



2023 MOVING TO WORK REPORT

King County Housing Authority





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2023 MOVING TO WORK ANNUAL REPORT

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SECTION I

INTRODUCTION

A. OVERVIEW OF SHORT-TERM MTW GOALS AND OBJECTIVES

In 2023, the King County Housing Authority (KCHA) continued to maximize our Moving to Work (MTW) flexibilities to provide housing assistance to our community's most vulnerable households, leverage operational efficiencies to serve additional households, coordinate housing with high-quality services, and expand social-impact initiatives that advance family self-sufficiency and life outcomes for our residents. In large part due to our MTW status, KCHA remained in a solid position to respond to the needs of our community members with the lowest incomes as we continue to see the residual effects of the COVID-19 pandemic. Throughout 2023, KCHA strengthened existing operations and forged innovative partnerships to serve the community in critical ways. KCHA's highlights from this year include the following:

⇒ SUPPORTED RESIDENT HEALTH, STABILITY AND WELL-BEING.

In 2023, KCHA renewed our focus on health initiatives and resources. Agency staff have continued the work to develop a comprehensive health strategy that aims to support KCHA clients in remaining stably housed and launched a Client Health Needs Assessment in December. In addition to laying the foundation for a more strategic approach to supporting the health and well-being of clients, KCHA also made significant progress on bringing resources and services to clients. KCHA was awarded an AmeriCorps VISTA placement to support health-related projects, including the Client Health Needs Assessment, health-related trainings for staff, health education bulletins for clients, and a health resources toolkit for Resident Services staff.

Through collaborations with local partners, KCHA continued to provide food delivery, fitness classes, visits from local pharmacists, and social gatherings that promote wellness. New in 2023, clients were offered free swim lessons, senior emergency survival kits, box fan air filters to deal with wildfire smoke, and childhood and COVID vaccines. KCHA's partnership with

UnitedHealthcare also flourished. Partners held a diabetes and pre-diabetes screening event that saw a large turnout with more than 65 residents tested. KCHA plans to launch the evidence-based Diabetes Prevention Program in 2024 for eligible clients identified during the screening event.

⇒ **ADAPT OPERATIONS, POLICIES AND PROCEDURES TO SUPPORT RESIDENTS AND STAFF DURING THE COVID-19 PANDEMIC WIND-DOWN PHASE.**

As the course of the pandemic moved unpredictably forward in 2023, we continued to pursue opportunities to streamline and adapt our operations, policies and procedures to better meet resident needs, ease administrative burdens, remove barriers to efficiently administer federal housing assistance, and assure resident and staff safety. In 2023, KCHA ended the use of the previously employed COVID-related emergency waivers and implemented permanent technology-friendly options in order to ease the administrative burden on residents and staff.

⇒ **ADVANCED RACIAL EQUITY AND SOCIAL JUSTICE IN THE COMMUNITIES WE SERVE.**

The effects of historical and institutional racism remain pervasive and continue to show themselves in housing outcomes, including disproportionate rates of homelessness, community displacement and neighborhood access. KCHA is committed to embedding equity, diversity, inclusion, and belonging into every aspect of our work. The Office of Equity, Diversity, Inclusion and Belonging (EDIB) was assigned the responsibility of completing the initial phase of a three-year EDIB strategy (2024-2027), which involved fully executing three key deliverables:

- Publication of KCHA's inaugural Annual EDIB Report, which includes information about our programs, resources and personnel, including areas of development and expansion.
- Establishing shared definitions and "I" statements across the agency, using a survey on Inclusive Culture and EDIB Definitions.
- Advancing our Section 3 program by creating a new benchmarking report and focusing on building relationships with the business community in key industries.

These deliverables underscore KCHA's dedication to confronting and challenging our industry — and ourselves — on the vital path toward racial equity and becoming an antiracist and

multi-cultural organization.

⇒ **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 and received 133 new vouchers in 2023. Extremely-low income (ELI) households (those making 30% or less than area median income) represented 81% of KCHA's households served in 2023. 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 ELI 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 2023, KCHA received 32 new Emergency Housing Vouchers (EHV) for households experiencing or at risk of homelessness, building upon the 762 EHV's that reached full utilization in 2022. Throughout the year, developing and sustaining strong partnerships with other local agencies remained critical to successfully pair rental assistance with applicable supportive services and ultimately improve outcomes in reducing homelessness in King County. Our partnership with contracted nonprofit providers ensured that individuals had access to the support they needed during their housing search, including assistance with the initial housing search, and ongoing supportive services to support continued stability through a grant provided by King County. KCHA's holistic approach to leveraging our MTW status made this possible as EHV clients continued to benefit 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.**

King County continues to experience a significant homelessness crisis that demands action and sustained collaboration from a variety of actors. At the time of preparation of this report, the 2024 annual Point-in-Time Count had not been finalized. However, the King County Regional Homelessness Authority's most recent Point-in-Time Count in March 2022 reported 13,368 people in the county lacked housing on a single night, an increase of 1,617 over the 2020 count. Additionally, a recent King County Department of Health and Human Services (DHHS) analysis drawing on multiple administrative data sources estimated that 40,800 people experienced homelessness in the King County region at some point in 2020.¹ KCHA supports regional efforts to address homelessness through innovative programming, a robust Special Purpose Voucher program, strong community partnerships, and investments to help fund the creation of new housing opportunities.

Core themes from these continuing efforts include:

⇒ **Innovative Partnerships.** KCHA's Collaborative Case Management (CCM) program continues to expand access to HUD-VASH vouchers through a partnership with the King County Veterans Program. By the end of 2023, KCHA had issued all but eight of the allocated CCM vouchers. In 2023, our ongoing emphasis on forging partnerships with local education institutions to offer housing assistance to students facing homelessness remained a key priority. Additionally, we sustained a partnership with the Washington State Department of Children, Youth & Families to support families involved in the child welfare system and youth transitioning out of foster care.

¹ King County Department of Health and Human Services: [Analysis of Integrated Data Report](#).

⇒ **Housing Search Navigation Supports.** Offering vouchers to individuals for accessing affordable housing in the community is crucial, but it may not suffice to bring an end to their homelessness, especially when competition among renters is at an all-time high. Recognizing this, KCHA remains committed to enhancing our support services by leveraging over two decades of experience in providing housing navigation services. This includes targeted assistance for Special Purpose Voucher clients through contracted services and the ongoing deployment of in-house housing navigators made available through local grant funding to support our CCM program.

⇒ **Adding Incremental Vouchers to our Portfolio.** KCHA received a new HUD allocation of 57 Foster Youth to Independence (FYI) Competitive vouchers in March 2023, and a new allocation of 48 Family Unification Program (FUP) vouchers in January 2024. Additionally, in August 2023, KCHA received a new allocation of 28 Fair Share vouchers. Recognizing that housing is a fundamental solution to homelessness, KCHA will pursue opportunities to expand our Special Purpose Voucher portfolio by applying for new opportunities that HUD makes available during 2024.

⇒ **Project-Basing Assistance.** In collaboration with King County, A Regional Coalition for Housing (ARCH) and other public funders like the Continuum of Care, KCHA continued to pursue opportunities to allocate Project-based Voucher assistance for the development of new Permanent Supportive Housing (PSH) projects in suburban King County. In 2023, 167 new PSH units were brought on line for occupancy, including the first PSH site in East King County: *Plymouth Crossing*. An additional 141 units are planned for completion and occupancy in 2024.

⇒ **DEEPENED PARTNERSHIPS WITH LOCAL SCHOOL DISTRICTS TO IMPROVE EDUCATIONAL OUTCOMES.**

With over 15,000 children residing in KCHA's federally-subsidized housing at the end of 2023, KCHA's commitment to promoting economic mobility and long-term academic success of residents is more important than ever. In 2023, KCHA continued our collaboration with youth,

parents and local education stakeholders, including school districts and out-of-school time providers, to promote and support students' educational success. This included partnerships with out-of-school-time providers to offer after-school and summer learning programs, benefiting school-aged children with access to enrichment activities beyond school hours. During 2023, KCHA invested in youth programs that offered academic enrichment programming spanning across KCHA-owned properties. We also engaged youth to co-design a new Youth Leadership Program, slated for an early 2024 launch. This program aims to empower young individuals to lead community-based projects at KCHA-owned properties, fostering skills in research, planning, budgeting, public speaking, and time management.

Additionally, KCHA continued our focus and efforts to support early learning through the Neighborhood Early Learning Connectors (NELC) program, which supports healthy child development for kindergarten readiness. NELC staff, comprised of KCHA housing program participants, reflect the cultural and linguistic diversity of their communities. Through our partnership with local nonprofit KidVantage, NELC staff extend the opportunity for families to receive early childhood essentials, such as diapers, wipes, car seats, cribs, and clothing. Through this partnership, families in 2023 received over 130,000 diapers, over 4,000 hygiene items and over 6,000 items of clothing, with an overall value of more than \$160,000. This multifaceted approach ensures that families receive both the educational support and essential resources to enhance their overall well-being. At time of preparing this report, KCHA was notified that the NELC program had received the highest award of Excellence for Resident and Client Services from the National Association of Housing and Redevelopment Officials (NAHRO).

KCHA also sustained our housing programs with Highline College and the Highline and Tukwila School Districts to provide critical housing resources to students and their families experiencing homelessness. In 2023, KCHA expanded the While-in-School Housing (WISH) program by adding 10 more vouchers, increasing the program's voucher capacity to 50. One mother participating in KCHA's WISH program expressed her gratitude for the program:

"I was homeless with a 1-year-old baby. (WISH) helped me and gave me peace in my life. Now I have a place where I can live, eat, shower and all those things that we need in our daily life. My baby and I are super grateful. I do not know what could happen to us without this help. Many, many thanks!"

⇒ **INCREASED GEOGRAPHIC CHOICE.**

Recognizing that economic and racial integration is critical to both individual family outcomes and the long-term condition of the region, KCHA continued our multi-pronged approach to broadening geographic housing choice for low-income households. In 2023, we continued our practice of examining rental market trends, along with a host of other vital market indicators, to determine the success of our ZIP Code-based voucher amounts and make any necessary modifications. Additional strategies to increase access and expand geographic choice for our residents include: 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. Following the successful completion of the Creating Moves to Opportunity (CMTO) initiative, which tested strategies to assist families with young children in accessing and moving to high-opportunity neighborhoods, 33% of KCHA's HUD-subsidized households with children now live in high- or very high-opportunity neighborhoods. The CMTO program results, which utilized randomized control groups to evaluate various approaches, have provided key insights for HUD's efforts to expand its mobility initiatives. KCHA will continue to draw from CMTO results and insights to inform sustained mobility programming to advance our goal of improving long-term educational and economic outcomes for families and children living in KCHA-supported homes.

⇒ **INVESTED IN THE ELIMINATION OF ACCRUED CAPITAL REPAIR AND SYSTEM REPLACEMENT NEEDS IN OUR FEDERALLY SUBSIDIZED HOUSING INVENTORY.**

In 2023, KCHA invested nearly \$15.5 million in major repairs to our federally subsidized housing stock to ensure that quality housing options remain available to families with low incomes for

years to come. The investments completed in 2023 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

Through participation in the MTW program, KCHA is able to address a wide range of affordable housing needs in the region. We use the regulatory flexibility available through MTW to support these overarching strategic goals:

- **STRATEGY 1:** Continue strengthening the physical, operational, financial, and environmental sustainability of our portfolio of 12,657 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 the implementation and ongoing evaluation of KCHA's EDIB strategy.
- **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 throughout King County.
- **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 community members.

- **STRATEGY 7:** Work with 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 children and families we serve directly.
- **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 make the most effective use of 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 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 2023	RAD ?	Description of Project
Sunset Gardens	38	38	Committed	No	PBV AHAP contract effective 05/19/2022, with project completion/occupancy anticipated in 2024 Q1. The project will serve veterans exiting homelessness in a Permanent Supportive Housing (PSH) environment.
Mercy Housing Angle Lake	0	8	Committed	No	KCHA awarded PBVs through the 2022 King County Combined Funders RFP. PBV AHAP contract effective 10/26/2023, with project completion/occupancy anticipated in 2025 Q2. The project will serve people exiting homelessness in a PSH environment.
Horizon Housing Totem Lake	8	8	Committed	No	KCHA awarded PBV's through the 2021 ARCH Housing Trust Fund RFP. PBV AHAP contract effective 06/08/2023, with project completion/occupancy anticipated in 2026 Q4. The project will serve people exiting homelessness in a PSH environment.
Providence John Gabriel House	0	35	Leased/Issued	No	KCHA amended our existing PBV HAP contract adding 35 PBVs on 02/23/2023. This project serves low-income senior households.
Plymouth Eastgate	0	87	Leased/Issued	No	Carry-over from the 2022 MTW Plan. KCHA entered into a PBV HAP contract with Plymouth Eastgate effective 06/16/2023 to serve people exiting homelessness into a PSH environment.
Shoreline PSH	0	80	Leased/Issued	No	Carry-over from the 2021 MTW Plan. KCHA entered into a PBV HAP contract with Catholic Housing Services effective on 11/08/2023 to serve people exiting homelessness in a PSH environment.
King County 2023 Combined	150	81	Committed	No	Project-based vouchers made available through the 2023 Combined Funders RFPs for projects serving people exiting homelessness.

Funders		
NOFA		
Planned		
Total		
Vouchers to	196	337
be Newly		
Project-		
based		

Description of difference between the Planned and Actual Number of Vouchers Newly Project-Based:

Plymouth Eastgate and Shoreline PSH were carried over from past MTW Plans, and were not included in 2023's planned total.

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 2023

In 2023, KCHA acquired 182 units between two properties; 66 units at Plum Court (Kirkland) and 116 units at Sterling Ridge (Kent). These acquisitions are part of KCHA's effort to acquire and preserve existing affordable housing, bringing KCHA's unit inventory to 12,657 total units.

iv. General Description of Actual Capital Fund Expenditures During 2023

In 2023, KCHA spent about \$15.5 million to complete capital improvements critical to maintaining our federally subsidized properties. These investments ensure that our housing stock is available and livable for years to come. Expenditures during 2023 included:

- **UNIT UPGRADES (\$5.2 MILLION).** KCHA continued our ongoing efforts to significantly upgrade the interiors of our affordable housing inventory as units turned over in 2023. KCHA's in-house, skilled workforce performed the renovations, which included the installation of new flooring, cabinets and fixtures that extended the useful life of 128 units by 20 years.
- **BUILDING ENVELOPE AND RELATED COMPONENTS UPGRADES (\$4 MILLION).** In 2023, a number of projects experienced delays due to unanticipated design issues. The

envelope upgrade (new siding, windows, exterior doors, and roofing) at Westminster Manor (Shoreline) was one such project, which will now be implemented in 2024. All planned envelope components were replaced at Woodcreek Lane (Woodinville). The roofing project at Burien Park (Burien) is rescheduled for 2024, as is the work at the Burndale Homes (Auburn) foodbank building due to the revised schedule for relocating the foodbank operation. Since the delays described above created additional capacity, several projects were added and completed in 2023, including the complete interior and exterior renovation of Sunnydale Apartments (Burien), new roofs at Nike Manor (Kent) and a new roof and attached exterior walkway at Park Royal Apartments (Bothell).

- **SYSTEMS (HEATING, SEWER, ELEVATOR) AND SITE IMPROVEMENTS (\$5.0 MILLION).** Completed work on the heating system at Casa Juanita (Kirkland) included the replacement of the hydronic in-unit heaters and controls. The sewer lining project at Mardi Gras (Kent) was delayed, but the replacement of rooftop equipment was completed. The elevator at the Central Office (Tukwila) was refurbished with a new jack, controls and interior cab improvements, as were elevators at Northwood (Kenmore) and Burien Park (Burien). Projects were added to replace aging fire alarm monitoring systems at Northwood (Kenmore) and Burien Park (Burien), as well as improvements to the storm drainage system and walkways at Northwood Square (Auburn).
- **“509” INITIATIVE IMPROVEMENTS (\$1.3 MILLION).** Planned improvements in the portfolio of 509 units of former Public Housing properties converted to project-based Section 8 in 2013 were completed. The fire monitoring system at Eastridge House (Issaquah) was upgraded and improvements were made to the attic ventilation systems at Juanita Trace (Kirkland). All components of the envelope at Glenview Heights (Renton) were replaced. The Vista Heights (Renton) project to replace water-damaged subfloor and flooring materials was completed.

B. LEASING INFORMATION

i. Actual Number of Households Served²

In 2023, KCHA used a combination of our traditional federal housing programs, Public Housing and HCV, and locally designed non-traditional programs to serve 12,013 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.

Number of Households Served Through 2023:	Number of Unit Months Occupied/Leased		Number of Households Served	
	Planned	Actual	Planned	Actual
MTW Public Housing Units Leased	29,280	30,288	2,440	2,524
MTW Housing Choice Vouchers (HCV) Utilized	104,520	111,889	8,710	9,324 ³
Local, Non-traditional: Tenant-based	1,620	1,980	135	165
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	135,420	144,157	11,285	12,013

Description of differences between the planned and actual households served

Deviation between planned households served and actual households served is due to KCHA’s continued over-leasing to serve more families and the absorption of port-in vouchers during 2023.

Local, Non-traditional Category	MTW Activity Number/Name	Number of Unit Months Occupied/Leased		Number of Households Served	
		Planned	Actual	Planned	Actual

² These numbers reflect a cumulative total of households served under the MTW block grant between January 1 and December 31, 2023. This number does not include the 2,418 port-in vouchers that were administered in 2023 or other non-block grant vouchers.

³ In 2022, via HUD guidance, KCHA began including in this count only ACC block grant-eligible households. This count does not include 165 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.

Tenant-based	Activity 2014-1: Stepped Down Assistance for Homeless Youth	0	0	0	0
Tenant-based	Activity 2013-2: Flexible Rental Assistance (SFSI & WISH)	840	116	70	93
Tenant-based	Activity 2007-6: Develop a Sponsor-based Housing Program	780	864	65	72
Planned/Actual Totals		1,620	980	135	165

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 2023.
Housing Choice Vouchers (HCV)	King County continues to experience unprecedented population growth, low vacancy rates and rising rents. The resulting competition among renters for a limited supply of affordable units creates leasing challenges for those utilizing tenant-based vouchers and individuals with barriers to housing stability. We have observed a significant jump in rents since Washington state's moratorium on rent increases during the pandemic expired. To address these challenges, KCHA will continue to deploy a variety of interventions, including: executing contracts with nonprofits to provide housing search services; hiring two new housing navigators at KCHA through use of grant funding; a ZIP Code-based payment standard system that tracks changes 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 aimed to mitigate financial leasing barriers for people accessing special purpose vouchers.
Local, Non-traditional	Successfully leasing an apartment and maintaining housing stability in a tight rental market is a challenge for families with low incomes. This remains especially true for those who are underemployed and with complex physical and behavioral health needs. KCHA continues to work with our partners to support efforts related to accessing rental housing units for populations served through KCHA's local, non-traditional housing 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 2023?
Housing Choice Voucher	Community-wide	1,000	Partially open (accepting targeted voucher referrals only)	No

Public Housing	Other: Regional	8,869	Closed as of 11/1/2023	Yes
Public Housing	Site-based	8,784	Closed as of 11/1/2023	Yes
Project-based	Other: Regional	6,823	Closed as of 11/1/2023	Yes
Public Housing - Conditional Housing	Program-specific	30	Closed as of 11/1/2023	Yes

ii. Changes to the Waiting List in 2023

Waiting List Name	Description of Actual Changes to Waiting List
Public Housing (Regional and Site-based)	<p>With more than 22,000 households waiting as of November 1, 2023, KCHA decided to temporarily close our waiting list for subsidized housing (Public Housing and other site-based programs) in December 2023.</p> <p>KCHA plans to use this period of temporary closure to transition to a new housing management software system. Among other anticipated improvements, a new online application will streamline the process.</p>

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 2023
50%-80% Area Median Income	4
30%-49% Area Median Income	14
Below 30% Area Median Income	86

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 2023.				

iii. Mix of Family Sizes Served⁴

	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 2023	5,554	3,123	1,604	1,167	687	798	12,933
Percentages of Households Served in 2023	42.94%	24.15%	12.4%	9.02%	5.31%	6.17%	100%
Percentage Change	8.89%	0.53%	-4.35%	-3.3%	-1.53%	-0.25%	

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. In King County, 73% of people experiencing homelessness were living in single-adult households, according to the 2022 Point-in-Time Count.⁵ KCHA's family mix has shifted accordingly over time.

⁴ This table does not include the 149 households served through KCHA's local, non-traditional programs.

⁵ 2007 - 2022 Point-in-Time Estimates by CoC (XLSX) downloaded from www.hudexchange.info/resource/3031/pit-and-hic-data-since-2007.

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

Activity Name/#	Number of Households Transitioned in 2023	Agency Definition of Self-sufficiency
Stepped-down Assistance for Homeless Youth (2014-1)	0	Maintain housing
Passage Point Re-entry Housing Program (2013-1)	10	Positive move from incarceration to Public Housing or other independent housing
FSS Program Modifications (2008-3)	42	Graduated from KCHA's FSS program
EASY & WIN Rent (2008-10, 2008-11)	113	Positive move from KCHA to unsubsidized housing
Develop a Sponsor-Based Housing Program (2007-6)	72	Maintain housing
Households Duplicated Across Activities/Definitions	0	
<hr/>		
ANNUAL TOTAL NUMBER OF HOUSEHOLDS TRANSITIONED TO SELF-SUFFICIENCY	237	

In 2023, 237 households in KCHA's federally subsidized housing programs achieved self-sufficiency milestones. Of those, 113 achieved self-sufficiency by moving to non-subsidized housing, and 82 households maintained stable housing after experiencing homelessness or incarceration. Additionally, 42 households successfully graduated from KCHA's FSS program.

SECTION III

PROPOSED MTW ACTIVITIES

All proposed MTW activities that were granted approval by HUD are reported in Section IV as Approved Activities.

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	20
2018-1	Encouraging the Successful Lease-up of the Housing Choice Voucher Program	Housing Choice	21
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	24
2014-2	Revised Definition of "Family"	Housing Choice	25
2013-1	Passage Point Re-entry Housing Program	Housing Choice	26
2013-2	Flexible Rental Assistance	Housing Choice	28
2009-1	Project-based Section 8 Local Program Contract Term	Housing Choice	30
2008-1	Acquire New Public Housing	Housing Choice	31
2008-3	FSS Program Modifications	Self-Sufficiency	32
2008-10 & 2008-11	EASY and WIN Rent Policies	Cost-effectiveness Self-sufficiency	33
2008-21	Public Housing and Housing Choice Voucher Utility Allowances	Cost-effectiveness	36
2007-6	Develop a Sponsor-based Housing Program	Housing Choice	37
2007-14	Enhanced Transfer Policy	Cost-effectiveness	39
2005-4	Payment Standard Changes	Housing Choice	40
2004-2	Local Project-based Section 8 Program	Cost-effectiveness Housing Choice	42
2004-3	Develop Site-based Waiting Lists	Cost-effectiveness Housing Choice	45
2004-5	Modified Housing Quality Standards (HQS) Inspection Protocols	Cost-effectiveness	47
2004-7	Streamlining Public Housing and Housing Choice Voucher Forms and Data Processing	Cost-effectiveness	48
2004-9	Rent Reasonableness Modifications	Cost-effectiveness	51
2004-12	Energy Performance Contracting	Cost-effectiveness	52
2004-16	Housing Choice Voucher Occupancy Requirements	Cost-effectiveness	53

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

MTW STATUTORY OBJECTIVE: Increase Housing Choice

APPROVAL: 2019

IMPLEMENTED: 2019

CHALLENGE: This activity seeks to address a common barrier to affordable housing development. While traditional third-party debt can support a significant portion of total development or acquisition costs, it generally is not sufficient to finance the full cost of a property's acquisition or new development. MTW funds for development, acquisition, financing, or renovation costs can mitigate this financing gap in whole or in part, in accordance with PIH Notice 2011-45.

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. As stated in the agency's approved 2022 MTW Annual Plan, KCHA may continue to use MTW funds to support local nonprofits in the acquisition, rehabilitation or development of small- to medium-sized properties in King County, and will continue to leverage previously authorized flexibility under this activity to support KCHA's Trailhead development, a 168-unit non-federally subsidized family complex in Issaquah and similar ventures.

PROGRESS AND OUTCOMES: In 2023, as part of KCHA's efforts to expand our affordable housing portfolio, we purchased Plum Court (Kirkland) and Sterling Ridge (Kent), adding 182 new units to our affordable housing inventory.. No MTW block-grant funds were used for acquisition and waiver flexibility associated with this activity was not leveraged to support acquisition and/or development efforts in 2023.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 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 vacancy rate, coupled with the large in-migration of an affluent and skilled workforce, make it difficult for KCHA's voucher holders to compete in the private market. The shopping success rate after eight months of searching hovers around 66% — an achievement in this market, but lower than our agency stretch goal of 80%.

SOLUTION: KCHA is working to preserve and increase the number of housing options available by continuing efforts to streamline 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's three pilot phases have been implemented, including: (1) allowing self-certifications for newly constructed, not-previously-occupied units issued a Certificate of Occupancy or Temporary Certificate of Occupancy; (2) allowing KCHA-owned properties built after 1978 to self-certify; and (3) allowing non-KCHA affiliated LIHTC properties to self-certify. These efficiencies are enabling faster lease-up times and cause less disruption for landlords while ensuring program compliance.

In addition to strategies to improve landlord recruitment and retention, KCHA will continue 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; use of multi-tiered, ZIP-Code based payment standards; and continuing to focus on the customer experience.

PROGRESS AND OUTCOMES: KCHA completed the two-phase Creating Moves to Opportunity (CMTO) demonstration program, which tested strategies to assist families with young children in accessing high-opportunity neighborhoods. In 2023, building on lessons learned through CMTO, KCHA hired two grant-funded housing navigation staff to support HUD-VASH Collaborative Case Management participants, and is studying the use of in-house housing search services.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 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 ⁶	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	72% at 240 days	In Progress

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

⁶ This activity does not save staff hours or other resources.

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 landlord'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 2023.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$1,320 saved	Estimated \$1,400 saved ⁷	Exceeded
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

⁷ This figure was calculated by multiplying the median hourly wage and benefits (\$35 as of 2023) 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.

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.
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 2023.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
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Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	Estimated \$11,840 saved	Estimated \$12,324 saved ⁸	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: In July 2023, 1,779 households experiencing homelessness in King County were in families with children.⁹ Thousands more elders and people with disabilities, many with severe rent burdens, are experiencing homelessness and often on our waiting lists.

SOLUTION: This policy directs KCHA’s limited resources to populations facing the greatest need: elderly and near-elderly households; people with disabilities; families with children; and head of households designated as emancipated minors (aged 16 and above) pursuant to State of Washington regulations. We modified the eligibility standards outlined in the Public Housing Admissions and Continued Occupancy Policy (ACOP) and HCV Administrative Plans to limit eligible households to those that include at least one elderly member, person with a disability or a minor/dependent child. The current policy affects only admissions and does not affect the eligibility of households currently receiving assistance. Exceptions will be made for participants in programs that target specialized populations, such as survivors of domestic violence or individuals experiencing chronic homelessness.

PROGRESS AND OUTCOMES: In 2023, KCHA continued to apply this policy to new applicants, sustaining an HCV waitlist time of 22 months.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
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⁸ This figure was calculated by multiplying the median hourly wage and benefits (\$79 as of 2023) 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.

⁹ King County Regional Homelessness Authority: Households Served. www.kcrha.org/households-served

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 state fiscal year 2023, 989 individuals in King County returned to the community after a period of incarceration.¹⁰ Across the U.S., 47% of state prisoners and 58% of federal prisoners are parents of at least one minor child,¹¹ and they will face barriers to securing housing and employment upon release from incarceration due to their criminal record and/or lack of traditional job skills. 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 46 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 through 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 are able to succeed in a less service-intensive environment. Passage Point residents who complete the program and regain custody of their

¹⁰ Washington State Department of Corrections. Number of Prison Releases by County of Release.

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

¹¹ Maruschak, M M and Bronson, J (2021). [Parents in Prison and Their Minor Children, Survey of Prison Inmates, 2016.](#)

children may apply to KCHA’s Public Housing program and receive priority placement on the wait list.

PROGRESS AND OUTCOMES: In 2023, the YWCA and King County agreed to put in additional measures to expand the eligibility requirement from one-year to up to three years justice impacted. This eligibility change has made it possible for the YWCA to expand its outreach to other organizations, making it possible for more families to be reunited. The YWCA continues to provide outreach to King County’s corrections agency, crisis diversion programs, hospital liaisons, veteran programs, and the state Department of Children, Youth, & Families. The YWCA’s expanded outreach efforts are engaging other organizations such as the King County Re-Entry Services group, the Black Prisoners Caucus, King County drug court, and other re-entry systems and programs.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 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 ¹²	0 households	40 households	45 households	Exceeded
Increase housing choices	HC #7: Number of households receiving services aimed to increase housing choice	0 households	40 households	45 households	Exceeded
Increase self-sufficiency	SS #1: Average (median) earned income of households affected by this policy	\$0	\$3,584	\$7,740	Achieved

¹² “Better unit” is defined as stable housing.

Increase self-sufficiency	SS #3: Employment status for heads of household	(1) Employed Full-time 0	15	6	Partially Achieved
		(2) Employed Part-time 0	15	6	
		(3) Enrolled in an Educational Program 0	15	5	
		(4) Enrolled in Job Training Program 0	12	7	
		(5) Unemployed 0	0	11	
		(6) Other: engaged in services 0	0	0	
Increase self-sufficiency	SS #8: Number of households transitioned to self-sufficiency ¹³	0 households	5 households	10 households	Exceeded

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 individuals with low incomes that are facing distinct housing crises. In many of these cases, a short-term rental subsidy paired with

¹³ "Self-sufficiency" in this activity is defined as graduating to Public Housing or other independent housing.

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 and cross-sector partners, offers tailored flexible housing assistance programs to families and individuals experiencing homelessness. KCHA provides flexible financial and rental assistance, which could include time-limited rental subsidy, security deposits, rent arrears, and funds to cover move-in costs, while our partners provide individualized support services. KCHA currently administers two distinct flexible rental assistance programs:

- ⇒ **Student and Family Stability Initiative (SFSI):** SFSI pairs short-term rental assistance with housing stability and employment navigation services for families experiencing or on the verge of homelessness. School-based McKinney-Vento liaisons identify and connect these families to community-based service providers while caseworkers have the flexibility to determine the most effective approach to quickly stabilize participants in housing.
- ⇒ **While-in-School Housing Program (WISH):** In the 2019 MTW Plan, KCHA proposed and received approval for the application of the flexible housing assistance model to a new population — college students experiencing homelessness or housing instability. This tenant-based, time-limited subsidy, developed in partnership with Highline College, provides up to 54 months of housing support while leveraging existing, on-campus services that support students beyond their housing needs. This program was launched in 2020.

PROGRESS AND OUTCOMES: As noted previously, in June 2023, KCHA increased the number of Housing Choice Vouchers (HCV) for the WISH program from 40 to 50. By end of year, all 50 vouchers had been issued with 44 students leased in housing. The conclusion of the COVID-19 Eviction Prevention and Rental Assistance Program (EPRAP) left a significant void in the community, especially as individuals are still grappling with rising rents.

Families participating in the Student Family Stability Initiative (SFSI) continued to face insurmountable challenges maintaining their housing due to their incomes not keeping pace with rental increases. In response to this urgent situation, KCHA took action by modifying our SFSI contract with local nonprofit Neighborhood House. This adjustment allowed for the integration of

additional eviction prevention services and timely emergency rental assistance for families facing imminent housing instability. These measures were implemented to provide support and prevent children from experiencing another episode of homelessness. Additional programmatic adjustments were made to align SFSI with local Rapid Re-housing models through our Continuum of Care.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Increase housing choices	HC #5: Number of households able to move to a better unit	0 households	80 households	76 households	Partially Achieved
Increase housing choices	HC #7: Number of households receiving services aimed to increase housing choice	0 households	100 households	93 households	Partially 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: In 2023, KCHA continued to save 20 hours of staff time per contract.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$880 saved	\$940 saved per contract ¹⁴	Achieved
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: About 47% of renter households in King County pay over 30% of their income in rent.¹⁵ Relatedly, fewer than 10% of all apartments are considered affordable to households earning less than 30% of AMI.¹⁶ 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 renters who have low incomes, KCHA must continue to increase the inventory of units that are affordable to households with extremely low incomes.

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.¹⁷

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

¹⁴ This figure was calculated by multiplying the median hourly wage and benefits (\$47 as of 2023) 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.

¹⁵ US Census Bureau, ACS 2021 one-year estimate.

¹⁶ US Census Bureau, ACS 2019 one-year estimate

¹⁷ Neighborhood opportunity designations are from the Puget Sound Regional Council and Kirwan Institute's Opportunity Mapping index. www.psrc.org/opportunity-mapping.

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.¹⁸

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 2023 did not leverage this activity to acquire or convert such properties.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 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	488 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	488 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 2008-3: FSS Program Modifications

MTW STATUTORY OBJECTIVE: Increase Self-sufficiency

APPROVAL: 2008

IMPLEMENTED: 2018

CHALLENGE: Nationally, only 26.6% of households that qualify for housing assistance due to their very low incomes receive rental assistance.¹⁹ To serve more households with limited resources,

¹⁸ Some Public Housing units might be designated MTW Neighborhood Services units upon approval from the HUD field office.

¹⁹ [Worst Case Housing Needs: 2023 Report to Congress, Executive Summary](#), page 7.

housing authorities need to support households in their efforts to achieve economic independence and cycle out of housing subsidy programs. HUD’s standard Family Self-Sufficiency (FSS) program may not provide the full range of services and incentives necessary to support greater self-sufficiency among participants.

SOLUTION: KCHA is implementing modifications to the FSS program that could increase incentives for resident participation, education and training outcomes, and income growth. With KCHA’s rent policy, the new Contract of Participation (COP) length can potentially decrease the number of families served. Through MTW flexibility, the COP will begin on the first day of the following month that is signed and will be in effect for five years, with possible extensions for up to two years. Additionally, in order to serve more families, FSS families that are actively seeking employment at contract end date and are ready to move to market rate housing or homeownership will be deemed as successful participants and can graduate from the program. We also continue to explore the manner and rate at which participants accumulate and access escrow funds as part of a broader workforce development strategic planning process.

PROGRESS AND OUTCOMES: In 2023, 73 FSS participants signed the new FSS Contract of Participation.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Increase self-sufficiency	SS #5: Number of households receiving services	0 households	0 households	324	Achieved
Increase self-sufficiency	SS #8: Number of households transitioned to self-sufficiency ²⁰	0 households	5 households	42	Exceeded

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

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness

²⁰ “Self-sufficiency” in this activity is defined as graduated from KCHA’s FSS program.

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 household participating in WIN Rent 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 continues to realize significant savings in staff time and resources through the simplified rent calculation protocol, saving more than 6,345 hours in 2023. 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 ²¹	Benchmark	2023 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness.	CE #1: Total cost of task in dollars	\$0 saved	\$116,787 saved	\$206,710 saved ²²	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	4,699 HCV staff hours saved; 1,207 PH staff hours saved	Exceeded
Increase self-sufficiency	SS #1: Average income of households (EASY)	HCV: \$10,617 PH: \$10,514	2% increase	HCV: \$14,507 PH: \$14,044	Exceeded

²¹ 2010 earned income baseline from Rent Reform Impact Report, John Seasholtz.

²² This figure was calculated by multiplying the median hourly wage and benefits (\$35 as of 2023) 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.

Increase self-sufficiency	SS #1: Average earned income of households (WIN)	HCV: \$7,983 PH: \$14,120	3% increase	HCV: \$26,849 PH: \$31,237	Exceeded
Increase self-sufficiency	SS #8: Households transition to self-sufficiency ²³	0 households	25 households	113 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;

²³ Self-sufficiency is defined as a positive move from subsidized housing.

and the utility provider. We modified allowances for units where the resident pays water and/or 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: KCHA continued to use streamlined utility allowances, allowing us to save more than 300 hours of staff time this past year.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$22,116 saved	\$24,462 saved ²⁴	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	291 hours saved	302 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

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

MTW STATUTORY OBJECTIVE: Increase Housing Choice

APPROVAL: 2007

IMPLEMENTED: 2007

CHALLENGE: According to the King County Regional Homelessness Authority's most recent Point-in-Time Count in March 2022, more than 13,368 people in the county lacked housing while approximately 28.6% of all individuals experiencing homelessness were experiencing chronic homelessness.²⁵

²⁴ This figure was calculated by multiplying the median hourly wage and benefits (\$81 as of 2023) 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.

²⁵ King County Regional Homelessness Authority, Households Served dashboard, accessed August 5, 2022. www.kcrha.org/households-served

SOLUTION: KCHA provides housing funds directly to our behavioral health care and nonprofit partners, including Sound Health, Navos/MultiCare Mental Health Solutions, and Valley Cities Counseling and Consultation. These providers use the funds to secure private market rentals that then are 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 King County’s Coordinated Entry for All system. 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: Throughout 2023, KCHA remained dedicated to collaborating with our Sponsor-based Supportive Housing (SBSH) partners to evaluate their capacity and potential to enhance the utilization of contracted rental subsidies we provide. One contract, aimed at housing individuals experiencing chronic homelessness, maintained full capacity throughout the year. The other program, which offers housing and supportive services to individuals exiting mental health facilities, concentrated efforts on expanding capacity. This ongoing effort will persist into 2024 as we strive to optimize support for those in need as part of our larger efforts to address homelessness.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 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	76 units	Exceeded
Increase housing choices	HC #5: Number of households able to move to a better unit	0 households	72 households	72 households	Achieved
Increase self-sufficiency	SS #5: Number of households receiving services aimed to increase self-sufficiency	0 households	72 households	72 households	Achieved
Increase self-sufficiency	SS #8: Number of households	0 households	72 households	72 households	Achieved

transitioned to
self-sufficiency²⁶

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.

PROGRESS AND OUTCOMES: In 2023, 23 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	2023 Outcome	Benchmark Achieved?
Increase housing choices	HC # 5: Number of households able to move to a better	0 households	10 households	23 households	Exceeded

²⁶ Self-sufficiency for this activity is defined as securing and maintaining housing.

unit and/or a high-
opportunity
neighborhood

ACTIVITY 2005-4: Payment Standard Changes

MTW STATUTORY OBJECTIVE: Increase Housing Choice

APPROVAL: 2005

IMPLEMENTED: 2005

CHALLENGE: Currently, 35% of all KCHA's tenant-based voucher households live in high-opportunity neighborhoods. These neighborhoods offer benefits to their residents, including improved educational opportunities, increased access to public transportation and greater economic opportunities.²⁷ When market rents exceed allowable subsidy levels provided under HUD's traditional payment standard methodology, participating HCV households must pay the overage directly out of pocket. Therefore, the failure of the payment standards to reflect escalating housing costs directly increases the amount paid by HCV participants and can hamper the ability of some households, particularly households coming directly from homelessness with extremely limited incomes, to secure new housing. KCHA's multi-tiered approach to setting payment standards based on location has expanded geographic choice for families.

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 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

²⁷ Neighborhood opportunity designations are from the Puget Sound Regional Council and Kirwan Institute's Opportunity Mapping index. www.psrc.org/opportunity-mapping

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: KCHA continues to review market data twice a year and to update payment standards when necessary to promote success for participating households. At the end of 2023, 34.5% of all KCHA tenant-based voucher households were living in high-opportunity neighborhoods.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 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 ²⁸	Achieved
Increase housing choices	HC #5: Number of households able to move to a high-	21% of HCV households live in high-	30% of HCV households live in high-	35% of HCV households live in high-	Exceeded

²⁸ 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.

opportunity
neighborhood²⁹

opportunity
neighborhoods

opportunity
neighborhoods

opportunity
neighborhoods

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-need households, partnering effectively and efficiently with nonprofit developers, and promoting housing options in high-opportunity areas.

SOLUTION: The ability to streamline the Project-based Section 8 program is an important factor in addressing the distribution of affordable housing in King County and coordinating effectively with local initiatives. KCHA places Project-based Section 8 subsidies in high-opportunity areas of the county in order to increase access to these neighborhoods for households with low incomes. 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, who are mentally ill, or with disabilities, as well as young adults and families experiencing homelessness who traditionally are not served through our mainstream Public Housing and Housing Choice Voucher programs. Additionally, we coordinate with county government and suburban cities to underwrite a pipeline of new 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 Project-based Section 8 (PBS8) subsidy to a limited number of demonstration projects not qualifying under standard policy in order to serve important public purposes. (FY 2004)

²⁹ All tenant-based voucher households.

- ⇒ Modifying eligibility and selection policies as needed to align with entry criteria for nonprofit operated housing programs. (FY 2004)
- ⇒ Project-basing Family Unification Program vouchers for youth engaged with the child welfare system. (FY 2019)

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 unit 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)
- ⇒ Allowing KCHA to enter into a HAP contract for any type of unit that does not qualify as existing housing and is under construction or has been recently constructed, regardless of whether an AHAP has been executed. (FY 2019)

IMPROVE PROGRAM ADMINISTRATION BY:

- ⇒ Allowing project sponsors to manage project wait lists 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, if needed, and pay the higher rent. (FY 2004)
- ⇒ Assigning standard HCV payment standards to PBS8 units, allowing modification with approval of KCHA when deemed appropriate. (FY 2004)
- ⇒ Offering moves to Public Housing in lieu of an HCV exit voucher (FY 2004) or allow 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)
- ⇒ 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 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). In 2023, we procured three contracts, saving an estimated 136.5 staff hours.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
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Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved per contract	\$1,980 saved per contract ³⁰	\$1,949 saved per contract	Achieved
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 ³¹	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, residents in our Public Housing program have limited choices on 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 wait lists, we also maintain regional wait lists and

³⁰ 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.

³¹ 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.

have established a Conditional Housing waiting list to accommodate the needs of households ready to transition from the region’s network of transitional housing and KCHA’s targeted housing programs that assist households experiencing or at risk of homelessness to move toward self-sufficiency. In general, applicants are selected for occupancy using a rotation between the site-based, regional and transitional housing applicant pools, based on an equal ratio. Units are not held vacant if a particular wait list is lacking an eligible applicant. Instead, a qualified applicant is pulled from the next wait list in the rotation.

PROGRESS AND OUTCOMES: This streamlined process saved an estimated 166 hours of staff time in 2023.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$4,176 saved ³²	\$5,146 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	166 hours saved	Exceeded
Increase housing choices	HC #3: Average applicant time on the waitlist in months (decrease)	75 months	75 months	68.8 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

³² This figure was calculated by multiplying the median hourly wage and benefits (\$31) 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 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, adding an estimated \$100,000 or more 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 Housing Choice Vouchers.

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: (1) 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); (2) 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 (3) 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. We also are streamlining our 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. To ensure that these units meet KCHA's high inspection standards, quality control audits will be performed on no fewer than 20% of the self-certified units every 90 days of the two-year pilot. These efficiencies will enable faster lease-up times and cause less disruption for landlords while ensuring program compliance. In early 2020, in response to the

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

PROGRESS AND OUTCOMES: In 2023, KCHA resumed HQS Inspection standard procedures with an emphasis on health and safety. As staff have resumed regular procedures, enduring pandemic-related challenges related to unit quality have included a shortage of materials needed to make required repairs, staffing shortages and an increase in unit fails.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0	\$58,000 saved	\$162,279 saved ³³	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	1,810 hours saved	4,161 hours saved	Exceeded

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 recertifications, complex income calculations and strict timing rules cause unnecessary and regular intrusions into the lives of the residents we serve. These processes often require KCHA to expend our limited resources on work that does not support program goals.

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.

³³ This figure was calculated by multiplying the median inspector hourly wage and benefits (\$39 as of 2023) 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.

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)
- During the COVID-19 pandemic, 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)
- During the COVID-19 pandemic, implement emergency measures to streamline verification processes, 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: In January 2023, KCHA passed a resolution concluding all local emergency response efforts and corresponding COVID waivers. To keep pace with drastic cost of living increases in the region and further expand opportunities for clients to build work experience and achieve self-sufficiency, KCHA updated the Resident Service Stipend maximum income exclusion allowance from \$500 to \$750 per month, and updated the policy so that the maximum amount will be annually adjusted based on the COLA increases received by KCHA employees.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0	\$58,000 saved	\$71,715 saved ³⁴	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete the	0 hours saved	2,000 hours saved	2,049 hours saved	Exceeded

³⁴ This figure was calculated by multiplying the median hourly wage and benefits (\$35 as of 2023) of the staff member who oversees this activity by the number of hours saved. It is a monetization of the hours saved through the implementation of this program.

task in staff
hours

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 now performs Rent Reasonableness determinations only when a landlord requests an increase in rent. 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. In 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 own properties rather than contracting with a third party, allowing us to save additional resources. We also continue to consider a modification to the Rent Reasonableness review that would exclude any properties that are financed in whole or in part by local or federal programs, including tax credit properties.

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

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Reduce costs and achieve greater	CE #1: Total cost of task in dollars	\$0 saved	\$33,000 saved	\$39,975 saved ³⁵	Exceeded

³⁵ This figure was calculated by multiplying the median Inspector hourly wage and benefits (\$39 as of 2023) 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

cost-effectiveness					
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	1,025 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 using debt to the upfront necessary capital expenses. The energy services partner identifies these improvements through an investment-grade energy audit that then can be used to underwrite loans to pay for the measures. Project expenses, including debt service, are 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 2023, KCHA experienced an estimated \$4 million of energy savings due to EPC upgrade work.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
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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.

Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$800,000 saved	\$4 million saved	Exceeded
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ACTIVITY 2004-16: Housing Choice Voucher Occupancy Requirements

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness

APPROVAL: 2004

IMPLEMENTED: 2004

CHALLENGE: More than 20% of tenant-based voucher households move two or more times while receiving subsidy. Moves can be beneficial for the household if they lead to gains in neighborhood or housing quality, but moves also can 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 450 hours in staff time in 2023 while helping families avoid the disruption and costs of a move.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	2023 Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0	\$8,613 saved	\$14,840 saved ³⁶	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	474 hours saved	Exceeded

³⁶ This dollar figure was calculated by multiplying the median Property Management Specialist hourly wage and benefits (\$35 as of 2023) by the number of hours saved.

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	360 households	Exceeded
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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.

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 2008-5: 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, placed on hold in 2023³⁷

In partnership with Valley Cities Counseling and Consultation (VCCC), KCHA implemented a flexible, “stepped-down” rental assistance model to provide a short-term rental subsidy paired with supportive services. The Coming Up initiative offered independent housing opportunities to young adults (ages 18 to 25) transitioning out of homelessness. With support from the provider, the youth moved into housing in the private rental market, signed a lease and worked with a resource specialist who prepared them to take over the lease after a period of being stabilized in housing.

In 2023, KCHA and VCCC ended this program because an owner/landlord could not be identified. KCHA has placed the activity on hold while working to find another youth-serving agency able to partner with us on this innovative model.

³⁷ Activity 2014-1 was designated as on hold in KCHA’s 2024 MTW Plan.

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 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 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 families with low incomes that are not otherwise qualified for the Healthy Homes project but required assistance to avoid loss of affordable housing. This activity is completed. An evaluation of the program by Breyse *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 Social and Health Services funds. The goal was to continue the support of households experiencing or at risk of homelessness 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 allowed 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 homeownership. 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.

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. Adapting lessons associated with the COVID-19 pandemic continued to be a focus in 2023, in addition to our ongoing single-fund activities.

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. As noted throughout this report, KCHA continued to focus on leveraging

partnerships and grant funding, both with local government and community-based organizations, to advance regional solutions to the ongoing homelessness crisis in King County.

- ⇒ 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.
- ⇒ SUBSIDY RETENTION PROGRAM. The Subsidy Retention Program pairs KCHA internal Resident Services Coordinators (RSC) with voucher holders who are at acute risk of losing their voucher or housing. RSCs provide a range of services, including referring clients to community resources, and providing guidance on KCHA policies/processes and landlord relations. Over a three-year period, 1,776 households were served, with 87% retaining their voucher eight months beyond service intervention.
- ⇒ EDUCATION INITIATIVES. KCHA continued our collaboration with youth, parents and local education stakeholders, including school districts and out-of-school time providers, to promote and support students' educational success. This included partnerships with out-of-school time providers to offer after-school and summer learning programs, benefiting school-aged children with access to enrichment activities beyond school hours, early learning opportunities through the Neighborhood Early Learning Connectors (NELC) program, and the development and implementation of a new Youth Leadership Program slated for early 2024 launch.
- ⇒ INCREASE ACCESS TO HEALTH CARE THROUGH PARTNERSHIPS AND COLLABORATIVE PLANNING. KCHA is increasingly partnering with local healthcare delivery systems to support residents in accessing the health services they need to maintain housing stability and a high quality of life. Additionally, KCHA's rental assistance programs, including the Family Unification Program (FUP), Emergency Housing Voucher (EHV), and Project-based Voucher sites operating as permanent supportive housing in collaboration with Catholic

Community Services (CCS), are committed to leveraging the supportive housing Medicaid benefit — Foundational Community Supports (FCS). This effort aims to provide Medicaid-funded supportive services, specifically when individuals receiving KCHA's rental assistance are deemed eligible for FCS. CCS will persist in leveraging these resources as an integral component of their ongoing model for delivering supportive services. It's important to note that this support is not facilitated through any assistance or flexibilities provided by KCHA or MTW.

In 2023, KCHA continued to collaborate with local partners representing sectors, including behavioral health, primary care, and healthcare and social care system integration, to help make sure that the needs of KCHA clients are considered, and to build partnerships and opportunities for closer collaboration. For example, our existing partnership with UnitedHealthcare led to a new collaboration with a local healthcare delivery partner, Virginia Mason Franciscan Health, which brought diabetes screening on-site to a KCHA property. That led to conversations about further collaborations, including additional health screenings for KCHA clients. A strengthened partnership with Public Health - Seattle & King County also led to increased access to vaccines and emergency survival kits for KCHA clients.

- ⇒ 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 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 2023, KCHA purchased Plum Court (Kirkland) and Sterling Ridge (Kent), adding 182 new units to our inventory of affordable housing. No MTW block-grant funds were used in these acquisitions.
- ⇒ 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 also have 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 households with extremely low incomes. Despite ongoing uncertainties around federal funding levels, we continue to use MTW program flexibility to support housing voucher issuance above HUD baseline levels.
- ⇒ YOUNG ADULT PROSPERITY PROGRAM (YAPP). Working with the Washington State Department of Children, Youth, & Families (DCYF) and local youth-centered provider partners, KCHA administers both Foster Youth to Independence (FYI) vouchers and Family Unification Program (FUP) youth vouchers, dedicated to young adults who are transitioning out of foster care and those who were previously in foster care and are now experiencing homelessness. In 2023, KCHA worked with local youth-centered provider partners to develop the Young Adult Prosperity Program (YAPP). The YAPP program will provide youth-centered support services, provide the ability to extend vouchers beyond the current limit of three years, and allow up to 24 months of additional assistance to build economic independence and a pathway to long-term housing stability. Self-sufficiency services will be coordinated and complementary to existing FUP-youth and FYI case management services provided by KCHA's long-time partner, the YMCA, and may incorporate incentives that are tied to program-specific pathways and goal attainment measures. As a crucial component of this initiative, youth were actively engaged in consultations to ensure that the forthcoming programming would be customized to address both their developmental and

economic goals. KCHA expects to begin more detailed implementation planning and staff training in fiscal year 2024, with participant enrollment anticipated to begin in Q4 of 2024.

B. LOCAL ASSET MANAGEMENT PLAN

Has the PHA allocated costs within statute during the plan year?

No
Yes
Yes

Has the PHA implemented a local asset management plan (LAMP)?

Has the PHA provided a LAMP in the appendix?

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 2023 LAMP is attached to this document as Appendix D.

SECTION VI

ADMINISTRATIVE

A. HUD REVIEWS, AUDITS OR PHYSICAL INSPECTION ISSUES

A recent monitoring review of KCHA's Emergency Housing Vouchers resulted in one finding regarding background checks. KCHA has addressed the finding to further align with HUD requirements. All other monitoring visits, physical inspections and oversight activities did not identify any deficiency findings. The average REAC score for Public Housing Inventory inspected in 2023 was 92.9.

B. RESULTS OF LATEST KCHA-DIRECTED EVALUATIONS

In 2023, KCHA initiated the implementation of our updated agency-wide research agenda, focusing on four key areas: economic mobility; health and wellness; homelessness; and equity. These research areas intersect with KCHA's core housing programs and mission, playing a crucial role in housing stability and supporting residents and communities to thrive.

KCHA also conducted or began several evaluations of policies and programs to inform continuous improvement and decision-making, including an evaluation of our Subsidy Retention program, and an evaluation of in-house housing navigation support services for VASH participants that is expected to be finalized in 2024. The Research and Evaluation team also shared and discussed findings from prior research and evaluation projects with KCHA residents, HUD and other public housing authorities. For example, staff participated in a HUD briefing in October 2023 on the cross-sector HUD HEARS (Health, Economic, and Residential Stability), a 2022 study of housing assistance exits and their associated health, economic and housing outcomes (see Appendix E). This study was completed using KCHA and Seattle Housing Authority administrative data in partnership with Public Health – Seattle & King County partners.

KCHA's Research and Evaluation team will continue to enhance internal program design and evaluation capacity, data management, policy analysis, and data analysis and visualization while

also fostering external research partnerships to advance KCHA's goals under the MTW program. In November 2023, KCHA issued an RFP to select an external evaluation firm to assess our MTW rent policies. This evaluation is set to commence by mid-2024, with results expected by late 2025.

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 2023:

- 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.

Robin Walls

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Walls
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Robin Walls
Executive Director/Chief Executive Officer
King County Housing Authority

3/27/2024

Date

APPENDIX B

EXISTING PROJECT-BASED VOUCHER CONTRACTS

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2023	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	2	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	8	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	3	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
Enumclaw Fourplex	5	Leased	Homeless Families	No
Evergreen Court	30	Leased	Low Income Families, Elderly, or Disabled	No
Evergreen Court Apartments	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

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2023	Population Served	RAD?
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	1	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
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
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 Townhomes	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
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	41	Leased	Low Income Seniors	No
Parkview Group Home	1	Leased	Disabled Individuals	No

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2023	Population Served	RAD?
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
Plymouth Crossing	67	Leased	Homeless Non-Elderly Disabled	No
Providence John Gabriel House	43	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	55	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
Sophia's Home - Bellepark East	1	Leased	Homeless Individuals	No
Sophia's Home - Timberwood	2	Leased	Homeless Individuals	No
Sophia's Home - Woodside East	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	16	Leased	Homeless Veterans	No
Unity Village of White Center	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

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2023	Population Served	RAD?
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 House	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 - 2023

#	Fund	Property	Site	Unit #	Tenmast Unit #	Bed-room	Date Vacated	Date Complete	Total Hours	Labor Cost	Material Cost	Total Cost	Work Order #	
92	123	105	Park Royal	107	101051107	2	6/28/2023	10/2/2023	268	\$20,095	\$25,348	\$45,443	153611	
93	181	501	Valley Pk West - Tax Credit	212	505010016	3	7/7/2023	10/2/2023	328	\$23,873	\$22,899	\$46,772	151966	
94	509	102	Greenleaf	D-6	101020018	2	8/7/2023	10/6/2023	252	\$18,648	\$17,265	\$35,913	154185	
95	509	505	Evergreen Ct	21	505050012	3	5/8/2023	10/10/2023	288	\$20,468	\$24,927	\$45,395	149198	
96	112	292	Newport	22	802920022	2	7/31/2022	10/12/2023	264	\$19,663	\$20,905	\$40,568	152801	
97	125	151	Northridge	113	101510113	1	7/28/2023	10/13/2023	216	\$15,965	\$14,858	\$30,823	154233	
98	165	504	Burndale Homes	1726J	505040046	2	7/12/2023	10/19/2023	314	\$22,810	\$22,376	\$45,186	152168	
99	164	354	Brittany Pk - Tax Credit	309	303540309	1	8/13/2023	10/24/2023	274	\$22,681	\$15,336	\$38,017	154091	
100	146	450	Mardi Gras - Tax Credit	217	404500217	1	8/21/2023	10/24/2023	217	\$15,716	\$14,543	\$30,259	145103	
101	125	153	Northridge	134	101530134	1	8/8/2023	10/25/2023	216	\$15,876	\$17,825	\$33,701	154234	
102	125	151	Northridge	326	101530326	1	7/28/2023	10/26/2023	244	\$18,166	\$18,284	\$36,450	154232	
103	120	101	Ballinger Homes	193	101010193	2	7/24/2023	11/2/2023	344	\$25,418	\$34,210	\$59,628	155164	
104	124	152	Brianwood	305	101520305	1	8/18/2023	11/6/2023	216	\$16,089	\$19,171	\$35,260	154807	
105	148	503	Firwood Circle	353	505030030	4	8/2/2023	11/7/2023	386	\$28,303	\$27,006	\$55,309	152962	
106	208	467	Northwood Sq	A1	404670001	2	7/28/2023	11/8/2023	219	\$20,739	\$25,889	\$46,628	153328	
107	482	465	Bellevue Manor - Tax Credit	112	404650112	1	9/13/2023	11/15/2023	214	\$15,934	\$16,104	\$32,038	155165	
108	142	403	Cascade	W101	404030089	2	8/11/2023	11/15/2023	222	\$20,979	\$20,410	\$41,389	147759	
109	130	251	Casa Juanita	206	202510206	1	8/25/2023	11/20/2023	220	\$16,267	\$17,146	\$33,413	155528	
110	188	390	Burien Pk	124	303900124	1	8/30/2023	11/20/2023	199	\$13,890	\$13,250	\$27,140	154238	
111	150	551	Plaza 17 - Tax Credit	512	505510512	1	9/15/2023	11/21/2023	243	\$18,203	\$15,543	\$33,746	155249	
112	188	390	Burien Pk	122	303900122	1	9/27/2023	11/21/2023	254	\$17,416	\$14,750	\$32,166	155445	
113	169	296	Illahaee	26	202960026	2	6/26/2023	11/22/2023	350	\$26,093	\$27,506	\$53,599	151498	
114	250	156	Westminster	206	101560206	1	8/21/2023	11/28/2023	220	\$16,143	\$17,448	\$33,591	155688	
115	116	294	Parkway	212	802940212	1	9/8/2023	12/4/2023	278	\$20,805	\$19,432	\$40,237	156596	
116	167	552	Southridge	310	505520310	1	9/21/2023	12/4/2023	262	\$19,672	\$12,320	\$31,992	155154	
117	130	251	Casa Juanita	313	202510313	1	9/27/2023	12/5/2023	218	\$16,215	\$17,205	\$33,420	156597	
118	120	103	Cedar Grove	14	101030014	4	9/19/2023	12/13/2023	296	\$21,740	\$28,688	\$50,428	155529	
119	182	402	Birch Creek - Tax Credit	27313	404020079	2	8/21/2023	12/13/2023	201	\$14,973	\$22,111	\$37,084	156436	
120	120	101	Ballinger Homes	112	101010112	2	9/28/2023	12/19/2023	288	\$22,115	\$30,728	\$52,842	156976	
121	509	102	Greenleaf	D-3	101020015	2	11/2/2023	12/22/2023	258	\$19,262	\$20,440	\$39,702	157576	
122	190	192	Woodcreek Lane	B-12	101920014	2	11/3/2023	12/28/2023	270	\$19,904	\$18,874	\$38,778	158062	
123	164	365	Pacific Court	B9	3650226RM	2	9/1/2023	12/28/2023	323	\$24,100	\$19,000	\$43,100	154375	
124	164	365	Pacific Court	A21	303650221	2	7/31/2023	12/28/2023	249	\$18,371	\$18,905	\$37,276	153793	
125	150	551	Plaza 17 - Tax Credit	105	505510105	1	10/16/2023	12/28/2023	237	\$17,512	\$13,304	\$30,816	157048	
126	167	552	Southridge	409	505520409	1	9/21/2023	1/3/2024	280	\$20,958	\$15,262	\$36,220	155154	
127	140	401	Valli Kee	18	404010018	4	9/22/2023	1/4/2024	400	\$29,218	\$27,335	\$56,553	155547	
				Averages		1.77952756			265	\$19,752	\$19,779	\$39,531		
Single Family Home - Complete Repair & Renovation														
1	509	211	Bellevue 8 house 1	1	202110001	3	1/15/2022	8/11/2023	914	\$68,222	\$69,875	\$138,097	133492	
128	Total Upgrades													

APPENDIX D

LOCAL ASSET MANAGEMENT PLAN

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 implemented a Local Asset Management Plan (LAMP). Much has changed since the LAMP was originally adopted. Therefore, a revised LAMP is being adopted.

Definitions

HCV Block Grant is the term used to describe Housing Choice Voucher program revenue for Housing Assistance Payments (HAP) and Administrative fees for the ACC vouchers that are considered as part of the MTW program.

MTW Block Grant is the term used to describe the revenue sources of the Public Housing Operating Fund Subsidy (OpSub), the Capital Fund Program (CFP), and the HCV Block grant which are all considered to be fungible and can be used for any allowed purpose in Section 8 or 9 of the 1937 Act.

The **MTW Fund** is a self-balancing set of accounts that will be the focal point for most MTW financial activity and will account for program inflows and outflows.

An **AMP** is an Asset Management Property and is a term used by HUD to describe a grouping of Public Housing Properties.

Overview

KCHA will use its own local funding model for the Public Housing (PH) and Housing Choice Voucher (HCV) programs. As allowed under the current MTW contract, KCHA will use funds from the Public Housing Operating Fund Subsidy, the Capital Fund Program, and the HCV Block interchangeably as part of its MTW Block Grant.

The MTW Fund will be the accounting vehicle to track MTW activity.

- Inflows will consist of revenue from the HCV Block Grant and OpSub revenue intended to support resident services which will be recorded in the MTW fund along with other sources such as interest income. CFP grant revenue will be recorded directly on the books of each AMP as funds are drawn.
- Outflows will occur in multiple ways:
 - Certain expenses will be charged directly to the MTW fund, such as resident service costs, administrative costs, and other expenses directly related to MTW program activity.
 - Transfers will be made to and from Public Housing AMPs in support of operations. This is explained further below under Public Housing Program Considerations.
 - Transfers will be made to the HCV fund to pay for the costs of HCV Block Grant HAP costs and related administrative expenses.
 - Transfers will be made to Public Housing AMPs and other eligible properties to pay for rehabilitation projects, along with amounts to support related management fees
 - Loans will be made, both internally and externally, in support of eligible program purposes. Once the loans are made, the funds are considered as expended.

Public Housing Program Considerations

In contrast to regulations found in 990.280 which allows 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 the MTW Block Grant. KCHA will maintain a budgeting and accounting system that gives each property sufficient funds to support annual operations, including fees that have been determined to be reasonable under the LAMP. Actual revenues will include those provided by HUD and those allocated by KCHA from the MTW fund based on annual property-based budgets.

- KCHA will record OpSub revenue directly to each AMP. As the OpSub formula results in some AMPs being over-funded and others under-funded, transfers will be made to and from the MTW fund to insure adequate budget-based funding.
- CFP grant revenue will be recorded directly on the books of each AMP as funds are drawn.
- Resident services costs will be accounted for in a centralized fund that is a sub-fund of the MTW fund and not assigned to individual programs or AMPs. The portion of the Operating Fund Subsidy that is specifically intended to support Resident Services will be allocated directly to this sub-fund and not to the AMP.
- KCHA will maintain a public housing operating reserve equivalent of at least two months' expenses, but will not be less than any amounts required by HUD.
- KCHA may establish Replacement Reserves for Public Housing Properties.
- KCHA will provide accounting for each site AMP; however, KCHA, as owner of the properties will determine how much revenue will be included as each project's federal support.
- Central Office Cost Center (COCC) fees will be charged to each AMP at the amounts detailed below. However, in all cases, if federal funding is insufficient to support such fee levels, lower amounts may be substituted.
 - Property Management fees shall be set at the HUD-published 80th percentile Administrative Costs in FHA Housing by Field Office for the Seattle area.
 - Bookkeeping fees shall be set at the rate of \$7.50 PUM (as authorized under original Asset Management guidelines, and inflated annually from the 2006 baseline of 203.8, using the Bureau of Labor Statistics CPI-W for the Seattle-Tacoma-Bellevue area, as published for June for each year. The fee of \$7.50 has been in effect since 2006, and per HUD guidance (Federal Register, Volume 71, number 172, page 52712, section IX), "if a PHA considers the fees in this notice to be inadequate to address their individual circumstances, a PHA may use data that reflects the conditions of the local or national market". As KCHA considers a fee set in 2006 and never increased to be inadequate, it will use the index listed above as the basis for adjusting to local conditions.
 - Asset Management fees shall be set at the rate of \$10.00 PUM (as authorized under original Asset Management guidelines, and inflated annually from the 2006 baseline of 203.8, using the Bureau of Labor Statistics CPI-W for the Seattle-Tacoma-Bellevue area, as published for June for each year. The fee of \$10.00 has been in effect since 2006, and per HUD guidance (Federal Register, Volume 71, number 172, page 52712, section IX), "if a PHA considers the fees in this notice to be inadequate to address their individual circumstances, a PHA may use data that reflects the conditions of the local or national market". As KCHA considers a fee set in 2006 and never increased to be adequate, it will use the index listed above as the basis for adjusting to local conditions.

Housing Choice Voucher Program Considerations

- Amounts needed for Housing Assistance Payments (HAP) and program administrative costs will be transferred to the Housing Choice Voucher program fund, including sufficient funds to pay all management and bookkeeping 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.
- HCV block grant revenue may be used to support other voucher types that are not part of the MTW program, such as FUP, NED or VASH vouchers. This will be done via an internal transfer.
- Central Office Cost Center (COCC) fees will be charged to each property at the amounts detailed below. However, in all cases, if federal funding is insufficient to support such fee levels, lower amounts may be substituted.
 - Management fees will be set at the HUD authorized amount of \$12.00 PUM or 20% of the Administrative Fee whichever is greater. KCHA is defining the Administrative Fee amount as the Column B rate for the Authority for each calendar year.
 - Bookkeeping fees shall be set at the rate of \$7.50 PUM (as authorized under original Asset Management guidelines, and inflated annually from the 2006 baseline of 203.8, using the Bureau of Labor Statistics CPI-W for the Seattle-Tacoma-Bellevue area, as published for June for each year. The fee of \$7.50 has been in effect since 2006, and per HUD guidance (Federal Register, Volume 71, number 172, page 52712, section IX), “if a PHA considers the fees in this notice to be inadequate to address their individual circumstances, a PHA may use data that reflects the conditions of the local or national market”. As KCHA considers a fee set in 2006 and never increased to be inadequate, it will use the index listed above as the basis for adjusting to local conditions.

APPENDIX E

EVALUATIONS

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

Final report

December 2022

Public Health
Seattle & King County



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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 area¹. 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.

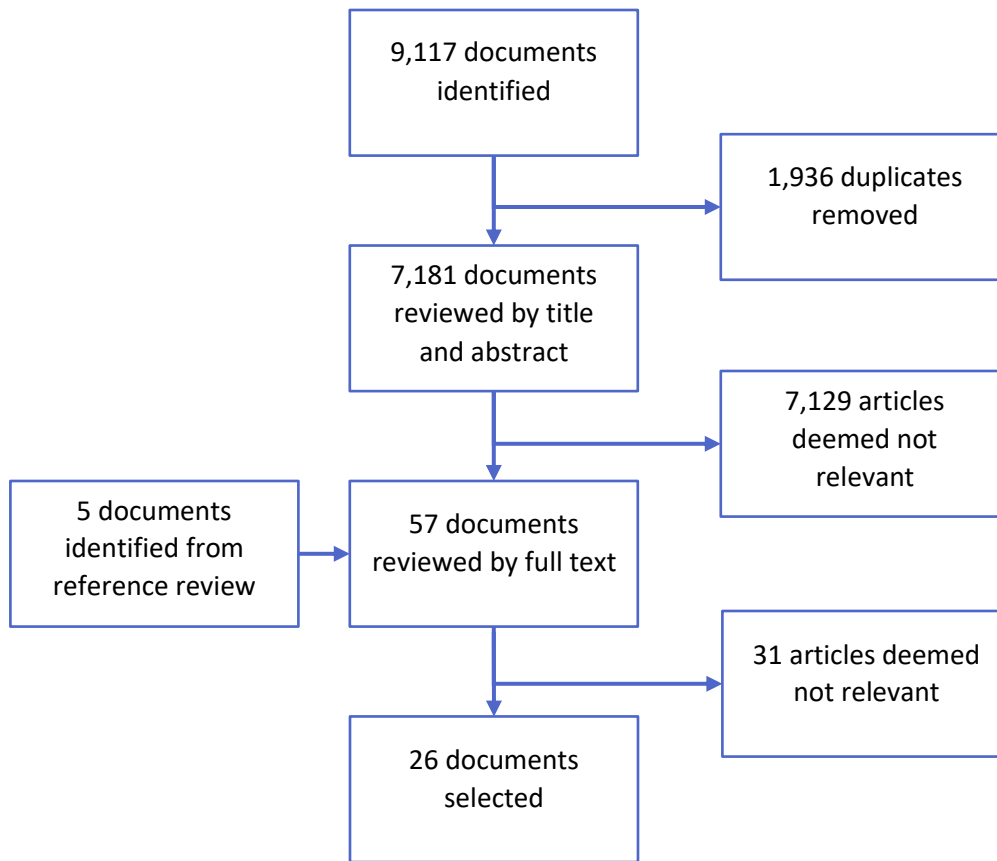


Figure 3-1: Literature review search results

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; Dantzer & 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, Kaspro, & 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.

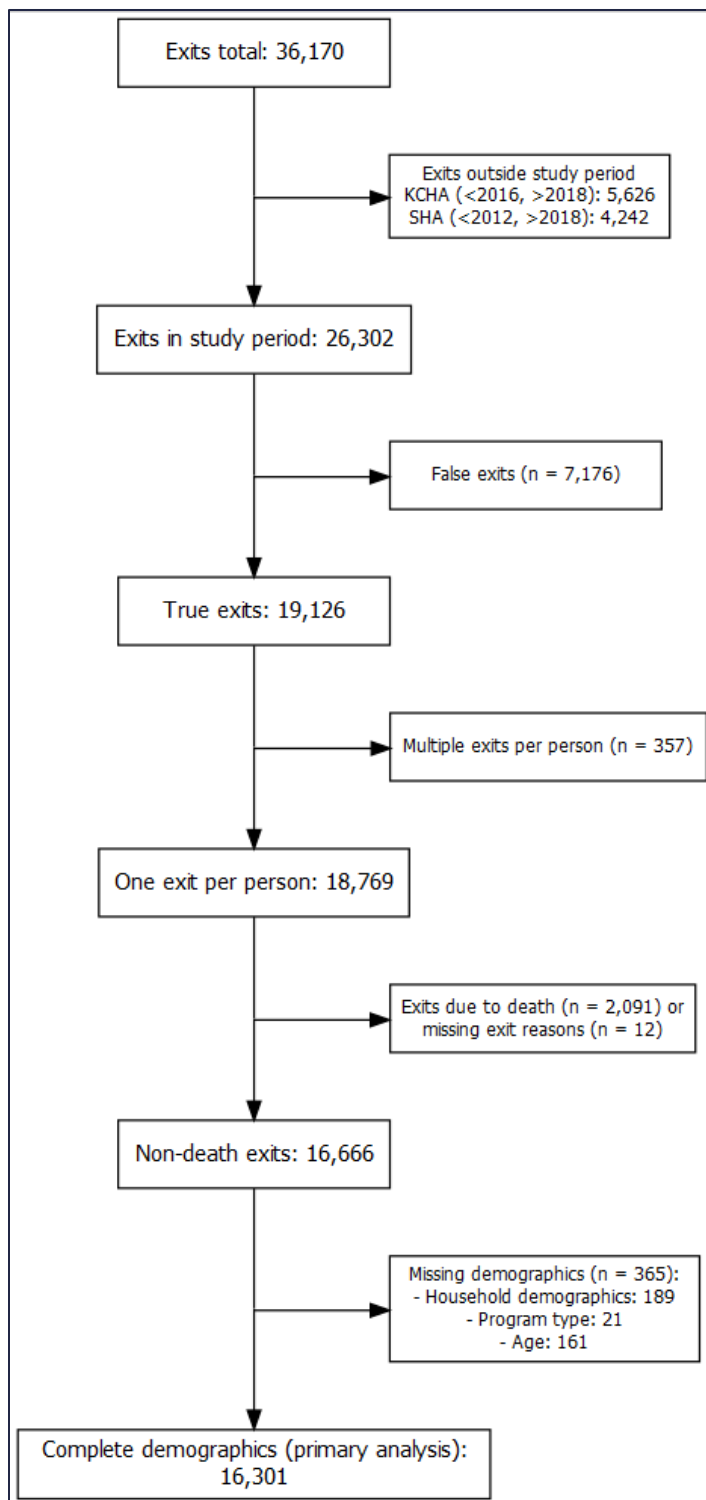


Figure 4-1: Number of people with exits during the study period

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.

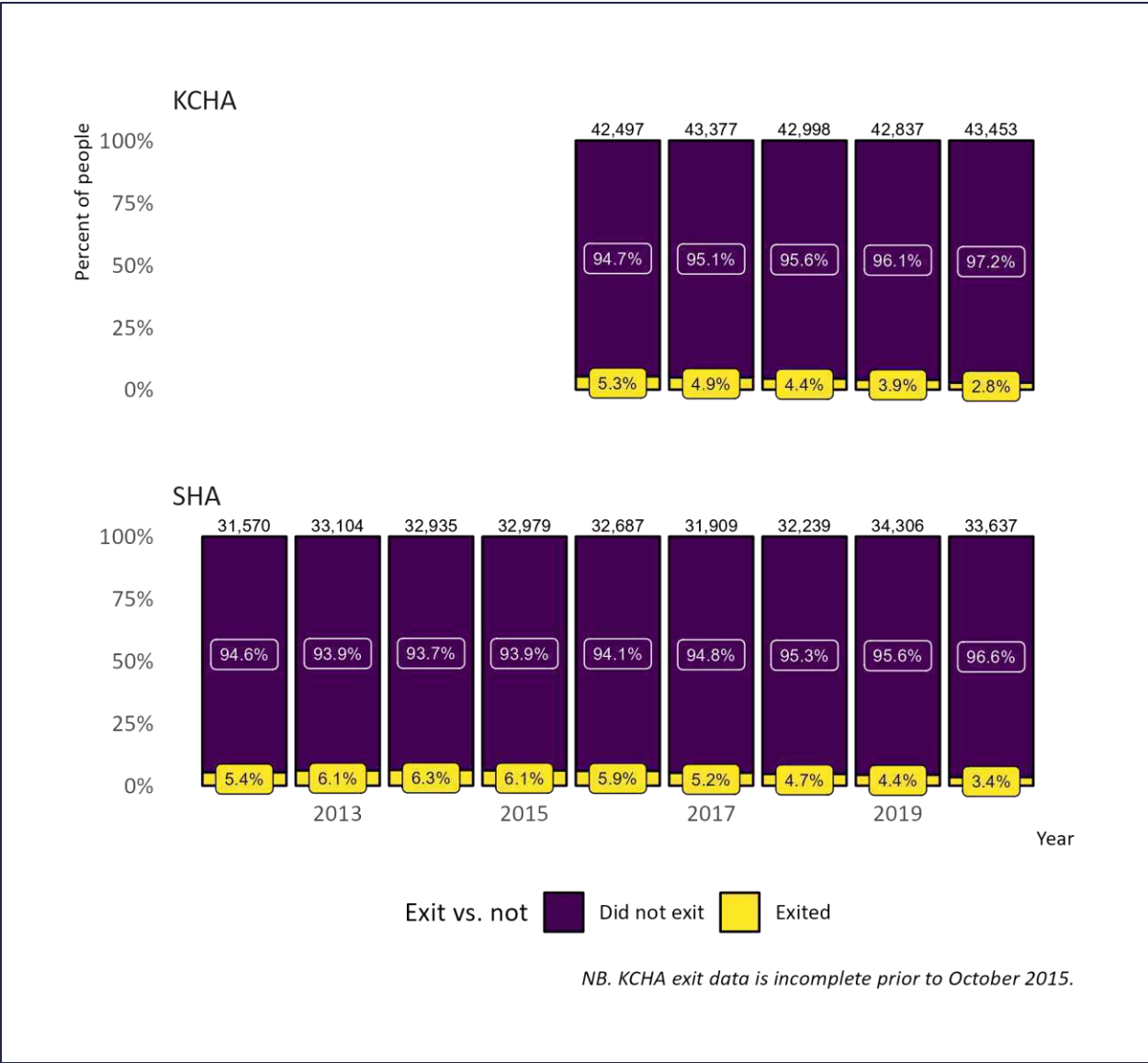


Figure 5-1: Number of exits by PHA and year



NB. KCHA exit data is incomplete prior to October 2015

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



NB. KCHA exit data is incomplete prior to October 2015

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-analysis 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/ethnicity¹					
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 type²					
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/ethnicity²		
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 type³		
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/ethnicity²				
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 type³				
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).

Kaplan-Meier Estimates of Time from Exit to Homelessness

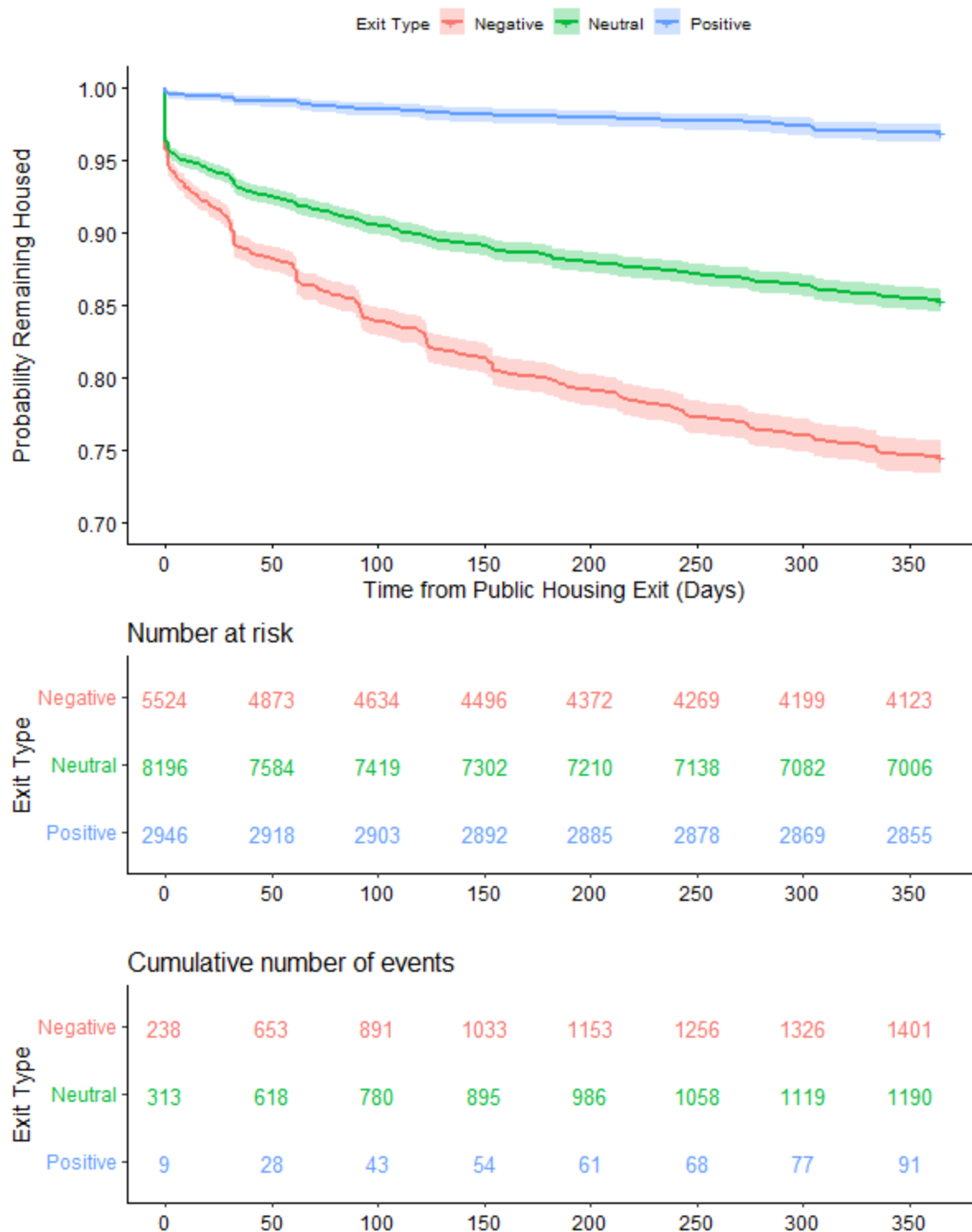


Figure 7-1: Kaplan-Meier curves of time to homelessness by exit type

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).

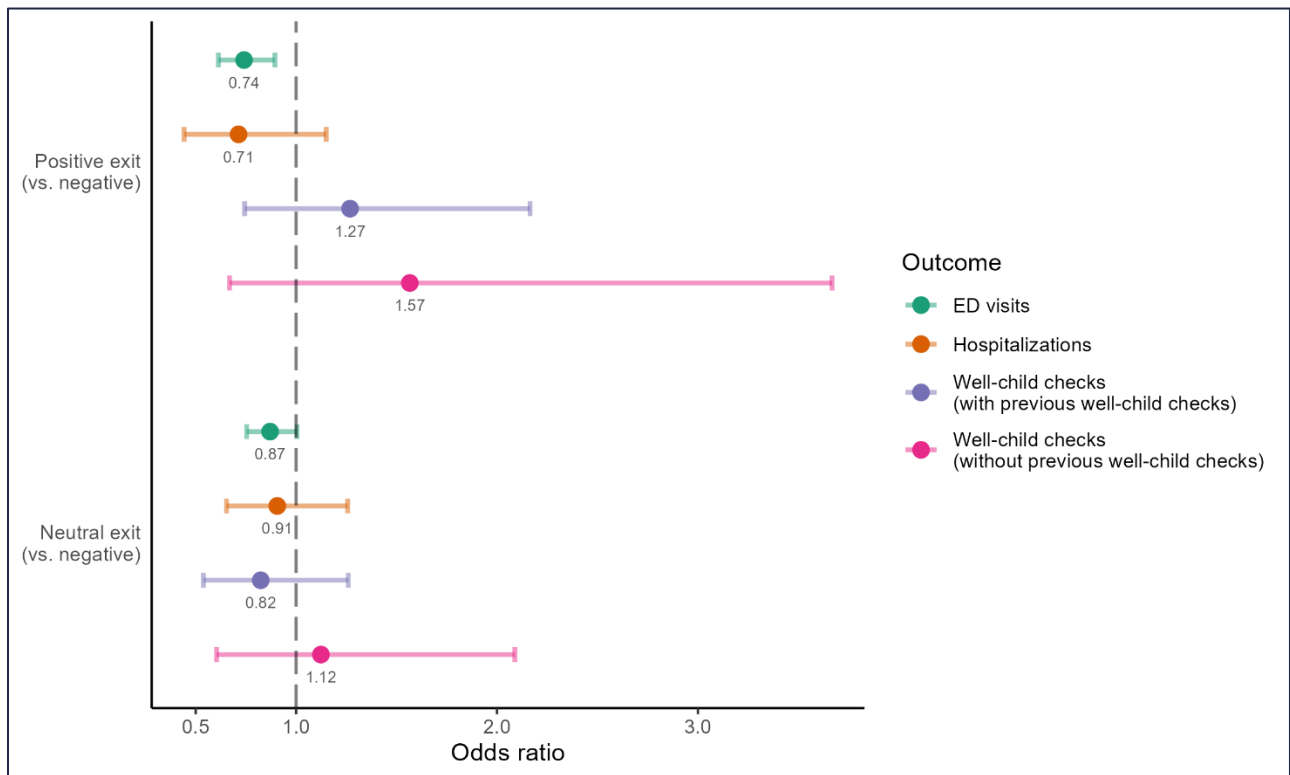


Figure 8-1: Regression results for health outcomes by exit type

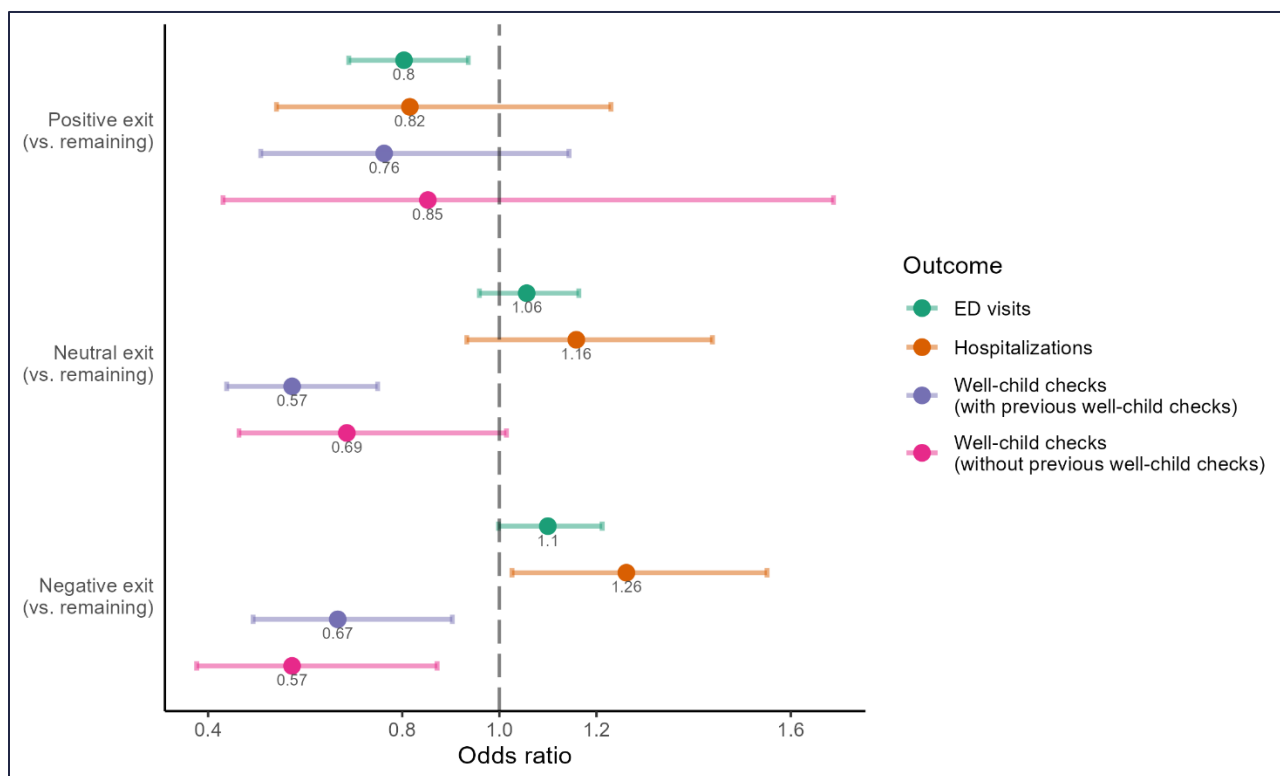


Figure 8-2: Regression results for health outcomes comparing exit types with remaining in housing assistance

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

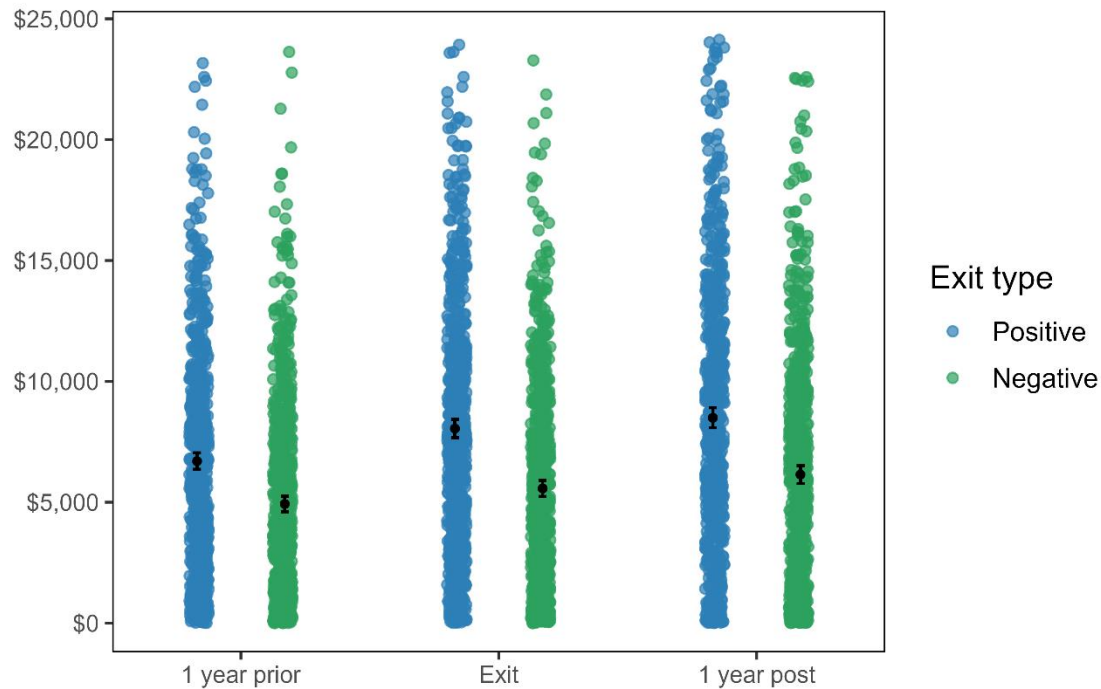
Chapter 10: Outcomes following exit: economic

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.



The black points and error bars are the mean and 95% confidence interval, 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).

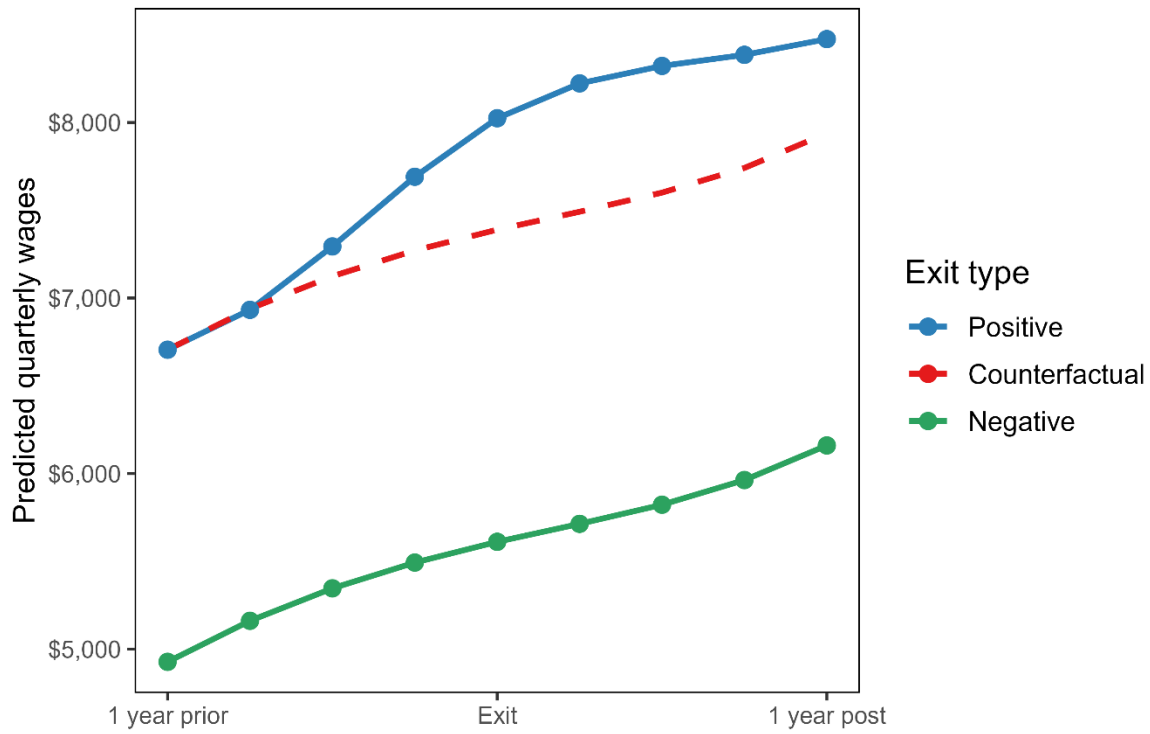


Figure 10-2: Predicted quarterly wages by exit type show faster wage growth for positive exits before exiting and faster wage growth for negative exits after exiting

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	<ul style="list-style-type: none"> - 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 Factors associated with exit	<p>Completion of the FSS program was associated with higher income at program exit (median of \$22,938 vs. \$13,964)</p> <ul style="list-style-type: none"> - 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 	Small sample size, the Rockford HA FSS program may not be generalizable to other areas.

						<p>who were married or divorced (almost all the participants were female).</p> <ul style="list-style-type: none"> - 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)	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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,	<ul style="list-style-type: none"> - 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)	<p>Among the older age group, the intervention group and HCV-only group had lower median income than controls but this was not significant.</p> <ul style="list-style-type: none"> - 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	<p>759,557 household records</p> <p>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</p>	Factors associated with exit	<ul style="list-style-type: none"> - 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	<p>3,066</p> <p>Those who expressed an expectation of moving in the two years subsequent to</p>	Factors associated with exit	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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)	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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. 	

						<ul style="list-style-type: none"> - 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)	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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)	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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)	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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 	<ul style="list-style-type: none"> - 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	<div>Factors associated with exit</div> <div>Outcomes following exits (- Residential stability - School attendance - Health)</div>	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> - 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.
						<ul style="list-style-type: none"> - 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)	<ul style="list-style-type: none"> - 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. 	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 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. 	

						<ul style="list-style-type: none"> - 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)	<ul style="list-style-type: none"> - 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 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	<ul style="list-style-type: none"> • 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).

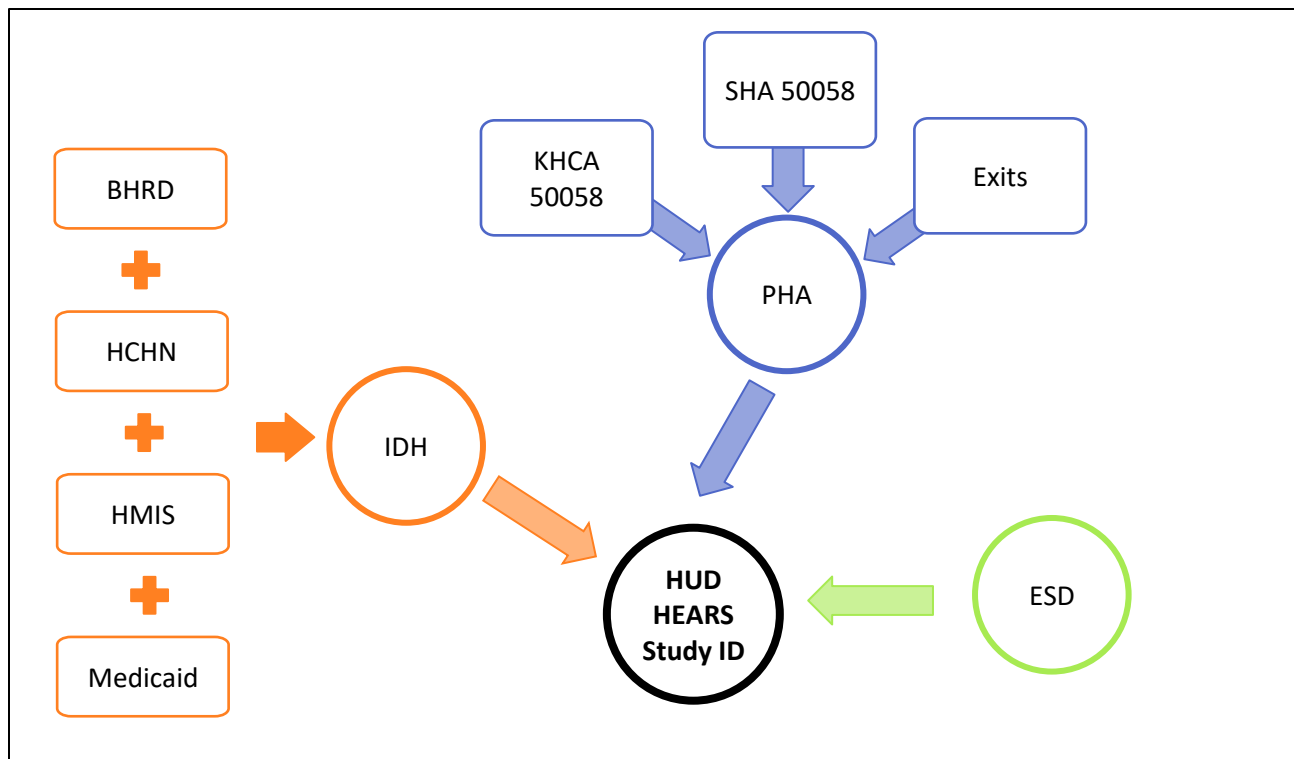


Figure C-1: Identity linkage between HUD HEARS data sources

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	Domestic violence	Negative
SHA	EVICT-ABANDONMENT	Eviction - abandonment	Negative
SHA	EVICT-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/ethnicity¹				
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 type²				
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. 220 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/ethnicity¹				
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 type²				
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/ethnicity²				
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 type³				
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).

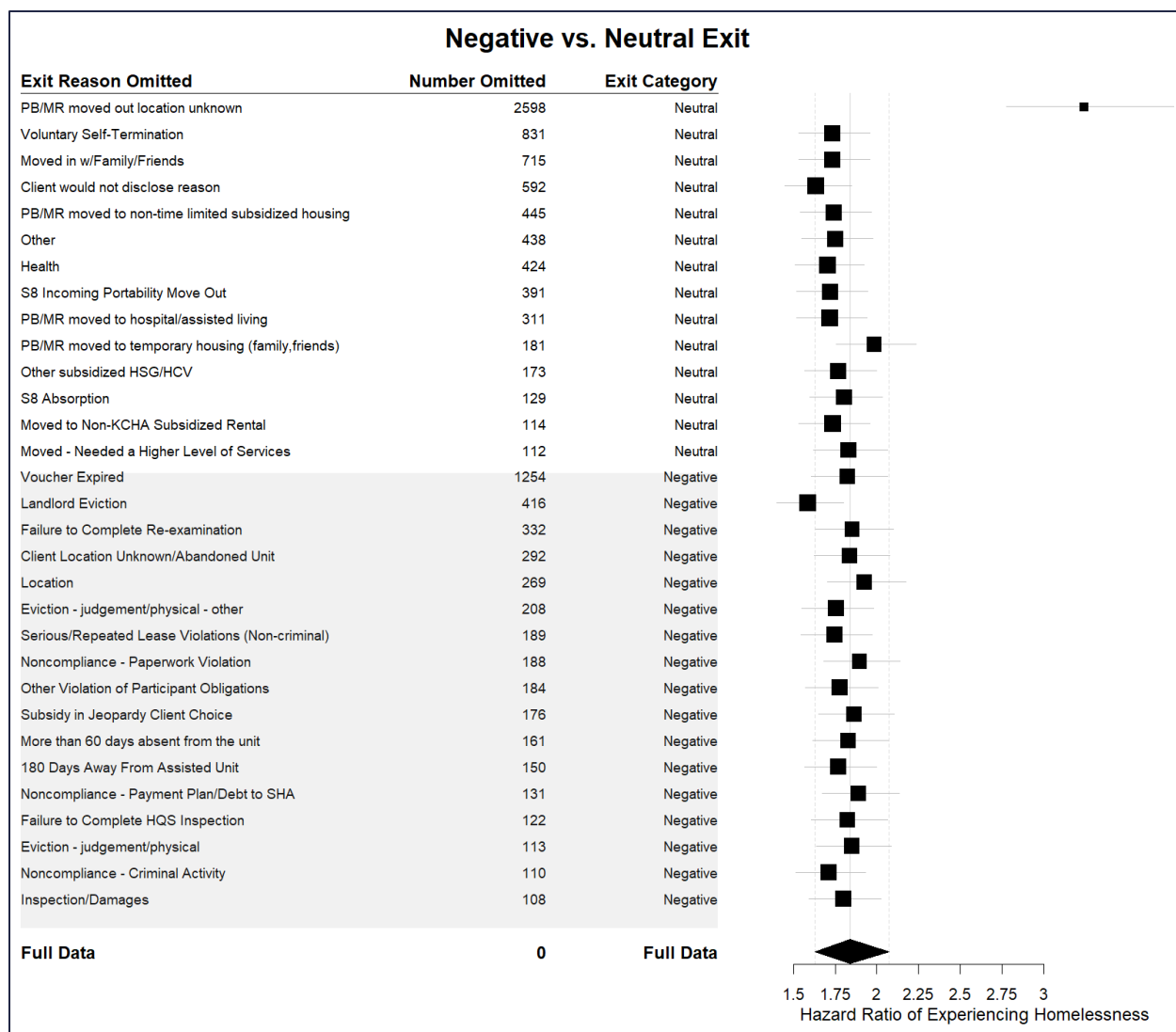


Figure F-1: Sensitivity analysis of time to homeless by exit reason, negative vs. neutral

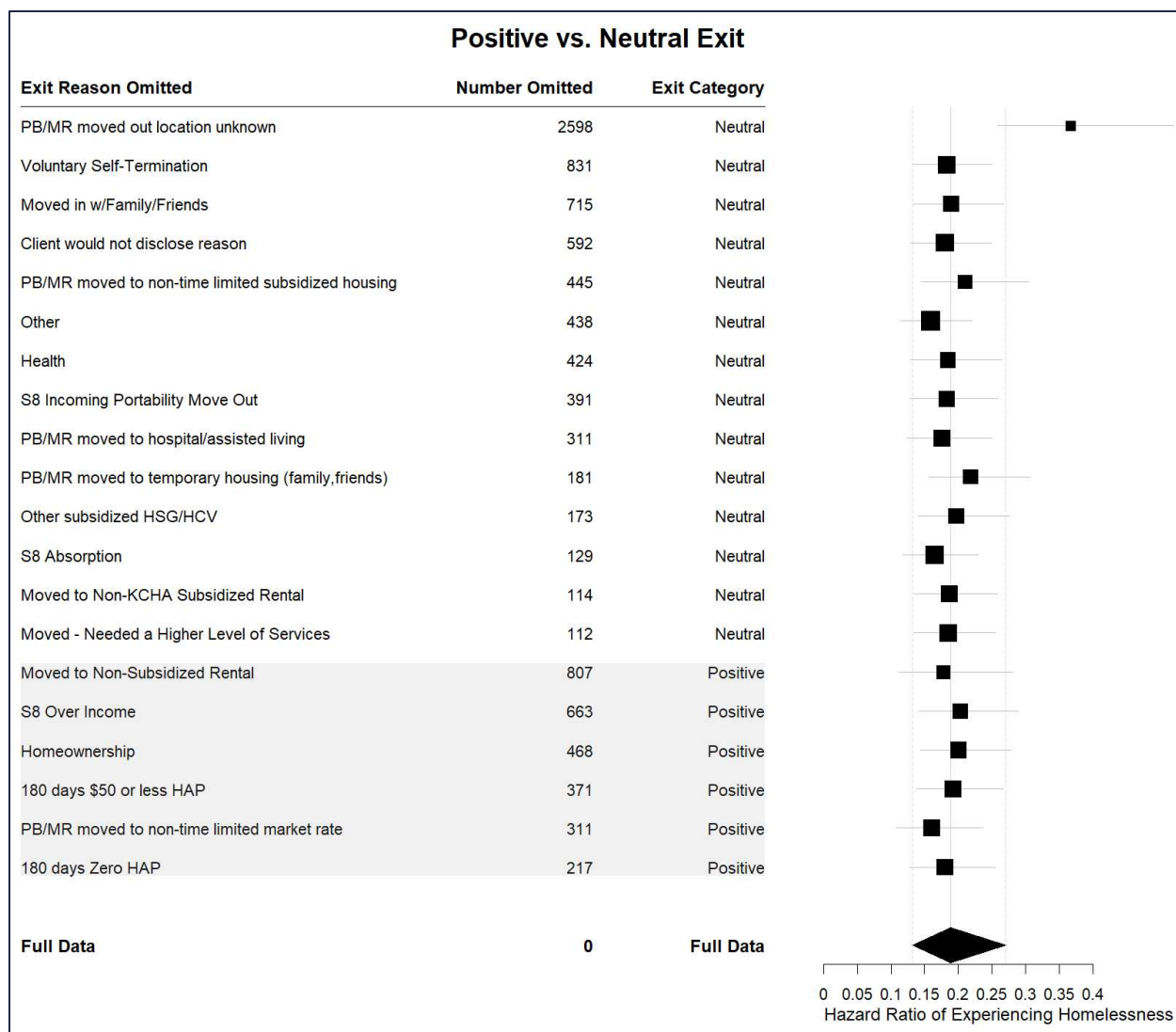


Figure F-2: Sensitivity analysis of time to homeless by exit reason, positive vs. neutral

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/ethnicity¹					
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 housing²					
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 characteristics²					
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
Gender²								
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/ethnicity³								
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 type⁴								
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
Gender²								
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/ethnicity³								
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 type⁴								
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/ethnicity²				
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 type³				
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.
$$\text{quarterly.wage} = \beta_0 + \beta_1 * \text{exit_type} + \beta_2 * \text{spline}(\text{time}) + \beta_3 * \text{exit_type} * \text{spline}(\text{time}) + \beta_4 * \text{confounder_1} + \beta_5 * \text{confounder_2} + \dots + \beta_{n+3} * \text{confounder_n} + e + u, \text{ where } \dots$$

 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 marginaeffects 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

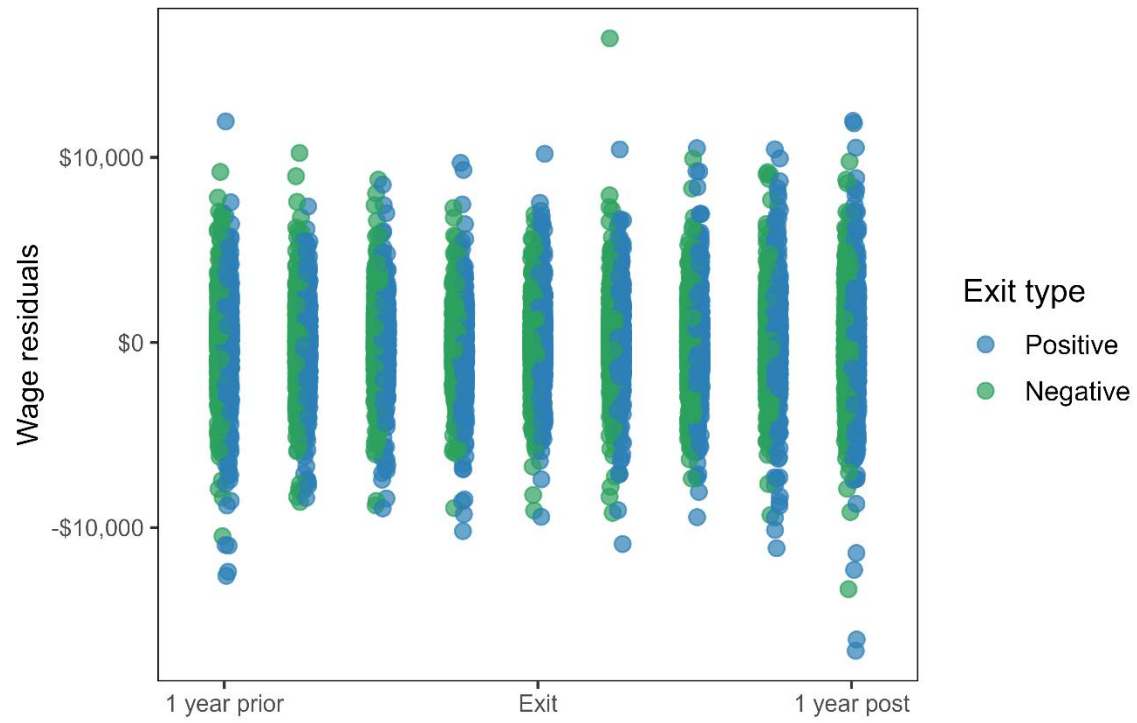


Figure I-1: A residual plot of model estimates over time shows no evidence of autocorrelation

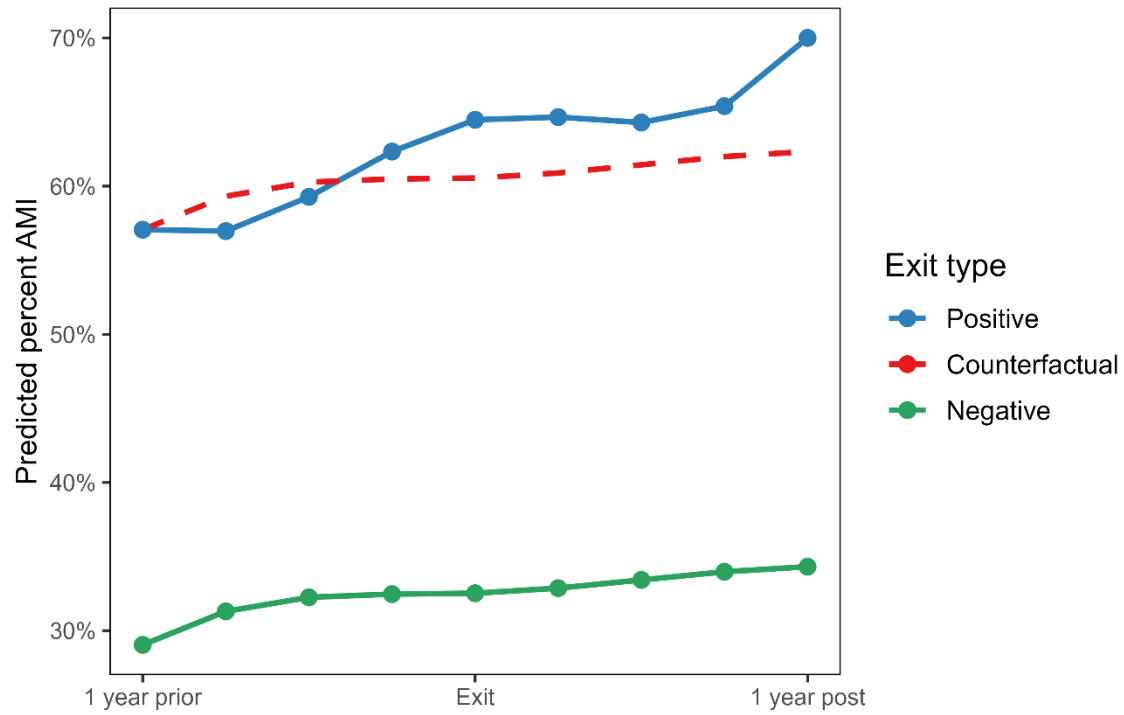


Figure I-2: Mean predictions of percent AMI for those who exited Seattle and King County PHA programs between January 1, 2016 and January 1, 2018

Code

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

Appendix J: References

- Actionable Intelligence for Social Policy. (2015). *Project 50: Ending Chronic Homelessness with Permanent Supportive Housing and Integrated Data Systems*. Retrieved from <https://aisp.upenn.edu/resource-article/project-50-ending-chronic-homelessness-with-permanent-supportive-housing-and-integrated-data-systems/>
- Albertson, E., Chen, R., Matheson, A., Ursua, M., Fliss, M., & Farquhar, S. (2020). Effect of public housing redevelopment on reported and perceived crime in a Seattle neighborhood. *Crime Prevention and Community Safety*, 22, 1–18. <https://doi.org/10.1057/s41300-020-00096-5>
- Ambrose, B. W. (2005). A Hazard Rate Analysis of Leavers and Stayers in Assisted Housing Programs. *Cityscape*, 8(2), 69–93. Retrieved from <http://www.jstor.org/stable/20868593>
- Andersson, F., Haltiwanger, J. C., Kutzbach, M. J., Palloni, G., Pollakowski, H. O., & Weinberg, D. H. (2016). *Childhood Housing and Adult Earnings: A Between-Siblings Analysis of Housing Vouchers and Public Housing*. Retrieved from <https://www.huduser.gov/portal/publications/Childhood-Housing-Adult-Earnings.html>
- Anthony, J. (2005). Family Self-Sufficiency Programs: An Evaluation of Program Benefits and Factors Affecting Participants' Success. *Urban Affairs Review*, 41(1), 65–92. Retrieved from <http://uar.sagepub.com/content/by/year>
- Aratani, Y. (2010). Public housing revisited: Racial differences, housing assistance, and socioeconomic attainment among low-income families. *Social Science Research*, 39(6), 1108–1125. <https://doi.org/https://doi.org/10.1016/j.ssresearch.2010.04.007>
- Arel-Bundock, V. (2022). *marginaleffects: Marginal Effects, Marginal Means, Predictions, and Contrasts*. Retrieved from <https://cran.r-project.org/package=marginaleffects>
- Breslow, N. E. (2005). *Case-Control Studies BT - Handbook of Epidemiology* (W. Ahrens & I. Pigeot, Eds.). https://doi.org/10.1007/978-3-540-26577-1_7
- Brisson, D., & Covert, J. (2015). Housing Instability Risk among Subsidized Housing Recipients: Characteristics Associated with Late or Nonpayment of Rent. *Social Work Research*, 39(2), 119–128. <https://doi.org/10.1093/swr/svv009>
- Centers for Medicare and Medicaid Services. (2022). Chronic Conditions Data Warehouse. Retrieved June 15, 2022, from <https://www2.ccwdata.org/web/guest/condition-categories-chronic>
- Chetty, R., Hendren, N., & Katz, L. F. (2016). The effects of exposure to better neighborhoods on children: New evidence from the moving to opportunity experiment. *The American Economic Review*, 106(4), 855–902. <https://doi.org/10.1257/aer.20150572>
- Cortes, A., Lam, K., & Fein, D. (2008). Household Life Cycle and Length of Stay in Housing Assistance Programs. *Cityscape*, 10(1), 117–156. Retrieved from <http://www.jstor.org/stable/20868645>
- Dantzer, P. A., & Rivera, J. D. (2019). Settling in or moving out? Exploring the effect of mobility intentions on public housing exits. *Housing Studies*, 34(4), 715–733. <https://doi.org/10.1080/02673037.2018.1470229>
- Ellen, I. G., Dragan, K. L., & Glied, S. (2020). Renovating Subsidized Housing: The Impact On Tenants' Health. *Health Affairs*, 39(2), 224-232,232A-232E.

<https://doi.org/http://dx.doi.org/10.1377/hlthaff.2019.00767>

- Employment Security Department, W. S. (n.d.). Occupations Exempted from Unemployment Insurance Coverage. Retrieved August 16, 2022, from <https://esdorchardstorage.blob.core.windows.net/esdwa/Default/ESDWAGOV/employer-Taxes/ESD-exempt-professions-chart.pdf>
- Freeman, L. (2005). Does housing assistance lead to dependency? Evidence from HUD administrative data. *Cityscape*, 115–133.
- Geyer, J., Dastrup, S., & Finkel, M. (2019). Impact of Expanded Choice on Attrition in the Housing Voucher Program. *Cityscape: A Journal of Policy Development and Research*, 21(3), 71–88. Retrieved from <http://offcampus.lib.washington.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ec&AN=1826826&site=ehost-live>
- Gubits, D., Khadduri, J., & Turnham, J. (2009). *Housing Patterns of Low Income Families with Children: Further Analysis of Data From the Study of the Effects of Housing Vouchers on Welfare Families*. Retrieved from <https://www.jchs.harvard.edu/research-areas/working-papers/housing-patterns-low-income-families-children-further-analysis-data>
- Hartig, F. (2022). *DHARMA: Residual Diagnostics for Hierarchical (Multi-Level / Mixed) Regression Models*. Retrieved from <https://cran.r-project.org/package=DHARMA>
- HUD Policy Development & Research. (n.d.). Neighborhood Stabilization Program Data. Retrieved August 16, 2022, from <https://www.huduser.gov/portal/datasets/NSP.html>
- Hungerford, T. L. (1996). The dynamics of housing assistance spells. *Journal of Urban Economics*, 39(2), 193–208. <https://doi.org/10.1006/juec.1996.0010>
- Johnson, C., McHugh, C., & Reimal, E. (2021). *Integrating Data to Better Measure Homelessness*. Retrieved from https://kingcounty.gov/~media/depts/community-human-services/department/documents/KC_DCHS_Cross_Systems_Homelessness_Analysis_Brief_12_16_2021_FINAL.ashx
- Kang, S. (2020). To Whom Do Housing Policies Provide Stable Housing? Examining Housing Assistance Recipients and Leavers. *URBAN AFFAIRS REVIEW*. <https://doi.org/10.1177/1078087420906203>
- Kaspro, W. J., Rosenheck, R. A., Frisman, L., & DiLella, D. (2000). Referral and housing processes in a long-term supported housing program for homeless veterans. *Psychiatric Services (Washington, D.C.)*, 51(8), 1017–1023. <https://doi.org/10.1176/appi.ps.51.8.1017>
- King County Housing Authority. (2022). Subsidized Housing Eligibility. Retrieved from <https://www.kcha.org/housing/subsidized/eligibility>
- King County Procurement and Payables Section. (2021). Living Wage Ordinance - King County. Retrieved August 16, 2022, from <https://kingcounty.gov/depts/finance-business-operations/procurement/about-us/Living-Wage.aspx>
- Kuznetsova, A., Brockhoff, P. B., & Christensen, R. H. B. (2017). lmerTest Package: Tests in Linear Mixed Effects Models. *Journal of Statistical Software*, 82(13 SE-Articles), 1–26. <https://doi.org/10.18637/jss.v082.i13>
- Laurent, A. A., Matheson, A., Escudero, K., & Lazaga, A. (2020). Linking Health and Housing Data to Create

- a Sustainable Cross-Sector Partnership. *American Journal of Public Health*, 110(S2), S222–S224. <https://doi.org/10.2105/AJPH.2020.305693>
- Lubell, J. M., Shroder, M., & Steffen, B. (2003). Work participation and length of stay in HUD-assisted housing. *Cityscape: A Journal of Policy Development and Research*, 6(2), 207–223.
- Martinez, M. (2022). U.S. Housing Cost Burden Declines Among Homeowners but Remains High for Renters. Retrieved June 14, 2022, from <https://www.prb.org/articles/u-s-housing-cost-burden-declines-among-homeowners-but-remains-high-for-renters/>
- McClure, K. (2018). Length of Stay in Assisted Housing. *Cityscape (Washington, D.C.)*, 20(1), 11–38.
- McCinnis, D., Buron, L., & Popkin, S. J. (2007). Metropolitan Housing and Communities Center Are HOPE VI Families at Greater Risk for Homelessness? *Urban Institute*, (7), 1–8.
- Montgomery, A. E., & Cusack, M. (2017). *HUD-VASH Exit Study*. Washington, DC.
- Montgomery, A. E., Cusack, M., Szymkowiak, D., Fargo, J., & O'Toole, T. (2017). Factors contributing to eviction from permanent supportive housing: Lessons from HUD-VASH. *Evaluation and Program Planning*, 61, 55–63. <https://doi.org/10.1016/j.evalprogplan.2016.11.014>
- Newman, S. J., & Harkness, J. M. (2002). The long-term effects of public housing on self-sufficiency. *Journal of Policy Analysis and Management: The Journal of the Association for Public Policy Analysis and Management*, 21(1), 21–43.
- O'Connell, M. J., Kaspro, W., & Rosenheck, R. A. (2008). Rates and risk factors for homelessness after successful housing in a sample of formerly homeless veterans. *Psychiatric Services (Washington, D.C.)*, 59(3), 268–275. <https://doi.org/10.1176/ps.2008.59.3.268>
- Office of Planning & Community Development. (2021). About Seattle. Retrieved from <https://www.seattle.gov/opcd/population-and-demographics/about-seattle>
- Olsen, E. O., Tyler, C. A., King, J. W., & Carrillo, P. E. (2005). The effects of different types of housing assistance on earnings and employment. *Cityscape*, 163–187.
- Public Health - Seattle & King County. (2022). Community Health Indicators: American Community Survey. Retrieved from [https://kingcounty.gov/depts/health/data/community-health-indicators/american-community-survey.aspx?shortname=Median household income](https://kingcounty.gov/depts/health/data/community-health-indicators/american-community-survey.aspx?shortname=Median%20household%20income)
- R Core Team. (2022). *R: A Language and Environment for Statistical Computing*. Retrieved from <https://www.r-project.org/>
- Regional Affordable Housing Task Force. (2019). *Final Report and Recommendations for King County, WA*. King County, WA.
- Richter, F. G.-C., Coulton, C., Urban, A., & Steh, S. (2021). An Integrated Data System Lens Into Evictions and Their Effects. *Housing Policy Debate*, 0(0), 1–23. <https://doi.org/10.1080/10511482.2021.1879201>
- Rohe, W. M., & Kleit, R. G. (1997). From Dependency to Self-Sufficiency: An Appraisal of the Gateway Transitional Families Program. *Housing Policy Debate*, 8(1), 75–108. Retrieved from <http://www.tandfonline.com/loi/rhpd20>
- Rohe, W. M., Webb, M. D., & Frescoln, K. P. (2016). Work Requirements in Public Housing: Impacts on

- Tenant Employment and Evictions. *Housing Policy Debate*, 26(6), 909–927.
<https://doi.org/10.1080/10511482.2015.1137967>
- RStudio Team. (2022). *RStudio: Integrated Development Environment for R*. Retrieved from <http://www.rstudio.com/>
- Sariyar, M., & Borg, A. (2020). *RecordLinkage: Record Linkage Functions for Linking and Deduplicating Data Sets*. Retrieved from <https://cran.r-project.org/package=RecordLinkage>
- Smith, R. E., Popkin, S., George, T., & Comey, J. (2014). What Happens to Housing Assistance Leavers? In *Urban Institute, Jun 2014, 27 pp*. Retrieved from <https://search.proquest.com/books/what-happens-housing-assistance-leavers/docview/1680143054/se-2?accountid=14784>
- Turner, M. A., & Kingsley, G. T. (2008). *Federal Programs for Addressing Low-Income Housing Needs*. Washington, DC.
- U.S. Department of Housing and Urban Development. (2019). *Strategic Plan 2018-2022*. Retrieved from <https://www.hud.gov/sites/dfiles/SPM/documents/HUDSTRATEGICPLAN2018-2022.pdf>
- WA State Department of Labor and Industries. (n.d.). History of Washington State's Minimum Wage. Retrieved August 16, 2022, from <https://lni.wa.gov/workers-rights/wages/minimum-wage/history-of-washington-states-minimum-wage>
- Washington State Health Care Authority. (2020). EPSDT Well-child checkups for your child or teen. Retrieved August 8, 2022, from <https://www.hca.wa.gov/assets/free-or-low-cost/19-0056-epsdt-well-child-checkups.pdf>
- Washington State Health Care Authority. (2022). Delivery System Reform Incentive Payment (DSRIP) Measurement Guide. Retrieved July 25, 2022, from <https://www.hca.wa.gov/assets/program/mtp-measurement-guide.pdf>

APPENDIX F

COLLATERALIZED FUNDS REPORTS

**APENDIX RELATED TO MTW FUNDS PLEDGED AS
COLLATERAL**

MOVING KING COUNTY RESIDNETS 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: 509Total
 - 1-bedroom-43 units
 - 2-bedroom-256 units
 - 3-bedroom-197 units
 - 4-bedroom-11 units
 - 5-bedroom-2 units
 - 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

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)	\$25,959,900
Total Rehab needed (\$65,000/Unit)	\$33,085,000
Add'l Capital in 2021 adjusted for infl	\$9,576,748

bal. outstanding

bal. outstanding

ATTACHMENT B

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.

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 puttable 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

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

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

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
-----	-----	-----
09/2021	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

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
-----	-----	-----
09/2025	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

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
09/2029	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

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, Saeed Hajarizadeh, EVP Administrative Services/Chief Administrative Officer 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 investment purchased with MTW fund 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).

**Saeed
Hajarizadeh**

Digitally signed by Saeed
Hajarizadeh
Date: 2024.02.09 15:08:26
-08'00'

Saeed Hajarizadeh, EVP Administrative Services/ Chief
Administrative Officer

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 : 02/08/2024 04:20 PM

Deposit Accounts


840420	Daily Time Non-Member Int/Non-Int	\$0.00
681084173	Demand Non-Member Interest Bearing	\$318,728.24
	Term Time Ledger Balance	\$0.00
	Term Time Pledged Amount	\$0.00

Advances

Advances	\$8,612,903.25
Letters of Credit	\$0.00
MPF Credit Enhancement	\$0.00
Current FHLB Indebtedness	\$8,612,903.25
Forward Starting Advances	\$0.00
Total FHLB Indebtedness	\$8,612,903.25

100% of the Total FHLB Indebtedness of \$8,612,903.25 must be collateralized by KCHA.

First KCHA pledged the loan between KCHA and MKCRF. This loan currently has an outstanding balance of \$11,405,550.12 but is assigned a market value of \$11,191,593.41. Its Advance Equivalent is 70% of the market value, or \$7,834,115.39.

**eAdvantage**
Collateral

Current Member

Collateral Summary

Data Updated: 02-08-2024 4:24 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	\$11,405,550.12	\$11,191,593.41	\$7,834,115.39	1	70
Total Loans Pledged:	\$11,405,550.12	\$11,191,593.41	\$7,834,115.39	1	

[Export Loans Pledged](#)

As the minimum collateral requirement is \$8,612,903.25 and the Advance Equivalent of the collateralized loan is \$7,834,115.39, there is a collateral gap of \$778,787.86. 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 12/31/2023, the Fair Market Value of the investments was \$2,916,554.90 and the Advance Equivalent \$2,654,064.96. 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	\$2,916,554.90	\$2,654,064.96	3	91
Total Securities/Term Time Pledged:	\$3,000,000.00	\$2,916,554.90	\$2,654,064.96	3	
Securities/Term Time Pledged 					

The Advance Equivalent of \$2,654,064.96 exceeds the collateral gap of \$778,787.86. KCHA considers the amount of MTW funds pledged as collateral to be equal to the collateral gap, or \$778,787.86.

APPENDIX G

ENERGY PERFORMANCE CONTRACT REPORT

2024 - 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	\$ 182,564	\$ -	\$ 182,564	\$ 1,304
150	Paramount House	70	\$ 71,238	\$ -	\$ 71,238	\$ 1,018
152	Briarwood & Lake House	140	\$ 424,188	\$ -	\$ 424,188	\$ 3,030
153	Northridge I & Northridge II	140	\$ 156,904	\$ -	\$ 156,904	\$ 1,121
201	Forest Glen	40	\$ 18,602	\$ -	\$ 18,602	\$ 465
203	College Place & Eastside Terrace	101	\$ 182,115	\$ -	\$ 182,115	\$ 1,803
251	Casa Juanita	80	\$ 87,356	\$ -	\$ 87,356	\$ 1,092
350	Boulevard Manor	70	\$ 66,088	\$ -	\$ 66,088	\$ 944
352	Munro Manor & Yardley Arms	127	\$ 180,009	\$ -	\$ 180,009	\$ 1,417
354	Brittany Park & Riverton Terrace	105	\$ 166,920	\$ -	\$ 166,920	\$ 1,590
401	Valli Kee	115	\$ 88,788	\$ -	\$ 88,788	\$ 772
403	Cascade Apartments	108	\$ 173,561	\$ -	\$ 173,561	\$ 1,607
450	Mardi Gras	61	\$ 50,213	\$ -	\$ 50,213	\$ 823
503	Firwood Circle	50	\$ 74,222	\$ -	\$ 74,222	\$ 1,484
504	Burndale Homes	50	\$ 49,006	\$ -	\$ 49,006	\$ 980
550	Gustaves Manor & Wayland Arms	102	\$ 48,707	\$ -	\$ 48,707	\$ 478
551	Plaza Seventeen	70	\$ 32,856	\$ -	\$ 32,856	\$ 469
552	Southridge House	80	\$ 59,467	\$ -	\$ 59,467	\$ 743
553	Casa Madrona	70	\$ 87,898	\$ -	\$ 87,898	\$ 1,256
Total		1,719	\$ 2,200,701	\$ -	\$ 2,200,701	

2024 - 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	\$ 13,972	\$ 287,154	\$ 301,126	\$ 2,151
105	Park Royal	23	\$ 12,823	\$ 14,781	\$ 27,604	\$ 1,200
150	Paramount House	70	\$ 181	\$ 47,984	\$ 48,165	\$ 688
152	Briarwood & Lake House	140	\$ -	\$ 161,822	\$ 161,822	\$ 1,156
153	Northridge I & Northridge II	140	\$ 6,174	\$ 177,377	\$ 183,551	\$ 1,311
156	Westminster	60	\$ 14,252	\$ -	\$ 14,252	\$ 238
180	Brookside Apartments	16	\$ 12,165	\$ -	\$ 12,165	\$ 760
191	Northwood	34	\$ 16,172	\$ 20,793	\$ 36,965	\$ 1,087
201	Forest Glen	40	\$ -	\$ 54,671	\$ 54,671	\$ 1,367
203	College Place & Eastside Terrace	101	\$ -	\$ 193,223	\$ 193,223	\$ 1,913
210	Kirkland Place	9	\$ 2,265	\$ 4,894	\$ 7,160	\$ 796
213	Island Crest	17	\$ 25,226	\$ 10,000	\$ 35,225	\$ 2,072
251	Casa Juanita	80	\$ 3,768	\$ -	\$ 3,768	\$ 47
290	NorthLake House	38	\$ 19,202	\$ 15,504	\$ 34,706	\$ 913
344	Zephyr	25	\$ 47,840	\$ 9,748	\$ 57,588	\$ 2,304
345	Sixth Place	24	\$ 6,322	\$ 33,042	\$ 39,364	\$ 1,640
350	Boulevard Manor	70	\$ -	\$ 82,306	\$ 82,306	\$ 1,176
352	Munro Manor & Yardley Arms	127	\$ -	\$ 125,910	\$ 125,910	\$ 991
354	Brittany Park, Riverton Terrace, & Pacific Court	105	\$ 7,307	\$ 62,700	\$ 70,006	\$ 667
390	Burien Park	102	\$ 28,184	\$ 34,526	\$ 62,710	\$ 615
401	Valli Kee	115	\$ -	\$ 152,299	\$ 152,299	\$ 1,324
403	Cascade Apartments	108	\$ -	\$ 188,283	\$ 188,283	\$ 1,743
409	Shelcor	8	\$ (4,513)	\$ 3,774	\$ (740)	\$ (92)
450	Mardi Gras	61	\$ 18,342	\$ 35,782	\$ 54,125	\$ 887
467	Northwood Square	24	\$ 8,808	\$ -	\$ 8,808	\$ 367
503	Firwood Circle	50	\$ -	\$ 62,219	\$ 62,219	\$ 1,244
504	Burndale Homes	50	\$ -	\$ 76,529	\$ 76,529	\$ 1,531
550	Gustaves Manor & Wayland Arms	102	\$ 7,063	\$ 42,420	\$ 49,483	\$ 485
551	Plaza Seventeen	70	\$ 25,872	\$ -	\$ 25,872	\$ 370
552	Southridge House	80	\$ 9,885	\$ 22,933	\$ 32,818	\$ 410
553	Casa Madrona	70	\$ 7,027	\$ 47,347	\$ 54,374	\$ 777
Total		2,099	\$ 288,338	\$ 1,968,020	\$ 2,256,358	