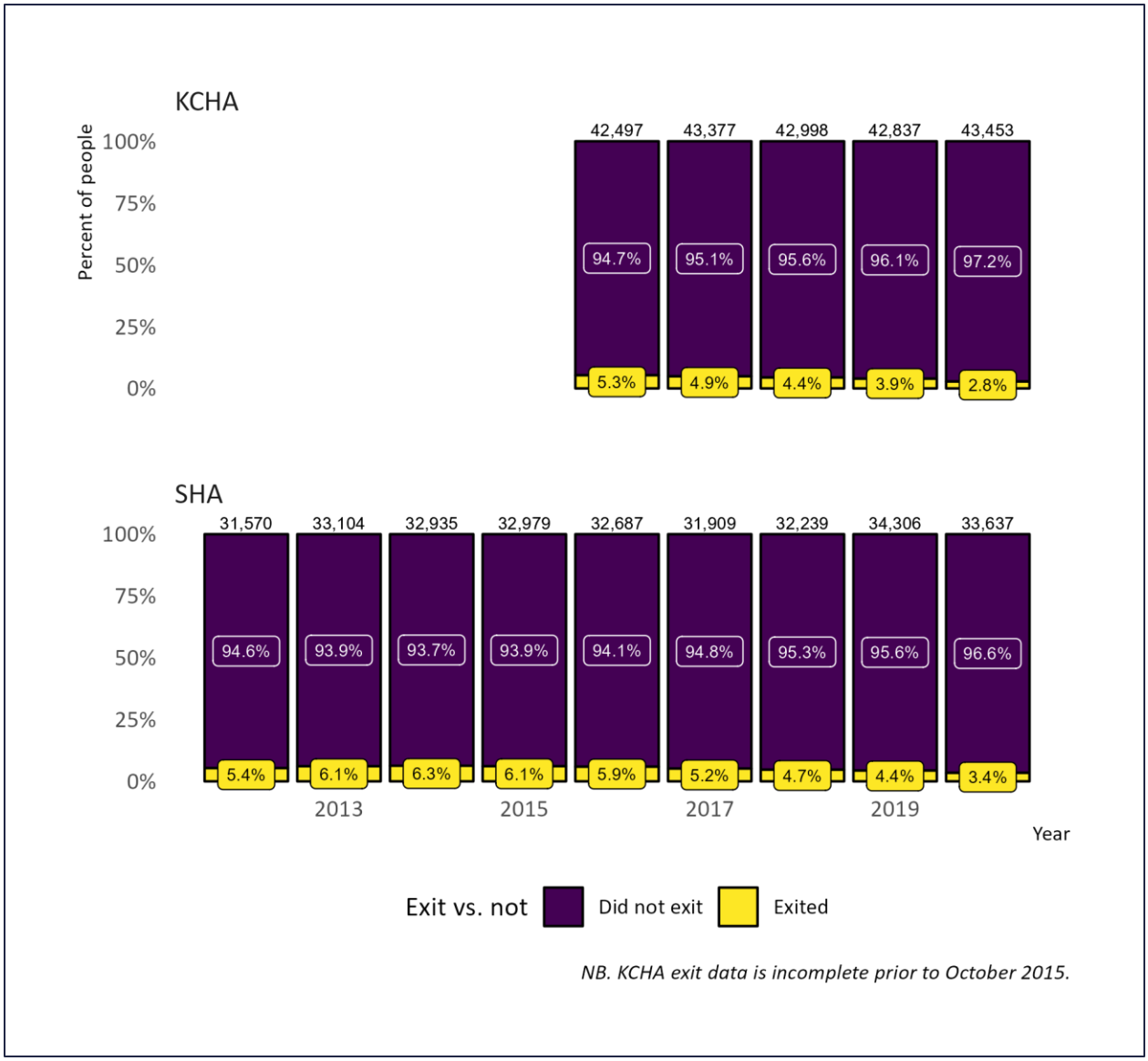

Figure 5-1: Number of exits by PHA and year

Figure 5-2: Exit categories by PHA and year (all exits)

Figure 5-3: Exit categories by PHA and year (excluding deaths)

Chapter 6: Who exits from housing assistance?

We used the linked data described above to determine the factors associated with both exiting from housing assistance in general and each exit type. We examined exits from KCHA (2016–2018) and SHA (2012–2018) using heads of household as the unit of analysis. For the analysis of exiting vs. remaining, we randomly matched each exiting person to four controls who remained in housing for at least 12 months past the exit date and used binomial logistic regression. For the exit type analysis, we set neutral exits as the reference category as part of a multinomial logistic regression. We also conducted a sub-analyses of Medicaid enrollees to look at the relationship between health events and exiting. Full details of the data variables and methods are in Appendix E.

After applying the inclusion criteria noted in Chapter 4, and limiting to heads of households, we analyzed 8,266 exits (2,610 negative, 4,538 neutral, and 1,118 positive) and 25,162 non-exiting controls in our regression analysis. Demographics for each group are in Table 6-1. Our secondary analysis of PHA recipients who also had full, non-dual, Medicaid coverage prior to exit, was limited to 3,001 households. A comparison of demographics for people who are included in the Medicaid analysis vs. not is in Table E-1 (note that this table is not restricted to those aged under 62 to allow age group comparisons).

Descriptive statistics

Heads of households who exited for any reason were more likely to have the following attributes than remained in housing (Table 6-1):

- Male (39.9% vs. 34.5%)
- Shorter average tenure in housing assistance (median of 3.7 vs 5.5 years)
- Receiving PBV assistance (43.4% vs. 18.6%)
- Experienced recent homelessness (39.4% vs. 22.8%)
- Have had a recent behavioral health crisis (6.9% vs. 1.6%)

Race, household size, whether there was a single caregiver, or whether the head of household had a disability did not substantially vary between those exiting and those remaining in housing. In our secondary analysis of Medicaid recipients, people exiting had greater healthcare utilization in the year prior to exit for both ED visits (55.6% had 1+ vs. 46.9% of people remaining) and hospitalizations (10.0% vs. 8.8%).

When comparing exits by type, those with a neutral exit tended to be older than those with positive or negative exits (median age 52 years compared with 47 and 45 years, respectively), were slightly more likely to be male (41.0% vs. 37.8% and 38.9%), were more likely to be white (42.4% vs. 31.9% and 34.8%), and had shorter average tenure in housing assistance (median of 3 years vs. 5.6 and 4.5 years) (Table 6-1). Those with a positive exit had larger average household sizes (mean of 2.6 vs. 1.7 and 2.1 for neutral and negative exits, respectively) were more likely to be living in public housing (29.6% vs. 20.1% and 22.9%), and were less likely to have experienced recent homelessness (20.2% vs. 43.5% and 40.5%) or a behavioral crisis (1.6% vs. 7.5% and 8.2%). Among Medicaid recipients, those with positive exits had lower levels of recent ED visits (34.7% vs. 56.6% and 60.5%), hospitalizations (5.6% vs. 11.5% and 9.4%), and chronic conditions at the time of exit (average of 1.5 vs. 1.8 and 2.0)

Regression results

After adjusting for other factors, male gender, receiving a project-based voucher, homelessness within the previous three years, and having a behavioral health crisis event were all associated with increased odds of exits of any type (Table 6-2). Being over age 25, increased time in housing (6+ years), larger household size, having a

single caregiver household, and having a disability were all associated with decreased odds of exit. Race/ethnicity was not associated with exiting. For the secondary analysis of housing recipients who also had 7+ months of full Medicaid coverage in the year prior to exit, experiencing one or more ED visits in the year prior to exit was positively associated with exit (adjusted odds ratio (aOR): 1.27, 95% confidence interval (CI): 1.16–1.40, p< 0.001), experiencing a hospitalization in the same time frame was not associated with exit, and having two or more chronic conditions was negatively associated with exits (0.75, 95% CI: 0.68–0.83, p<0.001) (Table 6-2 and Table E-3)

Among those who exited, there was some commonality between positive and negative exits, as compared to neutral exits. Male gender and longer time in housing were both positively associated with both positive and negative exits, while senior age (62+) and receiving PBV assistance were negatively associated with both positive and negative exits (Table 6-3). It is unclear why these factors have similar associations for both positive and negative exits and a deeper analysis of specific exit reasons may yield a better understanding of this finding.

There were also substantial differences in factors associated with positive and negative exits. Those who are American Indian/Alaskan Natives, Black, or Latina/o/x were more likely to have a negative exit when compared to Whites, and Asians were less likely to have a negative exit. The reasons for differences by race/ethnicity are unclear; there may be systemic factors that impact certain race/ethnicity groups differently or race/ethnicity may be a proxy for additional factors we were not able to include in the model. Heads of household in single caregiver households, who had a disability, experienced a behavioral health crisis event, or had a recent ED visit were all more likely to have a negative exit and less likely to have a positive exit, when compared against neutral exits. These associations suggest that single caregivers or those with health problems face barriers to working and may experience other obstacles to stable housing. Those with recent homelessness were less likely to have a positive exit but there was no difference between negative and neutral exits.

Table 6-1: Demographics of heads of households who exited vs. controls who did not, and by exit type

	Remained (N=25,162)	Exited (N=8,266)	Neutral exit (N=4,538)	Positive exit (N=1,118)	Negative exit (N=2,610)
Age					
Mean (years)	52.4	50.7	53.2	48.9	47.2
Median (years)	52	49	52	47	45
Senior (aged 62+)	29.9%	26.9%	33.3%	21.0%	18.3%
Gender					
Another gender	353 (1.4%)	97 (1.2%)	48 (1.1%)	17 (1.5%)	32 (1.2%)
Female	16,117 (64.1%)	4,869 (58.9%)	2,628 (57.9%)	678 (60.6%)	1,563 (59.9%)
Male	8,692 (34.5%)	3,300 (39.9%)	1,862 (41%)	423 (37.8%)	1,015 (38.9%)
Race/ethnicity[1]					
AI/AN	329 (1.3%)	158 (1.9%)	81 (1.8%)	<20	65 (2.5%)
Asian	2,464 (9.8%)	689 (8.3%)	421 (9.3%)	118 (10.6%)	150 (5.7%)
Black	8,558 (34%)	2,866 (34.7%)	1,413 (31.1%)	437 (39.1%)	1,016 (38.9%)
Latina/o/x	1,684 (6.7%)	561 (6.8%)	299 (6.6%)	72 (6.4%)	190 (7.3%)
Multiple	2,530 (10.1%)	737 (8.9%)	367 (8.1%)	114 (10.2%)	256 (9.8%)
NH/PI	203 (0.8%)	67 (0.8%)	34 (0.7%)	<10	25 (1%)
White	9,394 (37.3%)	3,188 (38.6%)	1,923 (42.4%)	357 (31.9%)	908 (34.8%)
Time in housing					
Mean time (years)	5.9	5	4.5	6.2	5.6
Median time (years)	5.5	3.7	3	5.6	4.5
Household characteristics					
Head of household disability	44.3%	42.0%	45.4%	25.2%	43.3%
Mean household size	2.2	2	1.7	2.6	2.1
Median household size	1	1	1	2	1
Single caregiver	19.0%	17.3%	15.0%	14.5%	22.6%
Program type[2]					
PBV	4,672 (18.6%)	3,586 (43.4%)	2,761 (60.8%)	308 (27.5%)	517 (19.8%)
PH	7,118 (28.3%)	1,840 (22.3%)	912 (20.1%)	331 (29.6%)	597 (22.9%)
TBV	13,372 (53.1%)	2,840 (34.4%)	865 (19.1%)	479 (42.8%)	1,496 (57.3%)

	Remained (N=25,162)	Exited (N=8,266)	Neutral exit (N=4,538)	Positive exit (N=1,118)	Negative exit (N=2,610)
Health and homelessness events					
Experienced recent homelessness	5,726 (22.8%)	3,256 (39.4%)	1,972 (43.5%)	226 (20.2%)	1,058 (40.5%)
Experienced 1+ behavioral health crisis events in year prior to exit (excl. Medicaid ED visits)	408 (1.6%)	570 (6.9%)	339 (7.5%)	18 (1.6%)	213 (8.2%)
Experienced 1+ behavioral health crisis events in year prior to exit (inc. ED visits)[3]	313 (0.9%)	240 (2.8%)	122 (8.0%)	<10	82 (7.2%)
Average # ED visits in year prior to exit[3]	0.8	1	2	0.8	2.1
Experienced 1+ ED visits in year prior to exit[3]	13,435 (36.6%)	3,381 (40.0%)	862 (56.6%)	118 (34.7%)	689 (60.5%)
Average # hospitalizations in year prior to exit (per 100 people)[3]	6.1	7.8	17.5	6.8	15.4
Experienced 1+ hospitalizations in year prior to exit[3]	1,657 (4.5%)	440 (5.2%)	175 (11.5%)	19 (5.6%)	107 (9.4%)
Average # of chronic conditions[3]	1	0.9	1.8	1.5	2

[1] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[2] PBV = Project-based voucher, PH = Public housing, TBV = Tenant-based voucher

[3] Health event data available for those aged <62 enrolled in Medicaid (Remained N=36,737, Exited N=8,448, Negative N=1,139, Neutral N=1,522, Positive N=340)

Table 6-2: Regression output for heads of households who exited vs. controls who did not

	Odds ratio[1]	95% CI
Age		
<25	ref	—
25-44	0.67***	0.58–0.78
45-61	0.48***	0.41–0.55
62+	0.50***	0.43–0.58
Gender		
Female	ref	—
Male	1.08**	1.02–1.15
Multiple	0.96	0.76–1.21
Race/ethnicity[2]		
White	ref	—
AI/AN	1.25*	1.01–1.53
Asian	0.92	0.83–1.01
Black	1.06	1.00–1.13
Latino	0.97	0.87–1.09
Multiple	1.00	0.90–1.10
NH/PI	1.10	0.81–1.47
Time in housing		
<3	ref	—
3-5.99	1.15***	1.07–1.23
6-9.99	0.95	0.89–1.03
10+	1.16***	1.07–1.26
Household characteristics		
Head of household disability	0.70***	0.66–0.75
Household size	0.90***	0.89–0.92
Single caregiver	0.76***	0.70–0.82
Program type[3]		
TBV	ref	—
PBV	2.94***	2.75–3.14
PH	1.20***	1.12–1.29

	Odds ratio[1]	95% CI
Health and homelessness events		
Experienced recent homelessness	1.41***	1.32–1.51
Experienced 1+ behavioral health crisis event in year prior to exit (excl. ED visits)	2.91***	2.53–3.35
Experienced 1+ behavioral health crisis event in year prior to exit (incl. ED visits)[4]	2.12***	1.69–2.66
Experienced 1+ ED visit in year prior to exit[4]	1.27***	1.16–1.40
Experienced 1+ hospitalization in year prior to exit[4]	0.96	0.82–1.12
2+ chronic conditions[4]	0.75***	0.68–0.83

[1] * = p<0.05, ** = p<0.01, *** = p<0.001

[2] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[3] PBV = Project-based voucher, PH = Public housing, TBV = Tenant-based voucher

[4] Health event data only available for those aged <62 enrolled in Medicaid (N = 9,234 for controls, 3,001 for exits)

Table 6-3: Regression output for heads of household by exit type

	Negative/positive exits vs. neutral exits (neutral N=4,538)			
	Negative exits (N=2,610)		Positive exits (N=1,118)	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
Age				
<25	ref	—	ref	—
25-44	1.02	0.78–1.33	1.43	0.95–2.16
45-61	0.87	0.66–1.15	1.43	0.94–2.17
62+	0.43***	0.32–0.58	0.59*	0.38–0.91
Gender				
Female	ref	—	ref	—
Male	1.33***	1.18–1.51	1.34***	1.14–1.56
Multiple	1.00	0.61–1.64	1.16	0.64–2.11
Race/ethnicity[2]				
White	ref	—	ref	—
AI/AN	1.86**	1.26–2.74	0.92	0.49–1.76
Asian	0.80	0.64–1.01	0.99	0.77–1.27
Black	1.25***	1.10–1.43	1.20*	1.01–1.43
Latino	1.30*	1.03–1.63	1.13	0.84–1.52
Multiple	1.10	0.90–1.35	1.14	0.87–1.48
NH/PI	1.27	0.69–2.32	0.85	0.37–1.94
Time in housing				
<3	ref	—	ref	—
3-5.99	1.18*	1.01–1.37	1.28*	1.05–1.56
6-9.99	1.14	0.97–1.34	1.36**	1.11–1.68
10+	1.20*	1.00–1.43	1.54***	1.24–1.92
Household characteristics				
Head of household disability	1.03	0.90–1.17	0.53***	0.45–0.63
Household size	0.98	0.94–1.02	1.11***	1.06–1.16
Single caregiver	1.33***	1.12–1.57	0.62***	0.50–0.77

	Negative/positive exits vs. neutral exits (neutral N=4,538)			
	Negative exits (N=2,610)		Positive exits (N=1,118)	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
Program type[3]				
TBV	ref	—	ref	—
PBV	0.07***	0.06–0.09	0.31***	0.26–0.38
PH	0.45***	0.39–0.52	0.86	0.71–1.03
Health and homelessness events				
Experienced recent homelessness	1.76***	1.53–2.03	0.63***	0.52–0.76
Experienced 1+ behavioral health crisis event in year prior to exit (excl. ED visits)	1.68***	1.36–2.08	0.43***	0.26–0.71
Experienced 1+ behavioral health crisis event in year prior to exit (incl. ED visits)[4]	1.50*	1.06–2.12	0.70	0.31–1.56
Experienced 1+ ED visit in year prior to exit[4]	1.30**	1.08–1.58	0.62***	0.47–0.82
Experienced 1+ hospitalization in year prior to exit[4]	0.79	0.59–1.06	0.74	0.44–1.26
2+ chronic conditions[4]	0.91	0.75–1.11	0.96	0.72–1.29

[1] * = p<0.05, ** = p<0.01, *** = p<0.001

[2] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[3] HCV = Housing Choice Voucher, PH = Public housing

[4] Health event data only available for those aged <62 enrolled in Medicaid (N = 1,522/1,139/340 for neutral/negative/positive exits)

Chapter 7: Outcomes following exit: residential stability

Our measure of residential stability following exit was time to experiencing homelessness or unstable housing in the year following exit from housing assistance. Because administrative data sources do not always perfectly capture dates of events, we counted individuals with a date of homelessness within 30 days prior to the exit date from housing assistance as having a time to homelessness of zero days.

We built on existing work at King County that uses multiple sources in the Integrated Data Hub (IDH) to reduce undercounting of housing instability (Johnson, McHugh, & Reimal, 2021), using data from the Homeless Management Information System (HMIS), King County Behavioral Health and Recovery Division (BHRD), King County Health Care for the Homeless Network (HCHN), and people in the Medicaid data who listed their address as “homeless”.

To compare exit types, we fitted a Cox proportional hazards model to the data, with time to homelessness within one year of exiting housing as the outcome and exit type (positive, negative, or neutral) as the independent variable. We adjusted for several demographic variables using propensity scores, which is a method used to balance comparison groups. We were also interested in which exit factors had the most influence on our results. To examine this, we conducted leave-one-out analyses where each exit factor with at least 100 exits was removed in turn and the model was rerun. Full details are in 0.

Among all 16,666 people who exited housing assistance, 2,682 (16.1%) experienced homelessness within one year of leaving, with a mean time to homelessness of 321 days (Figure 7-1). The risk of homelessness was not spread evenly across exit types; only 3.1% of people with positive exits had a homelessness event, compared with 14.5% for neutral exits and 25.4% for negative exits. After adjustment for demographic variables, people with positive exits were 82% less likely to experience homelessness than those with neutral exits, while people with negative exits were 74% more likely than those with neutral exits.

When examining which exit reasons were most influential in our results, landlord evictions appeared to be the most negative of reasons. When this reason was removed, negative and neutral exits looked more similar. Conversely, when “PB/MR [project-based/Mod Rehab] moved out location unknown”, which was classified as neutral, was removed the hazard ratio between negative and neutral increased from 1.74 to 3.24, indicating that this reason is actually negative in nature (Figure F-1). When “PB/MR moved out location unknown” was removed from the positive vs. neutral comparison the two groups looked more similar, reinforcing the idea that this category is negative. The most influential positive reason was “PB/MR moved to non-time limited market rate”, though none of the positive reasons significantly altered the overall result (Figure F-2).

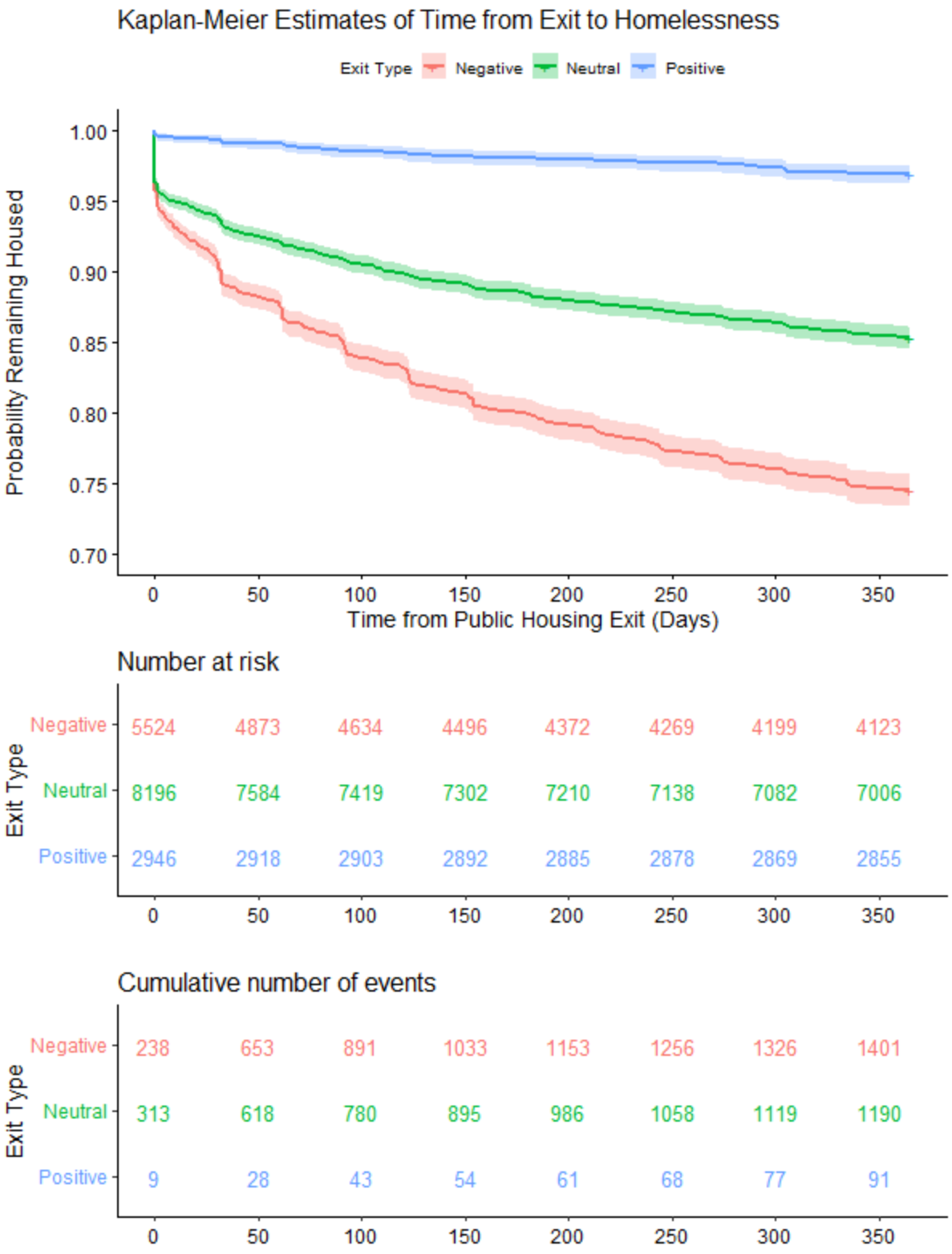

Figure 7-1: Kaplan-Meier curves of time to homelessness by exit type

Chapter 8: Outcomes following exit: physical health

We used Medicaid data to look at three health outcomes in the year following exit from housing assistance: 1) all-cause emergency department (ED) visits, 2) all-cause hospitalizations, and 3) well-child checks. We expected that positive exits would be associated with lower levels of ED visits and hospitalizations and greater likelihood of well-child checks, compared to both neutral and negative exits. For well-child checks, we hypothesized that a history of previous preventive visits would mitigate some of the impacts of a negative exit. To examine this theory, we separated our results out by 1+ well-child visit in the year prior to exit vs. no visits.

In addition to the inclusion criteria noted in Chapter 4, we added the following restrictions:

- Medicaid coverage (enrolled in a program that offers full benefits, non-dual (i.e., not also enrolled in Medicare), and not concurrently enrolled in other health insurance programs) for at least 7 of the 12 months prior to and following exit. The 7-month threshold ensures we would likely detect healthcare events in the claims data (Washington State Health Care Authority, 2022).
- For ED visits and hospitalizations, we restricted to ages <62 because this is the cut point for senior housing at the PHAs and most people in aged over 65 are also enrolled in Medicare, so we would not have a complete picture of their healthcare utilization.
- For the well-child analysis, we restricted to children aged <6 years because this is the age where at least one visit per year is recommended (Washington State Health Care Authority, 2020)

To account for confounding, we also adjusted for the following variables: gender, age, race/ethnicity, head of household with a self-reported disability, length of time in housing, housing assistance type, household size, and single caregiver (one adult and one or more children in the household). For the ED visit and hospitalization analyses, we also adjusted for baseline health as measured by 1+ ED visits/hospitalizations in the year prior to exit and 2+ chronic conditions. Details of the groups used for each variable are in Appendix G.

For all models we used multinomial logistic regression with negative exits as the reference group and generalized estimating equations to account for clustering at the household level. We were also interested in whether moving itself was detrimental to health so repeated the analysis comparing each exit type to randomly selected controls who remained in housing for 12 months following the matched exit date (and met all other criteria).

After applying the Medicaid inclusion requirements to the 16,301 exits in Figure 4-1, there were 5,550 exits (2,205 negative, 2,346 neutral, and 999 positive). For the secondary analysis, there were 34,039 non-exiting controls. For the analysis of well-child outcomes, there were 316 negative exits, 408 neutral exits, 150 positive exits, and 5,823 non-exiting controls.

After adjustment, those with positive exits had 26% lower odds (95% confidence interval (CI): 6–39% lower, $p < 0.01$) of having one or more ED visits in the year following exit than those with negative exits (Figure 8-1). Neither positive exits nor neutral exits were significantly different from negative exits in terms of hospitalizations. We did not observe significant differences in well child checks when comparing positive vs. negative or neutral vs. negative exits across either stratum of previous visit history.

When comparing exit types to those who remained receiving housing assistance, positive exits were again associated with lower odds of ED visits (adjusted odds ratio (aOR): 0.80, 95% CI: 0.69–0.94, $p < 0.01$) but were no different in terms of hospitalizations or well-child visits (Figure 8-2). Children exiting for neutral reasons had approximately 35% lower odds of having a well-child check than children who remained, regardless of whether they had completed a well-child check in the previous year. There were no significant differences in ED visits or hospitalizations between neutral exits and remaining. Finally, people with negative exits had slightly higher but

non-significant odds of one or more ED visits (aOR: 1.10, 95% CI: 1.00–1.21, p = 0.054) and were more likely to be hospitalized (aOR: 1.26, 95% CI: 1.03–1.55, p < 0.05) than people who continued to receive housing assistance. Both those with and without previous well-child visits had 33% and 43% lower odds, respectively, of having a well-child visit following exit than those continuing to receive housing assistance (95% CI: 10–51% lower odds, p < 0.01 and 95% CI: 13–62% lower odds, p < 0.01, respectively).

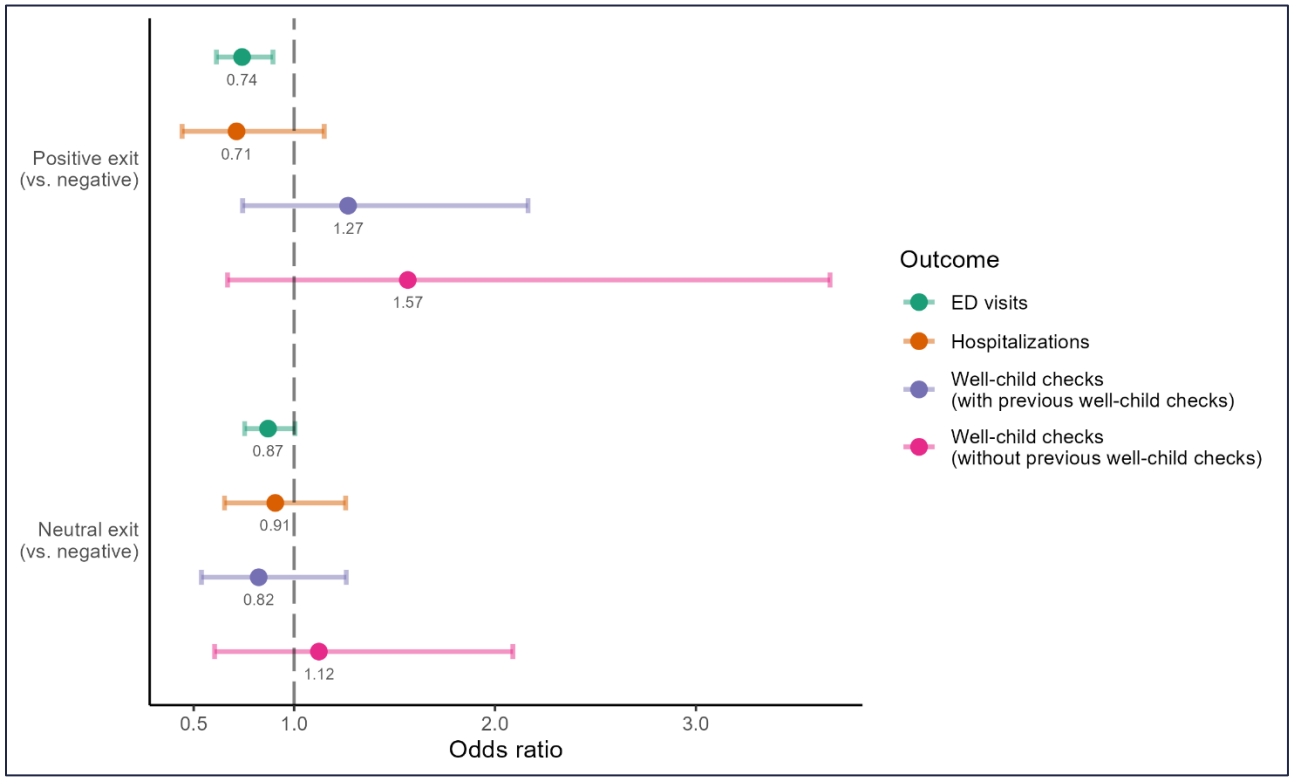

Figure 8-1: Regression results for health outcomes by exit type

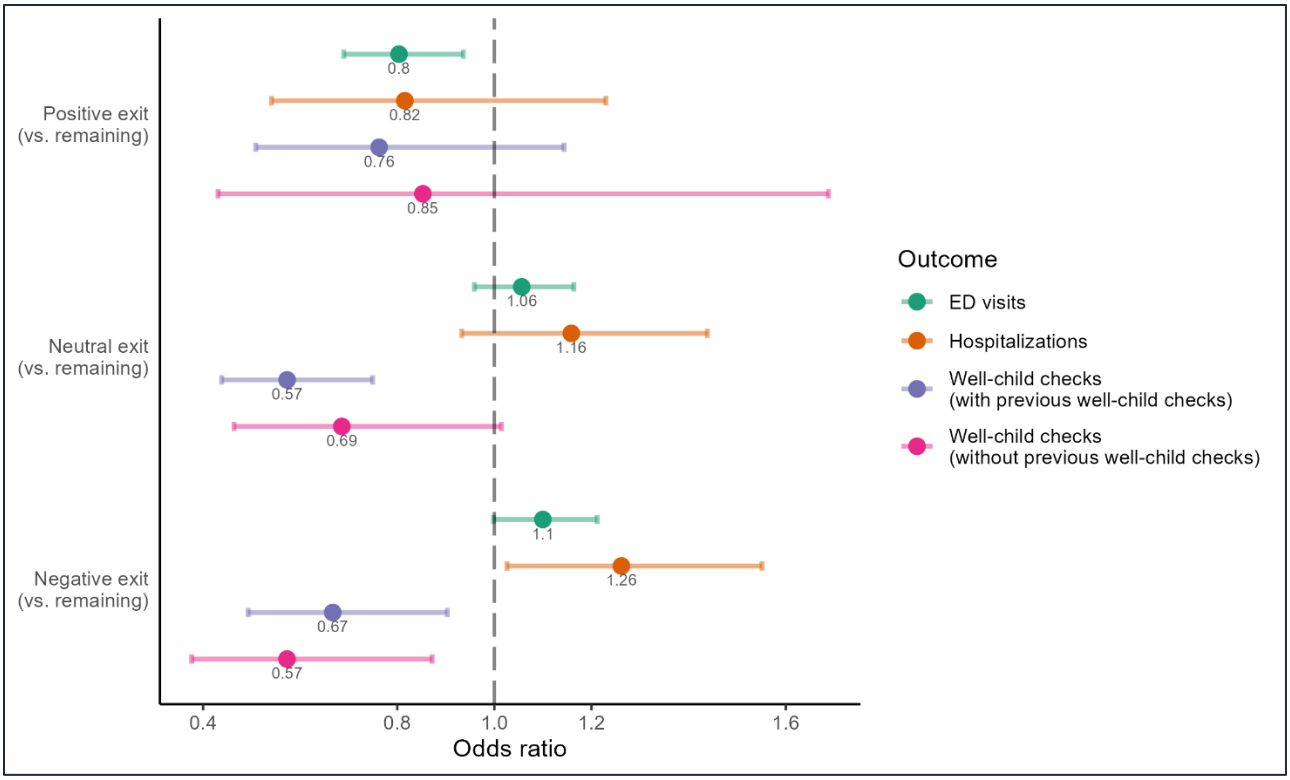

Figure 8-2: Regression results for health outcomes comparing exit types with remaining in housing assistance

Chapter 9: Outcomes following exit: behavioral health

We examined whether the nature of PHA exits is associated with acute behavioral health crisis events in the year following exit, using linked data described in Chapter 4, Medicaid data described in Chapter 8, and service delivery data from the King County Behavioral Health and Recovery Division. We hypothesized that, relative to neutral exits, positive exits would be associated with a lower risk of behavioral health crisis events in the year following exit, while negative exits would be associated with a higher risk of behavioral health crisis events.

We included all individuals who exited housing assistance with KCHA between 2016–2018 and SHA between 2012–2018 and who had all available covariate information. Exit type was categorized as neutral, positive, or negative, as described in Chapter 5. Behavioral health crisis events included acute behavioral health services provided by the Department of Community and Human Services (DCHS) via the King County Behavioral Health and Recovery Division (BHRD) and court-ordered mental health treatment required by the Washington State Involuntary Treatment Act. In a secondary analysis, we further limited our study population to individuals <62 years of age, and who had full Medicaid coverage for 7 of the 12 calendar months before and 7 of the 12 calendar months after the date of exit from housing. In the Medicaid subset, we looked at the outcomes described above, with the addition of emergency department visits due to behavioral health events. See Appendix H for more information.

Confounders were selected *a priori* and reflected participant characteristics at the time of exit. These included gender (male, female, both genders reported at different time points), age at exit, 1+ behavioral health crisis event in the 12 months prior to exit, time in housing, single caregiver household (single adult with 1+ children), household size, race/ethnicity (American Indian/Alaska Native, Asian, Black, Latino, multiple race, Native Hawaiian/Pacific Islander, and White), type of assistance (project-based vouchers, public housing, or tenant-based vouchers), and head of household disability. In the Medicaid subset, we also adjusted for history of treatment for behavioral health conditions (listed in Appendix H). Treatment for behavioral health conditions was based on algorithms applied to the Chronic Conditions Data Warehouse, which use diagnoses in claims data to identify chronic health conditions (Centers for Medicare and Medicaid Services, 2022).

We calculated summary statistics by exit type for all participants and those in the Medicaid subset. Next, we used multivariable logistic regression models, with neutral exit as the referent category. Analyses were repeated for the Medicaid subset. Generalized estimating equations were used to account for clustering at the household level.

Our sample included 16,301 participants for whom full covariate data was available. Full demographic characteristics, by exit type, can be found in Table E-2. The proportion having one or more behavioral health crisis events in the 12 months following exit was 0.8%, 2.8%, and 3.5% for those with positive, neutral, and negative exits, respectively (Table A-1). The Medicaid subset included 5,550 participants, 5.0%, 13.9%, and 15.2% of whom had at least one crisis event among those with positive, neutral, and negative exits, respectively. Demographic characteristics of this subset are in Table G-1.

Results of logistic regression models are shown in Table H-1. Among all study participants, a negative exit was associated with 110% higher odds (95% confidence interval (CI): 1.64–2.69, p<0.001) of a behavioral health crisis event in the year following exit, compared to those with a neutral exit type. However, there was no significant difference in odds of behavioral health crisis event between those with neutral and positive exits (adjusted odds ratio (aOR): 0.95, 95% CI: 0.60–1.49). A similar trend was seen in the Medicaid subset, where, relative to those with neutral exits, those with negative exits had 61% higher odds (95% CI: 1.29–2.00) of behavioral health crisis

events in the year following exit, and there was no significant difference in odds of behavioral health crisis among those with positive exits (aOR=0.90, 95% CI: 0.62–1.30).

Table A-1: Behavioral health crisis events by exit type

	Positive	Neutral	Negative
Crisis events			
n	2,902	7,984	5,415
Proportion with 1+ crisis event	0.8%	2.8%	3.5%
Mean number crisis events (per 100)	3.2	7	9.3
Median number events	0	0	0
Range of crisis event numbers	0-32	0-30	0-27
Crisis events (Medicaid subpopulation)[1]			
n	999	2,346	2,205
Proportion with 1+ crisis event	5.0%	13.9%	15.2%
Mean number crisis events (per 100)	14.9	59.6	54.7
Median number events	0	0	0
Range of crisis event numbers	0-32	0-63	0-49

[1] Includes behavioral-health related ED visits not captured in the full analysis

Chapter 10: Outcomes following exit: economic

We described the relationship between exit type (positive or negative) and wages for the four quarters after the exit quarter. We also assessed wages four quarters prior to the exit quarter and during the exit quarter in order account for pre-existing trends. We limited the data to exits between January 1, 2016 and January 1, 2018, to households with wage earners between 18 and 61 years of age at the time of exit, and to households with more than one year of tenure in housing assistance.

Summary statistics are reported with statistical significance defined by a p-value less than 0.05 for a Kruskal-Wallis (continuous variables) or chi square (categorical variables) test. We also created a multi-level/hierarchical regression model for the relationship of exit type with wage earnings over time. In a secondary analysis, we modeled the relationship of exit type and percent area median income (AMI) over time.

Our analysis included 1,355 individuals (positive = 680, negative = 675) in 954 households. When comparing the proportions of positive and negative exits, Asians (11.9% vs 7.3%) were over-represented and Blacks (43.4% vs 49.2%) were under-represented among positive exits (Table I-1). During the quarter of exit, those with positive exits had higher median wage earnings ($7,763 vs $4,823), higher median work hours (480 vs 406), and higher median hourly wages ($18/hour vs $16/hour). Positive exits were more likely to occur in the spring and summer and to have received housing assistance for more years (mean 9 years vs 7 years). Positive exits were less likely to have a head of household with disability (10.4% vs 16.6%) and to live in single caregiver households (9.0% vs 26.1%). Positive exits also had a higher mean percent AMI (34% vs 29%). Finally, regarding program type, tenant-based vouchers (TBV) were more common among negative exits (73.4% vs 65.6%), while project-based vouchers (PBV) (17.5% vs 13.6%) and public housing (PH) (16.9% vs 12.9%) were more common among positive exits.

There was substantial variance in wages at all time points and the mean wages among positive exits were higher than those among negative exits four quarters prior to exit, during the quarter of exit, and four quarters post exit (Figure 10-1). Four quarters post exit, the mean wages among positive and negative exits were $8,495 and $6,146, respectively.

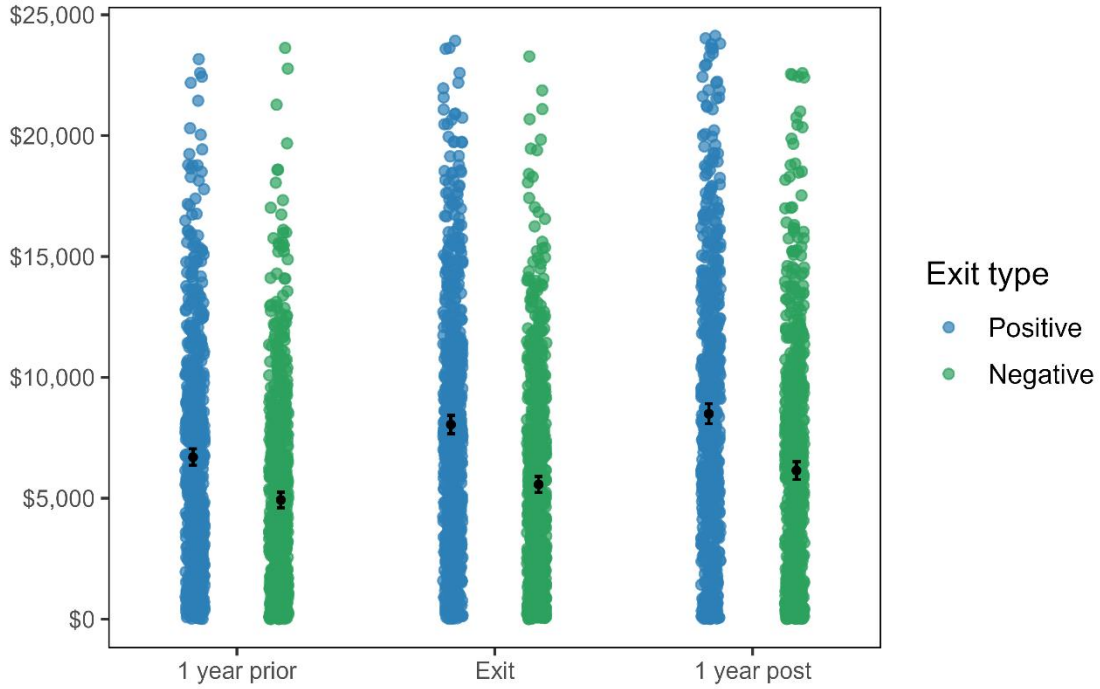

Figure 10-1: Observed quarterly wages for those who exited Seattle and King County PHA programs between January 1, 2016 and January 1, 2018

We fit a model predicting wages four quarters prior to exit, during the quarter of exit, and four quarters after exit (Table I-2). It performed well based on a scatterplot of the observed vs predicted wages (not shown), a plot of residuals over time (Figure I-1) and via a comparison of the mean quarterly observed values to the mean quarterly predicted values (Table I-3). A plot of the mean predicted values by quarter and exit type shows that, in the period before exit, wage increases were greater among positive exits, whereas after exiting, wage increases were greater among negative exits (Figure 10-2). The secondary model of exit type and percent AMI demonstrated a similar pattern (Table I-4 and Figure I-2).

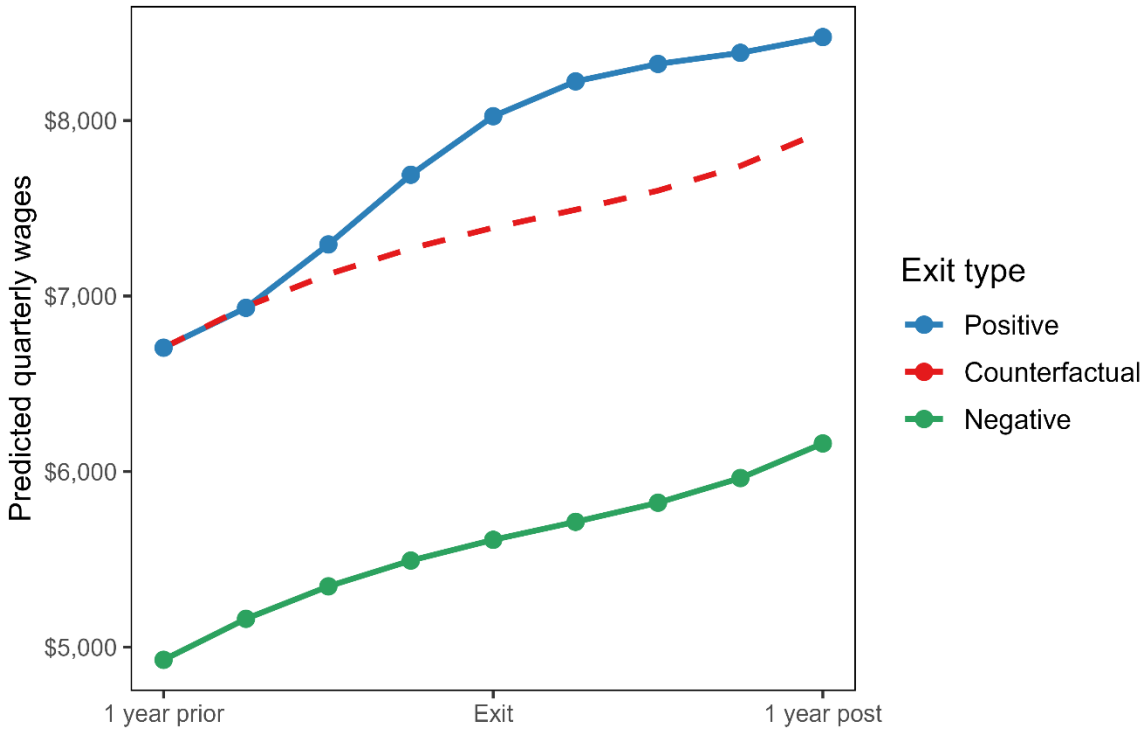

Figure 10-2: Predicted quarterly wages by exit type show faster wage growth for positive exits before exiting and faster wage growth for negative exits after exiting

Chapter 11: Conclusion

Linking data across sectors offers a way to comprehensively describe the experience of people receiving housing assistance. It also enables PHAs and HUD to understand the trajectories of the people they serve all the way from the circumstances under which a person enters housing assistance through to their outcomes following exit from housing.

The HUD HEARS study has shown that who exits from housing assistance is not random. Males, those on PBVs, the recently homeless, and people who experienced a behavioral health crisis event or emergency department visit were all more likely to exit. The type of exit is also strongly associated with a range of factors, only some of which are readily identifiable in PHA data. Heads of household in single caregiver households, who had a disability, experienced a behavioral health crisis event, or had a recent ED visit were all more likely to have a negative exit and less likely to have a positive exit, when compared against neutral exits. Conversely, larger household size was associated with positive exits but not negative exits.

The type of exit from housing assistance matters:

- Around 1 in 4 people who exit for negative reasons experience homelessness or unstable housing in the year following exit, compared to 1 in 32 for positive exits.
- People with positive exits are less likely to have an ED visit than those with negative or neutral exits.
- Those with negative exits are 74% more likely to experience a behavioral health crisis than those with neutral exits.
- Positive exits are associated with higher household income, though the gap between positive and negative exits narrows following exit from housing assistance.

Policy and program implications

The results from HUD HEARS show that there is some way to go to realizing the goal of increased exits from housing assistance due to self-sufficiency; positive exits made up only 13.5% of all non-death exits in the study. The findings also reinforce the idea that the goal is a worthy one because negative and neutral exits were associated with worse outcomes than positive exits.

For PHAs that are working to increase positive exits while minimizing negative exits, the findings present some challenges. First, some factors such as gender and type of housing assistance had the same associations for both positive and negative exit types (as compared to neutral). Second, some factors are generally fixed (e.g., date of birth, gender, race/ethnicity) and it may be illegal or unethical to target services based solely on those factors. To address these challenges, further investigation into why those characteristics are associated with exits and exit types could help adapt services accordingly.

Where there was a more specific association between factors and exit type, policy and program implications are clearer. Although not statistically significant, the relationship between being of working age and positive exits suggests that an emphasis on workforce training and other self-sufficiency programs may be warranted. A longer tenure in housing assistance was associated with increased odds of a positive exit, which suggests that a stabilization period is required before households can get themselves to a position where positive exits are more possible. PHAs may wish to investigate what it is about the early years of housing assistance that are not conducive to positive exits and determine what can be done to help households through the transition period.

Knowing that recent homelessness is a risk factor for negative exits suggests that efforts to support people transitioning from homelessness into housing are crucial. Indeed, the PHAs in this study are already participants

in federal initiatives for specific voucher types such as Emergency Housing Vouchers and Veterans Affairs Supportive Housing vouchers that pair housing with supportive services. They also fund supportive initiatives through their own programming, contract with community-based organizations and local government, and maintain referral partnerships with local providers. Similarly, when negative exits do occur, wraparound services or warm handoffs to other social support agencies may help prevent future homelessness and should be studied further. However not all PHAs are in a position to do this; KCHA and SHA can undertake these programs through grant funding and because their MTW authority offers flexibility in how funds are used. Other PHAs without MTW authority are less able to resource these kinds of supports.

The associations between both emergency department visits and crisis events with negative exits highlights the fact that housing is interconnected with other aspects of a person's life. ED visits and crisis events were both associated with increased likelihood of a negative exit and then a negative exit was associated with increased likelihood of subsequent ED visits and crisis events, even after controlling for baseline events. The exact direction of causation is unclear and may be circular in nature (healthcare events trigger a series of events that increase the chance of a negative exit and the reason for exiting has flow on effects for future health needs). Holistic interventions that encompass health and housing elements will require collaborations between PHAs and healthcare organizations that have mutual interests in avoiding ED visits, behavioral health crises, and negative exits.

Finally, even though those with positive exits had higher post-exit median wage earnings than those with negative exits (annualized wages of $33,980 vs $24,584), the amount is still far less than what is required to afford to live in the Seattle/King County, where 80% of the area median income is $95,300 for a family of four (King County Housing Authority, 2022). This suggests that even after exit, households will continue to require safety net services and positive exits should not be assumed to equate to economic self-sufficiency.

Reproducibility and sustainability

While the confluence of datasets used in this analysis is unique to the King County setting, the component datasets are either used nationally or have equivalents in other states. The 50058 MTW form is used by all MTW PHAs, HUD sets data standards for HMIS, and Medicaid claims look similar across states. Other jurisdictions are likely to have wage and behavioral health service data that could be linked for an equivalent initiative. Data from other sectors such as education and social services would add to the completeness of data on the experience of a person receiving housing assistance.

As noted in Chapter 4, some data sets were already being regularly linked while others were brought together specifically for the HUD HEARS project. The project work focused on exit and post-exit factors, but the linked data has vast potential for population assessments, program evaluations, and informing policies. Our goal is to provide regular updates on the results presented in this report and make them available to interested parties, in a manner to the existing health and housing dashboard: https://kingcounty.gov/depts/health/data/health-housing.aspx. To that end, we are in the process of adding PHA data to the integrated data hub, which will facilitate routine analyses of linked data.

Recommendations for future work

The findings from this project have specific implications for PHAs as they consider programs and policies that might impact exit type. However, HUD HEARS is not the final word on work related to exits and there are several areas for future work:

HUD should consider how to build a standardized and comprehensive process for collecting exit information. Consistency around when and how PHAs gather data on exits from housing assistance would allow for comparisons both across PHAs and over time. At the same time, lists of exit reasons should be flexible enough to address specific PHA needs. A standard way of mapping exit reasons to categories may be an appropriate middle ground. In addition, collecting information on when and why non-heads of households exit may yield additional insights about how to increase opportunities for positive exits.

Collect qualitative information about exit circumstances. The scope of the HUD HEARS project did not allow for engaging with those who have exited from housing assistance. Gathering stories and other qualitative information from people exiting would add valuable context to the statistics and should be prioritized in future work.

Engage with current PHA housing recipients on linked data. The consent process used by KCHA and SHA allows for the sort of work undertaken for HUD HEARS and the project was approved by an institutional/ethics review board. However, meaningful engagement with current housing recipients around data linkage and use offers several benefits. It provides a path to truly informed consent about how a person's data are collected, linked, and used. Adding community voices and sharing power around the decision-making process is an important element of increasing equity. Finally, the people who use the various services that collect their data are best placed to offer ideas for how the data could best be used to improve wellbeing.

Appendix A: Acronyms

AIAN	American Indian/Alaskan Native
AMI	Area median income
aOR	Adjusted odds ratio
BH	Behavioral health
BHRD	Behavioral Health and Recovery Division
CI	95% confidence interval
DCHS	Department of Community and Human Services
ED	Emergency department
ESD	Washington Employment Security Department
FSS	Family Self-Sufficiency
HCHN	Healthcare for the Homeless Network
HCV	Housing choice voucher
HMIS	Homeless management information system
HUD	U.S. Department of Housing and Urban Development
HUD HEARS	Housing and Urban Development Health, Economic, and Residential Stability Study
IDH	Integrated data hub
KCHA	King County Housing Authority
MTCS	Multifamily Tenant Characteristics System
MTW	Moving to work
NHPI	Native Hawaiian/Pacific Islander
OR	Odds ratio
PB/MR	Project-based/Mod Rehab
PBV	Project-based voucher
PH	Public housing
PHA	Public housing authority
PHSKC	Public Health – Seattle & King County
S8	Section 8
SHA	Seattle Housing Authority
TBV	Tenant-based voucher
TRACS	Tenant Rental Assistance Certification System
VASH	Veterans' Affairs Supportive Housing

Appendix B: Literature review

Detailed methodology

Inclusion criteria

We applied the following inclusion criteria to both the published and grey literature searches:

- Published in English.
- A central focus on populations receiving Federal housing assistance in the United States. For the purposes of this review, Federal housing assistance refers to living in public housing, receiving a Housing Choice Voucher (HCV), or a project-based subsidy. Other forms of housing assistance (e.g., permanent supportive housing) were not included as they are not directly relevant to the larger HUD HEARS project.
- Reports on special populations (e.g., veterans, elderly) were included but limitations on generalizability noted.
- Reports from 1990 onwards.
- All study types, including descriptive analyses of exits and subsequent outcomes. Quantitative and qualitative approaches were included.

Search terms

We used the following search terms:

- "HUD" OR "Housing and Urban Development" OR "housing assistance" OR "housing program" "public housing" OR "housing voucher" OR "tenant-based voucher" OR "Housing Choice Voucher" OR "Section 8" OR "subsidized housing"
  AND
- "leave" OR "leaver" OR "exit" OR "exiting" OR "termination" OR "terminate" OR "completion" OR "complete"

Published literature strategy

We used the following databases for the published literature search (number of results are also shown):

- Campbell Collaboration (n = 5)
- EconLit (n = 31)
- Google Scholar (first 15 pages) (n = 150)
- PubMed (n = 33)
- ScienceDirect (note, due to limitations on search terms, the following search string was used for ScienceDirect: ("Housing and Urban Development" OR "housing assistance" OR "public housing" OR "housing voucher" OR "subsidized housing") AND ("leave" OR "exit" OR "terminate" OR "completion")) (n = 5,060)
- Web of Science (n = 109)

Grey literature strategy

We used the following search engines or grey literature databases to search for publications, reports, or other relevant documents (number of results are also shown):

- Google (first 10 pages) (n = 100)
- National Bureau of Economic Research Working Papers (https://www.nber.org/papers.html)

    - Note: Results were restricted to papers under the following topics: “Health, Education, and Welfare”, and “Poverty and Wellbeing” (n = 687)
- PAIS Index (n = 1,968)

Specific web sites

We searched the following web sites for relevant publications (number of results are also shown):

- HUD Office of Policy Development and Research (we reviewed the first 250 results under a search for ‘exit’)
- Urban Institute (we searched the 399 papers under the Federal programs and policies subject, under the Housing and Housing Finance category)
- HousingIs.org (n = 9)
- National Low Income Housing Coalition (n = 43)
- Center on Budget and Policy Priorities (n = 273)

Relevant references

We examined the references cited in articles that were selected for analyses to identify other relevant articles.

Processing results

We first reviewed titles, abstracts, or executive summaries of documents to screen for relevancy. The full-text version of documents that were initially deemed relevant were reviewed for a deeper assessment. No quantitative meta-analysis was conducted. Relevant documents were summarized across the domains below and a qualitative synthesis conducted:

- Year of study/report and authors
- Years of data included
- Population included (location, demographics, housing and voucher types)
- Number of people included
- Which question the results pertain to
- Domain of any results that focused on outcomes following exit (physical health, mental health, economic, residential stability, crime, etc.)
- Comparison groups
- Primary findings
- Any major limitations

Full list of papers examined

Table B-1: Summary of relevant literature

Authors	Years examined	Locations and special populations	Assistance type	No. people included and comparison groups	Research Q (outcome category)	Primary findings	Limitations
Ambrose, BW (2005)	1994-2002	National	PH, HCV, and project-based vouchers	25,336 households None. The study used a survival analysis with several covariates.	Factors associated with exit	- Across all assistance types, having a head of household who was elderly, female, Black, Asian, Hispanic, or disabled was associated with decreased exits from housing support. - Having children in the household was associated with increased exits, but only for project-based vouchers. - Larger households were associated with increased exits among those in public housing, decreased exits among those with project-based vouchers, and there was no association among those with tenant-based vouchers. - An increased percent of people in the census tract who were linguistically isolated (a proxy for proportion with recent immigration) was strongly associated with decreased exits among all assistance types. - Households are more likely to leave assisted housing during periods of economic expansion and less likely to leave during periods of economic uncertainty. Households residing in public housing units are significantly less sensitive to changes in local economic conditions than households receiving tenant-based housing assistance.	
Andersson, F et al. (2016)	Baseline was 2000, follow up was 2010	Non-MTW counties Youth aged 13-18 in 2000 living with 1+ sibling	PH and HCV	~1.172m Time spent in subsidized housing Did not live in subsidized housing	Outcomes following exits (Income, incarceration)	Each additional year spent in subsidized housing is associated with increased earnings at age 26 and reduced incarceration. The effects are greatest for non-Hispanic Blacks and Hispanics.	Some censoring of time spent in housing (only used 1997-2005), but used imputation to correct.
Anthony, J (2005)	1994-2003	Rockford, IL People who signed up for Family Self-Sufficiency	PH and HCV	135 (69 who graduated from FSS and 66 who did not) Graduated from FSS vs. did not	Exit type	Completion of the FSS program was associated with higher income at program exit (median of $22,938 vs. $13,964)	Small sample size, the Rockford HA FSS program may not be generalizable to other areas.
					Factors associated with exit	- Young adults (25–40 years) were 3.6 times as likely to complete FSS as mature adults (>40 years old). - Unmarried participants with or without children were almost three times as likely to succeed as those	

						who were married or divorced (almost all the participants were female). - Participants who did not have a high school diploma were only 27% as likely to succeed as those who did. - Compared to those who acquired three or more skills in the program, those who acquired one or two skills or no skills had virtually no chance of success.	
					Outcomes following exits (- Employment - Residential stability)	Fifty-seven of the successful participants became homeowners within two years of graduation; 36 of the homeowners were living in their own homes in 2003, several years after acquiring them.	
Aratani, Y (2010)	Baseline was 1979-1981, follow up was 1987 and 1997/1998	National Age 19 or younger in 1981	PH only	200-400 (varied by outcome) Lived in PH vs. did not	Outcomes following exits (- Educational attainment - Economic self-sufficiency - Wealth)	- No significant differences in high school graduation or college attendance. - Marginally more likely to be receiving a housing subsidy in the short term (by 1987) but no difference in the longer term (by 1997). - No significant differences in receiving other welfare, being employed, owning an automobile, or owning a car.	- Only considered living in PH as of 1981 but people could have lived in PH in the past (29% non-PH people had). - Multiple testing problem (looked at 12 outcomes by total and then White and Black). - Propensity score matching might have missed important confounders.
Brisson, D and Covert, J (2015)	2010-2012	18 states Mercy Housing residents	HCV, project-based, LIHTC	15,328 households Those evicted vs. those not	Factors associated with exit	- Increased age, being Asian (vs. White), and living in senior or supported housing (vs. family housing) were all associated with reduced risk of a lease violation. - Being female, Black or Other race (vs. White), having a larger household, or increased income were all associated with increased risk of a lease violation. - Increases in work income, variable benefits income, and other income are related to a slightly higher likelihood of experiencing a lease violation. An increase in stable benefits is related to a slightly lower likelihood of experiencing a lease violation.	No adjustment for length of time in housing.
Chetty, R et al. (2016)	MTO was 1994-1998, follow up ranged	Baltimore, Boston, Chicago, Los Angeles, New York City	PH and HCV	7,340 Offered a voucher and required to move	Outcomes following exits (- Educational attainment - Income,	- Median income was $1,624 higher for the intervention group compared to the control among the younger age groups (statistically significant). Income was $1,109 higher when comparing the HCV-only group to control but this was not significant.	MTO took place in 5 larger cities so findings may not be generalizable to other settings.

	from 2000 to 2014	Age 21 by 2012 (divided into groups >13 at random assignment and 13-18 at random assignment)		to a low-income area, offered a voucher, and not offered a voucher (but could remain in PH)	- Marriage and fertility)	- Among the older age group, the intervention group and HCV-only group had lower median income than controls but this was not significant. - Among the younger age group, children in the intervention group were 2.5 percentage points more likely to attend college than the control group (19% vs. 16.5%). There was a smaller, non-significant increase for the HCV-only group. Among the older age group, children in the intervention group were 4.3 percentage points less likely to attend college than the control group (11.3% vs. 15.6%). Similarly, the HCV-only group were significantly less likely to attend college. - Among younger children, those in the experimental group were more likely to be married (5.3% vs. 3.4%), and more likely to have the father listed on the birth certificate (50.9% vs. 44.1%) than those in the control group. Among older children, there was no significant difference in the percent married and fathers were less likely to be listed on the birth certificate (38.4% vs. 46.7%).	
Cortes, A et al. (2008)	1997 to 2005	National	HCV only	759,557 household records Non-elderly heads of households with children; non-elderly, disabled heads of households with children; and non-elderly heads of households with at least one disabled child	Factors associated with exit	- Non-Whites, females, and households with children (especially younger children) were all less likely to exit housing support. - Households that exited had lower median income. The average vacancy rates was higher for exiters and the average poverty rate was slightly lower.	
Dantzler, PA and Rivera, JD (2018)	Those who entered PH after 1986 through to 2013	National	PH only	3,066 Those who expressed an expectation of moving in the two years subsequent to	Factors associated with exit	- An expectation of moving, being married, having some college education, having a disability, and living in an area with a higher unemployment rate were all positively associated with exiting public housing. - Increased tenure in housing and being older were negatively associated with exiting public housing.	The paper was framed as examining an intention to move but the actual question asks more about an expectation of moving, which could be for

				being interviewed vs. those who did not			positive or negative reasons. It was not clear if people who moved out of PH were supported by an HCV or not.
Freeman, L (2005)	1995-2002	National	PH and HCV	~7.5m None. The study used a survival analysis with several covariates.	Factors associated with exit	- Non-Whites, people of older age, females, people with a disability, those with children, those receiving HCV support (vs. PH), and those living in the Northeast were less likely to exit housing assistance. - A higher local vacancy rate was strongly associated with exiting housing assistance. - The pattern for tenure in housing assistance was not clear.	
Geyer, J et al. (2019)	1995-2017	145 PHAs	HCV only	~1m households 7 Small-Area Fair Market Rent PHAs vs. 138 comparison PHAs using metropolitan-area fair market rents	Factors associated with exit	Introduction of SAFMR increased the probability of exit by 27% and shortened the median time to exit.	
Gubits, D et al. (2009)	Baseline was 2000, follow up was 2004	CA (Los Angeles and Fresno), GA (Atlanta and, Augusta), TX (Houston), and WA (Spokane)	Welfare to Work voucher holders only	3,167 People who leased up but relinquished their voucher, people who leased up and continued to use their voucher, and people who did not lease up	Exit type	"Those who relinquish vouchers may lose them inadvertently through inability to navigate housing authority rules and the housing market, or they may have comparatively high earnings and desire to let others take advantage of the voucher."	
					Factors associated with exit	- Families more likely to relinquish the voucher also are more likely to have relatively older children (the youngest member of household was age 6-17 when the voucher was issued), are more likely to be white or Hispanic, have had a driver's license at baseline, and have been receiving Medicaid at baseline. - Families less likely to relinquish the voucher also were more likely to have a high reservation wage ($13-15), more likely to have been enrolled in a training program at baseline, more likely to have been living in public or assisted housing at baseline, and more likely to have received TANF at baseline.	
					Outcomes following exits (- Income - Residential stability	"Compared to those who still hold vouchers, those who relinquished a voucher report that they: have more earnings, receive less TANF and Food Stamps, have larger households, live in similar neighborhoods (slightly poorer), are more likely to have experienced	

					- Welfare	homelessness in the past year, are more likely to be in poverty when both cash and near cash income are considered and have less monthly food per person. Even though relinquishers have more earnings than those who still hold vouchers, they seem to be somewhat worse off at the point of follow-up. Based on comments from the in-depth interviews, families value being able to live independently from their extended family. Therefore, we interpret the larger households of relinquishers as less desirable than the smaller households of voucher holders."	
Hungerford, Thomas L (1996)	1986-1989	National	PH and HCV	1,226 households Exited housing vs did not	Factors associated with exit	- Females and elderly were more likely to remain with housing support. - When removing households with left censoring, females, Blacks, and elderly were more likely to remain in public housing while greater education was associated with leaving. Those with a disability were more likely to continue to receive a HCV.	
Kang, Seungbeom (2020)	199-2009	National	PH and HCV	3,751 Left housing assistance vs. did not	Outcomes following exits (Residential stability)	- PH leavers are approximately 5.2x as likely to experience housing instability compared to those who remain in public housing. - HCV leavers are approximately 5.8x as likely to experience housing instability compared to those who remain in public housing.	
Kasprow WJ, Rosenheck RA, Frisman L, DiLella D (2000)	1991-1999	National VASH	HCV only	1,649 Still in housing after one year vs. not	Factors associated with exit	Women were significantly more likely than men to still be housed after one year (OR=2.49, CI=1.81 to 3.18).	
Lubell, Jeffrey M; Shroder, Mark; Steffen, Barry (2003)	1937-2000	National	PH and HCV	92,397 PH and 131,467 HCV Household type (elderly, disabled, non-elderly and non-disabled with children, non-elderly and non-disabled without children	Factors associated with exit	- Among PH recipients, those with an elderly head of household had longer lengths of stay than other groups. Households with children also had longer lengths of stay. - Among HCV recipients, those with an elderly head of household had longer lengths of stay than other groups. Households with children had shorter lengths of stay.	Only a descriptive study. No testing was done to examine statistical significance of differences.
McClure, K (2018)	1995-2015	National	PH, HCV, and project-based vouchers	~81m records None. Survival analyses by covariates	Factors associated with exit	- Length of stay has increased over time, more so for non-White households. - Households that exited assisted housing had similar median income compared with households that remained in assisted housing.	

						- Income was negatively correlated with length of stay. - Higher area poverty levels and vacancy rates were associated with shorter lengths of stay. - Higher area rent levels were associated with longer lengths of stay.	
McInnis, D et al. (2007)	2001-2005	Atlantic City, Chicago, Durham, Richmond, Washington DC HOPE VI households	PH and HCV	715 households Those who were no longer receiving assistance and those who were	Exit type	"About one in five of the other unassisted renters cited a "positive reason" such as marriage or higher incomes as the reason they were no longer eligible to receive assistance. But far more—nearly half (46 percent) of unassisted renters—cited a negative reason for why they no longer received assistance, including breaking program rules, being evicted, being relocated from public housing and unable to move back, and rent and utility costs that were too high."	
					Outcomes following exits (- Residential stability - Economic attainment)	- Roughly 23 percent of unassisted renters reported that they moved three or more times since 2001, compared with 8.7 percent of voucher holders and 1.9 percent of other public housing residents. - Unassisted renters and voucher holders had similar levels of being late paying utilities (43-44%) but the proportion was much lower among PH residents. - Unassisted renters were much more likely to report being late paying their rent and most likely to report being evicted for nonpayment of rent.	
Montgomery AE et al. (2017)	2011-2014	National VASH	HCV only	7,383 Exited VASH vs. stayed in the program	Exit type	- Almost half (42.5%) of leased-up exiters did so because they had accomplished their goals. Other main reasons were being evicted (9.1%), death (8.7%), and finding other housing (8.1%). - One in five (21.9%) non-leased-up exiters were no longer interested in participating in VASH, 16.6% could not be located, 14.2% had found other housing, and 10.1% had non-compliance with VASH case management.	- Exit from VASH did not equate to exiting subsidized housing; 1/3 continued receiving housing support. - Veterans may have accessed other community-based homelessness assistance programs the research team did not have access to (e.g., local HMIS)
					Factors associated with exit	- Among those who had leased up, having a service-connected disability was associated with exiting. - Among exiters, having PTSD was positively associated with not being leased up.	
					Outcomes following exits (Residential stability)	- Almost 93 percent of leased-up exiters and 90 percent of non-leased exiters did not return to VA homeless programs during the observation period. - Having a service-connected disability and being female were associated with reduced homelessness after exit. Having a drug use disorder was associated with increased homelessness.	
Montgomery, AE and	2008-2016	National	HCV only	20,146	Exit type	Veterans who exited HUD-VASH during the observation period and had either been evicted (N = 4684; 10.2%) or	

Cusack, M (2017)		Those who had exited VASH		Exited VASH due to eviction vs. exited due to accomplishing goals		left the program because they had accomplished their case management goals (N = 15,462; 33.7%). The leading reasons for exiting for the remaining 25,688 Veterans who were excluded from the study were finding other housing (N = 4641; 10.1%) and no longer being financially eligible (N = 3741; 8.2%) or interested (N = 2878; 6.3%); a further 3795 (8.3%) Veterans died while in HUD-VASH housing.	
					Factors associated with exit	- Males were about 50% more likely to be evicted than females, and younger veterans were somewhat more likely to be evicted than older veterans. - Veterans receiving compensation for a service-connected disability and veterans with chronic medical conditions had lower odds of eviction, while those with psychosis, history of self-injury, and alcohol use disorders were over 50% more likely to be evicted. - Drug use disorders raised the odds of eviction by about 150%. - Use of acute care was generally associated with eviction with the largest effects observed in acute care related to substance use. - Primary care and outpatient medical care were largely protective.	
Newman, SJ and Harkness, JM (2002)	Baseline was 1968-1982, follow up was at ages 20-27 (1978-1993)	National Youth aged 10-16 at baseline	PH only	1,183 Public housing during youth vs. unassisted	Outcomes following exits (- Income - Welfare receipt)	- Every year of public housing residence between ages 10 and 16 is estimated to increase the probability of working between ages 25 and 27 by 7 percentage points. - Less significant, but still notable, every year of public housing residence is also estimated to reduce years of welfare dependence between ages 20 and 27 by 0.71 of a year and to increase annual earnings between ages 25 and 27 by $1,861	
O'Connell MJ et al. (2008)	Baseline was 1992-1995, follow up was for up to five years	Cleveland, New Orleans, San Diego, San Francisco VASH	HCV only	392 VASH vs. intensive case management vs. standard care	Outcomes following exits (Residential stability)	Approximately 40% of the VASH group experienced 1+ day of homelessness within 4.5 years of being housed.	
Olsen, E et al. (2005)	1992-2002	National	HCV only	~1.1m households None. Survival analyses with covariates	Factors associated with exit	- Disabled, elderly, Black, and White heads of households (as compared to non-Black, non-White) were less likely to exit. - Increased family size was associated with increased likelihood of exiting. - A $100 per month decrease in the local payment standard was associated with a 3 percent increase in the rate of program exit and an increase of $100 per	- Assumes that participants only leave the HCV program when there is a net benefit to them. - Used the most recent

						month in the minimum tenant contribution to rent was associated with a 12.6% increase in program attrition.	certification data, not any EOP data (because it is not checked), but this may inaccurately state income levels if people left for an income-based reason.
Richter, FG et al. (2021)	2011-2017, evictions between 2013 and 2016	Cleveland	PH and possibly HCV	19,748 People who received an eviction order vs. people who had an eviction filing but no eviction order	Factors associated with exit	- Among all those with an eviction filing (not just those in PH), being White (vs. Black), male, having more children, and having had a filing in the past year were all associated with receiving an eviction order. - Having an eviction filing by a public housing entity or nonprofit organization carries a lower risk of getting an eviction order, relative to a filing by a private entity.	- Could only identify PH landlord but not HCV recipients. - Most analyses were for all landlords combined, though PH and non-profit landlords only made up 28% of the total.
					Outcomes following exits (- Residential stability - School attendance - Health)	- Among all those in the study, receiving an eviction order was associated with increased mobility in the three quarters following eviction compared with those who received an eviction filing but no eviction order. - Households in public housing who are not evicted do not see an increase in shelter utilization relative to the baseline year. However, those that are evicted from public housing increase shelter utilization by 3.3 days in the following year and by almost 2 days (1.97) the subsequent year. - In the school year of the eviction filing, children in 7th grade to 12th grade in households with an eviction move-out order have a share of absent days 2.3 percentage points higher relative to those in households without an eviction move- out order. For kindergarten to 6th grade, there is no significant difference in the share of absent days for children of households with an eviction order relative to those without an eviction move-out order. - Children in households with an eviction filing had lower rates of lead testing compared to the Cleveland average, and the rate for children in households with an eviction order was lower than that of households with a filing but no order. The proportion of children with elevated blood lead levels was higher for children in households with an eviction filing than for Cleveland overall, but there was not a great difference between children in	

						households with an eviction order and those with only a filing.	
Rohe, WM and Kleit, RG (1997)	1989-1995	Charlotte, NC People who applied for the Family Self-Sufficiency program	PH only	224 People who participated in the FSS program vs. those who applied did not complete the application process or declined once accepted	Outcomes following exits (- Income - Welfare)	- All groups had a higher monthly mean wage compared to baseline, but graduates had the largest increase ($792 compared with $660 for dropouts and $245 for the comparison group). - All groups experienced decreases in the proportions receiving Aid to Families with Dependent Children benefits, but graduates had the largest decrease (23% points compared with 21 for dropouts and 3 for the comparison group). - All groups experienced decreases in the proportions receiving food stamps, but graduates had the largest decrease (26% points compared with 8 for dropouts and 9 for the comparison group). - Graduates were more likely to own their own home at follow up.	- Small sample size, the Gateway FSS program may not be generalizable to other areas. - People dropped out of the program for different reasons so are a heterogeneous group.
Rohe, WM et al. (2016)	2011-2014	Charlotte, NC	PH only	550 Work requirement sites with a history of FSS programs, work requirement sites with newly introduced case managers, and non-work requirement sites	Exit type	Positive move-outs were defined as moving to private-market housing. Negative move-outs (i.e., evictions) were defined by failure to pay rent, violating lease terms, or moving without notice.	
					Factors associated with exit	There is some evidence that work requirements increased positive move outs, but the numbers were very small.	
Smith, RE et al. (2014)	MTO was 1994-1998, follow up ranged from 2008-2011	Baltimore, Boston, Chicago, Los Angeles, New York City	HCV only	1,149 households - Receiving housing assistance vs. not at final follow up - Positive vs. negative exits	Exit type	- Positive exits were defined as homeownership or incoming out. Negative exits included lease violations, evictions, or inability to lease up during the period. - After using a hierarchy of information sources to fill in gaps (a reason for exit was only provided by 40.6% of leavers), 53% were classified as having a positive exit and 47% as having a negative exit.	
					Factors associated with exit	- There was no difference between positive and negative exits in terms of age, gender, or household size. - Those with positive exits were more likely to be married at the end of the study, have ever been married, and Hispanic. Those with negative exits were more likely to be non-Hispanic Black.	

						- Those with positive exits were less likely to have ever been homeless, less likely to live in overcrowded housing, and less likely to have a high housing cost burden. Median income at study end was substantially higher, but given that income formed part of the definition of a positive exit, this is not surprising. - Those with positive exits had similar demographics to those who remained receiving housing assistance.	
					Outcomes following exits (- Neighborhood characteristics - Health)	- Those with positive exits were more likely to rate their housing as excellent or good, have a higher neighborhood satisfaction rating, and feel safe in their neighborhood than both people with negative exits and those still receiving assistance. Those with negative exits and were similar to those receiving assistance but were slightly more likely to feel safe in their neighborhood and less likely to say it had alcohol problems; loitering problems; or trash, graffiti, and abandoned buildings. - Those with positive exits were also more likely to rate their health as good or better and less likely to take medicines for blood pressure or face depression than both those with negative exits and those still receiving assistance. - Those with positive exits were less likely to be receiving other forms of welfare than those still receiving assistance. Those with negative exits also were less likely to receive other form of welfare, despite having a similar median income to those still receiving assistance. - Perhaps as a consequence, those with a negative exit were more likely to report food insecurity.	

Appendix C: Data sources and linkage

Table C-1: Data sources used for HUD HEARS

Data source	Years used	Existing linkages
Behavioral health (BHRD)	2012–2019	HCHN, HMIS and Medicaid
Employment Security Division (ESD)	2012–2019	
Healthcare for the Homeless Network (HCHN)		BHRD, HMIS, and Medicaid
Homeless Management Information System (HMIS)	2012–2019	BHRD, HCHN, and Medicaid
Medicaid claims data	2012–2019	• 50058 data • HMIS and BHRD
PHA administrative data (including 50058)	2012–2019	Medicaid
PHA exit data	2012–2019	

To link the data sources, we utilized an existing multi-sector data system. The King County Integrated Data Hub (IDH) combines identities across several data sets including BHRD, HCHN, HMIS, and Medicaid. The IDH uses a mix of probabilistic and deterministic methods to match individuals across data systems via a proprietary tool (Informatica, Redwood City, CA). PHA data (50058 and exit data from both KCHA and SHA) were probabilistically linked on name, social security number, date of birth, and gender using the RecordLinkage package in R v4.2.0 and RStudio v2022.2.3.492 (R Core Team, 2022; RStudio Team, 2022; Sariyar & Borg, 2020). IDH, ESD, and PHA data were then linked using the same RecordLinkage approach (Figure C-1).

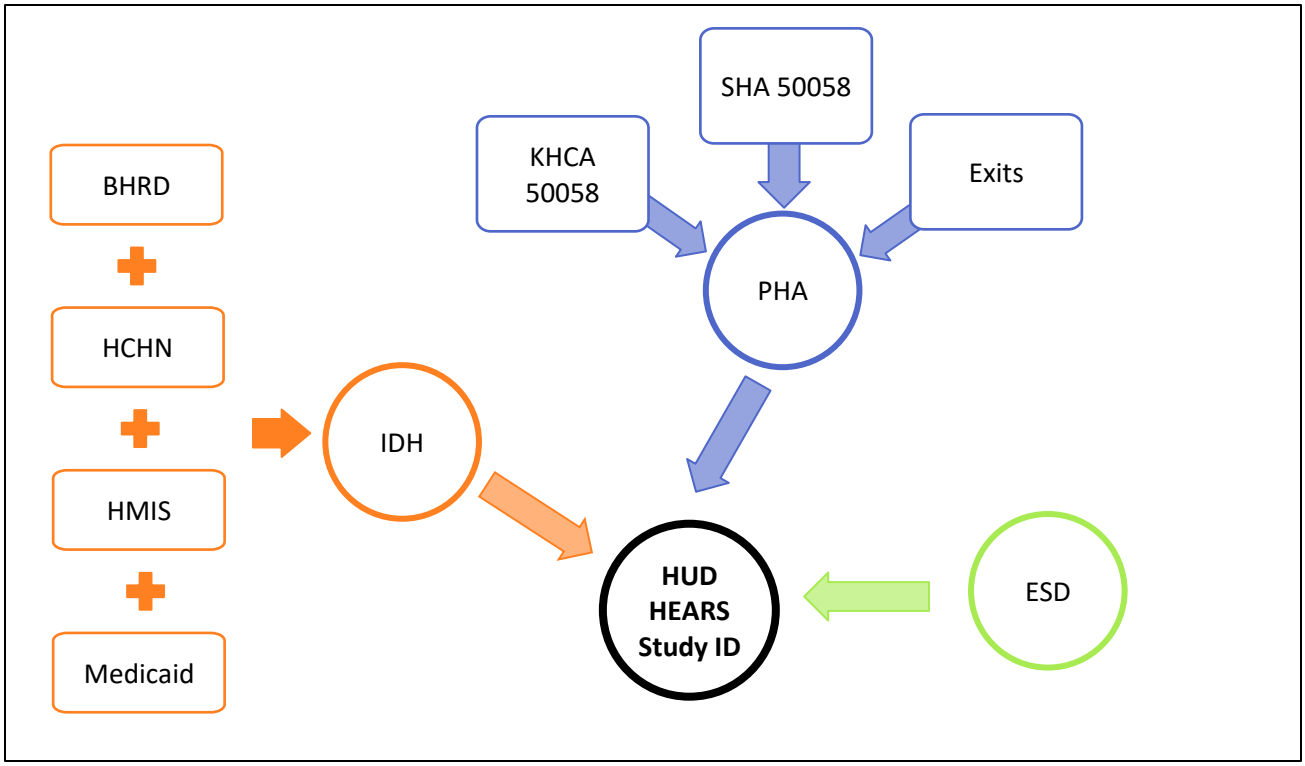

Figure C-1: Identity linkage between HUD HEARS data sources

Appendix D: Exit definitions

Table D-1: Exit reasons and categories

PHA	Original exit reason	Cleaned exit reason	Category
KCHA	13 - S8 Cross Absorption	S8 Cross Absorption	Neutral
KCHA	14 - S8 Absorption	S8 Absorption	Neutral
KCHA	30 - Homeownership	Homeownership	Positive
KCHA	31 - Moved to Non-Subsidized Rental	Moved to Non-Subsidized Rental	Positive
KCHA	32 - S8 Over Income	S8 Over Income	Positive
KCHA	33 - Needed Housing with Higher Level of Services	Moved - Needed a Higher Level of Services	Neutral
KCHA	35 - Transitional Housing Graduate to KCHA Managed Units	Transitional Housing Graduate to KCHA Managed Units	Neutral
KCHA	36 - Transitional Housing Graduate to any Section 8 Voucher	Transitional Housing Graduate to any Section 8 Voucher	Neutral
KCHA	37 - Trans Grad into KCHA PBA	Transitional Housing Graduate to KCHA PBA	Neutral
KCHA	38 - Transitional Housing Graduate to Non-Subsidized Rental	Transitional Housing Graduate to Non-Subsidized Rental	Positive
KCHA	39 - Transitional Housing Graduate to Other Subsidized Rental	Transitional Housing Graduate to Other Subsidized Rental	Neutral
KCHA	40 - Transitional Housing Non-Graduate Early Program Exit	Transitional Housing Non-Graduate Early Program Exit	Neutral
KCHA	41 - Deceased	Deceased	Neutral
KCHA	42 - Changed Subsidy Program Type	Moved - Changed Subsidy Program Type	Neutral
KCHA	45 - S8 Incoming Portability Move Out	S8 Incoming Portability Move Out	Neutral
KCHA	46 - Moved in w/Family/Friends	Moved in w/Family/Friends	Neutral
KCHA	47 - Subsidy in Jeopardy Client Choice	Subsidy in Jeopardy Client Choice	Negative
KCHA	49 - S8 Landlord Eviction	Landlord Eviction	Negative
KCHA	50 - Paperwork Violation	Noncompliance - Paperwork Violation	Negative
KCHA	51 - Inspection/Damages	Inspection/Damages	Negative
KCHA	52 - Unreported Income	Fraud - Household Income	Negative
KCHA	53 - Criminal Activity	Noncompliance - Criminal Activity	Negative
KCHA	54 - Unauthorized Live In	Fraud - Household Composition	Negative
KCHA	55 - Client Location Unknown/Abandoned Unit	Client Location Unknown/Abandoned Unit	Negative
KCHA	55 - Loc Unknown/Abandon Unit	Client Location Unknown/Abandoned Unit	Negative
KCHA	56 - Absence - Incarceration	Absence - Incarceration	Negative
KCHA	57 - Absence Treatment/Hospital	Absence Treatment/Hospital	Negative
KCHA	58 - S8 Port Out Termination	Port Out Termination	Neutral
KCHA	59 - Non Payment of Rent	Non Payment of Rent	Negative

KCHA	60 - S8 PB Failed Social Services Program	S8 PB Failed Social Services Program	Negative
KCHA	61 - S8 Term Limit Program	Expired - Term Limit Program	Neutral
KCHA	63 - Moved to Non-KCHA Subsidized Rental	Moved to Non-KCHA Subsidized Rental	Neutral
KCHA	64 - S8 Voucher Expired	Voucher Expired	Negative
KCHA	69 - S8 Voucher Expired - Ported Out	Expired - Ported Out	Negative
KCHA	70 - Non Payment of Retro Rent	Non Payment of Retro Rent	Negative
KCHA	99 - S8 Sponsor-based Provider Based Move Out	S8 Sponsor-based Provider Based Move Out	Neutral
KCHA	Client would not disclose reason	Client would not disclose reason	Neutral
KCHA	No required information	Failed to provide information	Negative
KCHA	PM Move to KCHA Section 8 Voucher	PM Move to KCHA Section 8 Voucher	Neutral
SHA	180 days $50 or less HAP	180 days $50 or less HAP	Positive
SHA	180 Days Away From Assisted Unit	180 Days Away From Assisted Unit	Negative
SHA	180 days Zero HAP	180 days Zero HAP	Positive
SHA	ABANDONMENT	Client Location Unknown/Abandoned Unit	Negative
SHA	Absence - Extended Leave	Absence - Extended Leave	Negative
SHA	Absence - Incarceration	Absence - Incarceration	Negative
SHA	Absence - Treatment/Hospital	Absence - Treatment/Hospital	Negative
SHA	Criminal Activity	Criminal Activity	Negative
SHA	Deceased	Deceased	Neutral
SHA	DECEASED	Deceased	Neutral
SHA	DID NOT DISCLOSE	Client would not disclose reason	Neutral
SHA	DOMESTIC VIOLENCE	Domestive violence	Negative
SHA	EVICTION-ABANDONMENT	Eviction - abandonment	Negative
SHA	EVICTION-NON PAY	Eviction - non-payment	Negative
SHA	EVICT-JUDGMT/PHYSICAL	Eviction - judgement/physical	Negative
SHA	EVICT-JUDGMT/PHYSICAL-CRIMINAL	Eviction - judgement/physical - criminal	Negative
SHA	EVICT-JUDGMT/PHYSICAL-OTHER	Eviction - judgement/physical - other	Negative
SHA	Expired - Ported Out	Expired - Ported Out	Neutral
SHA	Expired - Term Limit Program	Expired - Term Limit Program	Neutral
SHA	Expired - Voucher	Voucher Expired	Negative
SHA	Failure to Complete HQS Inspection	Failure to Complete HQS Inspection	Negative
SHA	Failure to Complete Re-examination	Failure to Complete Re-examination	Negative
SHA	Failure to Provide SHA-requested Information	Failed to provide information	Negative
SHA	Fraud - Household Composition	Fraud - Household Composition	Negative
SHA	Fraud - Household Income	Fraud - Household Income	Negative
SHA	Fraud - Other	Fraud - Other	Negative
SHA	FUP Youth 18 Month Expiration	FUP Youth 18 Month Expiration	Neutral

SHA	Graduated - 180 days $50 or less HAP	Graduated - 180 days $50 or less HAP	Positive
SHA	HEALTH	Health	Neutral
SHA	HQS Breach	HQS Breach	Negative
SHA	Ineligible - Citizenship/Immigration	Ineligible - Citizenship/Immigration	Neutral
SHA	LEASE ENFORCEMENT	Lease enforcement	Negative
SHA	Lease Violation - Criminal	Lease Violation - Criminal	Negative
SHA	Lease Violation - Landlord Eviction	Landlord Eviction	Negative
SHA	Lease Violation - Non-Criminal	Lease Violation - Non-Criminal	Negative
SHA	LOCATION	Location	Negative
SHA	More than 60 days absent from the unit	More than 60 days absent from the unit	Negative
SHA	Moved - Changed Subsidy Program Type	Moved - Changed Subsidy Program Type	Neutral
SHA	Moved - Homeownership	Homeownership	Positive
SHA	Moved - Needed a Higher Level of Services	Moved - Needed a Higher Level of Services	Neutral
SHA	Moved - Non-subsidized Rental	Moved to Non-Subsidized Rental	Positive
SHA	Moved - Shelter	Moved - Shelter	Negative
SHA	Moved - Transitional Housing Program	Moved - Transitional Housing Program	Negative
SHA	Moved - w/Family/Friends	Moved in w/Family/Friends	Neutral
SHA	MUTUAL TERMINATION	Mutual termination	Neutral
SHA	NEIGHBORHOOD QUALITY	Neighborhood quality	Negative
SHA	NO LONGER USED 9/14/16 (OTHER)	No longer used as of 2016-09-14 (other)	Neutral
SHA	Noncompliance - Citizenship/Immigration	Noncompliance - Citizenship/Immigration	Negative
SHA	Noncompliance - Criminal Activity	Noncompliance - Criminal Activity	Negative
SHA	Noncompliance - HQS	Noncompliance - HQS	Negative
SHA	Noncompliance - Paperwork Violation	Noncompliance - Paperwork Violation	Negative
SHA	Noncompliance - Payment Plan/Debt to SHA	Noncompliance - Payment Plan/Debt to SHA	Negative
SHA	Noncompliance - Program Partnership	Noncompliance - Program Partnership	Negative
SHA	OTHER	Other	Neutral
SHA	OTHER SUBSIDIZED HSG/HCV	Other subsidized HSG/HCV	Neutral
SHA	Other Violation of Participant Obligations	Other Violation of Participant Obligations	Negative
SHA	Payment Plan Non-Compliance/Debt to SHA	Noncompliance - Payment Plan/Debt to SHA	Negative
SHA	PB/MR moved due to incarceration	PB/MR moved due to incarceration	Negative
SHA	PB/MR moved out location unknown	PB/MR moved out location unknown	Neutral
SHA	PB/MR moved to hospital/assisted living	PB/MR moved to hospital/assisted living	Neutral

SHA	PB/MR moved to non-time limited market rate	PB/MR moved to non-time limited market rate	Positive
SHA	PB/MR moved to non-time limited subsidized housing	PB/MR moved to non-time limited subsidized housing	Neutral
SHA	PB/MR moved to shelter	PB/MR moved to shelter	Negative
SHA	PB/MR moved to temporary housing (family,friends)	PB/MR moved to temporary housing (family,friends)	Neutral
SHA	PB/MR moved to transitional housing program	PB/MR moved to transitional housing program	Neutral
SHA	PURCHASED HOME	Homeownership	Positive
SHA	RENT TOO HIGH	Rent too high	Negative
SHA	RENTED PRIVATELY/NO SUBSIDY	Moved to Non-Subsidized Rental	Positive
SHA	Serious/Repeated Lease Violations (Criminal)	Serious/Repeated Lease Violations (Criminal)	Negative
SHA	Serious/Repeated Lease Violations (Non-criminal)	Serious/Repeated Lease Violations (Non-criminal)	Negative
SHA	UNIT/PROPERTY QUALITY	Unit/property quality	Negative
SHA	Unknown - Client would not disclose reason	Client would not disclose reason	Neutral
SHA	Unknown - Port Out Termination	Port Out Termination	Neutral
SHA	Vacated Mod Rehab/Project Based Unit	PB/MR moved out location unknown	Neutral
SHA	Voluntary Self-Termination	Voluntary Self-Termination	Neutral
SHA	Voucher Expired	Voucher Expired	Negative

Appendix E: Factors associated with exit

Detailed methodology

Data sources and variables

We used the following variables from the 50058 MTW data in the exit analyses: 1) head of household demographics: gender (male, female, or both male and female reported over time, which we termed multiple), age (<25, 25–44, 45-61, 62+ (senior housing eligibility begins at age 62)), race/ethnicity (American Indian/Alaskan Native, Asian, black, Latina/o/x, multiple race, Native Hawaiian/Pacific Islander, white), self-reported disability, length of time in housing, and 2) household characteristics: household size, single caregiver (one adult and one or more children in the household), and assistance type (project-based vouchers (PBV), PH, or tenant-based vouchers (TBV)).

We restricted exits to those where there was at least a 12-month gap between the exit date and any subsequent housing (termed "true exits") and to non-death exits. If a head of household had multiple exits during the study period, we used the most recent exit. If multiple exit categories were recorded for a single event, we prioritized the reason that belonged to the smallest group (positive, then negative, then neutral).

Based on existing literature and PHA expertise, we hypothesized that health status and prior housing instability would influence exits from housing and exit type. In addition to demographic factors listed above, we used BHRD data to identify people who had experienced an acute behavioral health crisis event in the 12 months prior to housing exit. Homelessness was defined as one or more of the following in the three years prior to exit: appearing in HMIS or HCHN data, having a housing status in BHRD data that indicated housing instability, or having an address listed as "Homeless" in the Medicaid data (Johnson et al., 2021). We used Medicaid data to identify those who had experienced emergency department (ED) visits or hospitalizations for any reason in the 12 months prior to housing exit, or those with one of more chronic conditions as defined by the Chronic Condition Warehouse (Centers for Medicare and Medicaid Services, 2022). We also created an enhanced definition of behavioral health crisis event that added behavioral health-related ED visits from Medicaid to the BHRD data. Collectively, the Medicaid-derived all-cause ED visit, hospitalization, and chronic condition measures are a proxy for a person's health status.

Statistical analysis

Our primary analyses aimed to answer two questions: 1) What factors are associated with exiting from housing assistance? and 2) What factors are associated with each exit type? For both analyses, the unit of analysis was the head of household. Although some exit reasons may apply to the entire household, others focus on the individual and other household members may continue to receive housing assistance.

To look at the first question we randomly matched four controls (heads of household who remained in housing) for each exit without replacement and assigned the controls a pseudo-exit date that matched the exit date for the purposes of assessing the demographic and other variables noted above. We used a 4:1 ratio because greater ratios yield minimal gain in power to detect differences and there were a limited number of controls available for matching (Breslow, 2005). Controls were eligible to be matched if they remained in housing for at least 12 months following the case exit date. Because we wanted to examine how each variable was associated with exits, we did not match controls on any other characteristics. If we had matched on a factor (e.g., age), we would have artificially balanced the distribution of that factor

between those who exited and controls, meaning no relationship between the factor and exiting would be found.

We first examined descriptive statistics for programmatically meaningful differences in characteristics, as defined by subject matter experts who work with the PHA population. Then we used a binomial logistic regression to evaluate the relationship between each variable and exiting from housing. To examine factors associated with exit type, we used a multinomial logistic regression with neutral exits as the reference category. We used the DHARMa R package to conduct model checking (Hartig, 2022).

Secondary analysis

Healthcare utilization data (ED visits, hospitalizations, and diagnosed chronic conditions) were only available for those who were enrolled in Medicaid prior to exiting. We therefore conducted a secondary analysis with the subset of participants (both those exiting and controls) who had full, non-dual (i.e., they were not also enrolled in Medicare), Medicaid coverage for at least 7 of the 12 months prior to the exit or pseudo-exit date. This minimum coverage requirement ensures that if a person did visit the ED, was hospitalized, or was diagnosed with a chronic condition, we would likely detect the event in the claims data (Washington State Health Care Authority, 2022). Because we excluded Medicaid members with dual Medicare coverage, we also restricted secondary analyses to those aged <62 since most older Medicaid recipients also have Medicare and Medicaid claims may be incomplete.

Detailed results

For both those who remained and those who exited, people with seven or more months of full Medicaid coverage in the year prior to exit were younger (median of 44/41 years for remained/exited and had Medicaid vs. 59/56 years for those without Medicaid), more likely to be female (70.2%/64.6% vs. 60.0%/55.3%), be Black (43.8%/43.5% vs. 27.6%/29.1%), have a larger household (mean 2.8/2.4 vs. 1.8/1.7), and have a single caregiver (30.1%/28.4% vs. 11.8%/10.4%), but less likely to have disability (35.4%/37.0% vs. 50.1%/45.2%) (Table E-1). Among those with Medicaid coverage, those exiting were more likely to be receiving a PBV than those who remained (49.4% vs. 22.2%).

Although analyses were at the head of household level, a demographic profile of all those who exited is in Table E-2. The pattern of differences between each exit type was largely the same as for heads of households (shown in Table 6-1)

Table E-1: Demographics of heads of households who exited vs. those who did not, by Medicaid enrollment status

	Remained, no Medicaid (N=15,214)	Remained, Medicaid (N=9,948)	Exited, no Medicaid (N=5,083)	Exited, Medicaid (N=3,183)
Age				
Mean (years)	58	44	56.5	41.4
Median (years)	59	44	56	41
Senior (aged 62+)	44.8%	7.2%	40.1%	5.7%
Gender				
Another gender	208 (1.4%)	145 (1.5%)	61 (1.2%)	36 (1.1%)
Female	9,131 (60%)	6,986 (70.2%)	2,813 (55.3%)	2,056 (64.6%)
Male	5,875 (38.6%)	2,817 (28.3%)	2,209 (43.5%)	1,091 (34.3%)
Race/ethnicity[1]				
AI/AN	171 (1.1%)	158 (1.6%)	75 (1.5%)	83 (2.6%)
Asian	1,763 (11.6%)	701 (7%)	522 (10.3%)	167 (5.2%)
Black	4,202 (27.6%)	4,356 (43.8%)	1,481 (29.1%)	1,385 (43.5%)
Latina/o/x	1,011 (6.6%)	673 (6.8%)	339 (6.7%)	222 (7%)
Multiple	1,539 (10.1%)	991 (10%)	468 (9.2%)	269 (8.5%)
NH/PI	119 (0.8%)	84 (0.8%)	45 (0.9%)	22 (0.7%)
White	6,409 (42.1%)	2,985 (30%)	2,153 (42.4%)	1,035 (32.5%)
Time in housing				
Mean time (years)	6.2	5.5	5.4	4.4
Median time (years)	6.2	4.5	4.3	3
Household characteristics				
Head of household disability	50.1%	35.4%	45.2%	37.0%
Mean household size	1.8	2.8	1.7	2.4
Median household size	1	2	1	2
Single caregiver	11.8%	30.1%	10.4%	28.4%
Program type[2]				
PBV	2,462 (16.2%)	2,210 (22.2%)	2,013 (39.6%)	1,573 (49.4%)
PH	4,985 (32.8%)	2,133 (21.4%)	1,330 (26.2%)	510 (16%)
TBV	7,767 (51.1%)	5,605 (56.3%)	1,740 (34.2%)	1,100 (34.6%)

	Remained, no Medicaid (N=15,214)	Remained, Medicaid (N=9,948)	Exited, no Medicaid (N=5,083)	Exited, Medicaid (N=3,183)
Health and homelessness events				
Experienced recent homelessness	2,373 (15.6%)	3,353 (33.7%)	1,448 (28.5%)	1,808 (56.8%)
Experienced 1+ behavioral health crisis events in year prior to exit (excl. Medicaid ED visits)	220 (1.4%)	188 (1.9%)	343 (6.7%)	227 (7.1%)

1 AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

2 PBV = Project-based voucher, PH = Public housing, TBV = Tenant-based voucher

Table E-2: Demographics of all those who exited, by exit type (individual level)

	All exits (N=16,301)	Neutral exit (N=7,984)	Positive exit (N=2,902)	Negative exit (N=5,415)
Age				
Mean (years)	33.9	37.1	31.1	30.8
Median (years)	31	35	27	27
Senior (aged 62+)	14.8%	20.3%	9.2%	9.7%
Gender				
Another gender	221 (1.4%)	99 (1.2%)	41 (1.4%)	81 (1.5%)
Female	8,793 (53.9%)	4,293 (53.8%)	1,572 (54.2%)	2,928 (54.1%)
Male	7,287 (44.7%)	3,592 (45%)	1,289 (44.4%)	2,406 (44.4%)
Race/ethnicity[1]				
AI/AN	262 (1.6%)	120 (1.5%)	20 (0.7%)	122 (2.3%)
Asian	1,422 (8.7%)	782 (9.8%)	317 (10.9%)	323 (6%)
Black	6,983 (42.8%)	3,245 (40.6%)	1,348 (46.5%)	2,390 (44.1%)
Latina/o/x	1,303 (8%)	583 (7.3%)	188 (6.5%)	532 (9.8%)
Multiple	1,341 (8.2%)	585 (7.3%)	265 (9.1%)	491 (9.1%)
NH/PI	227 (1.4%)	103 (1.3%)	36 (1.2%)	88 (1.6%)
White	4,763 (29.2%)	2,566 (32.1%)	728 (25.1%)	1,469 (27.1%)
Time in housing				
Mean time (years)	5.5	4.7	7	5.9
Median time (years)	4.4	3.2	7.1	5
Household characteristics				
Head of household disability	27.3%	30.9%	14.7%	28.7%
Mean household size	3.2	2.9	3.9	3.2
Median household size	3	2	4	3
Single caregiver	25.7%	24.7%	15.7%	32.6%
Program type[2]				
PBV	6,152 (37.7%)	4,436 (55.6%)	755 (26%)	961 (17.7%)
PH	3,239 (19.9%)	1,418 (17.8%)	743 (25.6%)	1,078 (19.9%)
TBV	6,910 (42.4%)	2,130 (26.7%)	1,404 (48.4%)	3,376 (62.3%)
Health and homelessness events				
Experienced recent homelessness	5,015 (30.8%)	2,857 (35.8%)	401 (13.8%)	1,757 (32.4%)
Experienced 1+ behavioral health crisis events in year prior to exit (excl. Medicaid ED visits)	608 (3.7%)	356 (4.5%)	23 (0.8%)	229 (4.2%)

	All exits (N=16,301)	Neutral exit (N=7,984)	Positive exit (N=2,902)	Negative exit (N=5,415)
Experienced 1+ behavioral health crisis events in year prior to exit (inc. ED visits)[3]	173 (3.1%)	97 (4.1%)	<10	70 (3.2%)
Average # ED visits in year prior to exit[3]	1.1	1.2	0.5	1.1
Experienced 1+ ED visits in year prior to exit[3]	2,265 (40.8%)	1,048 (44.7%)	286 (28.6%)	931 (42.2%)
Average # hospitalizations in year prior to exit (per 100 people)[3]	7.5	8.7	3.9	7.9
Experienced 1+ hospitalizations in year prior to exit[3]	287 (5.2%)	148 (6.3%)	30 (3.0%)	109 (4.9%)
Average # of chronic conditions[3]	1	1	0.7	1.1

[1] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[2] PBV = Project-based voucher, PH = Public housing, TBV = Tenant-based voucher

[3] Health event data available for those aged <62 enrolled in Medicaid (All exits N=5,550, Negative N=2,205, Neutral N=2,346, Positive N=999)

Table E-3: Regression output for heads of households who exited vs. controls who did not (Medicaid population)

	Odds ratio[1]	95% CI
Age		
<25	ref	—
25-44	0.67***	0.56–0.81
45-61	0.50***	0.41–0.61
Gender		
Female	ref	—
Male	1.05	0.94–1.17
Multiple	0.97	0.65–1.43
Race/ethnicity[2]		
White	ref	—
AI/AN	1.23	0.90–1.67
Asian	0.94	0.77–1.15
Black	1.03	0.93–1.15
Latino	0.92	0.76–1.10
Multiple	0.90	0.76–1.07
NH/PI	0.89	0.52–1.45

	Odds ratio[1]	95% CI
Time in housing		
<3	ref	—
3-5.99	1.18**	1.05–1.32
6-9.99	1.16*	1.01–1.32
10+	1.22**	1.05–1.42
Household characteristics		
Head of household disability	0.81***	0.72–0.90
Household size	0.93***	0.90–0.96
Single caregiver	0.82***	0.73–0.92
Program type[3]		
TBV	ref	—
PBV	2.80***	2.52–3.11
PH	1.26***	1.11–1.43
Health and homelessness events		
Experienced recent homelessness	1.74***	1.57–1.94
Experienced 1+ behavioral health crisis event in year prior to exit (incl. ED visits)[4]	2.12***	1.69–2.66
Experienced 1+ ED visit in year prior to exit[4]	1.27***	1.16–1.40
Experienced 1+ hospitalization in year prior to exit[4]	0.96	0.82–1.12
2+ chronic conditions[4]	0.75***	0.68–0.83

[1] * = p<0.05, ** = p<0.01, *** = p<0.001

[2] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[3] PBV = Project-based voucher, PH = Public housing, TBV = Tenant-based voucher

[4] Health event data available for those aged <62 enrolled in Medicaid (N = 9,234 for controls, 3,001 for exits)

Table E-4: Regression output for heads of household by exit type (Medicaid population)

	Negative/positive exits vs. neutral exits (neutral N=1,522)			
	Negative exits (N=1,139)		Positive exits (N=340)	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
Age				
<25	ref	—	ref	—
25-44	0.97	0.70–1.35	0.99	0.58–1.67
45-61	0.86	0.60–1.22	0.92	0.53–1.61
Gender				
Female	ref	—	ref	—
Male	1.08	0.88–1.34	1.21	0.90–1.63
Multiple	0.77	0.33–1.82	2.14	0.85–5.37
Race/ethnicity[2]				
White	ref	—	ref	—
AI/AN	1.67	0.98–2.85	0.56	0.17–1.92
Asian	0.85	0.54–1.33	1.35	0.82–2.22
Black	1.14	0.93–1.40	1.00	0.74–1.36
Latino	1.24	0.87–1.79	1.26	0.74–2.14
Multiple	0.95	0.68–1.33	0.93	0.57–1.54
NH/PI	2.58	0.90–7.36	1.19	0.23–6.12
Time in housing				
<3	ref	—	ref	—
3-5.99	1.41**	1.12–1.78	1.36	0.96–1.93
6-9.99	1.55**	1.18–2.02	1.61*	1.10–2.36
10+	1.85***	1.35–2.53	2.49***	1.63–3.82
Household characteristics				
Head of household disability	0.90	0.72–1.13	0.48***	0.33–0.68
Household size	0.93*	0.88–0.99	1.10*	1.02–1.18
Single caregiver	1.12	0.89–1.40	0.56***	0.40–0.78
Program type[3]				
TBV	ref	—	ref	—
PBV	0.11***	0.09–0.14	0.59**	0.42–0.82

	Negative/positive exits vs. neutral exits (neutral N=1,522)			
	Negative exits (N=1,139)		Positive exits (N=340)	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
PH	0.82	0.63–1.07	2.08***	1.45–2.98
Health and homelessness events				
Experienced recent homelessness	2.12***	1.69–2.65	0.87	0.63–1.20
Experienced 1+ behavioral health crisis event in year prior to exit (incl. ED visits)	1.50*	1.06–2.12	0.70	0.31–1.56
Experienced 1+ ED visit in year prior to exit	1.30**	1.08–1.58	0.62***	0.47–0.82
Experienced 1+ hospitalization in year prior to exit	0.79	0.59–1.06	0.74	0.44–1.26
2+ chronic conditions	0.91	0.75–1.11	0.96	0.72–1.29

[1] * = p<0.05, ** = p<0.01, *** = p<0.001

[2] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[3] HCV = Housing Choice Voucher, PH = Public housing

Appendix F: Housing outcomes following exit

Detailed methodology

To account for additional factors that might distort our estimate of the impact of exit type on subsequent homelessness, we adjusted for the following confounders: individual-level variables of age at exit date, gender, race, and homelessness within 3 years prior to the exit date; household-level variables of agency (SHA or KCHA), assistance program type (grouped into major categories of public housing, project-based vouchers, or tenant-based vouchers), length of time in housing (years from entrance to exit date), household size, an indicator for the head of household having a disability, and an indicator for the household having a single caregiver. We calculated propensity scores for each exit type using a multinomial regression model that contained the confounding variables above and accounted for household clustering.

We used inverse probability treatment weighting (IPTW) to weight the observations in the Cox proportional hazards model using the propensity scores. We accounted for household clustering by using sandwich estimators.

For the leave-one-out analyses, we re-ran the primary analysis with each exit factor with at least 100 exits omitted in turn. We visualized these distributions with forest plots and compared them to the hazard ratio estimates from the primary analysis. The exit reasons that resulted in the estimate changing the most when omitted were considered the most influential exit reasons in the primary analysis.

Detailed results

The two figures below show the results of the leave-one-out analyses, first focusing on the negative vs. neutral comparison (Figure F-1) and then positive vs. neutral (Figure F-2).

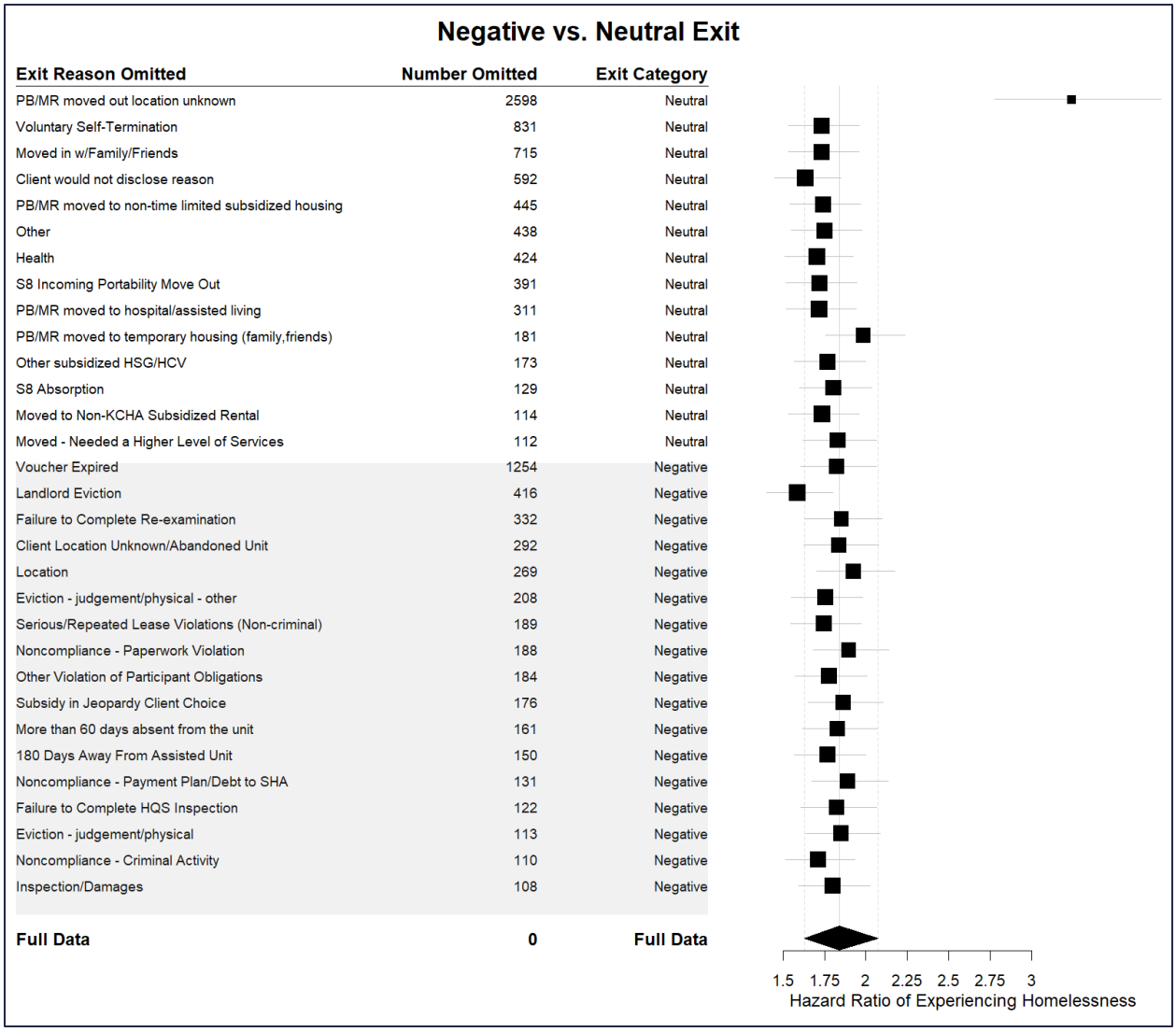

Figure F-1: Sensitivity analysis of time to homeless by exit reason, negative vs. neutral

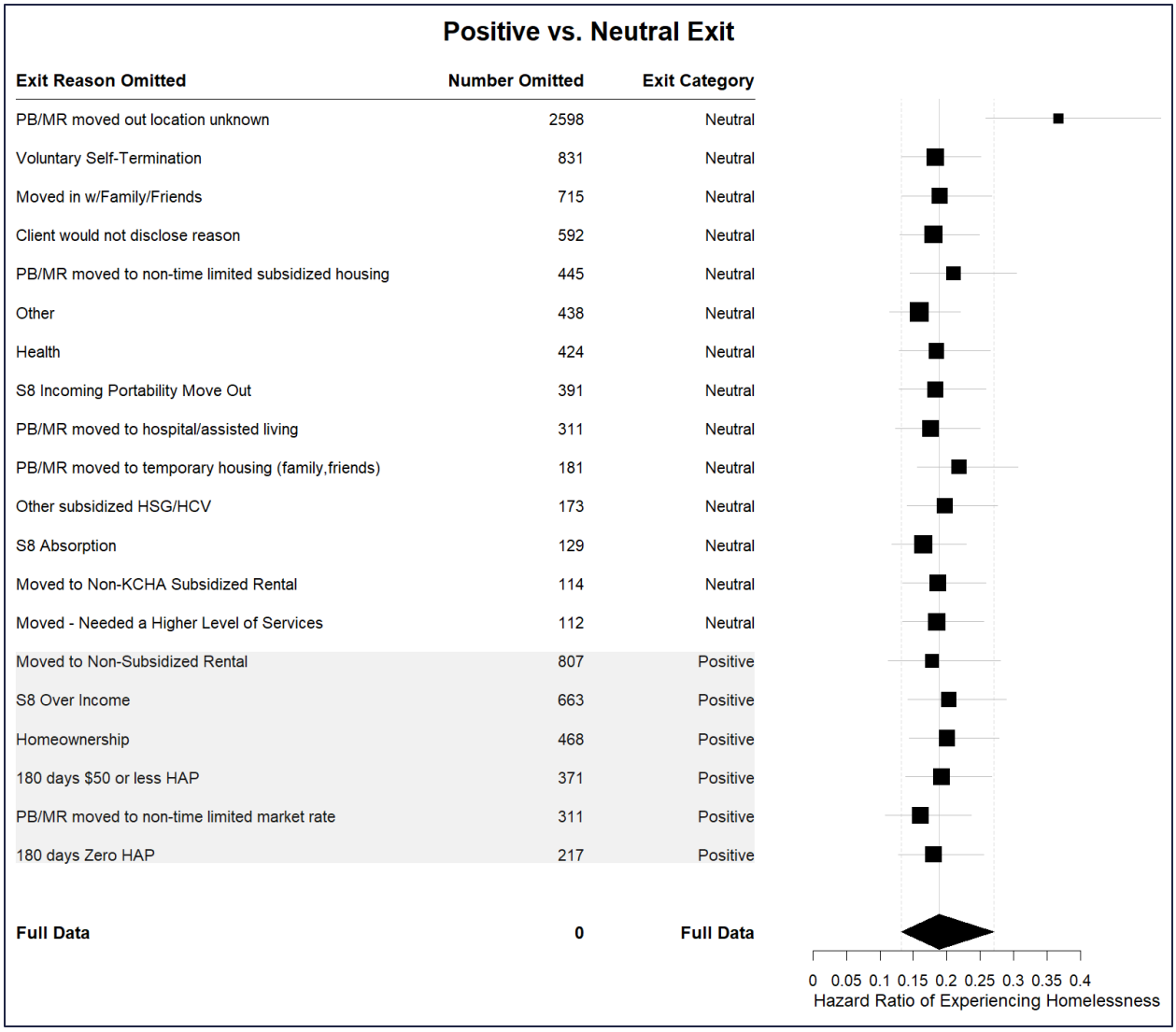

Figure F-2: Sensitivity analysis of time to homeless by exit reason, positive vs. neutral

Appendix G: Physical health outcomes following exit

Detailed methodology

We adjusted for the following variables:

- Gender (male, female, or another gender)
- Age (<25, 25–44, 45-62)
- Race/ethnicity (American Indian/Alaskan Native, Asian, black, Latina/o/x, multiple race, Native Hawaiian/Pacific Islander, white)
- Head of household with a self-reported disability
- Length of time in housing (<3, 3–<6, 6–<10, 10+ years)
- Housing assistance type (housing choice voucher or public housing)
- Household size
- Single caregiver (one adult and one or more children in the household)
- 1+ ED visit/hospitalization in the year prior to exit
- 2+ chronic conditions (as defined by the Chronic Condition Warehouse (Centers for Medicare and Medicaid Services, 2022))

Detailed results

Among exits, those who exited for positive reasons were more likely to be Asian and less likely to be Latina/o/x or multiple race (Table G-1). At the household level and compared with other exit types, those with positive exits tended to have received housing assistance for longer, were in larger households, were less likely to have or be single caregivers, were less likely to have a head of household with a disability, and were more likely to live in public housing. People with positive exits also tended to be healthier, with fewer chronic conditions, ED visits, and hospitalizations both in the year prior to and year after exit. Among ages <6, those with positive exits were more likely to have well-child checks prior to and following exit.

When compared with people who continued to receive housing assistance, those exiting for any reason were similar in terms of age, gender, and race/ethnicity, but tended to have shorter times in housing assistance, have smaller households, be more likely to have a head of household with a disability, and less likely to live in public housing (Table G-1). Those exiting also were slightly more likely to have an ED visit or hospitalization in the year prior to and after exit, but less likely to have a well-child visit after exit.

Table G-1: Demographics of those included in the analysis of physical health outcomes

	Remained (N=34,039)	Exited (N=5,550)	Negative exit (N=2,205)	Neutral exit (N=2,346)	Positive exit (N=999)
Age					
Mean (years)	21.7	22.2	22.2	23	20
Median (years)	15	16	16	17	15
Gender					
Another gender	603 (1.8%)	75 (1.4%)	30 (1.4%)	33 (1.4%)	12 (1.2%)
Female	18,952 (55.7%)	3,051 (55%)	1,277 (57.9%)	1,235 (52.6%)	539 (54%)
Male	14,484 (42.6%)	2,424 (43.7%)	898 (40.7%)	1,078 (46%)	448 (44.8%)
Race/ethnicity[1]					
AI/AN	396 (1.2%)	111 (2%)	63 (2.9%)	41 (1.7%)	<10
Asian	2,307 (6.8%)	384 (6.9%)	92 (4.2%)	172 (7.3%)	120 (12%)
Black	17,743 (52.1%)	2,792 (50.3%)	1,096 (49.7%)	1,184 (50.5%)	512 (51.3%)
Latina/o/x	2,798 (8.2%)	497 (9%)	254 (11.5%)	176 (7.5%)	67 (6.7%)
Multiple	3,087 (9.1%)	431 (7.8%)	194 (8.8%)	179 (7.6%)	58 (5.8%)
NH/PI	495 (1.5%)	91 (1.6%)	41 (1.9%)	39 (1.7%)	<20
White	7,213 (21.2%)	1,244 (22.4%)	465 (21.1%)	555 (23.7%)	224 (22.4%)
Time in housing[2]					
Mean time (years)	5.8	4.9	5.5	3.8	6.7
Median time (years)	5.2	3.5	4.4	2.3	6.4
Household characteristics[2]					
Mean household size	4.3	2.8	2.8	2.5	3.8
Median household size	4	2	2	2	4
Single caregiver	35.8%	30.9%	36.2%	29.7%	20.8%
Head of household disability	19.4%	31.4%	31.2%	37.3%	14.1%
Program type[2,3]					
PBV	6,299 (18.7%)	1,245 (44.3%)	255 (22.8%)	865 (67.9%)	125 (29.8%)
PH	6,788 (20.1%)	430 (15.3%)	210 (18.8%)	120 (9.4%)	100 (23.9%)
TBV	20,650 (61.2%)	1,135 (40.4%)	652 (58.4%)	289 (22.7%)	194 (46.3%)

	Remained (N=34,039)	Exited (N=5,550)	Negative exit (N=2,205)	Neutral exit (N=2,346)	Positive exit (N=999)
Health and homelessness events					
Average # of chronic conditions	1	1	1.1	1	0.7
Average # ED visits in year prior to exit	0.8	1.1	1.1	1.2	0.5
Average # hospitalizations in year prior to exit (per 100 people)	6	7.5	7.9	8.7	3.9
Experienced 1+ ED visits in year prior to exit	12,529 (36.8%)	2,265 (40.8%)	931 (42.2%)	1,048 (44.7%)	286 (28.6%)
Experienced 1+ hospitalizations in year prior to exit	1,516 (4.5%)	287 (5.2%)	109 (4.9%)	148 (6.3%)	30 (3.0%)
Completed 1+ well-child visits in the year prior to exit (ages <6)4	4,285 (73.6%)	614 (70.3%)	215 (68.0%)	287 (70.3%)	112 (74.7%)
Average # ED visits in year after exit	0.7	1.2	1.2	1.4	0.5
Average # hospitalizations in year after exit (per 100 people)	5.2	6.9	8.2	7.4	3
Experienced 1+ ED visits in year after exit	12,116 (35.6%)	2,149 (38.7%)	920 (41.7%)	964 (41.1%)	265 (26.5%)
Experienced 1+ hospitalizations in year after exit	1,271 (3.7%)	260 (4.7%)	115 (5.2%)	121 (5.2%)	24 (2.4%)
Completed 1+ well-child visits in the year after exit (ages <6)[4]	3,836 (65.9%)	486 (55.6%)	168 (53.2%)	228 (55.9%)	90 (60.0%)

[1] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[2] At household level (Remained N=33,737, Exited N=2,810, Negative N=1,117, Neutral N=1,274, Positive N=419)

[3] HCV = Housing Choice Voucher, PH = Public housing

[4] Ages <6 (Remained N=5,823, Exited N=874, Negative N=316, Neutral N=408, Positive N=150)

Table G-2: Regression output from the physical health outcomes model, by exit type

	ED visits		Hospitalizations		Well-child checks (with previous visit)		Well-child checks (without previous visit)	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
Exit category								
Negative	ref	—	ref	—	ref	—	ref	—
Positive	0.74**	0.61–0.89	0.71	0.44–1.15	1.27	0.74–2.16	1.57	0.67–3.67
Neutral	0.87	0.75–1.00	0.91	0.65–1.26	0.82	0.54–1.26	1.12	0.60–2.09
Age								
<25	ref	—	ref	—	—	—	—	—
25-44	1.26**	1.07–1.49	2.75***	1.89–3.99	—	—	—	—
45-<62	0.94	0.75–1.17	1.84*	1.15–2.95	—	—	—	—
Age at exit (years)	—	—	—	—	0.82***	0.74–0.92	1.03	0.83–1.27
Gender[2]								
Female	ref	—	ref	—	ref	—	ref	—
Male	0.88*	0.77–0.99	0.53***	0.39–0.71	0.93	0.66–1.30	0.97	0.59–1.61
Multiple	1.21	0.74–1.99	1.21	0.46–3.17	—	—	—	—
Race/ethnicity[3]								
White	ref	—	ref	—	ref	—	ref	—
AI/AN	1.87*	1.15–3.05	1.26	0.58–2.75	10.50*	1.24–89.05	0.00***	0.00–0.00
Asian	0.56***	0.42–0.74	0.58	0.27–1.24	1.94	0.78–4.85	0.70	0.18–2.76
Black	0.99	0.85–1.16	0.91	0.67–1.24	1.15	0.68–1.93	0.63	0.29–1.36
Latino	1.08	0.85–1.36	0.58	0.31–1.07	0.95	0.45–1.98	0.68	0.26–1.82
Multiple	1.16	0.91–1.48	0.89	0.53–1.49	0.85	0.35–2.04	0.93	0.29–3.03
NH/PI	1.35	0.83–2.19	2.17	0.91–5.19	0.17	0.03–1.06	0.26	0.03–2.12
Time in housing								
<3	ref	—	ref	—	ref	—	ref	—
3-5.99	0.92	0.78–1.08	0.68*	0.47–0.98	0.71	0.47–1.09	0.69	0.35–1.35
6-9.99	0.88	0.74–1.06	0.74	0.49–1.11	1.00	0.56–1.78	0.63	0.30–1.35
10+	0.80*	0.66–0.97	0.76	0.49–1.19	2.52*	1.22–5.19	0.81	0.33–1.96

	ED visits		Hospitalizations		Well-child checks (with previous visit)		Well-child checks (without previous visit)	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
Household characteristics								
Household size	0.91***	0.88–0.95	0.92	0.84–1.01	0.87*	0.76–0.99	1.05	0.89–1.24
Single caregiver	0.93	0.81–1.07	0.89	0.64–1.24	0.91	0.59–1.40	0.97	0.52–1.82
Head of household disability	1.01	0.85–1.20	1.27	0.93–1.74	1.09	0.56–2.13	1.91	0.75–4.86
Program type[4]								
HCV	ref	—	ref	—	ref	—	ref	—
PH	0.74**	0.61–0.90	0.89	0.56–1.42	0.66	0.40–1.08	0.81	0.34–1.89
TBV	0.87	0.74–1.02	1.07	0.74–1.54	0.73	0.47–1.15	1.04	0.56–1.95
Health								
No. ED visits in year prior to exit	1.53***	1.44–1.62	—	—	—	—	—	—
No. hospitalizations in year prior to exit	—	—	2.05***	1.68–2.50	—	—	—	—
2+ chronic conditions	2.28***	1.91–2.72	2.47***	1.78–3.43	—	—	—	—

[1] * = p<0.05, ** = p<0.01, *** = p<0.001

[2] Too few with multiple gender to include in model for well-child checks

[3] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[4] PBV = Project-based voucher, PH = Public housing, TBV = Tenant-based voucher

Table G-3: Regression output from the physical health outcomes model, by exit type vs. remaining

	ED visits		Hospitalizations		Well-child checks (with previous visit)		Well-child checks (without previous visit)	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
Exit category								
Remained	ref	—	ref	—	ref	—	ref	—
Positive	0.80**	0.69–0.94	0.82	0.54–1.23	0.76	0.51–1.14	0.85	0.43–1.69
Neutral	1.06	0.96–1.16	1.16	0.93–1.44	0.57***	0.44–0.75	0.69	0.46–1.01
Negative	1.10	1.00–1.21	1.26*	1.03–1.55	0.67**	0.49–0.90	0.57**	0.38–0.87
Age								
<25	ref	—	ref	—	—	—	—	—
25-44	1.24***	1.17–1.32	2.67***	2.29–3.11	—	—	—	—
45-<62	0.88**	0.81–0.95	1.64***	1.35–2.00	—	—	—	—
Age at exit (years)	—	—	—	—	0.74***	0.71–0.77	1.00	0.92–1.08
Gender[2]								
Female	ref	—	ref	—	ref	—	ref	—
Male	0.89***	0.85–0.93	0.51***	0.45–0.58	0.94	0.83–1.07	1.17	0.97–1.42
Multiple	1.11	0.94–1.30	0.92	0.62–1.38	—	—	—	—
Race/ethnicity[3]								
White	ref	—	ref	—	ref	—	ref	—
AI/AN	1.11	0.90–1.36	0.98	0.64–1.52	0.93	0.46–1.85	0.91	0.37–2.24
Asian	0.55***	0.50–0.62	0.75*	0.57–0.98	1.46*	1.03–2.07	0.69	0.39–1.20
Black	1.12***	1.05–1.18	1.08	0.95–1.24	1.18	0.98–1.44	1.04	0.78–1.38
Latino	1.09	1.00–1.20	0.91	0.72–1.15	1.10	0.84–1.44	0.96	0.64–1.44
Multiple	1.02	0.94–1.12	0.90	0.73–1.11	0.98	0.73–1.33	0.91	0.59–1.40
NH/PI	1.09	0.91–1.32	1.58*	1.05–2.39	0.79	0.49–1.27	0.43*	0.23–0.83
Time in housing								
<3	ref	—	ref	—	ref	—	ref	—
3-5.99	1.00	0.94–1.07	0.82**	0.71–0.95	1.00	0.85–1.17	1.05	0.81–1.35
6-9.99	0.97	0.92–1.04	0.77***	0.66–0.89	0.99	0.84–1.18	0.85	0.65–1.11
10+	0.90***	0.84–0.96	0.66***	0.56–0.77	0.95	0.77–1.18	0.63**	0.46–0.87

	ED visits		Hospitalizations		Well-child checks (with previous visit)		Well-child checks (without previous visit)	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
Household characteristics								
Household size	0.96***	0.94–0.97	0.95**	0.92–0.98	0.93***	0.90–0.97	1.03	0.97–1.09
Single caregiver	1.02	0.97–1.08	0.83**	0.73–0.95	0.78**	0.67–0.90	0.86	0.68–1.08
Head of household disability	1.08*	1.02–1.15	1.03	0.90–1.18	1.05	0.84–1.32	1.28	0.92–1.80
Program type[4]								
HCV	ref	—	ref	—	ref	—	ref	—
PH	0.98	0.91–1.06	0.89	0.75–1.06	0.94	0.77–1.15	1.60**	1.16–2.22
TBV	1.02	0.96–1.08	1.02	0.89–1.17	0.82*	0.69–0.97	1.22	0.95–1.57
Health								
No. ED visits in year prior to exit	1.69***	1.65–1.73	—	—	—	—	—	—
No. hospitalizations in year prior to exit	—	—	2.13***	1.93–2.34	—	—	—	—
2+ chronic conditions	1.86***	1.74–1.99	2.54***	2.22–2.92	—	—	—	—

[1] * = p<0.05, ** = p<0.01, *** = p<0.001

[2] Too few with multiple gender to include in model for well-child checks

[3] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[4] PBV = Project-based voucher, PH = Public housing, TBV = Tenant-based voucher

Appendix H: Behavioral health outcomes following exit

Behavioral health conditions identified in Medicaid claims data based on algorithms provided by the Chronic Conditions Data Warehouse:

1. Attention Deficit Hyperactivity Disorder (ADHD)
2. Adjustment disorders
3. Alcohol use disorders
4. Anxiety disorder
5. Cannabis use disorder
6. Cocaine use disorder
7. Depression
8. Disruption/Impulse/Conduct Disorders
9. Mania/Bipolar disorder
10. Opioid use disorders
11. Other Stimulant use disorders
12. Other Substance use disorders
13. Psychotic disorder
14. Sedative use disorder

Table H-1: Adjusted odds ratios for the association between exit type and behavioral health crisis events for all types of housing assistance

	All exits		Medicaid subset	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
Exit category				
Neutral	ref	—	ref	—
Negative	2.10***	1.64–2.69	1.61***	1.29–2.00
Positive	0.95	0.60–1.49	0.90	0.62–1.30
Age				
Age at exit (years)	0.99***	0.98–0.99	1.03***	1.02–1.03
Gender				
Female	ref	—	ref	—
Male	0.84	0.68–1.04	0.91	0.74–1.12
Multiple	0.71	0.23–2.17	1.24	0.54–2.83

	All exits		Medicaid subset	
	Odds ratio[1]	95% CI	Odds ratio[1]	95% CI
Race/ethnicity[2]				
White	ref	—	ref	—
AI/AN	0.92	0.44–1.95	1.67	0.91–3.08
Asian	0.77	0.44–1.35	0.37**	0.20–0.70
Black	0.86	0.66–1.10	0.82	0.65–1.04
Latino	1.28	0.86–1.92	0.76	0.52–1.11
Multiple	1.21	0.84–1.73	1.36	0.97–1.91
NH/PI	1.25	0.46–3.38	0.68	0.18–2.53
Time in housing				
Years in housing	0.95**	0.92–0.98	0.97*	0.94–0.99
Household characteristics				
Household size	0.61***	0.53–0.71	0.89**	0.83–0.96
Single caregiver	0.72	0.49–1.07	1.01	0.78–1.29
Head of household disability	1.86***	1.43–2.41	1.43**	1.13–1.80
Program type[3]				
TBV	ref	—	ref	—
PBV	1.77***	1.31–2.39	1.49**	1.17–1.90
PH	1.12	0.78–1.60	0.79	0.57–1.10
Existing behavioral health				
Prior crisis events	9.53***	7.39–12.28	8.45***	6.81–10.49

[1] * = p<0.05, ** = p<0.01, *** = p<0.001

[2] AI/AN = American Indian/Alaskan Native, NH/PI = Native Hawaiian/Pacific Islander

[3] PBV = Project-based voucher, PH = Public housing, TBV = Tenant-based voucher

Appendix I: Wage outcomes following exit

Study population

King County Housing Authority (KCHA, 2016-2018) and Seattle Housing Authority (SHA, 2012-2018) clients comprised our cohort. We limited the cohort to those who exited federally supported housing between 2016-2018 to prevent the introduction of temporal biases. We further limited KCHA and SHA clients to tenants with a final exit on record who did not re-enter public housing within one year (i.e., 'true exits') and to those with a recorded positive or negative exit, as defined in Chapter 5. We also excluded those who were public housing authority (PHA) clients for less than 1 year. Finally, we limited observations to wage earners between 18 and 61 years of age and excluded households with a wage earner 62 years old or older since senior housing and pension eligibility begin at age 62.

Data sources and variables

Foundational demographic data (age, gender, race/ethnicity, single caregiver household, and head of household with a disability) was extracted from US Department of Housing and Urban Development (HUD) Form 50058. We obtained wage data from the Washington State Employment Security Department (ESD). Wage data is available for most Washington State employees, except for independent contractors and specific exempt employees (Employment Security Department, n.d.). Wages greater than three standard deviations from the mean wage were excluded, as were hourly wages below the legal minimum wage (King County Procurement and Payables Section, 2021; WA State Department of Labor and Industries, n.d.). We defined the quarter of exit as quarter zero, coded the quarters before as -4, -3, -2, -1 and coded the quarters after exit as 1, 2, 3, 4.

HUD Neighborhood Stabilization Program tables provided data for calculation of percent AMI, which was limited to households with less than nine members in Washington State (HUD Policy Development & Research, n.d.).

Analytic individual level characteristics included client age, gender (female, male, or multiple (those with records indicating both male and female at different times)), race (with Hispanic as a race), quarterly wage earnings, quarterly hours worked, and quarterly hourly wages. Household level characteristics included exit year (2016, 2017, or 2018), exit season (winter, spring, summer, or fall), the number of years receiving housing assistance (continuous), head of household having a disability (binary), single caregiver household (binary), housing agency (KCHA or SHA), and PHA program type (Tenant Based Voucher (TBV), Project Based Voucher (PBV), and Public Housing (PH)).

Data linkage

The foundational data linkage process was described in Chapter 4: Data sources and linkage. In addition, the wage data was linked to the housing data by social security number.

Statistical analysis

We used chi-square (categorical variables) and Kruskal-Wallis (continuous variables) tests to assess statistically significant differences in client characteristics by exit type. We designated all variables that were associated with the exit type in univariate analyses as potential confounders. When potential confounders were also associated with quarterly wages (assessed using Kruskal-Wallis or Spearman's Rank Correlation tests), we designated them as confounders and included them in the final model.

We modeled the relationship between exit type and quarterly wages using linear regression with random effects to account for repeated measures (persons and households) and nesting (persons within households) (equation 1). We modeled time (quarters -4 to 4) as a cubic spline with a knot at the time of exit (quarter 0) and included an interaction with exit type. We used a likelihood ratio test to determine whether to keep the interaction term. All previously identified confounders were included in the model without data transformations. We assessed model quality by creating plots of observed vs. predicted wages and plots of residuals over time.

equation 1. $quarterly.wage = \beta_0 + \beta_1 * exit\_type + \beta_2 * spline(time) + \beta_3 * exit\_type * spline(time) + \beta_4 * confounder\_1 + \beta_5 * confounder\_2 + \ldots + \beta_{n+3} * confounder\_n + e + u$, where …

e is the random intercept for the individual

u is the random intercept and slope for the household

We calculated the mean predicted quarterly wage by averaging 10,000 samples from the normal distribution defined by the estimate and standard error predicted for each row of the original dataset. We ascribed the mean absolute quarterly change in wages among negative exits to the starting positive exit mean quarterly wage to generate a counterfactual. We plotted quarterly positive, negative, and counterfactual predicted wages for descriptive analyses.

We defined statistical significance based upon a two-sided p-value of < 0.05 and expressed regression uncertainty as 95% confidence intervals (CI). We used R and Rstudio for all analyses, with the lmerTest package for regression and the marginaleffects package for predictions (Arel-Bundock, 2022; Kuznetsova, Brockhoff, & Christensen, 2017; R Core Team, 2022; RStudio Team, 2022).

Secondary analysis

We performed a secondary analysis where we replaced wages with percent AMI. We were interested in percent AMI because it accounts for overall household wages and household size and is the metric used to define eligibility for federally subsidized housing.

Detailed results

Table I-1: Demographics during the quarter of exit for those who exited Seattle and King County public housing between January 1, 2016 and January 1, 2018

	Negative (N=675)	Positive (N=680)	Total (N=1,355)	P-value
Age				**0.293**
Mean (SD)	34 (11)	35 (13)	35 (12)	
Gender				**0.076**
Female	449 (66.5%)	412 (60.6%)	861 (63.5%)	
Male	220 (32.6%)	261 (38.4%)	481 (35.5%)	
Race/ethnicity*				**0.006**
AI/AN	15 (2.2%)	<10	21 (1.5%)	
Asian	49 (7.3%)	81 (11.9%)	130 (9.6%)	
Black	332 (49.2%)	295 (43.4%)	627 (46.3%)	
Latino	50 (7.4%)	54 (7.9%)	104 (7.7%)	
Multiple	56 (8.3%)	67 (9.9%)	123 (9.1%)	
NH/PI	16 (2.4%)	<10	24 (1.8%)	
White	157 (23.3%)	169 (24.9%)	326 (24.1%)	
Wages				**< 0.001**
Mean (SD)	5,568 (4,425)	8,048 (5,059)	6,812 (4,911)	
Median	4,823	7,673	6,356	
Hours				**< 0.001**
Mean (SD)	363 (210)	448 (186)	408 (202)	
Median	406	480	452	
Missing**	225	160	385	
Wages hourly				**< 0.001**
Mean (SD)	18 (8)	20 (8)	19 (8)	
Median	16	18	17	
Missing	225	160	385	
Exit year				**< 0.001**
2016	189 (28.0%)	206 (30.3%)	395 (29.2%)	
2017	267 (39.6%)	199 (29.3%)	466 (34.4%)	
2018	219 (32.4%)	275 (40.4%)	494 (36.5%)	
Season				**0.012**
Winter	149 (22.1%)	121 (17.8%)	270 (19.9%)	
Spring	183 (27.1%)	212 (31.2%)	395 (29.2%)	
Summer	160 (23.7%)	194 (28.5%)	354 (26.1%)	
Fall	183 (27.1%)	153 (22.5%)	336 (24.8%)	

Years in public housing				**< 0.001**
Mean (SD)	7 (4)	9 (4)	8 (4)	
Household characteristics				
Head of household with disability	112 (16.6%)	71 (10.4%)	183 (13.5%)	< 0.001
Single caregiver household	176 (26.1%)	61 (9.0%)	237 (17.5%)	< 0.001
Percent AMI* **				**< 0.001**
Mean (SD)	37 (29)	66 (34)	51 (35)	
Missing	7	17	24	
Agency** **				**0.675**
KCHA	450 (66.7%)	446 (65.6%)	896 (66.1%)	
SHA	225 (33.3%)	234 (34.4%)	459 (33.9%)	
Program type*** **				**0.007**
TBV	92 (13.6%)	119 (17.5%)	211 (15.6%)	
PBV	87 (12.9%)	115 (16.9%)	202 (14.9%)	
PH	495 (73.4%)	446 (65.6%)	941 (69.5%)	
Missing	1	0	1	

* AI/AN = American Indian/ Alaska Native; NH/PI = Native Hawaiian/ Pacific Islander
** When "Missing" is not shown, there are no missing values for the given variable
*** Percent AMI = Percent Area Median Income
**** KCHA = King County Housing Authority; SHA = Seattle Housing Authority
***** TBV = Tenant Based Voucher; PBV = Project Based Voucher; PH = Public Housing

Table I-2: Regression fixed effect coefficients describing the relationship between exit type and wages for those who exited Seattle and King County PHA programs between January 1, 2016 and January 1, 2018

Term	Estimate (95% CI)	P-value
(Intercept)	$4,873 ($4,184, $5,563)	<0.001
Positive exit	$1,589 ($1,067, $2,111)	<0.001
spline(time, knots = c(0))1	$349 (-$43, $740)	0.081
spline(time, knots = c(0))2	$733 ($300, $1,166)	0.001
spline(time, knots = c(0))3	$921 ($559, $1,283)	<0.001
spline(time, knots = c(0))4	$1,233 ($1,000, $1,466)	<0.001
Exit year: 2016	Referent	
Exit year: 2017	-$797 (-$1,379, -$216)	0.007
Exit year: 2018	$29 (-$545, $603)	0.922
Head of household with disability	-$1,087 (-$1,756, -$418)	0.001
Project type*		
TBV	Referent	
PBV	-$874 (-$1,547, -$201)	0.011
PH	$23 (-$646, $692)	0.947
Years in public housing	$90 ($33, $147)	0.002
exit:spline(time, knots = c(0))1	-$179 (-$732, $374)	0.526
exit:spline(time, knots = c(0))2	$1,017 ($407, $1,628)	0.001
exit:spline(time, knots = c(0))3	$684 ($173, $1,194)	0.009
exit:spline(time, knots = c(0))4	$537 ($208, $866)	0.001

* TBV = Tenant Based Voucher; PBV = Project Based Voucher; PH = Public Housing

Table I-3: Mean predicted wages are similar to mean observed wages for each exit type and quarter, Seattle and King County PHA programs between January 1, 2016 and January 1, 2018

Quarter	Exit Type	Predicted	Observed
-4	Positive	$6,706	$6,701
-3	Positive	$6,933	$6,933
-2	Positive	$7,294	$7,337
-1	Positive	$7,691	$7,621
Exit	Positive	$8,024	$8,048
1	Positive	$8,223	$8,217
2	Positive	$8,322	$8,380
3	Positive	$8,386	$8,322
4	Positive	$8,475	$8,495
-4	Negative	$4,927	$4,934
-3	Negative	$5,161	$5,139
-2	Negative	$5,346	$5,369
-1	Negative	$5,493	$5,500
Exit	Negative	$5,611	$5,570
1	Negative	$5,714	$5,771
2	Negative	$5,822	$5,772
3	Negative	$5,963	$5,988
4	Negative	$6,160	$6,155

Table I-4: Regression fixed effect coefficients describing the relationship between exit type and percent AMI for those who exited Seattle and King County PHA programs between January 1, 2016 and January 1, 2018

Term	Estimate (95% CI)	P-value
(Intercept)	21% (13%, 29%)	<0.001
Positive exit	24% (16%, 32%)	<0.001
spline(time, knots = c(0))1	4% (-1%, 9%)	0.101
spline(time, knots = c(0))2	2% (-3%, 8%)	0.396
spline(time, knots = c(0))3	5% (0%, 10%)	0.03
spline(time, knots = c(0))4	5% (2%, 8%)	<0.001
Exit year: 2016	Referent	
Exit year: 2017	-2% (-9%, 5%)	0.563
Exit year: 2018	-4% (-12%, 3%)	0.264
Head of Household with disability	-3% (-12%, 7%)	0.59
Project type *		
TBV	Referent	
PBV	-2% (-11%, 8%)	0.741
PH	-8% (-17%, 0%)	0.06
Years in public housing	2% (1%, 3%)	<0.001
exit:spline(time, knots = c(0))1	-7% (-16%, 2%)	0.152
exit:spline(time, knots = c(0))2	12% (2%, 22%)	0.02
exit:spline(time, knots = c(0))3	-1% (-10%, 7%)	0.728
exit:spline(time, knots = c(0))4	8% (2%, 13%)	0.005

* TBV = Tenant Based Voucher; PBV = Project Based Voucher; PH = Public Housing

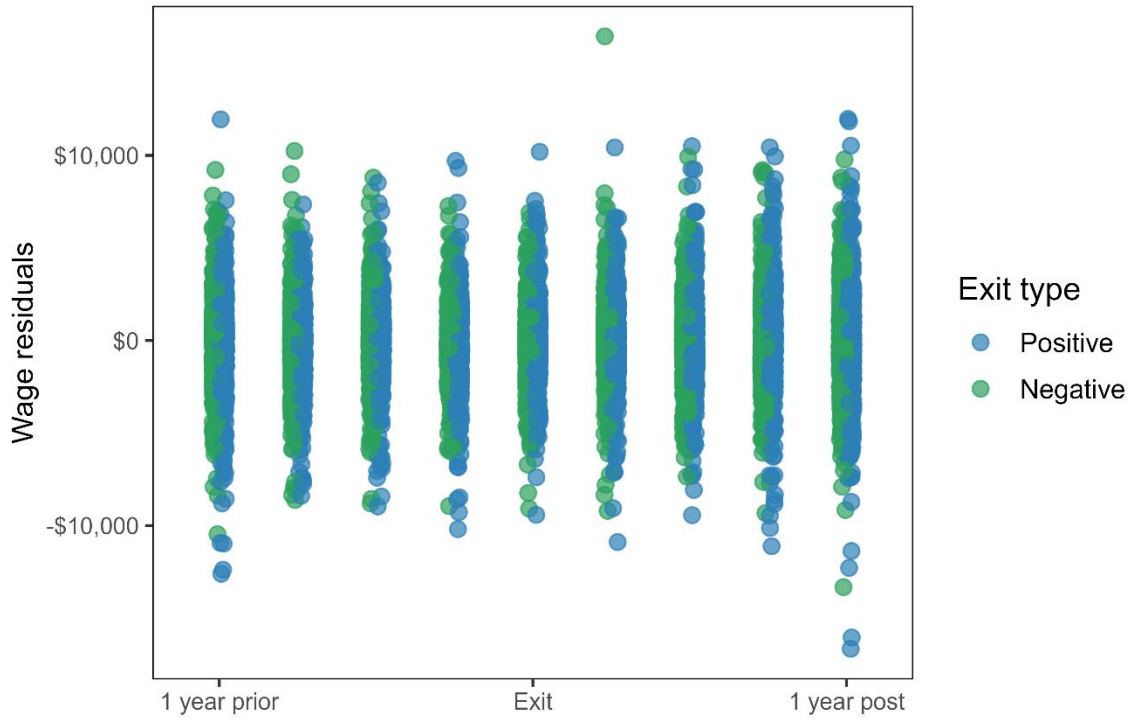

Figure I-1: A residual plot of model estimates over time shows no evidence of autocorrelation

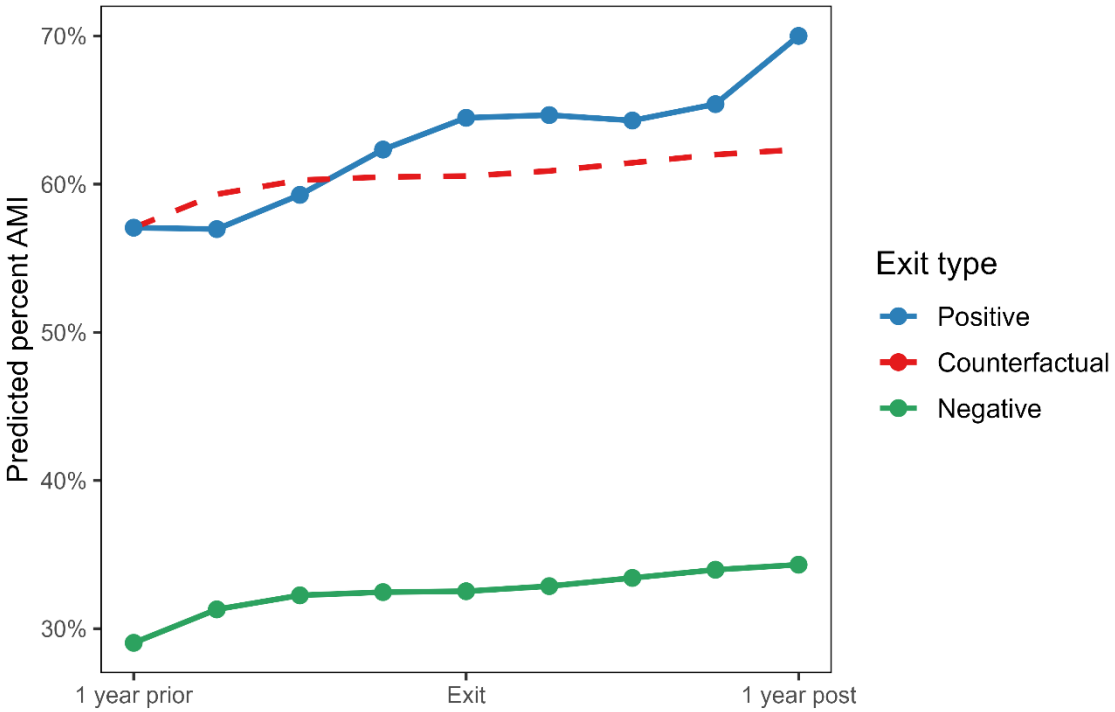

Figure I-2: Mean predictions of percent AMI for those who exited Seattle and King County PHA programs between January 1, 2016 and January 1, 2018

Code

https://github.com/PHSKC-APDE/hud_hears/tree/main/analyses/wages/final_report

Appendix J: References

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OPPORTUNITY INSIGHTS

Creating Moves to Opportunity:

Experimental Evidence on Barriers to Neighborhood Choice

PETER BERGMAN, RAJ CHETTY, STEFANIE DELUCA, NATHANIEL HENDREN, LAWRENCE F. KATZ, CHRISTOPHER PALMER

The United States government spends approximately $45 billion per year on affordable housing programs, including $20 billion on Housing Choice Vouchers, a program that provides rental assistance to low-income families.

Though the voucher program allows families to rent units in any neighborhood within their housing authority's jurisdiction, most of the 2.2 million families with vouchers currently live in relatively high-poverty, low-opportunity neighborhoods.

Why don't more low-income families take advantage of these options and move to opportunity? More broadly, what explains the segregation of low-income families into high-poverty, low-opportunity neighborhoods?

We consider three explanations. First, that low-income families prefer their current neighborhoods due to other attributes. Second, it could be the case that low-income families lack information about the benefits of moving to high-opportunity neighborhoods. Finally, perhaps low-income families face barriers that prevent them from moving to high-opportunity neighborhoods. Distinguishing between these explanations is important for understanding the drivers of residential segregation as well as for designing affordable housing policies to address any barriers that limit moves to opportunity.

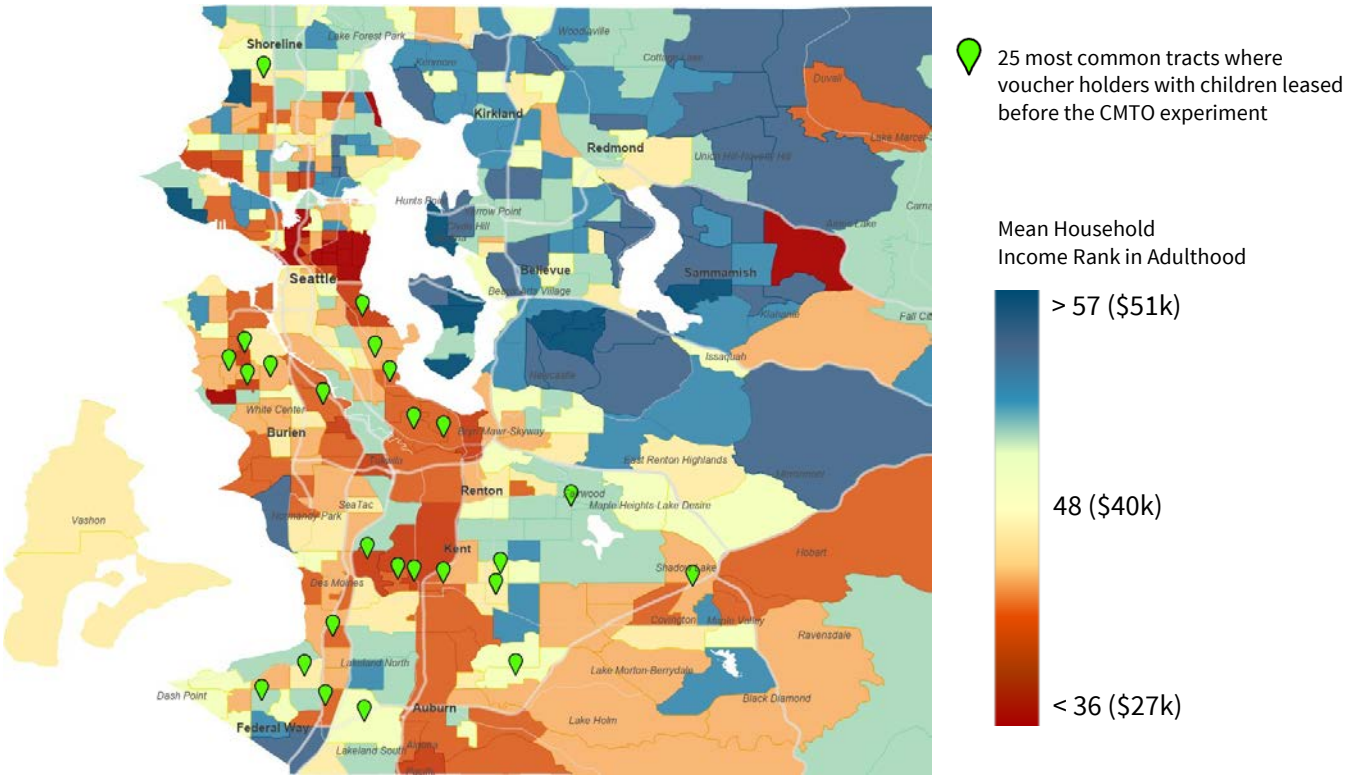
THIS RESEARCH SUMMARY DESCRIBES:

1. How we identify "high-opportunity" neighborhoods
2. The design of the CMTO program
3. Results from the randomized evaluation

KEY FINDINGS

- CMTO increased the number of families who moved to high-opportunity neighborhoods by 38 percentage points.
- CMTO changed where families chose to move but did not affect overall voucher utilization rates.
- Most families who move to high-opportunity areas stayed there when their leases come up for renewal and reported being more satisfied with their new neighborhoods.
- The program's capacity to provide services that addressed each family's needs in a customized manner was critical to its success.
- The full bundle of high-intensity CMTO support services had larger impacts on moves to high-opportunity neighborhoods than lighter touch or individual service elements alone.

Most Common Locations of Families with Housing Vouchers 2015-2017



The map shows the Opportunity Atlas estimates of upward mobility, defined as the mean predicted household income rank in 2014-15 for children whose parents were at the 25th percentile of the national household income distribution. Dots represent Top 25 tracts where Voucher Recipients with Children leased units in 2015-17. To protect confidentiality, the locations shown are approximated by introducing a small amount of random noise.

HIGH-OPPORTUNITY NEIGHBORHOODS

To identify high-opportunity neighborhoods, we start with data from the **Opportunity Atlas**. The Atlas shows rates of upward income mobility for children growing up in low-income families across neighborhoods (census tracts) in the U.S.

The Atlas provides a direct measure of opportunity by showing us where children from low-income families have a historical record of succeeding. We focus on children's outcomes when defining high-opportunity areas because **prior research**, such as the Moving to Opportunity experiment, has shown that neighborhoods have the largest impacts on children's rather than adults' economic outcomes.

Using the Atlas data, shown in the map above, we began by defining high-opportunity neighborhoods as Census tracts in the Seattle and King County areas that historically are in the top third of neighborhoods in terms of upward mobility. Our research shows that rates of upward mobility are generally stable over time. Nevertheless, we made adjustments to capture potential changes in neighborhoods by using recent school district data and insights from our housing authority partners.

Rather than relying on proxies for opportunity such as poverty, crime rates, or tools like the composite Kirwan Child Opportunity Index that have been widely used in prior work, our definition of "high-opportunity" neighborhoods is based on the actual outcomes of low-income children from each neighborhood. The distinction matters in practice because there are several areas – such as the eastern part of Kent in King County and the Northeastern part of Seattle – that rate poorly according to Kirwan-type or poverty-rate-based indices but offer high rates of upward mobility for low-income children. Such areas often excel on other dimensions that are correlated with upward mobility, such as measures of social capital and family stability, despite having higher poverty rates. Using the Opportunity Atlas to define high-opportunity areas yields predicted impacts on upward income mobility that are nearly 40% larger than what one would have obtained if one identified the same number of high-opportunity tracts based on the Kirwan Index or poverty rates.

Voucher holders in Seattle and King County, much like the rest of the nation, tend to live in low-opportunity neighborhoods. The dots on the map above show the most common locations of voucher holders with children in Seattle and King County prior to CMTO implementation. Families were clustered in low-opportunity neighborhoods (red and orange colors). This pattern of residential segregation in low-opportunity areas motivates our central questions: do families with vouchers want to live in high-opportunity neighborhoods, but face barriers that limit their access to such areas? If so, how can we reduce these barriers?

THE CMTO PROGRAM

In collaboration with the research team, the Seattle and King County Housing Authorities developed a set of services designed to support moves to high-opportunity neighborhoods, building on lessons from prior mobility and housing search assistance programs. The program included three components: search assistance for families, landlord engagement, and short-term financial assistance. The total up-front cost of the program, including all services, was $2,670 per family.

Search assistance was provided by a team of Navigators at a non-profit group through in-person meetings and phone calls. The services were tailored to individual families' needs and included: (1) providing information about "high-opportunity" areas; (2) making families more competitive tenants by preparing rental documents and addressing issues in their credit and rental history; and (3) helping families identify available units, connect with landlords in opportunity areas, and complete the application process. On average, non-profit staff spent about six hours assisting each family in the treatment group.

Non-profit staff also engaged with landlords in high-opportunity areas to encourage them to lease units to CMTO families and to expedite the lease-up process. Landlords were offered access to a damage mitigation fund for damages to the unit above and beyond security deposits.

Finally, families were offered short-term financial assistance that could be used for various up-front fees and security deposits. On average, these payments amounted to about $1,000 per family.

CMTO Service Components

Navigator Services

Tailored support services consisting of high-opportunity area education and information, rental application coaching, and housing search support services.

Landlord Services

Services designed to facilitate the leasing process between the family and landlord, to include cultivating relationships with landlords in high-opportunity areas, expediting the housing inspection process, and managing a property damage mitigation fund.

Financial Assistance

Short-term financial supports intended to facilitate families' move-in process, including covering costs of application fees, security deposits and other one-time moving expenses (on average $1,000).

EXPERIMENTAL RESULTS

We used a randomized controlled trial separated into two phases to evaluate whether CMTO increased the percentage of families who move to high-opportunity neighborhoods. The first phase of the trial enrolled families from April 2018 to April 2019 and evaluated the impacts of the comprehensive intervention described above. The second phase enrolled families from July 2019 through March 2020 and unbundled the phase one treatment into multiple arms to shed light on mechanisms underlying the impacts of the full intervention.

The sample for both phases consisted of low-income families with a child below age 15 issued a Housing Choice Voucher in the Seattle and King County area. The control group received standard services from the housing authority, which included a briefing about voucher use but no specific information about opportunity areas.

CMTO Experimental Design

Phase I

Treatment

Families received full bundle of high-intensity CMTO services.

Control

Standard services provided by the public housing authority.

Phase II

Treatment 1 (T1)

Families received only financial support services.

Control

Standard services provided by the public housing authority.

Treatment 2 (T2)

Families received a low-intensity version of CMTO services.

Treatment 3 (T3)

Families received full bundle of high-intensity CMTO services.

FINDING 1:

CMTO increased the number of families who moved to high-opportunity neighborhoods by 38 percentage points.

In the control group, 15.4% of families found housing in high-opportunity neighborhoods, consistent with historical averages. In the treatment group, 53.2% of families moved to high-opportunity areas.

Despite some variations in the magnitude of the effect, the CMTO program significantly increased the fraction of families moving to opportunity across racial and ethnic groups, families with lower vs. higher incomes, and those born in or outside of the U.S.

FINDING 2:

CMTO changed where families chose to move but did not affect overall voucher utilization rates.

CMTO primarily shifted *where* families chose to live rather than whether families were able to use their vouchers. 86.8% of families in the control group leased-up a unit somewhere using their housing vouchers compared to 87.3% of households leased up in the treatment group. Such similar lease-up rates indicate that CMTO services reduced specific barriers families face in accessing high-opportunity areas rather than addressing barriers families may have in the housing search process generally.

Additionally, families in the treatment group that made moves to high-opportunity neighborhoods were widely dispersed across the metro area, suggesting that CMTO services enabled broad geographic access across high-opportunity areas and did not reconcentrate families to specific neighborhoods.

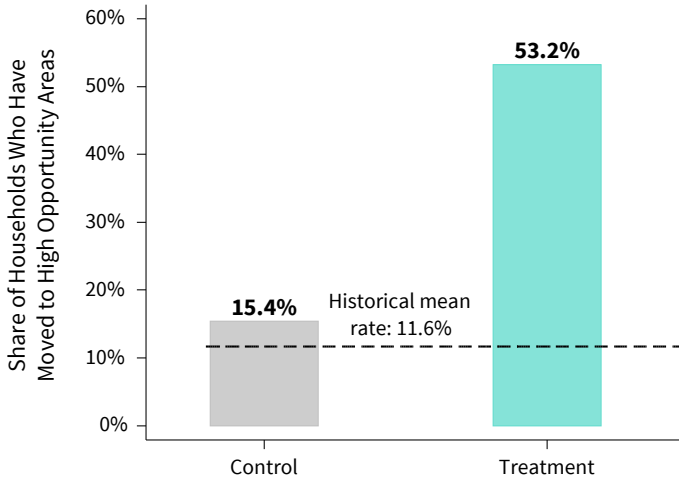
FINDING 3:

Most families who move to high-opportunity areas stay there when their leases come up for renewal and report being more satisfied with their new neighborhoods.

Three years after the initial lease-up, 58.6% of families in the treatment group lived in high-opportunity neighborhoods, compared with 22.4% in the control group. This neighborhood persistence among CMTO families is encouraging given prior evidence that each year a child spends growing up in a high-opportunity neighborhood has an additive effect on the long-term benefits of growing up in these areas.

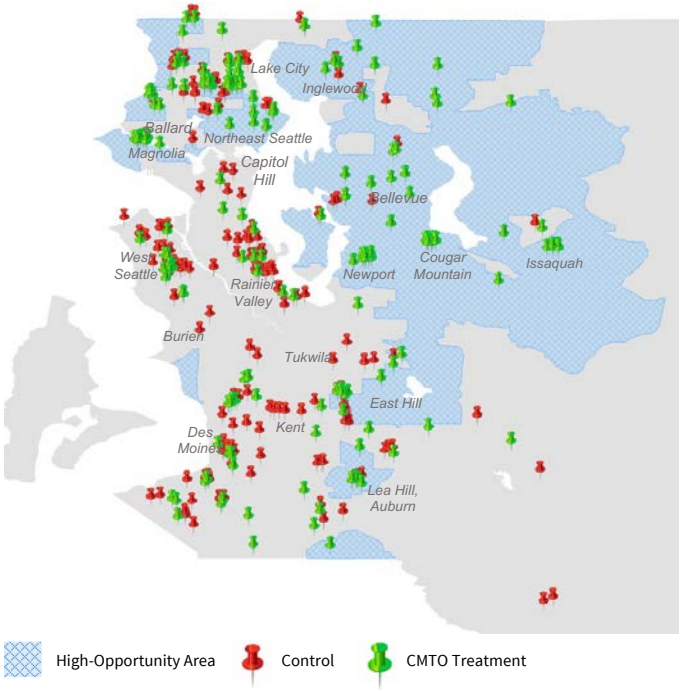
Post-move surveys also found that families in the treatment group expressed higher rates of satisfaction with their new neighborhoods, with 64.2% of families in the treatment group reported being “very satisfied” with their new neighborhood compared to 45.5% in the control group. Our estimates indicate that children who moved to high-opportunity neighborhoods at birth through the CMTO program would see a $212,000 increase in adult lifetime earnings; these moves are also likely to substantially increase college attendance rates and to reduce teen birth rates.

The proportion of families moving to high-opportunity areas was significantly higher among those receiving CMTO services during Phase I.



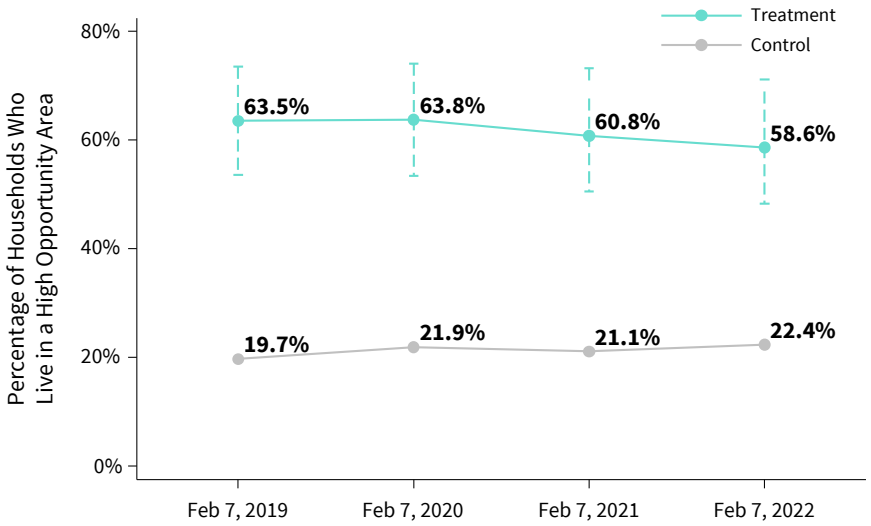
This figure shows the proportion of families during Phase I of the experiment who leased a unit in a high-opportunity area. It compares the those receiving regular services (Control) to those receiving the bundled CMTO services (Treatment). The dashed line shows the proportion of voucher recipients who leased units in high-opportunity areas during the two years prior to the CMTO experiment (2015 – 2017).

CMTO families successfully leased units across all high-opportunity areas.



This figure shows the approximate lease locations of families across the Control and CMTO Treatment groups.

CMTO families moving to high-opportunity neighborhoods show prolonged exposure to these areas.



This figure plots the proportion of families from Phase I who initially leased a unit in a high-opportunity area (whose average lease-up date was February 7, 2019) alongside the fraction who live in a high-opportunity area as of February 7, 2020, February 7, 2021, and February 7, 2022. The figure also shows 95% confidence intervals for each of the treatment effect estimates.

FINDING 4:

The program's capacity to provide services that address each family's needs in a customized manner was critical to its success.

To determine why the CMTO program made families more likely to move to opportunity neighborhoods, we conducted in-depth interviews with 251 participating families. Many families reported that they had extremely limited time and resources to search for housing and were pessimistic about the prospect of finding housing in high-opportunity areas given histories of past unfruitful searches.

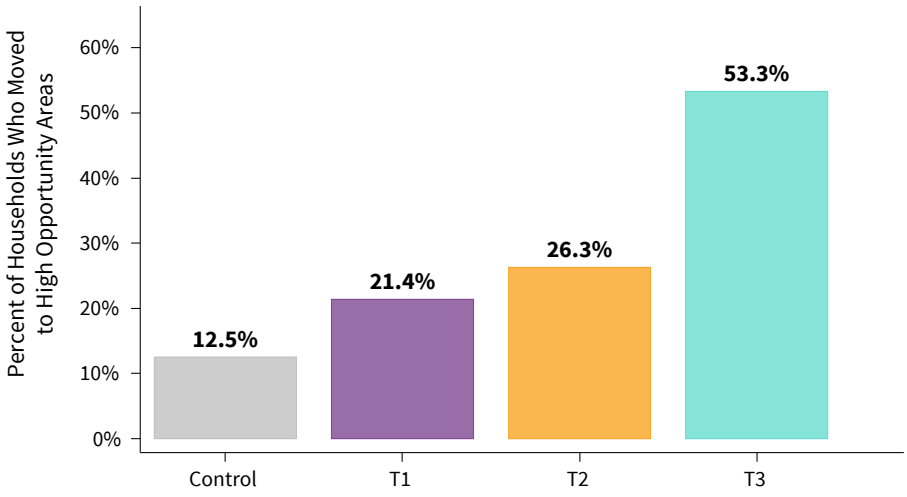
Evidence gathered from interviews shows that the Navigators' ability to respond in a customized manner to each family's specific needs was critical to CMTO's success. Families from both phases of the experiment point to a similar set of channels by which CMTO Navigators helped to address their challenges: providing emotional support and communication, increasing their motivation to move to a high-opportunity neighborhood by making such a move seem more attainable, streamlining the search process by helping to prepare rental applications and "rental resumes," providing brokerage services and representation with landlords, and deploying timely financial assistance for fees and deposits that could prevent a lease from being signed.

FINDING 5:

The full bundle of high-intensity CMTO support services had larger impacts on moves to high-opportunity neighborhoods than lighter touch or individual service elements alone.

Consistent with the Phase I opportunity move rates, during Phase II, 53.3% of families receiving the full bundle of CMTO services moved to high-opportunity neighborhoods. This rate was significantly greater than opportunity move rates among families receiving light-touch services (26.3%), financial incentives and information alone (21.4%), or the Control group that received standard services (12.5%). These results suggest that CMTO's impact is owed in large part to the customized, high-intensity services provided by CMTO Navigators, not solely the provision of financial assistance or information.

Families receiving the full bundle of CMTO services move to high-opportunity neighborhoods at far greater rates than families receiving other service approaches.



This figure shows the rates at which families in the Control and three treatment groups moved to high-opportunity neighborhoods during Phase II of the experimental study.

We also conducted a complementary quasi-experimental analysis of changes in payment standards that increased voucher amounts in higher-rent or higher-opportunity areas in Seattle and King County. These financial incentives had much smaller impacts on families' neighborhood choices: only 20% of families moved to high-opportunity areas even after the payment standard increases. Though sufficient payment standards may be a necessary precursor to opportunity moves in some housing markets, these findings indicate that payment standard adjustments alone do not induce opportunity moves at the same magnitude as those supported by more comprehensive supportive services along the lines of CMTO.

CONCLUSIONS

The segregation of low-income families into lower-opportunity neighborhoods is not driven by preferences; many low-income families live in such areas because of barriers preventing them from moving to high-opportunity neighborhoods. These barriers consist largely of challenges associated with the housing search process and can be overcome with customized support.

These findings call for greater focus on programs that offer personalized social support. A key challenge with such programs is replicability and scalability. The recently launched **Community Choice Demonstration** promises to shed light on this important issue by replicating housing mobility programs informed by CMTO in nine other cities that represent diverse housing markets and policy environments. In parallel and recognizing that not all families can or wish to move to neighborhoods presently defined as high-opportunity, it will be valuable to continue research on place-based solutions to improve opportunity in all places and for all persons.

Want to learn more?

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Based at Harvard University, **Opportunity Insights** identifies barriers to economic opportunity and develops scalable solutions that will empower families throughout the United States to rise out of poverty. **opportunityinsights.org**

Creating Moves to Opportunity: Seattle and King County, WA

Strategy background

- **Increasing access:** Helping low- and moderate-income households access private market housing is one way to increase their access to quality, affordable housing. Such strategies can include subsidies, grants or loans, or personalized housing search assistance.
- **Supplementing Housing Choice Vouchers:** By covering a portion of rent, the federal Housing Choice Voucher (HCV) program can assist low-income families in accessing rental housing. While public housing authorities administer the HCV program, jurisdictions can increase the effectiveness of HCVs by conducting outreach to recruit and retain landlords who accept vouchers; passing source-of-income laws, which prohibit landlords from refusing to rent to a household because it receives HCVs; and dedicating a portion of eligible state and federal funding to facilitate the development of highly-subsidized units accessible to very low-income households.
- **Supporting moves to high-opportunity areas:** Housing navigator programs help families use HCVs to move into rental properties in high-opportunity neighborhoods. Successful navigator programs typically engage with landlords to encourage them to accept voucher-holding tenants, provide families with housing search assistance, and supply some degree of financial assistance to families to offset moving costs.
- **Down payment assistance:** By subsidizing upfront costs, jurisdictions can help more low- and moderate-income families own homes. Down payment assistance reduces the overall cost of purchasing a home and the need for significant liquidity. This can take several forms, including offering low-interest or forgivable loans and providing cash grants.

Evidence

STRONG

Several rigorously evaluated practices to increase access to private market housing demonstrated significant, positive impacts on neighborhood choice and access. However, further research is needed to confirm magnitude and replicability of effects.

- A 2019 research synthesis found that the Housing Choice Voucher Program can be associated with increases in neighborhood choice and socio-economic diversity.
- In a 2020 randomized controlled trial, 53 percent of families receiving customized financial assistance and housing search support to supplement vouchers moved to a high-opportunity neighborhood, compared to 15.1 percent of families in the control group.

Results and accomplishments

38% CMTO interventions increased the number of voucher-holding families moving to opportunity areas by 38 percentage points. 117 out of 222 families in the treatmer group moved compared to 31 out of 208 families in the control group.

8.3% Children in families that moved to a high opportunity neighborhood are estimate an 8.3 percent increase in their lifetime earnings, as compared to their peers who move to a high opportunity neighborhood.

53% While 58 percent of families who were offered CMTO's comprehensive suite of se moved to high opportunity areas, only 26 percent of families who received lighter services and 21 percent of those who received only financial assistance and infor about neighborhoods made the move.

- **Creating opportunity for economic advancement:** Increasing evidence points to the role neighborhoods play in shaping children's educational and economic outcomes. The Creating Moves to Opportunity (CMTO) project assists families with young children in moving to high opportunity areas and improving their children's economic outlook. In the CMTO demonstration in Seattle and King County, housing voucher recipients who received CMTO services were 38 percentage points more likely to move to a high opportunity neighborhood than those in the control group.
- **Receiving significant media attention:** The CMTO project received significant coverage in the local and national press for its potential to reduce housing segregation and boost economic mobility. An op-ed in the *New York Times* by Nicholas Kristof exclaimed, "For all

those who think that poverty is hopeless, that nothing can change — read on!" This media coverage helped to position the CMTO program in Seattle and King County as a national model.

- **Two major bi-partisan bills proposed:** In 2019, U.S. Senators Chris Van Hollen (D-MD) and Todd Young (R-IN) proposed the Family Stability and Opportunity Vouchers Act. This legislation would create 500,000 additional housing vouchers for at-risk families with children and provide resources for customized housing search assistance and landlord engagement. In 2021, Senators Chris Coons (D-DE) and Kevin Cramer (R-ND) sponsored the Choice in Affordable Housing Act, which would offer signing bonuses to landlords in low-income areas for leasing voucher holders, use neighborhood-level data to ensure fair rents, and reduce inspection delays, among other activities. Both pieces of legislation were informed directly by the CMTO program.

- **A cohort of cities replicating the effort around the country:** Inspired by the CMTO program's success, the U.S. Department of Housing and Urban Development's Community Choice Demonstration (CCD) will attempt to replicate the CMTO model in other cities and housing markets across the country. CCD will run for six years and take place in ten communities, providing over 10,000 families with children better access to high-opportunity neighborhoods.

Overview

Summary

- In 2017, new research demonstrated the impact of neighborhood quality on children's long-term economic outcomes. At the same time, leaders in the Seattle and King County Housing Authorities recognized that housing voucher recipients rarely rented in high opportunity neighborhoods, even when vouchers were adjusted to account for higher rents in many of those areas. Often, barriers to these moves were practical and informational, not purely financial.

- In response, the Housing Authorities and their research partners launched the Creating Moves to Opportunity Project (CMTO), which aims to help low-income families who receive Housing Choice Vouchers overcome barriers to living in a high opportunity neighborhood. As part of the CMTO model, participating families receive support from a housing "navigator," who facilitates their access to housing search assistance and short-term financial assistance. The CMTO team also conducts landlord engagement, with the aim of increasing the number of landlords in high opportunity neighborhoods willing to approve prospective tenants in the CMTO program.

- Keys to the program's success include providing customized housing search assistance, the selection of a strong service delivery partner, strong collaboration between the Seattle and King County Housing Authorities, ongoing landlord engagement, and a commitment to rigorous program evaluation and continuous improvement.

- Obstacles faced by the CMTO program include concern that the model would undermine place-based investments, hesitancy among landlords to rent to program participants, and initial challenges providing certain families with the high level of support they required.

What was the challenge?

- **A metropolitan region with deep economic divides.** The Seattle metropolitan area is more racially integrated than many cities of similar size, but stark economic divides remain. White residents earn an average of 2–3 times more than Black residents and 1.2–1.5 more than Asian and Latinx residents. Seattle's racial gap in homeownership, which contributes to economic inequity, is also larger than the national average: over 65 percent of White families own homes compared to only 28 percent among Black families.

- **Families using Housing Choice Vouchers face barriers to living in areas of high opportunity.** As inequality in the Seattle region worsened, leaders of the King County and Seattle Housing Authorities increasingly recognized that individuals and families using Housing Choice Vouchers in the area were often using their vouchers in neighborhoods with lower levels of opportunity, even when higher-opportunity areas were available at a similar cost.

- **New research demonstrated that neighborhoods shape children's long-term economic outcomes.** A 2017 paper by economists Raj Chetty and Nathaniel Hendren demonstrated that neighborhoods affect children's long term outcomes, including earnings and college graduation rates. Recognizing this insight, leaders in the King County and Seattle Housing Authorities wanted to ensure that voucher-holding families with children had the ability to move to high opportunity neighborhoods.

- **Families missing out on opportunities they could afford.** Despite a previous implementation of variable payment standards, which ensured that voucher recipients could rent in higher-cost neighborhoods, few voucher-holding families in the Seattle region were moving to higher opportunity neighborhoods. Housing Authority leaders hypothesized that certain barriers frequently prevented families from moving, and if these barriers were mitigated, more families would choose to live in higher-opportunity neighborhoods.

- **A program to empower families to move to areas of higher opportunity.** To enable voucher holders to move to higher opportunity neighborhoods, the Seattle Housing

Authority and King County Housing Authority created an intervention, Creating Moves to Opportunity (CMTO), that would empower voucher holding families to have greater residential choices, including access to higher opportunity neighborhoods. The PHAs partnered with Opportunity Insights, MDRC, MEF Associates, JPAL and other organizations to measure and evaluate the outcomes of the program.

What was the solution?

- **Customized housing search assistance from trained navigators.** CMTO featured family and housing navigators who educated participants on housing options in high-opportunity areas, provided 1:1 coaching to help participants increase their applications' chances of success, and supported searches for housing that met the family's unique goals and needs. Families participating in CMTO could continue to move to any neighborhood within the PHA's jurisdiction; vouchers were not restricted to use in high opportunity areas. In qualitative interviews, participants reported that customized coaching was one of the most crucial aspects of the program.

- **Short-term financial assistance for moving costs.** KCHA and SHA provided $1,000 on average to families to help them cover application fees, security deposits, and other costs associated with moving. Amounts of support were customized to meet families' needs with a maximum of $3,500 per household.

- **Intensive landlord engagement to ensure successful home placements.** Program staff educated and built relationships with landlords in high-opportunity areas to increase the chances that they would approve prospective tenants in the program. CMTO also helped expedite the housing authority leasing process and created an insurance fund to assuage landlords' concerns, such as fear of property damage.

- **A service provider equipped to serve low-income populations in navigating the housing market.** A crucial piece of CMTO was finding a service delivery partner which could work with both low-income populations and property owners in the private real estate market. CMTO ultimately selected InterIm CDA, an organization with experience delivering rapid rehousing services and managing affordable housing, along with a demonstrated willingness to learn the CMTO model and adjust delivery as needed. CMTO leaders worked with InterIM to create job descriptions, training manuals, forms, and administrative processes, along with performing quality control and process improvement support.

What factors drove success?

- **Family-centered and scalable search assistance for voucher recipients.** Over the course of 400 qualitative interviews with participants in the study, recipients of the CMTO intervention shared that the personalized support they received from housing and family

navigators was critical in facilitating their move. The program helped families tailor their housing search to their specific needs, communicate with program staff as often as they needed, and receive emotional support during an often stressful process.

- **A thoughtful strategy for identifying and developing a service delivery partner.** KCHA and SHA leaders understood that the selection of the right partner to deliver services to participants would be crucial to the success of the program. Ultimately, they selected InterIm CDA because of their experience in serving low-income populations, their ability to build relationships with landlords, and their willingness to learn the program model and adapt as necessary. The PHAs worked hand and hand with InterIm to recruit and hire staff, design processes, and refine service delivery.

- **Cross-agency partnership.** KCHA and SHA had a long history of partnership and collaboration, which helped facilitate CMTO's success. The executive directors of each agency were close, as were many of the staff leads: Sarah Oppenheimer, Annie Pennucci, and Jenny Le of KCHA worked closely with Andria Lazaga, Sarah Birkeback, Jodi Speer, and others at SHA on every phase of the project's design and execution.

- **A focus on continuous improvement.** CMTO conducted a pilot before beginning the full implementation of the program and the randomized controlled trial. The pilot created the opportunity for staff to learn how to implement the model and identify areas for improvement. After a few months of service delivery, the PHAs paused the program in order to conduct additional staff training and address issues. Even after the pilot concluded, the PHAs continued to identify pain points and make adaptations to service delivery.

- **Engaging landlords in support via both program staff and renters.** Many landlords in high opportunity neighborhoods are not accustomed to renting to families using housing vouchers, and some exhibit racial and class-based prejudices against voucher holders. To encourage landlords to consider and approve tenants from low-income families, CMTO engaged landlords to educate them on the voucher program, address their concerns, and (in some cases) facilitate waiving strict approval criteria on credit history or prior eviction. Program staff also prepared and coached families to engage with landlords directly to increase their chances of approval.

- **Rigorous quantitative and qualitative evaluation.** By implementing a randomized controlled trial, CMTO was able to provide robust evidence that practical barriers were limiting many low-income families' ability to move and that these barriers could be removed in a cost-effective manner. Qualitative research also helped illustrate why these barriers mattered and the mechanisms that could be used to overcome them.

What were the major obstacles?

- **Fear of undermining place-based policy.** In early conversations among researchers and practitioners, some expressed fear that a program focused on supporting moves to high opportunity neighborhoods would, despite best intentions, serve as a substitute to place-based investment. Therefore, CMTO administrators, housing authority staff, and advocates in the region needed to feel reassured that the program could serve as a "both-and" solution, meaning that it would be a helpful intervention but not preclude additional, longer-term place-based investments in low-opportunity neighborhoods.

- **Rightsizing service delivery for families' needs.** Initially, some families needed a very high degree of support in the housing search, which many housing navigators felt prevented them from serving all participants effectively. To address this, KCHA and SHA shifted some of this workload from housing navigators to family navigators. Program staff also used the pause after the pilot to equip themselves with more knowledge of high-opportunity areas and make additional tweaks to the implementation processes and materials.

- **Working with landlords to overcome barriers.** Persuading landlords to approve voucher-holding renters participating in CMTO was a challenge despite prohibitions against "source of income" discrimination. Many landlords had negative perceptions of working through sluggish and bureaucratic housing authority processes. Others feared that low-income, voucher-holding tenants would fall behind on utility payments or would more likely to cause property damage. To address these kinds of barriers, CMTO streamlined many of the processes deemed excessively bureaucratic, devoted resources to assuage concerns about non-payment and damages, and provided assurances of PHA responsiveness to landlord concerns.

Timeline

Research emerges showing that neighborhoods strongly shape long term outcomes May 2015

Research by Harvard economists Raj Chetty, Nathaniel Hendren, and Lawrence Katz shows that neighborhoods make a large impact on the long-term outcomes of children. Seeing this research, Public Housing Authority leaders in King County and Seattle contacted Dr. Chetty and his team to discuss how the research could be used to inform federal housing policy and strategy. The researchers responded favorably and were keen to help leverage the study's findings in a new program.

Researchers and practitioners come together to build on the research Spring and Summer 2016

The King County Housing Authority and Seattle Housing Authority attend a gathering of public housing authorities and researchers in which they discuss Chetty and Hendren's research and share ideas for how to leverage its insights to increase upward mobility in Seattle and throughout King County. Soon thereafter, KCHA, SHA, and the researchers collaborate to develop CMTO, which seeks to encourage recipients of Housing Choice Vouchers to move to higher-opportunity neighborhoods.

Rigorous program evaluation is built into the effort from the beginning Summer 2016

A key component of CMTO's program design was the inclusion of a randomized control trial, led by researchers at the Equality of Opportunity Project (now Opportunity Insights) and research partners the Abdul Latif Jameel Poverty Action Lab (JPAL), Johns Hopkins University, and MDRC. From the beginning of the program, the PHAs would randomly assign individuals to receive program services and collect data for researchers to independently evaluate.

Grant Support Awarded for the CMTO RCT Summer 2017

The Bill and Melinda Gates Foundation provides support to the CMTO program over a three-year design and implementation phase for the RCT.

SHA and KCHA search for a service delivery partner with the right skills Summer 2017

With grant funds awarded, SHA and KCHA determine that a single vendor would be a better fit for the demonstration than each PHA operating CMTO at their agency. They release a joint RFP and ultimately select InterIm CDA, an organization with experience working with low-income populations and property owners and a willingness to learn from and collaborate with partners.

The design and pilot phases begin August 2017 – April 2018

With a service provider secured, SHA and KCHA work collaboratively with InterIm CDA to develop job descriptions, begin hiring staff, and establish service and data collection protocols. This programmatic and RCT design phase occurred between August 2017 and December 2017. Beginning in January 2018, the PHAs begin piloting service delivery to 46 families through April 2018. They then pause the implementation of the program to address early challenges and conduct additional staff training.

Full program enrollment for Phase I begins April 2018 PROGRAM LAUNCH

After adjusting program procedures based on pilot learning, full enrollment in the RCT begins. To find enrollees, the PHAs mail information to families on the waitlist for housing choice vouchers, targeting households who will soon be offered a voucher. When families express interest in the program, program staff screen them for eligibility and, if they are

eligible, present them with more information and begin enrollment. Program leaders soon determine that the pace of enrollment is too low (families were not responding to initial mailings about receiving a voucher) and expand outreach efforts with follow-up emails and phone calls. Enrollment completes in February 2019 with 499 families.

Early findings analyzed, Phase II begins enrollment Summer 2019

Findings from Phase I are released to the project team (researchers and PHAs), who convene to discuss next steps for Phase II. The purpose of the second phase is to experiment with alternative and lower-cost bundles of services. To achieve this, participants are divided into four groups with varying levels of services. Phase II enrollment takes place between June 2019 and March 2020 and completes with 337 families.

Research results and media coverage validate the strategy August 2019

Initial results from Phase I are published and show that the program increased the number of families who moved to high-opportunity areas by 38 percentage points. Major media outlets including the New York Times, Vox, NPR, and others publish articles on the findings.

Independent replication efforts begin May 2020

MDRC begins an independent effort to replicate the successes of CMTO in three regions: Chicago-Cook County, Illinois, Milwaukee, Wisconsin, and St, Louis, Missouri. The program, called "Supporting Moves to Opportunity," is not formally connected to CMTO but will test the effects of program interventions used in CMTO as well as new components both before and after families move.

HUD awards funding for pilot programs in nine communities July 2020

Building on the evidence generated from CMTO, the U.S. Department of Housing and Urban Development launches the Housing Choice Voucher Mobility Demonstration, which seeks to provide funding to PHAs to incorporate lessons from the program. In April 2021, nine PHAs are awarded funding for implementation.

Implementation process

How did leaders confront the problem?

- **Concentrated poverty with long-term consequences.** As in many cities across the United States, low income families in Seattle and King County are concentrated in lower opportunity areas, many of which have seen decades of disinvestment and impacts of

systemic racism. Children growing up in these neighborhoods tend to experience poor long-term social and economic outcomes, with very few achieving upward economic mobility.

- **Additional supports are needed to ensure true geographic choice.** Both SHA and KCHA sought to enable families to use their vouchers to move to safe, healthy, high-opportunity neighborhoods. Unfortunately, most recipients of housing vouchers moved to neighborhoods with lower levels of opportunity. Despite some previous efforts to empower voucher recipients to move to higher opportunity areas, no program had succeeded at increasing the rate of voucher-holding families who leased in higher opportunity neighborhoods.

- **Researchers reveal the importance of neighborhoods in shaping long-term outcomes.** In 2015, a new analysis revealed significant benefits for children who moved to areas of high opportunity. Leaders from SHA and KCHA attended a gathering of practitioners and researchers to discuss the findings and begin preliminary conversations on how a program informed by the research might be developed.

- **Public housing authorities join with researchers to create a program.** Building on the momentum of the convenings, KCHA, SHA, and the research organization Opportunity Insights formed a partnership that would support moves to high-opportunity neighborhoods. The organizations submitted a proposal to the Bill and Melinda Gates Foundation, and the foundation awarded a grant to support the program.

How was the strategy designed?

- **Team begins identifying barriers to moves.** Early design conversations focused on what prevented low-income families from moving to high-opportunity areas. To identify removable barriers, agency staff reviewed existing research; spoke with front line staff, residents, and landlords; and reached out to other programs that served low-income people in securing affordable housing. The barriers identified included a lack of information about high-opportunity neighborhoods, competitive disadvantages in the rental process, challenges navigating housing search, difficulty affording moving fees and costs, and low participation in the housing voucher program among landlords.

- **Financial assistance to help with upfront costs.** Recognizing that many low-income families are unable to move because of application fees, security deposits, and other incidental costs of moving, CMTO included flexible financial assistance that could help families with the degree of short-term financial support that was appropriate for them. Financial support to families averaged around $1,000 per family, lower than the $3,500 threshold initially set in the program design phase.

- **Coaching to address weaknesses in applications.** Observing that many low-income families had competitive disadvantages in their housing applications such as low credit scores and sparse rental histories, CMTO helped participants create plans to address their credit histories and craft narratives to share with landlords during the application process.

- **Assertive landlord engagement.** Due to landlords' negative perceptions or prior experiences working with PHAs and prejudices against voucher holders, CMTO included several reforms to improve relationships, streamline interactions with the PHAs, educate landlords on anti-discrimination laws, and address landlords' questions and concerns. This included marketing, relationship building engagements, and expedited lease-up processes at the housing authorities. It also incorporated an insurance program to pay for potential property damage, a fund that has been rarely used.

- **Developing an RFP for the right service provider.** Agency staff discussed at length what kind of organization should provide housing counseling and landlord engagement services. CMTO required an agency who had experience working with low-income populations in a social service capacity and understood landlords and property owners in the private real estate market. Ultimately they selected InterIm CDA for its experience with rapid rehousing programs and its ability to work effectively with families. In its application, InterIm CDA proposed strategies on establishing business-to-business relationships with landlords and property managers and demonstrated a willingness to learn and adapt throughout the demonstration.

How was the plan implemented?

- **Defining roles and responsibilities.** Once InterIm CDA was signed on as a vendor, KCHA and SHA worked closely with them to write job descriptions, define interview and service protocols, hire staff, and establish data collection systems. The staff roster consisted of two Family Navigators, who were the initial point of contact with families; two Housing Navigators, who managed relationships with landlords and helped families directly on their housing search; a half-time manager; and one administrative role.

- **Recruitment begins.** CMTO began recruiting participants by sending families on the housing voucher waitlist information about the program via mail so that they would be able to enroll 14 to 60 days before receiving a voucher. Families who responded were screened for eligibility and given a short presentation on the housing choice voucher program. After a few months, it became clear to the PHAs that this recruiting process would not meet their enrollment targets, so PHAs began emailing and calling families who were eligible.

- **Pilot phase launches.** With roles established, initial training complete, and families recruited, CMTO began a pilot phase that offered services to 46 families. Running from

January through April 2018, the pilot revealed that some families needed significant support in excess of the staff's capacity and also revealed areas where more staff training was needed. CMTO leadership paused the implementation for a month in order to address these issues.

- **Full program launch.** Following the adjustments made during the pilot, the PHAs began recruiting families for the full study from April 2018–February 2019 and enrolled 499 families.

How was the approach funded?

- **Philanthropic funding for demonstration implementation and evaluation.** The Gates Foundation had a longstanding relationship with KCHA and SHA and provided initial funding to cover service costs of the program. The Gates Foundation also supported the qualitative evaluation and an implementation report by MDRC. Gates' funding for qualitative evaluation was extended to allow for additional follow up with families post-pandemic. Additionally, the Surgo Foundation provided resources to support continuous evaluation of CMTO.

- **Sustaining CMTO services requires PHAs to make trade offs.** Both KCHA and SHA participate in the federal Moving to Work (MTW) program which provides a small number of housing authorities with financial and regulatory flexibility to better meet local needs and fulfill program objectives, which include increasing housing choice. Following the demonstration, SHA has also leveraged their MTW status to maintain CMTO services for both new and existing Housing Choice Voucher holders. KCHA used their MTW status to support CMTO practices for a few years, but are not currently operating a CMTO program.

How was the approach measured and refined?

- **Building rigorous program evaluation into the program implementation.** A randomized controlled trial comparing the outcomes of families who received CMTO services to a control group was built into the program implementation. Families entering the Housing Choice Voucher program were provided with information about CMTO and the study component and given informed consent forms and completed an extensive questionnaire to help inform the research. If the family agreed, the staff randomly assigned them to the treatment or control group. If a family was assigned to CMTO, they were given further information about the program and then were contacted by a Family Navigator within two days.

- **Research partnership with Opportunity Insights.** Administrative data comparing which neighborhoods voucher recipients moved to was analyzed by Opportunity Insights. The results showed that CMTO increased the number of families who moved to high-opportunity neighborhoods by 38 percentage points and that the families who moved were more satisfied with their new neighborhoods. The program had no impact on voucher utilization rates and benefited all types of families. Staff tracked touch points with participants and expenditures by type and amount to inform cost and service level analyses.

- **Evaluating each component of the program separately.** In addition to evaluating the impact of the program overall, CMTO also included subsequent evaluations that tested each component of the program individually — financial assistance, housing counseling, and education — to see which elements of the program mattered the most. The evaluation found that the program was most effective when all three elements of the program were provided to participants.

- **Improving processes to make better use of staff time.** Initially, Family Navigators passed families onto the Housing Navigators early in the process, but this led to a disproportionate amount of work falling onto the Housing Navigators. Program administrators later moved the "handoff" further along in the process so that families would only begin working with Housing Navigators after their rental application had been approved. With this change, the Housing Navigators spent most of their time referring families to available units and conducting landlord outreach whereas Family Navigators focused on early engagement with families that included identifying families' goals and needs, opportunity area education, and developing rental resumes and other work to ensure more viable applications.

- **Digitizing materials.** CMTO leaders moved much of the program's resources and paperwork online to provide families easier access to information including a searchable map of opportunity areas, electronic versions of service and housing search resources, and neighborhood descriptions. Both phases included password-protected portals for each configuration of services being tested in the study.

- **Improving and adjusting service delivery.** CMTO continued to find ways to adjust service delivery to make it as efficient and effective as possible. During the demonstration, only new voucher recipients were provided with services. After the demonstration, both KCHA and SHA expanded participation to current voucher holders interested in moving to different housing. KCHA is no longer providing CMTO services, but SHA is providing these services to both existing and new Housing Choice Voucher families.

Acknowledgments

Results for America would like to thank the following individuals for their support in writing this case study: Sarah Oppenheimer and David Forte of Opportunity Insights; Jonathan Bigelow and Nandita Verma of MDRC; Annie Pennucci and Jenny Le of the King County Housing Authority; and Andria Lazaga, Sarah Birkeback, and Jeanne McGrady of the Seattle Housing Authority.

This case study was written by Jonathan Timm and Ross Tilchin.

Learn more:

Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice (Updated January 2023)

Implementing Creating Moves to Opportunity (MDRC)

J-PAL Project Overview: Creating Moves to Opportunity

Have suggestions to improve this page? Email the Catalog team at economicmobility@results4america.org.

APPENDIX F
COLLATORALIZED FUNDS REPORTS

APPENDIX RELATED TO MTW FUNDS PLEDGED AS COLLATERAL

MOVING KING COUNTY RESIDENTS FORWARD
Project Description:

- Number of separate housing sites: 22
- Type of Residents: Family and Senior
    - Family units-469
    - Senior units-40
- Number and Type of Units: 509 total
    - 1-bedroom-43 units
    - 2-bedroom-256 units
    - 3-bedroom-197 units
    - 4-bedroom-11 units
    - 5-bedroom-2 unit
    - Non-dwelling space: none

Financing Terms:

- Pro forma-see Attachment A
- Amortization schedule-see Attachment B

Certification: See Attachment C
Bank Statement: See Attachment D

ATTACHMENT A

Attachment A
Moving King County Residents Forward Pro Forma

Initial Loan Balance	$18,000,000
Interest Rate on LOC	6.00%
Amort Term (Yrs)	20
DSCR (stabilized)	1.96
Net Trans. Costs not available for Rehab	$1,175,661
Minimum Rehab needed ($51K/Unit)	$25,959,000
Total Rehab needed ($65,000/Unit)	$33,085,000
Add'l Capital in 2021 adjusted for infl	$9,576,748

Net Transaction Costs

Legal	$50,000
Misc	$125,000
Underwriting	$216,000
Debt Reserve (6 n	$784,661

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Rental Income	Ave Rent per Unit	$1,200															
Lease Revenue		1.00%	$7,329,600	$7,402,896	$7,476,925	$7,551,694	$7,627,211	$7,703,483	$7,780,518	$7,858,323	$7,936,907	$8,016,276	$8,096,438	$8,177,403	$8,259,177	$8,341,769	$8,425,186
Vacancy due to rehab			-$3,371,616	-$2,442,956													
Vacancy		-2.5%	-$98,950	-$123,999	-$186,923	-$188,792	-$190,680	-$192,587	-$194,513	-$196,458	-$198,423	-$200,407	-$202,411	-$204,435	-$206,479	-$208,544	-$210,630
Total Net Rental Income			$3,859,034	$4,835,942	$7,290,002	$7,362,902	$7,436,531	$7,510,896	$7,586,005	$7,661,865	$7,738,484	$7,815,869	$7,894,027	$7,972,968	$8,052,697	$8,133,224	$8,214,557
Expenses	Expense Trend %	3.5%															
Existing Operating Expense		$6,500	$3,308,500	$3,424,298	$3,544,148	$3,668,193	$3,796,580	$3,929,460	$4,066,991	$4,209,336	$4,356,663	$4,509,146	$4,666,966	$4,830,310	$4,999,371	$5,174,349	$5,355,451
Add'l Base Cost		$100	$50,900	$52,682	$54,525	$56,434	$58,409	$60,453	$62,569	$64,759	$67,026	$69,371	$71,799	$74,312	$76,913	$79,605	$82,392
Add'l costs due to structure		$250	$127,250	$131,704	$136,313	$141,084	$146,022	$151,133	$156,423	$161,898	$167,564	$173,429	$179,499	$185,781	$192,283	$199,013	$205,979
Replacement Reserves		$400	$203,600	$210,726	$218,101	$225,735	$233,636	$241,813	$250,276	$259,036	$268,102	$277,486	$287,198	$297,250	$307,654	$318,421	$329,566
Total Expenses			$ 3,690,250	$ 3,819,409	$ 3,953,088	$ 4,091,446	$ 4,234,647	$ 4,382,859	$ 4,536,259	$ 4,695,029	$ 4,859,355	$ 5,029,432	$ 5,205,462	$ 5,387,653	$ 5,576,221	$ 5,771,389	$ 5,973,387
Net Operating Income			168,784	1,016,533	3,336,914	3,271,456	3,201,884	3,128,037	3,049,746	2,966,837	2,879,129	2,786,437	2,688,565	2,585,314	2,476,476	2,361,835	2,241,169
			0.11	0.65	2.13	2.08	2.04	1.99	1.94	1.89	1.83	1.78	1.71	1.65	1.58	1.51	1.43
Debt Payments			($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)	($1,569,322)
Cash flow available for def'd capital needs/(Shortfall)			(1,400,538)	(552,789)	1,767,592	1,702,134	1,632,562	1,558,715	1,480,424	1,397,515	1,309,807	1,217,115	1,119,243	1,015,992	907,154	792,513	671,847
													$9,576,748				
Add'l Capital needs not funded from Debt			$8,743,661							18							
Balance to cover from Cash Flow		3.00%	$10,144,199	$11,001,314	$9,563,761	$8,148,540	$6,760,434	$5,404,533	$4,086,245	$2,811,318	$1,585,850	$416,311	$8,873,816	$7,857,823	$6,950,669	$6,158,156	$5,486,309

bal. outstanding

ATTACHMENT B

Federal Home Loan Bank Seattle

1001 Fourth Avenue, Suite 2600
Seattle, Washington 98154
206.340.2300 tel
206.340.2485 fax
www.fhlbsea.com

Lending Strength

Advance Confirmation Advice

King County Housing Authority
600 Andover Park W
Seattle, WA 98188

Transaction Date: 08/26/13
Docket: 99007
TPS transaction: 5
Note Number: 11541

Note Number	Current Rate	Advance Type	Principal	Accrual Basis	Requestor
11541	3.97000	AMO	18,000,000.00	ACT/ACT	CONSTANCE
			Principal to Amortize per attached schedule		

Effective Date	Maturity Date	Payment Date(s)	Bus Day Convention
08/26/13	08/26/33	First business day of every month	New York

This advance is granted under the terms of Advance Master Note 1.1. The details of the advance are specified above and will be considered accurate and binding unless the Seattle Bank is notified otherwise within ten (10) business days of the transaction date.

Questions regarding this confirmation may be directed to Member Services
Seattle (206) 340-8691
Toll Free (800) 340-3452

Federal Home Loan Bank Seattle

1001 Fourth Avenue, Suite 2600
Seattle, Washington 98154
206.340.2300 tel
206.340.2485 fax
www.fhlbsea.com

Lending Strength

Advance Confirmation Advice

King County Housing Authority
600 Andover Park W
Seattle, WA 98188

Transaction Date: 08/26/13
Docket: 99007
TPS transaction: 5
Note Number: 11541

The Seattle Bank shall charge prepayment fees on advances in the event of any voluntary or involuntary payment of all or part of the principal of such advance prior to the originally scheduled maturity thereof; including without limitation payments that become due as a result of an acceleration by the Seattle Bank pursuant to the terms of the advances agreement between the Seattle Bank and the borrower; provided, however, that a prepayment fee shall not be charged if the advance is terminated by the Seattle Bank at the end of the Initial Lockout Period or as of an Optional Termination Date. All prepayment fees shall be due at the time of the prepayment. The prepayment fee charged will be in an amount, calculated in accordance with the methodology set forth below, that is sufficient to make the Seattle Bank financially indifferent to the borrower's decision to repay the advance prior to its maturity date by enabling the Seattle Bank to obtain approximately the same investment yield that the Seattle Bank would have received had the Seattle Bank received all payments as originally provided in the advance that is being prepaid. The calculations and determinations of the Seattle Bank in this regard shall be in its sole and absolute discretion. Notwithstanding the above and the prepayment fee calculation methodology set forth below, in no event will a prepayment fee be less than zero unless the advance confirmation advice issued in connection with an advance expressly provides otherwise. In addition all prepayments and prepayment fees shall be governed by the provisions of the Seattle Bank's Member Products Policy and Financial Products and Services User Guide.

Prepayment fee calculation methodology: The Seattle Bank will calculate and charge a prepayment fee equal to the present value of the difference between: (i) the scheduled interest payments due in connection with the amount of the advance being prepaid, and (ii) the interest payments due in connection with a Federal Home Loan Bank (FHLBank) debt obligation or instrument, as of the date of the prepayment, of equivalent amount, term to maturity and other provisions as the advance that is being prepaid. The debt obligation or instrument referred to in (ii) above may, at the sole and absolute discretion of the Seattle Bank, be created synthetically via the derivative market for purposes of determining the prepayment fee calculation and need not be actual instrument, debt obligation, consolidated obligation, or liability of the Seattle Bank, another FHLBank or the FHLBank System.

In determining the present value of the difference between (i) and (ii) above, the Seattle Bank will discount the cashflows using the rate(s) on debt obligation or instrument described in (ii). The prepayment fee calculation will also be adjusted, as may be appropriate, to reflect the special financing characteristics of the advance that is being prepaid and (if applicable) any cost to modify, terminate, or offset the hedges associated with the advance (e.g., in the case of a putable advance, the embedded cost of the put option.) In some cases this adjustment will result in interest payments referred to in (ii) above that are lower than those due on FHLBank consolidated obligations or debt obligations of the Seattle Bank with similar terms to maturity, which may produce a higher prepayment fee.

Questions regarding this confirmation may be directed to Member Services
Seattle (206) 340-8691
Toll Free (800) 340-3452

Federal Home Loan Bank Seattle

1001 Fourth Avenue, Suite 2600
Seattle, Washington 98154
206.340.2300 tel
206.340.2485 fax
www.fhlbsea.com

Lending Strength

Customer: 99007 King County Housing Authority
Advance Original Principal: 18,000,000.00
Advance term in years: 20
Advance effective date: 08/26/13

Amortizing Schedule
Advance Note Nbr: 11541

Payment Date	Principal Payment	Advance Balance
09/2013	12,096.75	17,987,903.25
10/2013	75,000.00	17,912,903.25
11/2013	75,000.00	17,837,903.25
12/2013	75,000.00	17,762,903.25
01/2014	75,000.00	17,687,903.25
02/2014	75,000.00	17,612,903.25
03/2014	75,000.00	17,537,903.25
04/2014	75,000.00	17,462,903.25
05/2014	75,000.00	17,387,903.25
06/2014	75,000.00	17,312,903.25
07/2014	75,000.00	17,237,903.25
08/2014	75,000.00	17,162,903.25
09/2014	75,000.00	17,087,903.25
10/2014	75,000.00	17,012,903.25
11/2014	75,000.00	16,937,903.25
12/2014	75,000.00	16,862,903.25
01/2015	75,000.00	16,787,903.25
02/2015	75,000.00	16,712,903.25
03/2015	75,000.00	16,637,903.25
04/2015	75,000.00	16,562,903.25
05/2015	75,000.00	16,487,903.25
06/2015	75,000.00	16,412,903.25
07/2015	75,000.00	16,337,903.25
08/2015	75,000.00	16,262,903.25
09/2015	75,000.00	16,187,903.25
10/2015	75,000.00	16,112,903.25
11/2015	75,000.00	16,037,903.25
12/2015	75,000.00	15,962,903.25
01/2016	75,000.00	15,887,903.25
02/2016	75,000.00	15,812,903.25
03/2016	75,000.00	15,737,903.25
04/2016	75,000.00	15,662,903.25
05/2016	75,000.00	15,587,903.25
06/2016	75,000.00	15,512,903.25
07/2016	75,000.00	15,437,903.25
08/2016	75,000.00	15,362,903.25
09/2016	75,000.00	15,287,903.25
10/2016	75,000.00	15,212,903.25
11/2016	75,000.00	15,137,903.25
12/2016	75,000.00	15,062,903.25
01/2017	75,000.00	14,987,903.25
02/2017	75,000.00	14,912,903.25
03/2017	75,000.00	14,837,903.25
04/2017	75,000.00	14,762,903.25
05/2017	75,000.00	14,687,903.25
06/2017	75,000.00	14,612,903.25
07/2017	75,000.00	14,537,903.25
08/2017	75,000.00	14,462,903.25

Federal Home Loan Bank Seattle

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Lending Strength

Customer: 99007 King County Housing Authority
Advance Original Principal: 18,000,000.00
Advance term in years: 20
Advance effective date: 08/26/13

Amortizing Schedule
Advance Note Nbr: 11541

Payment Date	Principal Payment	Advance Balance
09/2017	75,000.00	14,387,903.25
10/2017	75,000.00	14,312,903.25
11/2017	75,000.00	14,237,903.25
12/2017	75,000.00	14,162,903.25
01/2018	75,000.00	14,087,903.25
02/2018	75,000.00	14,012,903.25
03/2018	75,000.00	13,937,903.25
04/2018	75,000.00	13,862,903.25
05/2018	75,000.00	13,787,903.25
06/2018	75,000.00	13,712,903.25
07/2018	75,000.00	13,637,903.25
08/2018	75,000.00	13,562,903.25
09/2018	75,000.00	13,487,903.25
10/2018	75,000.00	13,412,903.25
11/2018	75,000.00	13,337,903.25
12/2018	75,000.00	13,262,903.25
01/2019	75,000.00	13,187,903.25
02/2019	75,000.00	13,112,903.25
03/2019	75,000.00	13,037,903.25
04/2019	75,000.00	12,962,903.25
05/2019	75,000.00	12,887,903.25
06/2019	75,000.00	12,812,903.25
07/2019	75,000.00	12,737,903.25
08/2019	75,000.00	12,662,903.25
09/2019	75,000.00	12,587,903.25
10/2019	75,000.00	12,512,903.25
11/2019	75,000.00	12,437,903.25
12/2019	75,000.00	12,362,903.25
01/2020	75,000.00	12,287,903.25
02/2020	75,000.00	12,212,903.25
03/2020	75,000.00	12,137,903.25
04/2020	75,000.00	12,062,903.25
05/2020	75,000.00	11,987,903.25
06/2020	75,000.00	11,912,903.25
07/2020	75,000.00	11,837,903.25
08/2020	75,000.00	11,762,903.25
09/2020	75,000.00	11,687,903.25
10/2020	75,000.00	11,612,903.25
11/2020	75,000.00	11,537,903.25
12/2020	75,000.00	11,462,903.25
01/2021	75,000.00	11,387,903.25
02/2021	75,000.00	11,312,903.25
03/2021	75,000.00	11,237,903.25
04/2021	75,000.00	11,162,903.25
05/2021	75,000.00	11,087,903.25
06/2021	75,000.00	11,012,903.25
07/2021	75,000.00	10,937,903.25
08/2021	75,000.00	10,862,903.25

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Advance Original Principal: 18,000,000.00
Advance term in years: 20
Advance effective date: 08/26/13

Amortizing Schedule
Advance Note Nbr: 11541

Payment Date	Principal Payment	Advance Balance
09/2021	75,000.00	10,787,903.25
10/2021	75,000.00	10,712,903.25
11/2021	75,000.00	10,637,903.25
12/2021	75,000.00	10,562,903.25
01/2022	75,000.00	10,487,903.25
02/2022	75,000.00	10,412,903.25
03/2022	75,000.00	10,337,903.25
04/2022	75,000.00	10,262,903.25
05/2022	75,000.00	10,187,903.25
06/2022	75,000.00	10,112,903.25
07/2022	75,000.00	10,037,903.25
08/2022	75,000.00	9,962,903.25
09/2022	75,000.00	9,887,903.25
10/2022	75,000.00	9,812,903.25
11/2022	75,000.00	9,737,903.25
12/2022	75,000.00	9,662,903.25
01/2023	75,000.00	9,587,903.25
02/2023	75,000.00	9,512,903.25
03/2023	75,000.00	9,437,903.25
04/2023	75,000.00	9,362,903.25
05/2023	75,000.00	9,287,903.25
06/2023	75,000.00	9,212,903.25
07/2023	75,000.00	9,137,903.25
08/2023	75,000.00	9,062,903.25
09/2023	75,000.00	8,987,903.25
10/2023	75,000.00	8,912,903.25
11/2023	75,000.00	8,837,903.25
12/2023	75,000.00	8,762,903.25
01/2024	75,000.00	8,687,903.25
02/2024	75,000.00	8,612,903.25
03/2024	75,000.00	8,537,903.25
04/2024	75,000.00	8,462,903.25
05/2024	75,000.00	8,387,903.25
06/2024	75,000.00	8,312,903.25
07/2024	75,000.00	8,237,903.25
08/2024	75,000.00	8,162,903.25
09/2024	75,000.00	8,087,903.25
10/2024	75,000.00	8,012,903.25
11/2024	75,000.00	7,937,903.25
12/2024	75,000.00	7,862,903.25
01/2025	75,000.00	7,787,903.25
02/2025	75,000.00	7,712,903.25
03/2025	75,000.00	7,637,903.25
04/2025	75,000.00	7,562,903.25
05/2025	75,000.00	7,487,903.25
06/2025	75,000.00	7,412,903.25
07/2025	75,000.00	7,337,903.25
08/2025	75,000.00	7,262,903.25

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Advance term in years: 20
Advance effective date: 08/26/13

Amortizing Schedule
Advance Note Nbr: 11541

Payment Date	Principal Payment	Advance Balance
09/2025	75,000.00	7,187,903.25
10/2025	75,000.00	7,112,903.25
11/2025	75,000.00	7,037,903.25
12/2025	75,000.00	6,962,903.25
01/2026	75,000.00	6,887,903.25
02/2026	75,000.00	6,812,903.25
03/2026	75,000.00	6,737,903.25
04/2026	75,000.00	6,662,903.25
05/2026	75,000.00	6,587,903.25
06/2026	75,000.00	6,512,903.25
07/2026	75,000.00	6,437,903.25
08/2026	75,000.00	6,362,903.25
09/2026	75,000.00	6,287,903.25
10/2026	75,000.00	6,212,903.25
11/2026	75,000.00	6,137,903.25
12/2026	75,000.00	6,062,903.25
01/2027	75,000.00	5,987,903.25
02/2027	75,000.00	5,912,903.25
03/2027	75,000.00	5,837,903.25
04/2027	75,000.00	5,762,903.25
05/2027	75,000.00	5,687,903.25
06/2027	75,000.00	5,612,903.25
07/2027	75,000.00	5,537,903.25
08/2027	75,000.00	5,462,903.25
09/2027	75,000.00	5,387,903.25
10/2027	75,000.00	5,312,903.25
11/2027	75,000.00	5,237,903.25
12/2027	75,000.00	5,162,903.25
01/2028	75,000.00	5,087,903.25
02/2028	75,000.00	5,012,903.25
03/2028	75,000.00	4,937,903.25
04/2028	75,000.00	4,862,903.25
05/2028	75,000.00	4,787,903.25
06/2028	75,000.00	4,712,903.25
07/2028	75,000.00	4,637,903.25
08/2028	75,000.00	4,562,903.25
09/2028	75,000.00	4,487,903.25
10/2028	75,000.00	4,412,903.25
11/2028	75,000.00	4,337,903.25
12/2028	75,000.00	4,262,903.25
01/2029	75,000.00	4,187,903.25
02/2029	75,000.00	4,112,903.25
03/2029	75,000.00	4,037,903.25
04/2029	75,000.00	3,962,903.25
05/2029	75,000.00	3,887,903.25
06/2029	75,000.00	3,812,903.25
07/2029	75,000.00	3,737,903.25
08/2029	75,000.00	3,662,903.25

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Advance Original Principal: 18,000,000.00
Advance term in years: 20
Advance effective date: 08/26/13

Amortizing Schedule
Advance Note Nbr: 11541

Payment Date	Principal Payment	Advance Balance
09/2029	75,000.00	3,587,903.25
10/2029	75,000.00	3,512,903.25
11/2029	75,000.00	3,437,903.25
12/2029	75,000.00	3,362,903.25
01/2030	75,000.00	3,287,903.25
02/2030	75,000.00	3,212,903.25
03/2030	75,000.00	3,137,903.25
04/2030	75,000.00	3,062,903.25
05/2030	75,000.00	2,987,903.25
06/2030	75,000.00	2,912,903.25
07/2030	75,000.00	2,837,903.25
08/2030	75,000.00	2,762,903.25
09/2030	75,000.00	2,687,903.25
10/2030	75,000.00	2,612,903.25
11/2030	75,000.00	2,537,903.25
12/2030	75,000.00	2,462,903.25
01/2031	75,000.00	2,387,903.25
02/2031	75,000.00	2,312,903.25
03/2031	75,000.00	2,237,903.25
04/2031	75,000.00	2,162,903.25
05/2031	75,000.00	2,087,903.25
06/2031	75,000.00	2,012,903.25
07/2031	75,000.00	1,937,903.25
08/2031	75,000.00	1,862,903.25
09/2031	75,000.00	1,787,903.25
10/2031	75,000.00	1,712,903.25
11/2031	75,000.00	1,637,903.25
12/2031	75,000.00	1,562,903.25
01/2032	75,000.00	1,487,903.25
02/2032	75,000.00	1,412,903.25
03/2032	75,000.00	1,337,903.25
04/2032	75,000.00	1,262,903.25
05/2032	75,000.00	1,187,903.25
06/2032	75,000.00	1,112,903.25
07/2032	75,000.00	1,037,903.25
08/2032	75,000.00	962,903.25
09/2032	75,000.00	887,903.25
10/2032	75,000.00	812,903.25
11/2032	75,000.00	737,903.25
12/2032	75,000.00	662,903.25
01/2033	75,000.00	587,903.25
02/2033	75,000.00	512,903.25
03/2033	75,000.00	437,903.25
04/2033	75,000.00	362,903.25
05/2033	75,000.00	287,903.25
06/2033	75,000.00	212,903.25
07/2033	75,000.00	137,903.25
08/2033	75,000.00	62,903.25

Federal Home Loan Bank Seattle

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Lending Strength

Customer: 99007 King County Housing Authority
Advance Original Principal: 18,000,000.00
Advance term in years: 20
Advance effective date: 08/26/13

Amortizing Schedule
Advance Note Nbr: 11541

Payment Date	Principal Payment	Advance Balance
Final	62,903.25	0.00

ATTACHMENT C

Attachment C

MOVING KING COUNTY RESIDENTS FORWARD COLLATERAL CERTIFICATION

I, Windy Epps, Director of Finance for the King County Housing Authority (KCHA), do hereby certify that whenever the minimum collateral balance requirement of the "MKCRF" loan between KCHA and the Federal Home Loan Bank declines and investments purchased with MTW funds that are pledged as collateral against this loan are de-pledged, any released funds will be used for an eligible MTW activity or purpose that KCHA has received approval for through its MTW Plan. This loan was used to finance rehabilitation projects at 509 former public housing units disposed of by KCHA and now owned by Moving King County Residents Forward (MKCRF).

Windy Epps, Director of Finance,
King County Housing Authority

2/15/2023
Date

ATTACHMENT D

Attachment D

Below is the current outstanding amount borrowed by the King County Housing Authority (KCHA) from the Federal Home Loan Bank (FHLB) and then loaned to Moving King County Residents Forward (MKCRF):

Summary of Account Balances

Account Profile — Data Updated : 02/06/2023 03:49 PM

Deposit Accounts		
840420	Daily Time Non-Member Int/Non-Int	$0.00
681084173	Demand Non-Member Interest Bearing	$1,300,351.33
Term Time Ledger Balance		$0.00
Term Time Pledged Amount		$0.00

Advances	
Advances	$9,512,903.25
Letters of Credit	$0.00
MPF Credit Enhancement	$0.00
Current FHLB Indebtedness	$9,512,903.25
Forward Starting Advances	$0.00
Total FHLB Indebtedness	$9,512,903.25

100% of the Total FHLB Indebtedness of $9,512,903.25 must be collateralized by KCHA.

First KCHA pledged the loan between KCHA and MKCRF. This loan currently has an outstanding balance of $12,241,770.81 but is assigned a market value of $11,820,311.99. Its Advance Equivalent is 70% of the market value, or $8,274,218.39.

FHLB DES MOINES — eAdvantage Collateral — Current Member

Collateral Summary

Data Updated: 02-06-2023 3:55 PM
APSA Date: 04-13-2015
Collateral Status: Delivery APSA

Loans Pledged

Collateral Type		Unpaid Principal	Market Value / Adjusted Unpaid	Adv Equivalent	# of Items	LTV
1109	Multi-Family 1st Mtg	$12,241,770.81	$11,820,311.99	$8,274,218.39	1	70
Total Loans Pledged:		**$12,241,770.81**	**$11,820,311.99**	**$8,274,218.39**	**1**	

Export Loans Pledged

As the minimum collateral requirement is $9,512,903.25 and the Advance Equivalent of the collateralized loan is $8,274,218.39, there is a collateral gap of $1,238,684.86. To fill this gap, KCHA pledged investments purchased

with MTW funds. For these investments, the FHLB calculated the Advance Equivalent to be 91% of the Fair Market Value. At 12/31/2022, the Fair Market Value of the investments was $2,874,010.50 and the Advance Equivalent $2,615,349.56. The table shows the inventory of pledged investments.

Securities

Collateral Type	Unpaid Principal	Market Value	Adv Equivalent	# of Items	LTV
6010 Agency Debt-Discount Note/Debenture	$3,000,000.00	$2,874,010.50	$2,615,349.56	3	91
Total Securities/Term Time Pledged:	**$3,000,000.00**	**$2,874,010.50**	**$2,615,349.56**	3	

Securities/Term Time Pledged

The Advance Equivalent of $2,615,349.56 exceeds the collateral gap of $1,238,684.86. KCHA considers the amount of MTW funds pledged as collateral to be equal to the collateral gap, or $1,238,684.86.

APPENDIX G

ENERGY PERFORMANCE CONTRACT REPORT

2023 - EPC I Extension: Savings by Incentive Type

AMP	Property Name	Units	Frozen	RPUI	Total Savings by AMP	Total Savings by AMP per Unit
101	Ballinger Homes	140	$ 178,366	$ -	$ 178,366	$ 1,274
150	Paramount House	70	$ 71,169	$ -	$ 71,169	$ 1,017
152	Briarwood & Lake House	140	$ 247,367	$ -	$ 247,367	$ 1,767
153	Northridge I & Northridge II	140	$ 148,044	$ -	$ 148,044	$ 1,057
201	Forest Glen	40	$ 17,232	$ -	$ 17,232	$ 431
203	College Place & Eastside Terrace	101	$ 221,447	$ -	$ 221,447	$ 2,193
251	Casa Juanita	80	$ 116,331	$ -	$ 116,331	$ 1,454
350	Boulevard Manor	70	$ 60,930	$ -	$ 60,930	$ 870
352	Munro Manor & Yardley Arms	127	$ 154,375	$ -	$ 154,375	$ 1,216
354	Brittany Park & Riverton Terrace	105	$ 154,252	$ -	$ 154,252	$ 1,469
401	Valli Kee	115	$ 137,828	$ -	$ 137,828	$ 1,199
403	Cascade Apartments	108	$ 139,864	$ -	$ 139,864	$ 1,295
450	Mardi Gras	61	$ 54,340	$ -	$ 54,340	$ 891
503	Firwood Circle	50	$ 58,027	$ -	$ 58,027	$ 1,161
504	Burndale Homes	50	$ 44,007	$ -	$ 44,007	$ 880
550	Gustaves Manor & Wayland Arms	102	$ 43,890	$ -	$ 43,890	$ 430
551	Plaza Seventeen	70	$ 26,676	$ -	$ 26,676	$ 381
552	Southridge House	80	$ 76,712	$ -	$ 76,712	$ 959
553	Casa Madrona	70	$ 80,345	$ -	$ 80,345	$ 1,148
Total		1,719	$ 2,031,203	$ -	$ 2,031,203	

2023 - EPC II: Savings by Incentive Type

AMP	Property Name	Units	Frozen	RPUI	Total Savings by AMP	Total Savings by AMP per Unit
101	Ballinger Homes (RPUI Only) & Peppertree	140	$ 16,099	$ 259,533	$ 275,632	$ 1,969
105	Park Royal	23	$ 6,318	$ 12,733	$ 19,051	$ 828
150	Paramount House	70	$ 1,663	$ 41,940	$ 43,603	$ 623
152	Briarwood & Lake House	140	$ -	$ 141,395	$ 141,395	$ 1,010
153	Northridge I & Northridge II	140	$ 6,395	$ 155,024	$ 161,419	$ 1,153
156	Westminster	60	$ 9,764	$ -	$ 9,764	$ 163
180	Brookside Apartments	16	$ 19,483	$ -	$ 19,483	$ 1,218
191	Northwood	34	$ 18,302	$ 18,012	$ 36,314	$ 1,068
201	Forest Glen	40	$ -	$ 47,228	$ 47,228	$ 1,181
203	College Place & Eastside Terrace	101	$ -	$ 166,543	$ 166,543	$ 1,649
210	Kirkland Place	9	$ 2,175	$ 4,215	$ 6,390	$ 710
213	Island Crest	17	$ 22,857	$ 8,629	$ 31,485	$ 1,852
251	Casa Juanita	80	$ 3,938	$ -	$ 3,938	$ 49
290	NorthLake House	38	$ 15,566	$ 13,430	$ 28,996	$ 763
344	Zephyr	25	$ 54,036	$ 8,837	$ 62,873	$ 2,515
345	Sixth Place	24	$ 1,610	$ 29,973	$ 31,583	$ 1,316
350	Boulevard Manor	70	$ -	$ 71,905	$ 71,905	$ 1,027
352	Munro Manor & Yardley Arms	127	$ -	$ 109,910	$ 109,910	$ 865
354	Brittany Park, Riverton Terrace, & Pacific Court	105	$ 34,039	$ 55,116	$ 89,155	$ 849
390	Burien Park	102	$ 45,109	$ 30,163	$ 75,272	$ 738
401	Valli Kee	115	$ -	$ 128,041	$ 128,041	$ 1,113
403	Cascade Apartments	108	$ -	$ 162,354	$ 162,354	$ 1,503
409	Shelcor	8	$ 388	$ 3,252	$ 3,640	$ 455
450	Mardi Gras	61	$ 20,234	$ 31,841	$ 52,074	$ 854
467	Northwood Square	24	$ 5,384	$ -	$ 5,384	$ 224
503	Firwood Circle	50	$ -	$ 50,320	$ 50,320	$ 1,006
504	Burndale Homes	50	$ -	$ 63,135	$ 63,135	$ 1,263
550	Gustaves Manor & Wayland Arms	102	$ 632	$ 37,153	$ 37,785	$ 370
551	Plaza Seventeen	70	$ 25,817	$ -	$ 25,817	$ 369
552	Southridge House	80	$ 7,837	$ 20,005	$ 27,842	$ 348
553	Casa Madrona	70	$ 3,750	$ 42,131	$ 45,881	$ 655
Total		2,099	$ 321,395	$ 1,712,817	$ 2,034,212	