



MOVING TO WORK

FY 2020 ANNUAL REPORT



KING COUNTY HOUSING AUTHORITY

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Date: March 30, 2021

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Stephen J. Norman

LETTER FROM THE EXECUTIVE DIRECTOR

The COVID-19 pandemic has starkly demonstrated the importance of housing as a fundamental underpinning for personal and community health. The focus of King County Housing Authority (KCHA) in 2020 has been on keeping residents, program participants, and staff safe; assuring the continued delivery of essential services; and helping to mitigate the impacts of the pandemic and ensuing economic downturn in our region.

KCHA closed its offices in March 2020 and pivoted to teleworking to the maximum extent possible. With all but emergency work orders suspended, public housing field staff shifted to keeping the residents living in our housing safe and healthy — putting particular emphasis on our 30 housing complexes dedicated to seniors and people with disabilities. Community rooms were closed, air circulation systems adjusted, and buildings disinfected seven days a week. Partnering with a wide array of stakeholders — from local school districts to Amazon — KCHA staff from across the agency delivered meals to thousands of families and individuals to enable them to safely shelter in place. Resident Services staff undertook an expansive effort to reach residents by phone, providing the human contact that so many of our residents desperately needed, particularly seniors.

During 2020, KCHA's programs housed more than 15,000 children from low-income families. Faced with the challenges of remote learning and physical distancing, KCHA joined with school districts and local service providers to create all-day learning pods at four of our largest housing complexes. After-school providers at seven other sites transitioned to offering educational support during the school day to support remote learning. This initiative exposed existing inequities in internet access for low-income and BIPOC (Black, Indigenous, and People of Color) communities in our region. This will be an ongoing challenge as we move forward in addressing the region's racial and economic disparities.

Housing Choice Voucher staff also shifted operations to connecting with clients over the phone and internet, prioritizing HQS inspections to get medically at-risk people experiencing homelessness off the street as quickly as possible, and working with landlords to secure homes for additional households and assure ongoing housing stability. By the end of 2020, KCHA's HUD-subsidized programs were serving 16,023 households, 665 more than at the beginning of the year. Among all households entering our federally assisted programs in 2020, 45% were experiencing homelessness or living in temporary or emergency housing immediately prior to entry. Our Housing Choice Voucher Block Grant utilization rate averaged 107% of HUD's baseline.

Despite the challenges of the COVID-19 pandemic, KCHA's construction and maintenance staff continued to focus on the safety and upkeep of our housing. In 2020, \$10.7 million in capital projects that did not require entry into occupied units went forward. These efforts included the substantial

rehabilitation of 193 units at resident turnover, extending the useful life of these apartments by 20 years. KCHA's Real Estate Assessment Center score on inspections conducted before the suspension of activities in early 2020 averaged 90.2, and the overall inventory score stands at 94.0. The occupancy rate for our public housing averaged 99.51% in 2020.

KCHA in 2020 was awarded 461 additional Housing Choice Vouchers targeted to people with special needs, and is working with the region's service delivery systems to assure rapid utilization and alignment with the supportive service streams necessary to assure ongoing housing stability. In support of the region's development pipeline for permanent supportive housing, KCHA project-based Housing Choice Vouchers in two projects this year: the YMCA's New Arcadia development and Catholic Housing Services' Thea Bowman House. New Arcadia is housing 15 youth transitioning out of homelessness, and Thea Bowman will provide permanent supportive housing to 80 individuals formerly experiencing homelessness, including 36 veterans. In partnership with King County, KCHA also purchased the Oaks at Forest Bay, a vacant 45-room nursing home that will open soon as a COVID-19 homeless shelter with a goal to redevelop the property as permanent supportive housing in the future.

KCHA continues to take steps to address the displacement of low-income households living in gentrifying neighborhoods — a trend that is accelerating economic and racial segregation in the region. In 2020, KCHA purchased two additional properties in Bellevue, a community experiencing a rapid expansion of high-paying employment in the technology sector. The purchase of these 144 units will preserve this housing as affordable despite the intense surrounding market pressures. At the end of 2020, KCHA finalized a partnership with Amazon that will help finance these acquisitions and pave the way for the preservation, in total, of 1,000 units of existing housing.

As we move into 2021, our efforts must increasingly be shaped by questions of equity and racial justice. The continuing fallout from the pandemic heightens the urgency of this approach. The Moving to Work program provides KCHA the flexibility to collaborate with communities to determine how we can best deploy federal resources to address local challenges. There is much to be done.

Sincerely,



Stephen Norman
Executive Director

SECTION I

INTRODUCTION

A. OVERVIEW OF SHORT-TERM MTW GOALS AND OBJECTIVES

In 2020, the King County Housing Authority (KCHA) focused on using Moving to Work (MTW) flexibility to adapt to the challenging and rapidly changing environment surrounding the COVID-19 pandemic. In large part due to our MTW status, KCHA was in a strong position to respond to the needs of our lowest-income community members. MTW flexibility enabled KCHA to maintain existing operations while building out new partnerships to serve the community in critical new ways. Throughout the year, KCHA continued to administer federal housing assistance to households facing the greatest barriers to access, expanded the supply of affordable housing, leveraged staff capacity and leadership skills to quickly adopt new ways of administering our programs, connected housing to supportive services, and expanded social impact initiatives that advance positive life outcomes among residents.

In 2020, KCHA:

- **INCREASED THE NUMBER OF EXTREMELY LOW-INCOME HOUSEHOLDS WE SERVE.**

KCHA employed multiple strategies to expand our reach: property acquisitions; the lease-up of new incremental special purpose vouchers; issuing vouchers beyond HUD's Housing Choice Voucher (HCV) baseline; and the continuation of sponsor-based, flexible, and stepped subsidy programs for special populations. Our federally subsidized programs continued to surpass operational goals, allowing us to house 14,370 families in 2020.¹ The occupancy rate for our on-line owned units averaged 99.51% and the utilization rate for our HCV block grant averaged 107% of HUD baseline.

- **INCREASED GEOGRAPHIC CHOICE.**

KCHA continued to use a multi-pronged approach to broaden our residents' geographic choices across King County. Strategies included: use of a six-tier, ZIP Code-based, payment standard system; outreach and engagement efforts by dedicated landlord liaisons; expedited inspections; deposit assistance; targeted new property acquisitions; and project-basing subsidies in high-opportunity communities. By the close of 2020, over 30% of KCHA's HUD-subsidized households with children lived in high- or very high-opportunity neighborhoods, achieving the goal we had set to reach by the

¹ This number does not include the 3,414 port-in vouchers that KCHA administered in 2020.

end of the year. KCHA also continued its partnership with the Seattle Housing Authority (SHA) and a national interdisciplinary research team headed by Harvard economist Raj Chetty to administer the Creating Moves to Opportunity (CMTO) initiative. In 2020, KCHA closed out Phase II of the demonstration, and launched a third phase aimed at identifying the effectiveness of mobility services for households with a voucher looking to make a subsequent move.

- **EXPANDED OUR PORTFOLIO OF HOUSING ALONG EMERGING MASS TRANSIT COORIDORS.**

KCHA continued to actively seek out property acquisitions in strategic areas of King County, including current and emerging high-opportunity neighborhoods and transit-oriented development sites, to ensure that low-income families can access the benefits these areas afford. In 2020, we leveraged below-market financing from Amazon to acquire two properties in Bellevue, Pinewood Village and Illahee Apartments, adding 144 units to our expanding supply of affordable housing. By year's end, KCHA's portfolio had grown to 11,725 units, of which more than half are sited in high-opportunity neighborhoods.

- **FOSTER OPPORTUNITY IN NEIGHBORHOODS WITH HIGH RATES OF POVERTY .**

In 2020, KCHA continued our work to bring opportunity to neighborhoods that are historically underserved and under-resourced, and where the majority of the region's low-income households currently live. KCHA continued to provide community facilities that support youth and family programs across the region. To respond to the heightened demand for resources during the pandemic, KCHA worked closely with nonprofit partners to bring emergency food supplies onsite in under-resourced areas and connected residents to other vital resources.

- **LEVERAGED PARTNERSHIPS THAT ADDRESSED THE MULTI-FACETED NEEDS OF FAMILIES EXPERIENCING HOMELESSNESS IN OUR REGION.**

In 2020, 45% of all households that entered our federally assisted programs were experiencing homelessness or living in temporary or emergency housing immediately prior to receiving KCHA assistance. Our programs serve a diverse population with varying needs: veterans exiting homelessness; individuals with behavioral health needs; people with prior criminal justice system involvement; unaccompanied youth; youth experiencing homelessness or transitioning out of foster care; and families involved with the child welfare system. In 2020, KCHA was awarded new allocations of special purpose vouchers, including: 200 Veterans Affairs Supportive Housing (VASH) vouchers for veterans exiting homelessness; 190 Mainstream vouchers that target non-elderly

people with disabilities, many of whom are experiencing homelessness; and 71 Family Unification Program (FUP) vouchers serving both families and youth involved in the child welfare system who are experiencing or at high risk of homelessness. These additional 461 special purpose vouchers have been a critical resource in expanding our reach during a public health crisis, and in fostering cross-system efforts to combat housing instability and homelessness among some of the most marginalized members of our community.

- **EXPANDED HOUSING ASSISTANCE TO HOUSEHOLDS EXPERIENCING HOMELESSNESS THROUGH INNOVATIVE PROGRAMS.**

Working closely with our service provider partners, KCHA continued to support innovative programs that utilize federal housing resources to address our region's homelessness crisis. In 2020, KCHA worked with Highline College to launch the While in School Housing Program (WISH), a time-limited rental subsidy pilot that supports post-secondary students experiencing homelessness through the duration of their academic program and six months following graduation. KCHA also continued a cross-system collaborative partnership with the Washington State Department of Children, Youth, and Families (DCYF) and Catholic Community Services to provide a scattered-site supportive housing model that serves families with children involved in the child welfare system. Finally, with the addition of 190 new Mainstream vouchers, we were able to expand housing opportunities for non-elderly people with disabilities through KCHA's Housing Access and Services Program (HASP), an almost two-decade partnership with King County's disability systems. Many of those housed through the additional Mainstream vouchers were at high risk of contracting COVID-19. At the end of 2020, the HASP program was housing 2,049 households.

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

More than 15,000 children lived in KCHA's federally subsidized housing during 2020. Our strategies to support these children's academic success are the cornerstone of our efforts to prevent multi-generational cycles of poverty and promote long-term socioeconomic mobility. During the pandemic, these efforts adapted to the challenges of remote learning and physical distancing. KCHA coordinated with after-school providers and local schools to create learning pods at four KCHA sites with high numbers of school-aged children. After-school providers at seven other sites also transitioned to offering some educational support services during the school day to support remote learning. KCHA also launched a new pilot, Neighborhood Early Learning Connectors, a co-designed

program with residents that employs eight resident interns to connect KCHA families to local programming and resources that support healthy child development, while also supporting families to register their young children in pre-school and kindergarten. We continued to collaborate with families, school districts, and local education stakeholders across King County to advance other key outcomes, including housing and classroom stability, increased parental engagement during the pandemic, increased access to quality afterschool programs, and improved high school graduation rates for KCHA youth. To respond to increased food insecurity during the pandemic, KCHA also worked with 10 school districts and a range of nonprofit and public partners to bring no-cost meals and food boxes to families living at subsidized housing sites across King County.

- **SUPPORTED FAMILIES IN GAINING GREATER ECONOMIC INDEPENDENCE .**

During 2020, KCHA assisted 314 Public Housing and HCV households in the Family Self-Sufficiency (FSS) program, with 35 of the families graduating from the program. The FSS program advances families toward economic independence through individualized case management, supportive services, and program incentives including a monthly contribution to an escrow account when a family experiences an increase in earned income. With the onset of the pandemic, the FSS team quickly pivoted to remote services and employed multiple strategies to engage residents, including: conducting regular communication via email, telephone, and video conference; surveying participants on emerging needs and topics; offering one-on-one virtual budgeting sessions; and organizing drive-thru events to distribute face coverings, non-perishable food, and other resources.

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

In 2020, KCHA delayed a number of large capital investments to safeguard resident safety during the pandemic, and instead focused on external site repairs. Even with this shift, KCHA invested more than \$10.7 million in major repairs to our federally subsidized housing stock, ensuring that quality housing options remain available to low-income families for years to come. This investment improved resident safety, reduced maintenance costs and energy consumption, and extended the life expectancy of these affordable homes. The average Real Estate Assessment Center (REAC) score for KCHA's Public Housing inventory inspected in 2020 was 90.2. Our overall inventory score, using the most current rating for each property, is 94.0.

■ **STRENGTHENED OUR MEASUREMENT, LEARNING, AND RESEARCH CAPACITIES.**

In 2020, KCHA continued to leverage our internal capacity for program design and evaluation, and data management and analysis, while also expanding external partnerships that advance our long-term research agenda. We continued implementation of the CMTO mobility study in collaboration with research partners from Harvard, Massachusetts Institute of Technology, Johns Hopkins, and other universities; began a research project with Johns Hopkins to explore the effects of housing assistance on children's health outcomes; initiated a HUD-funded research project with Public Health Seattle-King County to examine health outcomes associated with positive and negative exits from housing assistance; completed a collaboration with the University of Washington to understand the characteristics and experiences of residents moving while using HCV; participated in a HUD-sponsored evaluation of FUP conducted by the Urban Institute; obtained private funding to contract with the Urban Institute to measure outcomes of families in place-based assistance located in high-opportunity areas; and conducted internal assessments of several of our programs. These efforts support the MTW program's mission to pilot and assess new approaches that more effectively and efficiently address local housing needs and interrupt intergenerational cycles of poverty.

■ **CREATED MORE COST-EFFECTIVE PROGRAMS BY STANDARDIZING LEADERSHIP PRACTICES, STREAMLINING BUSINESS PROCESSES, AND LEVERAGING TECHNOLOGY IN CORE BUSINESS.**

KCHA leadership emphasizes a culture of continuous improvement that supports and encourages employees to improve the quality of their work and KCHA's overall operations. During the pandemic, KCHA was able to quickly adjust processes to maintain continuity of operations and provide effective customer service to our residents, landlords, and community partners. KCHA's cross-departmental Virus Response Team (VRT) introduced a number of cost-effective and streamlined processes to maintain operations during the pandemic, including rapid tenant income adjustments, new Housing Quality Standards (HQS) inspection protocols, and modified move-in processes to reduce potential exposure. In 2020, KCHA also leveraged technology to a greater degree to provide core services remotely, including virtual HCV briefings. Flexibilities provided under MTW significantly aided our success in responding to the challenges posed by the pandemic.

■ **REDUCED THE ENVIRONMENTAL IMPACT OF KCHA'S PROGRAMS AND FACILITIES.**

In 2020, KCHA entered the fourth year of our five-year Resource Management Plan. We continue to reduce water and energy use, add to the number of alternatively powered vehicles in our fleet, and

increase solar capacity. KCHA in 2020 added 37.8 kilowatts of solar capacity at Meadows at Lea Hill, bringing agency-wide solar generating capacity to 234.5 kilowatts. KCHA also collaborated with King County's Solid Waste Division to deliver programming to families and youth living in the White Center neighborhood, including: a sustainable gardening program for nearly 100 gardeners; a youth program focused on recycling and reducing household chemicals that reached 225 households; and a family-focused program that taught safe cleaning, recycling, handling of household hazardous waste, and proper food storage practices.

B. OVERVIEW OF LONG-TERM MTW GOALS AND OBJECTIVES

Through our participation in the MTW demonstration program, KCHA is able to address a wide range of affordable housing needs in the Puget Sound region. These goals *all* must be carefully and continuously viewed through an equity lens, assuring that both internal and external policies and practices recognize and address the impact of long-standing systemic and institutional racism on underserved and BIPOC communities. We use the single-fund and regulatory flexibility provided through MTW to support these overarching strategic goals:

- **STRATEGY 1:** Continue to strengthen the physical, operational, financial, and environmental sustainability of our portfolio of more than 11,700 affordable housing units.
- **STRATEGY 2:** Increase the supply of housing in the region that is affordable to extremely low-income households — those earning below 30% of Area Median Income (AMI) — through the development of new housing and the preservation of existing housing, as well as through expansion in the size and reach of our rental subsidy programs.
- **STRATEGY 3:** Affirmatively Further Fair Housing and provide greater geographic choice for low-income households, including residents with disabilities, elderly residents with mobility impairments, and families with young children, so that more of our residents have the opportunity to live in neighborhoods with high-performing schools and convenient access to support services, health care, transit, and employment.
- **STRATEGY 4:** Coordinate closely with behavioral health and other social services systems to increase the supply of supportive housing for people who have experienced chronic homelessness and/or

have special needs, with the goal of making homelessness rare, brief, and one-time in King County.

- **STRATEGY 5:** 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.
- **STRATEGY 6:** Work with King County government, regional transit agencies, and suburban cities to support sustainable and equitable regional development by building or preserving affordable housing in regional growth corridors aligned with current and planned mass transit investments.
- **STRATEGY 7:** Expand and deepen partnerships with our residents, local school districts, Head Start programs, after-school program providers, public health departments, community colleges, and the philanthropic community with the goal of improving educational and life outcomes for the low-income children and families we serve.
- **STRATEGY 8:** 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 at the appropriate time.
- **STRATEGY 9:** Continue to develop institutional capacity and efficiencies at KCHA to make the most effective use of federal resources.
- **STRATEGY 10:** Continue to reduce KCHA's environmental footprint through energy conservation, renewable energy generation, waste stream diversion, green procurement policies, water usage reduction, and fleet management practices.
- **STRATEGY 11:** Develop our capacity as a learning organization that uses research and evaluation to drive decisions that shape policies and programs.

SECTION II

GENERAL HOUSING AUTHORITY OPERATING INFORMATION

A. HOUSING STOCK INFORMATION

i. Actual New Project-based Vouchers

Property Name	Planned Number of Vouchers	Actual Number of Vouchers	Status at end of 2020	RAD?	Description of Project
Juanita View	51	51	Leased	No	Preserving affordable housing for low-income families. KCHA is the project owner and opted-out of a Project-Based Rental Assistance (PBRA) contract with HUD.
Kirkland Heights	106	106	Leased	No	Preserving affordable housing for low-income families. KCHA is the project owner and opted-out of a PBRA contract with HUD.
Vashon Micro Units	8	8	Committed	No	As part of the King County Combined Funders NOFA (originally referenced in KCHA's 2019 MTW Plan), KCHA will provide Project-based Vouchers (PBVs) to provide permanent supportive housing for people with disabilities. This project completed an AHAP contract in 2020 with construction planned to complete in 2021.
New Arcadia	5	5	Leased/Issued	No	PBV combined with supportive services for young adults experiencing homelessness in King County. These vouchers were originally noted as part of KCHA's 2019 MTW Plan.
Highland Village	27	8	Leased/Issued	No	Preserving affordable housing for low-income families. KCHA is the project owner. These vouchers were originally noted as part of KCHA's 2018 MTW Plan. KCHA has decided to project-base eight of the 27 originally planned.
Kent Supportive Housing (now referred to as Thea Bowman Place)	80	80	Leased/Issued	No	Housing for individuals experiencing homelessness: 36 units for veterans, and 44 units for individuals with a disability, including chronic mental illness and substance use. These vouchers were originally noted as part of KCHA's 2018 MTW Plan.
Planned Total Vouchers to be Newly Project-based	277 ²	258			

² KCHA's 2020 MTW Plan noted only 165 planned new vouchers because it did not include Highland Village, New Arcadia, and Kent Supportive Housing, as they were included in prior MTW Plans as noted above.

ii. Actual Existing Project-based Vouchers

See Appendix C for a list of KCHA's existing PBV contracts. In total, KCHA currently project-bases 2,840 vouchers, of which 70% are sited in KCHA-owned properties. All other project-based vouchers are situated in nonprofit-owned properties. These vouchers support the goals of leveraging services to provide permanent supportive housing for people formerly experiencing homelessness, increasing access for extremely low-income households to high-opportunity neighborhoods, and — in partnership with King County — assisting in the financing of a pipeline of new affordable housing by the region's nonprofit housing sector.

iii. Actual Other Changes to the Housing Stock in 2020

In 2020, KCHA purchased Pinewood Village and Illahee Apartments, adding 144 units to our inventory of affordable housing. KCHA also completed the conversion of Kirkland Heights and Juanita View, two properties acquired in 2019, from PBRA contracts with HUD to KCHA-funded PBV assistance. At the end of 2020, KCHA's inventory stood at 11,725 units.

iv. General Description of Actual Capital Fund Expenditures During 2020

KCHA continued to improve the quality and long-term viability of our aging affordable housing inventory by investing more than \$10.7 million in capital repairs, unit upgrades, capital construction, and non-routine maintenance to our HUD-subsidized properties. These investments ensure that our housing stock is well-maintained and livable for years to come. In 2020, KCHA delayed or altered a number of projects in order to maintain resident safety during the pandemic.

- **UNIT UPGRADES (\$4.2 MILLION)**

In 2020, KCHA continued ongoing efforts to significantly upgrade the interiors of our affordable housing inventory as units turn over. KCHA's in-house, skilled workforce performed the renovations, which included installation of new flooring, cabinets, and fixtures that extended the useful life of 193 units by 20 years, including 135 units in our HUD-subsidized inventory.

- **BUILDING ENVELOPE AND RELATED COMPONENTS UPGRADES (\$3.0 MILLION)**

In 2020, the first phase of substantial renovation work planned for the recently acquired Houghton property (Kirkland) was completed. This work included the addition of a second story, which expanded four one-bedroom units into three-bedroom apartments, increasing the site's capacity to accommodate children in this high-opportunity neighborhood. KCHA installed new roofs at Northlake House (Bothell) and Hidden Village (Bellevue). At Pacific Court (Tukwila), KCHA replaced

all envelope components, including siding, windows, doors, and roofs. New soffits were installed at Casa Madrona (Olympia). Due to the pandemic, KCHA postponed the envelope work at Kirkland Place (Kirkland), which would have required entry into each unit, until 2021.

- **SYSTEMS (HEATING, SEWER, ELECTRICAL, DRAINAGE, SPRINKLER) IMPROVEMENTS (\$1.1 MILLION)**

KCHA delayed the planned lining of the sewers at Casa Madrona (Olympia), Westminster (Shoreline), and Yardley Arms (Burien) until 2021. These projects require both entry into a number of resident units and temporary water shutoffs, both of which presented unreasonable impacts on residents during the pandemic. All three of these properties house people with disabilities and elderly residents. At Munro Manor (Burien), KCHA completed only the lines running outside of the building in order to avoid unit entry. At Casa Juanita (Shoreline), a break in a main sewer line resulted in an emergency repair and lining of the sewer system in 2020. At Casa Madrona, the failure of the domestic hot water heaters, pumps, and boilers required emergency replacement to components of the heating system. KCHA rescheduled to at least 2021 (post-pandemic) the replacement of the in-unit radiators in the hydronic heat systems at Casa Madrona and Mardi Gras (Kent), as well as planned electrical upgrades at Pacific Court (Tukwila) and Wayland Arms (Auburn).

- **“509” INITIATIVE IMPROVEMENTS (\$1.4 MILLION)**

Planned improvements to the inventory included in the 2013 conversion of 509 scattered-site Public Housing properties continued in 2020. At Avondale Manor (Redmond), KCHA improved site drainage, and the parking lot, curbs, and gutters. Sidewalks were replaced and parking areas repaved at Cedarwood (Kirkland). The sewer line replacement project at Young’s Lake (Renton), which also involved complete upgrades of unit interiors, and site improvements at Evergreen Court (Federal Way) also were completed.

- **OTHER COMPLETED PROJECTS (\$1 MILLION)**

Project delays due to the pandemic left funding and staff capacity available to complete additional capital work not requiring interior unit access. KCHA made structural repairs to six buildings at Ballinger Homes (Shoreline) and painted all buildings at the 262 unit Birch Creek Apartments (Kent). KCHA re-roofed three buildings at Spiritwood Manor (Bellevue) and addressed an emerging site drainage issue at Paramount House (Shoreline). KCHA staff also worked to reconfigure offices and

installed safety measures at multiple properties to safeguard staff and resident safety during the pandemic.

B. LEASING INFORMATION

i. Actual Number of Households Served³

Over the course of 2020, KCHA served 14,370 households through a combination of our traditional federal housing programs, Public Housing and HCV, and locally designed non-traditional programs. These local, non-traditional programs included: programs targeting people experiencing homelessness through KCHA's sponsor-based supportive housing model; stepped rent for young adults; and short-term rental assistance targeting school-aged children and their families, and community college students experiencing homelessness through the use of time-limited tenant-based vouchers.

Number of Households Served Through:	Number of Unit Months Occupied/Leased		Number of Households Served	
	Planned	Actual	Planned	Actual
MTW Public Housing Units Leased	32,400	30,552	2,700 ⁴	2,546
MTW Housing Choice Vouchers (HCV) Utilized	123,600	140,196	10,300 ⁵	11,683 ⁶
Local, Non-traditional: Tenant-based	2,640	1,692	220	141
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	158,640	172,440	13,220	14,370

Local, Non-traditional Category	MTW Activity Number/Name	Number of Unit Months Occupied/Leased		Number of Households Served	
		Planned	Actual	Planned	Actual
Tenant-based	Activity 2014-1: Stepped-down Assistance for Homeless Youth	300	180	25	15
Tenant-based	Activity 2013-2: Flexible Rental Assistance	1,200	480	100	40
Tenant-based	Activity 2007-6: Develop a Sponsor-based Housing Program	1,140	1,032	95	86
Planned/Actual Totals		2,640	1,692	220	141⁷

³ These numbers reflect a cumulative count of the total number of households served between January 1 and December 31, 2020. This number does not include the 3,414 port-in vouchers that we administered in 2020.

⁴ The number of planned households served of 2,700 was included in the 2020 MTW Plan, but this number overestimated turnover in the program. Future reports and plans will reflect a lower number of planned households served.

⁵ KCHA previously had projected this number as a point in time, which does not capture the dynamics of turnover and port-out voucher absorption that take place over the course of a year.

⁶ This number includes both block grant and special purpose voucher households.

⁷ The pandemic posed substantial challenges to leasing in KCHA's local non-traditional programming. As these programs rely on in-person referrals and contacts, the remote operations of schools and community colleges constrained program staff's ability to engage with potential participants. See "Description of Any Issues and Solutions Related to Leasing" and corresponding updates for each Activity below and in Section IV.

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 2020.
Housing Choice Vouchers (HCV)	<p>King County continues to have one of the most competitive rental markets in the nation. Despite these market conditions and unique challenges posed by the pandemic, KCHA maintained a shopping success rate of 75% in 2020 because of the innovative policies, practices, and additional supports we have put into place to aid voucher holders in leasing up. KCHA continued use of a ZIP Code-based payment standard system that more closely matches area submarkets, reducing economic barriers to housing in high-opportunity neighborhoods. We also continued to provide deposit assistance to searching households. The assignment of HCV staff caseloads by ZIP Code provided landlords with a single and consistent point of contact that improved customer service and satisfaction.</p> <p>The pandemic added to the challenges of serving households in 2020. While KCHA transitioned to administering the program remotely, program staff also implemented a number of changes to assist residents in maintaining their housing during the pandemic, including: increased use of technology and introduction of paperless processes; allowing income reporting changes until the last day of the month; weighing all verifications equally; and allowing HQS self-certifications and video inspections.</p>
Local, Non-traditional	The pandemic posed substantial challenges to administering our flexible rental assistance program in 2020. With schools and college campuses closed, engagement with students, their families, and school-based staff was severely constrained. In the Student and Family Stability Initiative (SFSI) program, more than 75% of participating families lost income during the pandemic. To help offset these challenges, KCHA and our partners have implemented a series of programmatic changes to meet the needs of families and post-secondary students. KCHA also has launched a qualitative research study to center consumer-driven perspective as we continue to shape KCHA's approach to providing short-term rental assistance through the SFSI and While In School Housing (WISH) programs.

C. WAIT LIST INFORMATION

i. Waiting List Information at End of 2020

Waiting List Name	Description	Number of Households on Waiting List	Waiting List Open, Partially Open, or Closed	Was the Waiting List Opened During 2020?
Housing Choice Voucher	Community-wide	2,465	Closed	Yes ⁸
Public Housing	Other: Regional	8,039	Open	Yes
Public Housing	Site-based	7,930	Open	Yes
Project-based	Other: Regional	4,600	Open	Yes
Public Housing - Conditional Housing	Program-specific	32	Open	Yes

ii. Changes to the Waiting List in 2020

KCHA did not make any changes to our waiting lists in 2020.

⁸ In total, KCHA received over 20,000 applications for assistance for 2,500 available spaces.

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 2020
50% to 80% Area Median Income	1
30% to 49% Area Median Income	12
Below 30% Area Median Income	57

ii. Maintain Comparable Mix

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 2020.

Mix of Family Sizes Served⁹

	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 2020	6,408	3,272	1,801	1,252	732	764	14,229

⁹ This table does not include 141 households served through KCHA's local, non-traditional programs.

Percentages of Households Served in 2020	45.03%	23.00%	12.66%	8.80%	5.14%	5.37%	100.00%
Percentage Change	10.98%	-0.62%	-4.09%	-3.52%	-1.70%	-1.05%	

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 that HUD has made available. A large portion of these vouchers target veterans exiting homelessness and households headed by a person with a disability — populations largely comprised of single adults. According to the most recent point-in-time count in King County, more than 57% of individuals experiencing homelessness were living in single adult households.¹⁰ KCHA's family mix has shifted accordingly over time.

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

In 2020, 260 households in KCHA's federally subsidized housing programs achieved self-sufficiency milestones, including 174 who left KCHA programs and 86 who established stable housing after exiting homelessness or incarceration.

Activity Name/#	Number of Households Transitioned	Agency Definition of Self-sufficiency
Stepped-down Assistance for Homeless Youth (2014-1)	9	Maintain housing
Passage Point Re-entry Housing Program (2013-1)	7	Positive move to Public Housing or other independent housing
EASY & WIN Rent (2008-10, 2008-11)	174	Positive move from KCHA to unsubsidized housing
Develop a Sponsor-based Housing Program (2007-6)	70	Maintain housing
Households Duplicated Across Activities/Definitions	0	
ANNUAL TOTAL NUMBER OF HOUSEHOLDS TRANSITIONED TO SELF-SUFFICIENCY	260	

¹⁰ Count Us In 2020: Seattle/King County Point-in-Time Count of Persons Experiencing Homelessness. https://regionalhomelesssystem.org/wp-content/uploads/2020/07/Count-Us-In-2020-Final_7.29.2020.pdf

SECTION III

PROPOSED MTW ACTIVITIES

New activities are proposed in the annual MTW Plan.

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	Acquire and Develop New Affordable Housing	Housing Choice	19
2018-1	Encouraging the Successful Lease-up of the Housing Choice Voucher Program	Housing Choice	20
2016-2	Conversion of Former Opt-out Developments to Public Housing	Cost-effectiveness	21
2015-2	Reporting on the Use of Net Proceeds from Disposition Activities	Cost-effectiveness	22
2014-1	Stepped-down Assistance for Homeless Youth	Self-sufficiency	23
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	27
2009-1	Project-based Section 8 Local Program Contract Term	Housing Choice	28
2008-1	Acquire New Public Housing	Housing Choice	29
2008-10 & 2008-11	EASY and WIN Rent Policies	Cost-effectiveness Self-sufficiency	30
2008-21	Public Housing and Housing Choice Voucher Utility Allowances	Cost-effectiveness	32
2007-6	Develop a Sponsor-based Housing Program	Housing Choice	33
2007-14	Enhanced Transfer Policy	Cost-effectiveness	34
2005-4	Payment Standard Changes	Housing Choice	35
2004-2	Local Project-based Section 8 Program	Cost-effectiveness Housing Choice	37
2004-3	Develop Site-based Waiting Lists	Cost-effectiveness Housing Choice	40
2004-5	Modified Housing Quality Standards (HQS) Inspection Protocols	Cost-effectiveness	41
2004-7	Streamlining Public Housing and Housing Choice Voucher Forms and Data Processing	Cost-effectiveness	43
2004-9	Rent Reasonableness Modifications	Cost-effectiveness	44
2004-12	Energy Performance Contracting	Cost-effectiveness	45
2004-16	Housing Choice Voucher Occupancy Requirements	Cost-effectiveness	46

ACTIVITY 2019-1: ACQUIRE AND DEVELOP NEW AFFORDABLE HOUSING

MTW STATUTORY OBJECTIVE: Increase Housing Choice

APPROVAL: 2019

IMPLEMENTED: 2019

CHALLENGE: King County continues to experience extraordinary population growth. With escalating rents — especially in historically more affordable neighborhoods — and the failure of wages to keep pace with rising housing costs, many families are struggling to pay rent and an unprecedented number are experiencing homelessness. A recent report estimates that over the last decade, King County has lost more than 112,000 units of housing affordable to households earning less than 80% of AMI.¹¹

SOLUTION: KCHA's primary mission is to preserve and expand housing options for low-income families utilizing all available funding and financing tools. To expand existing efforts, we are leveraging MTW funds to support the development or acquisition of non-federally subsidized affordable housing that includes, but is not limited to, properties also leveraging Low Income Housing Tax Credits (LIHTC). 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 these projects. This financing gap can be addressed in whole or in part by using MTW funds for development, acquisition, financing, or renovation costs, in accordance with PIH Notice 2011-45. We anticipate that such funding may be structured as an internal loan or as an equity contribution to the development.

PROGRESS AND OUTCOMES: KCHA did not use any MTW funds to support our development activities in 2020.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase Housing Choice	HC #1: Additional units of housing made available	0 units	168 units	0 units	In Progress

¹¹ Why does prosperous King County have a homelessness crisis? January 22, 2020. McKinsey & Company. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/why-does-prosperous-king-county-have-a-homelessness-crisis#>.

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 rental vacancy rate, currently at a historic low, 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.

SOLUTION: KCHA is working to preserve and increase the number of housing options available by recruiting and retaining landlords in the HCV program. In order to secure units, KCHA is exploring the implementation of incentive payments to landlords who agree to lease a recently vacated unit to another voucher holder, in an amount not to exceed one month of the Housing Assistance Payment (HAP). These payments will serve as an incentive for landlords to continue their participation in the HCV program by minimizing the owner's losses typically experienced during turnover. KCHA also streamlines our HQS protocol even further by allowing landlords to inspect and self-certify that the unit passes HUD's standards. A full description of the MTW-modified HQS inspection protocol can be found in Activity 2004-5: Modified Housing Quality Standards (HQS) Inspection Protocols.

In addition to strategies to improve landlord recruitment and retention, KCHA continues 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 landlord customer service. During 2020, KCHA also completed Phase II of the CMTO demonstration project, which tested new strategies that assist families with young children to access and move to high-opportunity neighborhoods. We are in the process of identifying ways to incorporate proven strategies into regular operations.

PROGRESS AND OUTCOMES: In 2020, KCHA's shopping success rate was 75% at 240 days of searching.

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

Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours ¹²	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	75% 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.

SOLUTION: This policy allows KCHA to convert entire project-based Section 8 opt-out properties to Public Housing at once. Under current federal guidelines, units convert only when the original resident moves out with a voucher. This transition is gradual, and at properties that house seniors or people with disabilities, turnover of units tends to be especially slow. 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.

This activity builds on KCHA’s previously approved initiative (2008-1) to expand housing through use of banked Public Housing annual contributions contract (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 transition to Public Housing subsidy, current enhanced voucher participants retain protections against future rent increases in much the same manner as previously provided. As Public Housing residents, these households pay an affordable rent (based on policies outlined in KCHA’s Public Housing Admissions and Continued Occupancy Policy [ACOP]) and therefore remain protected from a private owner’s decision to increase the contract rent. At the same time, KCHA’s MTW-enhanced Transfer Policy ensures that former enhanced voucher recipients retain the same (if not greater) opportunity for

¹² This activity does not save staff hours or other resources.

mobility by providing access to transfer to other subsidized units within KCHA's portfolio or using a general HCV should 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) in order to ensure the development's seamless transition to the Public Housing program.

PROGRESS AND OUTCOMES: No conversions to Public Housing were made during 2020.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$1,320 ¹³ saved	Estimated \$1,320 saved	Achieved
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	40 hours saved	Estimated 40 hours saved	Achieved

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

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness

APPROVAL: 2015

IMPLEMENTED: 2016

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 net proceeds from our 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.

¹³ This figure was calculated by multiplying the median hourly wage and benefits (\$33) of staff who oversee this activity by the number of hours saved. The number is a monetization of the hours saved through the implementation of this program.

3. Provision of social services for residents.
4. Implementation of a preventative and routine maintenance strategy for specific single-family scattered-site ACC units.
5. Modernization of a portion of a residential building in our inventory to develop a recreation room, laundry room, or day-care facility for residents.
6. Leveraging of proceeds in order to partner with a private entity for the purpose of developing mixed-finance Public Housing under 24 CFR 905.604.

We report on the proceeds' uses, including administrative and overhead costs, in the MTW reports. The net proceeds from this project are estimated to be \$5 million.

PROGRESS AND OUTCOMES: KCHA did not use any net proceeds in 2020.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	Estimated \$11,840 ¹⁴ saved	Estimated \$11,840 saved	Achieved
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	Estimated 160 hours saved	Estimated 160 hours saved	Achieved

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

MTW STATUTORY OBJECTIVE: Increase Self-sufficiency

APPROVAL: 2014

IMPLEMENTED: 2014

CHALLENGE: During the January 2020 point-in-time homeless count in King County, 955 unaccompanied youth and young adults were identified as experiencing homelessness or an unstable housing situation.¹⁵ Local service providers have identified the need for a short-term, gradually diminishing rental subsidy structure to meet the unique needs of these youth.

SOLUTION: KCHA has implemented a flexible, “stepped-down” rental assistance model in partnership with local youth service providers. Our provider partners find that a short-term rental subsidy, paired with supportive services, is the most effective way to serve youth experiencing homelessness, as a

¹⁴ This figure was calculated by multiplying the median hourly wage and benefits (\$74) of the staff member who oversees this activity by the number of hours saved. This number represents a hypothetical estimate of the dollar amount that could be saved in staff hours by implementing this activity.

¹⁵ Count Us In 2020: Seattle/King County Point-in-Time Count of Individuals Experiencing Homelessness.
https://regionalhomelesssystem.org/wp-content/uploads/2020/07/Count-Us-In-2020-Final_7.29.2020.pdf.

majority of them do not require extended tenure in a supportive housing environment. By providing limited-term rental assistance and promoting graduation to independent living, more youth can be served effectively. KCHA is partnering with Valley Cities Counseling and Consultation to operate the Coming Up initiative. This program offers independent housing opportunities to young adults (ages 18 to 25) who are either exiting homelessness or currently living in service-rich transitional housing. With support from the provider, participants move into housing in the private rental market, sign a lease, and work with a resource specialist who prepares them to take over the lease after a period of being stabilized in housing.

PROGRESS AND OUTCOMES: During 2021, the Coming Up Program will transition from sponsor-based to project-based vouchers. The sponsor has identified a property owner who is willing to provide all 22 units of a large apartment complex centrally located near local healthcare centers, public transportation, and local amenities, which will help support more efficient service delivery. With this shift, we anticipate that utilization rates will increase and be sustained with the availability of units under a project-based HAP contract.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase self-sufficiency	SS #1: Average earned income of households affected by this policy	\$0/month	\$200/month	\$985.30/month	Exceeded
Increase self-sufficiency	SS #3: Employment status for heads of household	(1) Employed Full-time 0 participants	4 participants	5 participants	Partially Achieved
		(2) Employed Part-time 0 participants	7 participants	2 participants	
		(3) Enrolled in an Educational Program 0 participants	4 participants	0 participants	
		(4) Enrolled in Job-training Program 0 participants	1 participant	0 participants	
		(5) Unemployed 0 participants	0 participants	0 participants	
		(6) Other 0 participants	0 participants	3 participants	
Increase self-sufficiency	SS #5: Number of households receiving services	0 households	25 households	15 households	Partially Achieved
Increase self-sufficiency	SS #7: Tenant rent share	0 households	7 households paying \$200 or more toward contract rent	7 households paying \$200 or more toward contract rent	Achieved

Increase self-sufficiency	SS #8: Households transition to self-sufficiency ¹⁶	0 households	14 households	9 households	Partially Achieved
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ACTIVITY 2014-2: Revised Definition of “Family”

MTW STATUTORY OBJECTIVE: Increase Housing Choice

APPROVAL: 2014

IMPLEMENTED: 2014

CHALLENGE: According to the January 2020 point-in-time count, 3,743 individuals experiencing homelessness in King County were in families with children.¹⁷ Thousands more seniors and people with disabilities, many with severe rent burdens, are experiencing homelessness or on our waiting lists.

SOLUTION: This policy directs KCHA’s limited resources to populations facing the greatest need: elderly and near-elderly households; households with people with disabilities; and families with minor children. We modified the eligibility standards outlined in the Public Housing ACOP and HCV Administrative Plans to limit eligible households to those that include at least one senior or person with a disability, or a minor/dependent child. The current policy affects only admissions and does not affect the eligibility of households currently receiving assistance. Exceptions are made for participants in programs that target specialized populations, such as victims of domestic violence or individuals who have experienced chronic homelessness.

PROGRESS AND OUTCOMES: KCHA continued to apply this policy to new applicants, sustaining a reduced HCV wait list time of 22 months.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase housing choices	HC #3: Average applicant time on HCV wait list (in months)	29 months	25 months	22 months ¹⁸	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

¹⁶ “Self-sufficiency” for this activity is defined as securing and maintaining housing.

¹⁷ Count Us In 2020: Seattle/King County Point-in-Time Count of Individuals Experiencing Homelessness.

https://regionalhomelessnessystem.org/wp-content/uploads/2020/07/Count-Us-In-2020-Final_7.29.2020.pdf.

¹⁸ This represents the average amount of time between application and voucher issuance for households who were selected from the 2017 waiting list opening, which was exhausted during 2020.

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

MTW STATUTORY OBJECTIVE: Increase Housing Choice

APPROVAL: 2013

IMPLEMENTED: 2013

CHALLENGE: In 2020, 1,319 individuals in King County returned to the community after a period of incarceration.¹⁹ Nationally, more than half of all inmates are parents who will face barriers to securing housing and employment upon release due to their criminal record or lack of job skills.²⁰ 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 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 provides property management and supportive services. The YWCA performs outreach to prisons and correctional facilities to identify eligible individuals. In contrast to typical transitional housing programs that have strict 24-month occupancy limits, Passage Point participants may remain in place until they have completed the family reunification process, are stabilized in employment, and can demonstrate their ability to succeed in a less service-intensive environment. Passage Point participants who complete the program and regain custody of their children may apply to KCHA's Public Housing program and receive priority placement on the wait list.

PROGRESS AND OUTCOMES: In 2020, 48 families lived at Passage Point and participated in services there. By the end of the year, seven of these families had graduated to permanent housing.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #4: Amount of funds leveraged in dollars	\$0	\$500,000	\$780,242	Exceeded
Increase housing choices	HC #5: Number of households able to move to a better unit ²¹	0 households	40 households	48 households	Exceeded
Increase housing choices	HC #7: Number of households receiving services aimed to increase housing choice	0 households	40 households	48 households	Exceeded

¹⁹ Washington State Department of Corrections. Number of Prison Releases by County of Release. <https://www.doc.wa.gov/docs/publications/reports/200-RE001.pdf>.

²⁰ Glaze, L E and Maruschak, M M (2008). Parents in Prison and Their Minor Children. <http://www.bjs.gov/index.cfm?ty=pbdetail&iid=823>

²¹ "Better unit" is defined as stable housing.

Increase self-sufficiency	SS #1: Average earned income of households affected by this policy	\$0	\$3,584	\$6,828	Exceeded
		(1) Employed Full-time			
		0	15	12	
		(2) Employed Part-time			
		0	15	12	
		(3) Enrolled in an Educational Program			
Increase self-sufficiency	SS #3: Employment status for heads of household	0	15	9	Partially Achieved
		(4) Enrolled in Job Training Program			
		0	12	2	
		(5) Unemployed			
		0	0	11	
		(6) Other: engaged in services			
		0	0	10	
Increase self-sufficiency	SS #8: Number of households transitioned to self-sufficiency ²²	0 households	5 households	7 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 low-income individuals facing distinct housing crises. In many of these cases, a short-term rental subsidy paired with responsive, individualized case management can help a family out of a crisis situation and into safe and stable housing.

SOLUTION: This activity, developed with local service providers, offers tailored flexible housing assistance to families and individuals in crisis. KCHA provides flexible financial assistance, including time-limited rental subsidy, security deposits, rent arrears, and funds to cover move-in costs, while our partners provide individualized support services. The Student and Family Stability Initiative (SFSI) pairs short-term rental assistance with housing navigation and employment services for families experiencing

²² "Self-sufficiency" in this activity is defined as graduating to Public Housing or other independent housing.

or on the verge of homelessness. School-based McKinney-Vento liaisons identify and connect the families with community-based service providers, while caseworkers have the flexibility to determine the most effective approach to quickly stabilize the families in housing. In 2020, KCHA also worked with partners at Highline College to launch While in School Housing (WISH), a time-limited rental subsidy program using tenant-based vouchers to support students through the duration of their academic program and six months following graduation.

PROGRESS AND OUTCOMES: The pandemic contributed to substantial challenges of administering our flexible rental assistance programs in 2020. With schools and college campuses closed, engagement with students, their families, and school-based staff were severely constrained. In the SFSI program, more than 75% of participating families lost income during the pandemic. To help offset these challenges, KCHA and our partners have implemented a series of programmatic changes to meet the needs of families. KCHA also has launched a qualitative research study to center consumer-driven perspective as we continue to shape KCHA's approach to providing short-term rental assistance through the SFSI and WISH programs.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase housing choices	HC #5: Number of households able to move to a better unit	0 households	100 households	40 households	Partially Achieved
Increase housing choices	HC #7: Number of households receiving services aimed to increase housing choice	0 households	150 households	64 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: Prior to 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 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 sufficient cash flow to take on the debt necessary to develop or acquire affordable housing units.

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

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$880 saved	\$880 saved per contract ²³	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: In King County, 40% of households earning less than 80% of AMI pay more than 50% of their income each month on rent and utilities. For the lowest income families in our region, those earning less than 30% of AMI, a staggering 65% are paying more than half of their income on rent.²⁴ In the context of these challenges, KCHA's Public Housing wait lists continue to grow. Given the gap between available affordable housing and the number of low-income renters, KCHA must continue to increase the inventory of units affordable to extremely low-income households.

SOLUTION: KCHA's Public Housing 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

²³ 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.

²⁴ 2018 one-year American Community Survey estimates.

cannot support debt. We continued our innovative use of MTW working capital, with a particular focus on the creation or preservation of units in high-opportunity neighborhoods.²⁵

We further simplify the acquisition and addition of units to our Public Housing inventory by collaborating with the local HUD field office to streamline the information needed to add these units to the Public and Indian Housing Information and Resource Center 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.²⁶

PROGRESS AND OUTCOMES: KCHA did not convert any units to Public Housing in 2020.

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

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

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness and Self-sufficiency

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 and 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

²⁵ Neighborhood opportunity designations are from the Puget Sound Regional Council and Kirwan Institute's Opportunity Mapping index (<https://www.psrc.org/opportunity-mapping>).

²⁶ Some Public Housing units might be designated MTW Neighborhood Services units in 2021 upon approval from the HUD field office.

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 are able to 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 time period without an accompanying increase to the tenant's share of 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 are able to pay a lower rent or, in some cases, receive a credit payment. Following this period, a WIN Rent household pays a minimum rent of \$25 regardless of income calculation.

In addition to changes to the recertification cycle, we also have streamlined processing and reviews. For example, we limit the number of tenant-requested reviews to reduce 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 6,200 hours in 2020. In response to the pandemic, KCHA introduced temporary changes to our rent policy to include: allowing tenants to report income changes until the last day of the month; weighing all income verifications equally;

allowing pandemic-related decreases in rent to take effect the first day of the month following the date income decreased (rather than the first day of the month following the day reported).

MTW Statutory Objective	Unit of Measurement	Baseline ²⁷	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$116,787 saved ²⁸	\$207,273 saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	3,000 HCV staff hours saved; 450 PH staff hours saved	4,997 HCV staff hours saved; 1,284 PH staff hours saved	Exceeded
Increase self-sufficiency	SS #1: Average income of households (EASY)	HCV: \$10,617 PH: \$10,514	2% increase	HCV: \$12,772 PH: \$11,986	Exceeded
Increase self-sufficiency	SS #1: Average earned income of households (WIN)	HCV: \$7,983 PH: \$14,120	3% increase	HCV: \$21,898 PH: \$23,367	Exceeded
Increase self-sufficiency	SS #8: Households transition to self-sufficiency ²⁹	0 households	25 households	174 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 would spend an estimated \$23,600 in additional staff time to administer utility allowances under HUD’s one-size-fits-all national guidelines. HUD’s national approach fails 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 universal methodology that reflects local consumption patterns and costs. Before this policy change, allowances were calculated for each individual unit and household type with varied rules under the HCV and Public Housing programs. Additionally, HUD required an immediate update of the allowances with each cumulative 10% rate increase made by utility companies. Now, KCHA provides allowance adjustments annually when the Consumer Price Index produces a change (decrease or increase) of more than 10% rather than each time an adjustment is made to the utility equation. We

²⁷ 2010 earned income baseline from Rent Reform Impact Report, John Seasholtz.

²⁸ This figure was calculated by multiplying the median hourly wage and benefits (\$33) of the staff members who oversee this activity by the number of hours saved. This number is a monetization of the hours saved through the implementation of this program.

²⁹ “Self-sufficiency” is defined as a positive move from subsidized housing.

examined data from a Seattle City Light study completed in 2009, which allowed us to identify key factors in household energy use and project average consumption levels for various types of units in the Puget Sound region. We used this information to set a new utility schedule that considers various factors: type of unit (single vs. multi-family); size of unit; high-rise vs. low-rise units; and the utility provider. We also modified allowances for units where the resident pays water and/or sewer charges. KCHA's Hardship Policy, adopted in July 2010, allows KCHA to respond to unique household or property circumstances and documented cases of financial hardship, including utility rate issues.

PROGRESS AND OUTCOMES: KCHA continued to set utility allowances to the streamlined regional utility schedule, allowing us to save more than 300 hours of staff time in 2020.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$22,116 saved ³⁰	\$24,396 saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	291 hours saved	321 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 Public Housing file	2.5 minutes saved per HCV file and 5 minutes saved per Public Housing file	2.5 minutes saved per HCV file and 5 minutes saved per Public Housing 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 January 2020 point-in-time count in King County, 11,751 individuals were experiencing homelessness.³¹ Of those, 3,355 people were experiencing chronic homelessness. Many people who experience chronic homelessness require additional support, beyond rental subsidy, to secure and maintain a safe and stable place to live.

³⁰ This figure was calculated by multiplying the median hourly wage and benefits (\$76) of the staff member who oversees this activity by the number of hours saved. The number is a monetization of the hours saved through the implementation of this program.

³¹ Count Us In 2020: Seattle/King County Point-in-Time Count of Individuals Experiencing Homelessness. https://regionalhomelesssystem.org/wp-content/uploads/2020/07/Count-Us-In-2020-Final_7.29.2020.pdf.

SOLUTION: In the sponsor-based housing program, KCHA provides housing funds directly to our behavioral health care partners, including Sound, Navos Mental Health Solutions, and Valley Cities Counseling and Consultation. These providers use the funds to secure private market rentals that are then subleased to program participants. The programs operate under the “Housing First” model of supportive housing, which couples low-barrier placement in permanent, scattered-site housing with intensive, individualized services that help residents maintain long-term housing stability. Recipients of this type of support are referred through the mental health system, street outreach teams, and 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: In 2020, we continued to serve populations facing the greatest barriers to housing stability through a Housing First model that coordinates across the housing, behavioral health, and homeless systems. The program remained fairly stable in 2020, with some limitations on the sponsor’s ability to meet with clients in their units, as well as securing new units to lease with rental offices being closed to the public.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase housing choices	HC #1: Number of new units made available for households at or below 80% AMI	0 units	95 units	95 units	Achieved
Increase housing choices	HC #5: Number of households able to move to a better unit	0 households	95 households	86 households	Partially Achieved
Increase self-sufficiency	SS #5: Number of households receiving services aimed to increase self-sufficiency	0 households	95 households	86 households	Partially Achieved
Increase self-sufficiency	SS #8: Number of households transitioned to self-sufficiency ³²	0 households	90 households	70 households	Partially Achieved

ACTIVITY 2007-14: Enhanced Transfer Policy

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness
APPROVAL: 2007

³² “Self-sufficiency” for this activity is defined as securing and maintaining housing.

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: Under existing HUD guidelines, a resident cannot transfer between the HCV and Public Housing programs regardless of whether a more appropriate unit for the resident is available in the other program. This 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. 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, regardless of which federal subsidy they receive.

PROGRESS AND OUTCOMES: In 2020, 39 households that traditionally would not have been eligible for a change of unit were able to move to a more suitable unit.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Increase housing choices	HC # 5: Number of households able to move to a better unit and/or a high-opportunity neighborhood	0 households	10 households	39 households	Exceeded

ACTIVITY 2005-4: Payment Standard Changes

MTW STATUTORY OBJECTIVE: Increase Housing Choice

APPROVAL: 2005

IMPLEMENTED: 2005

CHALLENGE: Currently, 30% of KCHA's tenant-based voucher households live in high-opportunity neighborhoods, which means about 70% may be unable to reap the benefits that come with residing in such an area. These benefits include improved educational opportunities, increased access to public

transportation, and greater economic opportunities.³³ Not surprisingly, high-opportunity neighborhoods also have more expensive rents. According to recent market data, a two-bedroom rental unit at the 40th percentile in east King County — typically a high-opportunity area — costs \$554 more than the same unit in lower opportunity neighborhoods of south King County.³⁴ To move to high-opportunity areas, voucher holders need sufficient resources, which are not available under traditional payment standards. Conversely, broadly applied payment standards that encompass multiple housing markets — low and high — result in HCV rents “leading the market” in lower-priced areas.

SOLUTION: This initiative develops local criteria for the determination and assignment of payment standards to better match local rental markets, with the goals of increasing affordability in high-opportunity neighborhoods and ensuring the best use of limited financial resources. We develop our payment standards through an analysis of local submarket conditions, trends, and projections. This approach means that we can provide subsidy levels sufficient for families to afford the rents in high-opportunity areas of the county and not have to pay market-leading rents in less expensive neighborhoods. As a result, our residents are less likely to be squeezed out by tighter rental markets and therefore have greater geographic choice. In 2005, KCHA began applying new payment standards at the time of a resident’s next annual review. 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 rents in Puget Sound’s submarkets. Current payment standards for two-bedroom apartments range from 79% to 112% of the regional HUD FMR.

In 2016, KCHA implemented a five-tiered payment standard system based on ZIP Codes. We arrived at a 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. At the end of 2017, we implemented an additional sixth payment standard tier to more closely account for variations in a local housing market. Since 2018, KCHA has conducted biannual

³³ Neighborhood opportunity designations are from the Puget Sound Regional Council and Kirwan Institute’s Opportunity Mapping index (<https://www.psrc.org/opportunity-mapping>).

³⁴ CoStar Multi-Family Rental Data, 2020.

reviews of market conditions to ensure our payment standards keep pace with the diverging submarkets in King County.

PROGRESS AND OUTCOMES: At the end of 2020, over 30% of all tenant-based voucher households were living in high-opportunity neighborhoods.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0	\$0	\$0	Achieved
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete the task in staff hours	0 hours	0 hours	0 hours ³⁵	Achieved
Increase housing choices	HC #5: Number of households able to move to a high-opportunity neighborhood ³⁶	21% of HCV households live in high-opportunity neighborhoods	30% of HCV households live in high-opportunity neighborhoods	30.5% of HCV households live in high-opportunity neighborhoods	Exceeded

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

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness and Housing Choice

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. Some private-market landlords refuse to rent to tenants with imperfect credit or rental history, especially in tight rental markets such as those in King County.

Meanwhile, nonprofit housing acquisition and development projects that would serve extremely low-income households require reliable sources of rental subsidies. The reliability of these sources is critical for the financial underwriting of these projects and successful engagement with banks and tax-credit equity investors.

³⁵ 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.

³⁶ All tenant-based voucher households.

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 desirable neighborhoods for low-income households.³⁷ We also partner with nonprofit community service providers to create housing targeted to special needs populations, opening new housing opportunities for people experiencing chronic homelessness, behavioral health issues, or with a disability, as well as young adults and families exiting homelessness traditionally not served through our mainstream Public Housing and HCV programs. Additionally, we coordinate with county government and suburban jurisdictions to underwrite a pipeline of new 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 subsidy to a limited number of demonstration projects not qualifying under standard policy in order to serve important public purposes. (FY 2004)
- Modifying eligibility and selection policies as needed to align with entry criteria for nonprofit-operated housing programs. (FY 2004)

SUPPORT A PIPELINE OF NEW AFFORDABLE HOUSING BY:

- Prioritizing assignment of project-based Section 8 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 project-based Section 8 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)

³⁷ Neighborhood opportunity designations are from the Puget Sound Regional Council and Kirwan Institute's Opportunity Mapping index (<https://www.psrc.org/opportunity-mapping>).

- Allowing project-based Section 8 rules to defer to Public Housing rules when used in conjunction with a mixed finance approach to housing preservation or when assigned to a redeveloped former Public Housing property. (FY 2008)
- Partnering with local municipalities to develop a local competitive process that pairs project-based assistance with local zoning incentives. (FY 2016)

IMPROVE PROGRAM ADMINISTRATION BY:

- Allowing project sponsors to manage project 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 and pay the higher rent, if needed. (FY 2004)
- Assigning standard HCV payment standards to project-based Section 8 units, allowing modification where we deem appropriate. (FY 2004)
- Offering moves to Public Housing in lieu of an HCV exit voucher (FY 2004) or allowing offer of a tenant-based voucher for a limited period in conjunction with internal Public Housing disposition activity. (FY 2012)
- Allowing modifications to the HAP contract. (FY 2004)
- Eliminating the procedure of temporarily removing units from the HAP contract in cases in which a project-based Section 8 resident is paying full HAP (2004).
- Using Public Housing preferences for project-based Section 8 units in place of HCV preferences. (FY 2008)
- Allowing KCHA inspection of units at contract execution rather than contract proposal. (FY 2009)
- Modifying the definition of "existing housing" to include housing that could meet HQS within 180 days. (FY 2009)
- Allowing direct owner or provider referrals to a project-based Section 8 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 us to determine the size of our project-based Section 8 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 hours per contract for each issued Request for Proposal (RFP). In November 2020, Catholic Housing Services — in

partnership with KCHA, the U.S. Department of Veterans Affairs, and King County — opened doors at the newly constructed Kent Permanent Supportive Housing property (named Thea Bowman Apartments). Thea Bowman is the first permanent supportive housing project in King County outside of Seattle, and provides housing with onsite wraparound services to 80 individuals who have been experiencing chronic homelessness.³⁸

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved per contract	\$1,980 saved per contract ³⁹	\$1,980 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 hours saved per contract for RFP	Achieved
Increase housing choices	HC #3: Average applicant time on wait list in months (decrease)	0 months	29 months	45 months ⁴⁰	In Progress
Increase housing choices	HC #5: Number of households able to move to a better unit and/or high-opportunity neighborhood	0 households	45% of project-based units in high-opportunity neighborhoods	53% of project-based units in high-opportunity neighborhoods	Exceeded

ACTIVITY 2004-3: Develop Site-based Waiting Lists

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness and Housing Choice

APPROVAL: 2004

IMPLEMENTED: 2004

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

SOLUTION: Under this initiative, we have implemented a streamlined wait list system for our Public Housing program that provides applicants additional options for choosing the location where they want

³⁸ The virtual grand opening of Thea Bowman Apartments, featuring KCHA, can be viewed at: <https://youtu.be/zlPONAHiGY>.

³⁹ 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.

⁴⁰ KCHA has calculated this figure differently than in past years. We took 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.

to live. In addition to offering site-based wait lists, we also maintain regional wait lists and have established a list to accommodate the needs of graduates from the region's network of transitional housing facilities for families experiencing homelessness. In general, applicants are selected for occupancy using a rotation between the site-based, regional, and transitional housing applicant 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 continued to save an estimated 176 hours of staff time annually.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$4,176 saved ⁴¹	\$4,959 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	176 hours saved	Exceeded
Increase housing choices	HC #3: Average applicant time on wait list in months (decrease)	75 months	75 months	77 months	Achieved
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 wait lists	100% of Public Housing and project-based applicants housed from site-based or regional wait lists	Achieved

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

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness

APPROVAL: 2004

IMPLEMENTED: 2004

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

⁴¹ This figure was calculated by multiplying the median hourly wage and benefits (\$29) of the staff member who oversees this activity by the number of hours saved. The number is a monetization of the hours saved through the implementation of this program.

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

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

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

PROGRESS AND OUTCOMES: In 2020, KCHA paused all annual HQS inspections until further notice to reduce exposure risk to clients, staff, and community during the pandemic. In lieu of physical inspections, we further streamlined initial inspection procedures to allow self-certification, utilized video inspections, and implemented new temporary policies to deal with emergency repairs. Due to the pandemic, a significant number of inspections were delayed, allowing HQS inspectors to transition their focus to addressing the emergent needs of our residents, such as delivering food boxes.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0	\$58,000 saved ⁴²	\$41,085 saved	Partially Achieved
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved	1,810 hours saved	1,245 hours saved	Partially Achieved

⁴² This figure was calculated by multiplying the median inspector hourly wage and benefits (\$33) by the number of hours saved. These positions were not eliminated so this is a hypothetical estimate of the amount that could be saved in staff hours by implementing this activity. In 2020, inspectors undertook more auditing and monitoring activities, assisted in fraud investigations, provided landlord trainings, and sped up the timeline for new move-in inspections. It is a monetization of the hours saved through the implementation of this program.

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

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness

APPROVAL: 2004

IMPLEMENTED: 2004

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

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

CHANGES TO BUSINESS PROCESSES:

- Modify HCV policy to require notice to move prior to the 20th of the month in order to have 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 project-based Section 8 requirements to allow the most recent recertification (within last 12 months) to substitute for the full recertification when a tenant's unit is converted to a project-based Section 8 subsidy. (FY 2012)
- Allow Public Housing 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 the HUD form 9986 and is renewed every 40 months. (FY 2014)

CHANGES TO VERIFICATION AND INCOME CALCULATION PROCESSES:

- Exclude payments made to a landlord by the Washington State Department of Social and Health Services (DSHS) 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 decrease in Payment Standard at the time of the next annual review or update, rather than using HUD’s two-year phase-in approach. (FY 2004)
- Allow HCV residents who are at \$0 HAP to self-certify income at the time of review. (FY 2004)

PROGRESS AND OUTCOMES: These streamlined processes saved the agency more than 2,100 hours in staff time in 2020. In response to the pandemic, KCHA implemented new measures to streamlining processes for tenants and staff, including: transmitting briefing materials and tenant information electronically; implementing temporary policies to equally weigh all forms of tenant verifications, which allows us to streamline processing of reviews when standard third-party verification may be difficult to obtain (delaying the review) or is unavailable; and eliminating the 30-day waiting period for interim reviews and allowing income changes to be reported until the last day of the month.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0	\$58,000 saved ⁴³	\$61,191 saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete the task in staff hours	0 hours saved	2,000 hours saved	2,179 hours saved	Exceeded

ACTIVITY 2004-9: Rent Reasonableness Modifications

MTW STATUTORY OBJECTIVE: Increase Cost-effectiveness

APPROVAL: 2004

IMPLEMENTED: 2004

⁴³ This figure was calculated by multiplying the median Property Management Specialist hourly wage and benefits (\$29) by the number of hours saved. It is a monetization of the hours saved through the implementation of this program.

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

SOLUTION: KCHA saves more than 1,000 hours of staff time annually by performing Rent Reasonableness determinations only when a landlord requests 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. By 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.

PROGRESS AND OUTCOMES: With the elimination of this non-essential regulation, KCHA has been able to adopt a policy that is less disruptive to residents while saving an estimated 1,000 hours in staff time each year.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$33,000 saved ⁴⁴	\$35,970 saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 staff hours saved	1,000 staff hours saved	1,090 staff hours saved	Exceeded

ACTIVITY 2004-12: Energy Performance Contracting

MTW STATUTORY OBJECTIVE: Increase Cost Effectiveness

APPROVAL: 2004

IMPLEMENTED: 2004

⁴⁴ This figure was calculated by multiplying the median Inspector hourly wage and benefits (\$33) by the number of hours saved. These positions were not eliminated so this is a hypothetical estimate of the amount that could be saved in staff hours by implementing this activity. In 2020, inspectors instead undertook more auditing and monitoring inspections, assisted in fraud investigations, provided landlord trainings, and performed new move-in inspections. It is a monetization of the hours saved through the implementation of this program.

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 Contracting (EPC) — a financing tool that allows Public Housing Authorities to make needed energy upgrades without having to self-fund the upfront necessary capital expenses. The energy services partner (in this case, Johnson Controls) identifies these improvements through an investment-grade energy audit that is then used to underwrite loans to pay for the measures. Project expenses, including debt service, are then paid for out of the energy savings while KCHA and our residents receive the long-term savings and benefits. Upgrades may include: 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 for incremental Public Housing properties to make needed improvements.

PROGRESS AND OUTCOMES: EPC construction was completed in 2019. Minor repair and replacement work was performed in 2020 to maintain installed equipment. Overall, KCHA saw energy savings of more than \$3.8 million as a result of our EPC upgrade work.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0 saved	\$800,000 saved	\$3,800,000 saved	Exceeded

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 if they lead to gains in neighborhood or housing quality for the household, but moves also can be burdensome to residents 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 therefore be required to move to a larger unit. Under this modified policy, the family voluntarily may remain 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 saves an estimated 867 hours in staff time each year while helping families avoid the disruption and costs of a move.

MTW Statutory Objective	Unit of Measurement	Baseline	Benchmark	Outcome	Benchmark Achieved?
Reduce costs and achieve greater cost-effectiveness	CE #1: Total cost of task in dollars	\$0	\$8,613 saved ⁴⁵	\$16,831 saved	Exceeded
Reduce costs and achieve greater cost-effectiveness	CE #2: Total time to complete task in staff hours	0 hours saved per file	87 hours saved	510 hours saved ⁴⁶	Exceeded
Increase housing choices	HC #4: Number of households at or below 80% AMI that would lose assistance or need to move	0 households	150 households	170 households	Exceeded

⁴⁵ This dollar figure was calculated by multiplying the median Property Management Specialist hourly wage and benefits (\$33) by the number of hours saved.

⁴⁶ According to current program data, 170 households currently exceed the occupancy standard. At three hours saved per file, we estimate that KCHA continues to save 510 hours annually.

B. NOT YET IMPLEMENTED ACTIVITIES

Activities listed in this section are approved but have not yet been implemented.

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

APPROVAL: 2015

This activity provides a flat, per-unit subsidy in lieu of a monthly HAP and allows the service provider to dictate the terms of the tenancy (such as length of stay and the tenant portion of 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 populations experiencing homelessness in supportive housing programs tailored to nimbly meet an individual’s needs. This activity will be reconsidered for implementation when KCHA has more capacity to develop the program.

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 currently is 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

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 to a future year, if the need arises.

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

APPROVAL: 2010

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

ACTIVITY 2008-3: FSS Program Modifications

MTW STATUTORY OBJECTIVE: Increase Self-sufficiency

APPROVAL: 2008

KCHA is exploring possible modifications to the Family Self-Sufficiency (FSS) program that could increase incentives for resident participation and income growth. These outcomes could pave the way for residents to realize a higher degree of economic independence. The program currently includes elements that unintentionally act as disincentives for higher income earners, the very residents who could benefit most from additional support to exit subsidized housing programs. To address these issues, KCHA is exploring modifying the escrow calculation in order to avoid punishing higher earning households unintentionally.

This activity is part of a larger strategic planning process with local service providers that seeks to increase positive economic outcomes for residents.

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

There are no activities on hold.

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 allows 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 allows 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 the Student and Family Stability Initiative, 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. In addition to

formidable barriers to accessing these neighborhoods, many households are not aware of the link between location and educational and employment opportunities. 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 are informing Creating Moves to Opportunity, KCHA's new research partnership that seeks to expand geographic choice.

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

APPROVAL: 2012

CLOSEOUT YEAR: 2012

This project provided supplemental financial support to low-income families not otherwise qualified for the Healthy Homes project but requiring 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 Washington State Department of Social and Health Services funds. The goal was to continue the support of at-risk households experiencing 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 limits 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 redefine 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 now being field-tested across the country. 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. This activity is completed.

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 was 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. This activity is no longer active as agencies are now permitted to lease above their ACC limit.

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

APPROVAL: 2007
CLOSEOUT YEAR: 2007

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

ACTIVITY 2007-18: Resident Opportunity Plan (ROP)

APPROVAL: 2007
CLOSEOUT YEAR: 2015

An expanded and locally designed version of FSS, ROP's mission was to advance families toward self-sufficiency through the provision of case management, supportive services, and program incentives, with the goal of positive transition from Public Housing or HCV into private market rental housing or home ownership. KCHA implemented this five-year pilot in collaboration with community partners, including Bellevue College and the YWCA. These partners provided education and employment-focused case management, such as individualized career planning, a focus on wage progression, and asset-

building assistance. In lieu of a standard FSS escrow account, each household received a monthly deposit into a savings account, which continued throughout program participation. Deposits to the household savings account were made available to residents upon graduation from Public Housing or HCV subsidy. After reviewing the mixed outcomes from the multi-year evaluation, KCHA decided to close out the program and re-evaluate the best way to assist families in achieving economic independence.

ACTIVITY 2006-1: Block Grant Non-mainstream Vouchers

APPROVAL: 2006

CLOSEOUT YEAR: 2006

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

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

APPROVAL: 2005

CLOSEOUT YEAR: 2005

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

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

APPROVAL: 2004

CLOSEOUT YEAR: 2006

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

SECTION V

SOURCES AND USES OF MTW FUNDS

A. SOURCES AND USES OF MTW FUNDS

i. Actual Sources and Uses of MTW Funds

In accordance with the requirements of this report, KCHA has submitted our unaudited information in the prescribed FDS file format through the Financial Assessment System – PHA. The audited FDS will be submitted in September 2021.

ii. Activities that Used Only MTW Single-fund Flexibility

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

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

- **HOMELESS HOUSING INITIATIVES.** These initiatives addressed the varied and diverse needs of the most vulnerable populations experiencing homelessness — those living with chronic behavioral health issues, individuals with prior criminal justice involvement, young adults and foster youth experiencing homelessness, and students and their families living on the streets or in unstable housing. The traditional housing subsidy programs have failed to reach many of these households and lack the supportive services necessary to successfully serve these individuals and families. In 2020, KCHA invested nearly \$49 million of housing assistance into these targeted programs.
- **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. In 2020, we awarded emergency assistance to 43 families through this process. As a result of this assistance, all of these families were able to maintain their housing, avoiding the far greater human and safety net costs that would occur if they became homeless.

- **EDUCATION INITIATIVES.** KCHA continued to actively partner with local education stakeholders to improve outcomes for the 15,286 children who lived in our federally assisted housing in 2020. Educational outcomes, including improved attendance, grade-level performance, and graduation, are an integral part of our core mission. By investing in the next generation, we intend to combat intergenerational cycles of poverty that can persist among the families we serve. In 2020, after-school providers and numerous sites transitioned to operating day services to support remote learning for children living in KCHA housing. KCHA also launched the Neighborhood Early Learning Connectors pilot, a co-designed program that employs resident interns to connect KCHA families to local services that support healthy child development.
- **INCREASE ACCESS TO HEALTHCARE THROUGH PARTNERSHIPS AND COLLABORATIVE PLANNING.** KCHA partnered with the local healthcare delivery system to support residents in accessing the services they need to maintain housing stability and a high quality of life. In 2020, KCHA continued to develop our health and housing strategy by improving service coordination for residents with complex health needs, increasing resident access to health services, and identifying opportunities for impacting the social determinants of health. Overall, this effort enabled KCHA residents to access new health services made available through Medicaid waivers and expansion, funding opportunities from local sources, and philanthropic supports.
- **ACQUISITION AND PRESERVATION OF AFFORDABLE HOUSING.** We continued to use MTW resources to preserve affordable housing that is at risk of for-profit redevelopment, and to create additional affordable housing opportunities in partnership with the 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 2020, KCHA purchased Pinewood Village and Illahee Apartments, adding 144 units to our inventory of affordable housing.

- **LONG-TERM VIABILITY OF OUR GROWING PORTFOLIO.** KCHA used our single-fund flexibility to reduce outstanding financial liabilities and protect the long-term viability of our 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 resources that financed a portion of the redevelopment of the Greenbridge HOPE VI site remained outstanding. This financing will be repaid through proceeds from land sales as the build-out of this 100-acre, 900-unit site continues. 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 provided 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 initiative enables us to utilize savings achieved through MTW initiatives to over-lease and provide HCV assistance to more households than normally permissible under our HUD-established baseline. Our cost containment from a multi-tiered, ZIP Code-based payment standard system, operational efficiencies, and other policy changes have been critical in helping us respond to the growing housing needs of the region's extremely low-income households. Despite ongoing uncertainties around federal funding levels, we continue to use MTW program flexibility to support housing voucher issuance above HUD baseline levels.

B. LOCAL ASSET MANAGEMENT PLAN

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

In FY 2008, as detailed in the MTW Annual Plan for that year and adopted by our Board of Commissioners under Resolution No. 5116, KCHA developed and implemented our own local funding model for Public Housing and HCV using our MTW block grant authority. Under our current agreement, KCHA's Public Housing Operating, Capital, and HCV funds are considered fungible and may be used interchangeably. In contrast to 990.280 regulations, which require transfers between projects only after all project expenses are met, KCHA's model allows budget-based funding at the start of the fiscal year from a central ledger, not other projects. We maintain a budgeting and accounting system that gives each property sufficient funds to support annual operations, including allowable fees. Actual revenues include those provided by HUD and allocated by KCHA based on annual property-based budgets. As envisioned, all block grants are deposited into a single general ledger fund.

SECTION VI

ADMINISTRATIVE

A. HUD REVIEWS, AUDITS, OR PHYSICAL INSPECTION ISSUES

The results of HUD’s monitoring visits, physical inspections, and other oversight activities have not identified any deficiencies. The average REAC score for KCHA’s Public Housing inventory inspected in 2020 was 90.2.

B. RESULTS OF LATEST KCHA-DIRECTED EVALUATIONS

In 2020, KCHA continued to expand and enhance our internal program design and evaluation capacity while leveraging external research partnerships. We continued implementation of the Creating Moves to Opportunity mobility study in collaboration with research partners from Harvard, Massachusetts Institute of Technology, Johns Hopkins, and other universities. Results from the first phase of this project, as well as a new implementation report, can be found in Appendix D. Phase 2 results will be available in 2021, and KCHA’s internal evaluation team is evaluating Phase 3, which involved remote delivery of services during the pandemic. We also began research projects with Johns Hopkins University and Public Health Seattle-King County to explore the effect of receiving housing assistance on health outcomes; completed a collaboration with the University of Washington to understand the characteristics and experiences of residents moving with HCV (the August 2020 report can be found in Appendix D); obtained private funding for a new Urban Institute study of place-based housing assistance in opportunity areas; and conducted internal assessments of several of our programs, such as While in School Housing for community college students experiencing homelessness and Housing Outreach Partners behavioral health referral and support for Public Housing residents. Analysis and reporting for these efforts are underway and will be made public when available.

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 F.

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 2020:

- 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.

A handwritten signature in black ink, appearing to read "Stephen J. Norman", is positioned above a horizontal line.

STEPHEN J. NORMAN
Executive Director

3/30/21

DATE

APPENDIX B

KCHA'S LOCAL ASSET MANAGEMENT PLAN

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

- KCHA will develop its own local funding model for Public Housing and Section 8 using its block grant authority. Under its current agreement, KCHA can treat these funds and CFP dollars as fungible. In contrast to 990.280 regulations, which require transfers between projects after all project expenses are met, KCHA's model allows budget-based funding at the start of the fiscal year from a central ledger, not other projects. KCHA will maintain a budgeting and accounting system that gives each property sufficient funds to support annual operations, including allowable fees. Actual revenues will include those provided by HUD and allocated by KCHA based on annual property-based budgets. As envisioned, all block grants will be deposited into a single general ledger fund. This will have multiple benefits.
- KCHA gets to decide subsidy amounts for each public housing project. It's estimated that HUD's new funding model has up to a 40% error rate for individual sites. This means some properties get too much, some too little. Although funds can be transferred between sites, it's simpler to determine the proper subsidy amount at the start of the fiscal year rather than when shortfalls develop. Resident services costs will be accounted for in a centralized fund that is a sub-fund of the single general ledger, not assigned to individual programs or properties.
- KCHA will establish a restricted public housing operating reserve equivalent to two months' expenses. KCHA will estimate subsidies and allow sites to use them in their budgets. If the estimate exceeds the actual subsidy, the difference will come from the operating reserve. Properties may be asked to replenish this central reserve in the following year by reducing expenses, or KCHA may choose to make the funding permanent by reducing the unrestricted block grant reserve.

- Using this approach will improve budgeting. Within a reasonable limit, properties will know what they have to spend each year, allowing them autonomy to spend excess on “wish list” items and carefully watch their budgets. The private sector doesn’t wait until well into its fiscal year to know how much revenue is available to support its sites.
- Reporting site-based results is an important component of property management and KCHA will continue accounting for each site separately; however, KCHA, as owner of the properties will determine how much revenue will be included as each project’s subsidy. All subsidies will be properly accounted for under the MTW rubric.
- Allowable fees to the central office cost center (COCC) will be reflected on the property reports, as required. The MTW ledger won’t pay fees directly to the COCC. As allowable under the asset management model, however, any subsidy needed to pay legacy costs, such as pension or terminal leave payments and excess energy savings from the Authority’s ESCO, may be transferred from the MTW ledger or the projects to the COCC.
- Actual Section 8 amounts needed for housing assistance payments and administrative costs will be allotted to the Housing Choice Voucher program, including sufficient funds to pay asset management fees. Block grant reserves and their interest earnings will not be commingled with Section 8 operations, enhancing budget transparency. Section 8 program managers will become more responsible for their budgets in the same manner as public housing site managers.
- Block grant ledger expenses, other than transfers out to sites and Section 8, will be those that support MTW initiatives, such as the South County Pilot or resident self-sufficiency programs. Isolating these funds and activities will help KCHA’s Board of Commissioners and its management keeps track of available funding for incremental initiatives and enhances KCHA’s ability to compare current to pre-MTW historical results with other housing authorities that do not have this designation.
- In lieu of multiple submissions of Operating Subsidy for individual Asset Management Projects, KCHA may submit a single subsidy request using a weighted average project expense level (WAPEL) with aggregated utility and add-on amounts.

APPENDIX C

ACTUAL EXISTING PROJECT-BASED VOUCHERS

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2020	Population Served	RAD?
Parkview 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
Parkview Group Home	1	Leased	Disabled Individuals	No
Inland Empire Group Home	1	Leased	Disabled Individuals	No
Parkview Group Home	1	Leased	Disabled Individuals	No
Parkview 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
Petter Court	4	Leased	Homeless Families	No
Kensington Square	6	Leased	Homeless Families	No
Villa Esperanza	23	Leased	Homeless Families	No
Villa Capri	5	Leased	Homeless Families	No
Plum Court	10	Leased	Low Income Families	No
Enumclaw Fourplex	5	Leased	Homeless Families	No
The Willows	15	Leased	Homeless Families	No
Chalet	5	Leased	Low Income Families	No
Francis Village	10	Leased	Homeless Young Families	No
Independence Bridge	24	Leased	Homeless Young Adults	No
Chalet	4	Leased	Homeless Families	No
August Wilson Place	8	Leased	Homeless Families	No
Lauren Heights	5	Leased	Homeless Families	No
City Park Townhomes	11	Leased	Homeless Families	No
Burien Heights	15	Leased	Homeless Young Adults	No
Evergreen Court Apartments	15	Leased	Low Income Seniors	No
Village at Overlake Station	8	Leased	Disabled Individuals	No
Summerfield Apartments	13	Leased	Low Income Families	No
Phoenix Rising	24	Leased	Homeless Young Adults	No
Sophia's Home - Timberwood	2	Leased	Homeless Individuals	No
Sophia's Home - Woodside East	4	Leased	Homeless Individuals	No
Woodland North	10	Leased	Homeless Veterans	No
Passage Point	46	Leased	Homeless Families/Re-entry	No
Family Village	10	Leased	Homeless Families	No
Discovery Heights	10	Leased	Homeless Individuals	No
Unity Village of White Center	6	Leased	Homeless Families	No
Andrew's Glen	10	Leased	Low Income Families	No
Eernisse	13	Leased	Low Income Families	No
Avondale Park	43	Leased	Homeless Families	No
Woodside East	23	Leased	Low Income Families	No
Landmark Apartments	28	Leased	Low Income Families	No
Timberwood	20	Leased	Low Income Families	No
Newporter Apartments	22	Leased	Low Income Families	No
Village at Overlake Station	12	Leased	Low Income Families	No
Harrison House	48	Leased	Low Income Seniors	No

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2020	Population Served	RAD?
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
Heritage Park	15	Leased	Homeless Families	No
August Wilson Place	8	Leased	Homeless Families	No
Appian Way	6	Leased	Homeless Families	No
Seola Crossing I & II	63	Leased	Low Income Families	No
Rose Crest	10	Leased	Homeless Families	No
Rose Crest	8	Leased	Homeless Families	No
Copper Lantern	4	Leased	Homeless Individuals	No
Copper Lantern	7	Leased	Low Income Families	No
Summerwood	25	Leased	Low Income Families	No
Creston Point	5	Leased	Homeless Families	No
Joseph House	10	Leased	Low Income Seniors	No
Johnson Hill	8	Leased	Low Income Families	No
Velocity Apartments	8	Leased	Homeless Families	No
Compass Housing Renton	58	Leased	Homeless Veterans	No
Family Village	26	Leased	Low Income Families	No
William J. Wood Veterans House	44	Leased	Homeless Veterans	No
Timberwood Apartments	18	Leased	Homeless Veterans	No
Francis Village	10	Leased	Homeless Veterans	No
Bellepark East	12	Leased	Low Income Families	No
Laurelwood Gardens	8	Leased	Low Income Families	No
Woodland North	5	Leased	Low Income Families	No
Carriage House	13	Leased	Homeless Veterans	No
Villages at South Station	20	Leased	Homeless Veterans	No
Cove East Apartments	16	Leased	Homeless Veterans	No
Ronald Commons	8	Leased	Homeless Veterans	No
Velocity Apartments	8	Leased	Homeless Veterans	No
Providence John Gabriel House	8	Leased	Low Income Seniors	No
Kirkland Avenue Townhomes	2	Leased	Homeless Veterans	No
Athene	9	Leased	Low Income Seniors	No
Francis Village	3	Leased	Low Income Families	No
Houser Terrace	25	Leased	Homeless Veterans	No
NIA Apartments	42	Leased	Low Income Seniors	No
Spiritwood Manor	128	Leased	Low Income Families, Elderly, or Disabled	No
Birch Creek	262	Leased	Low Income Families	No
Salmon Creek	9	Leased	Low Income Families	No
Newport	23	Leased	Low Income Families, Elderly, or Disabled	No
Eastbridge	31	Leased	Low Income Families	No
Hidden Village	78	Leased	Low Income Families, Elderly, or Disabled	No
Heritage Park	36	Leased	Low Income Families	No
Alpine Ridge	27	Leased	Low Income Families	No
Bellevue House # 1	1	Leased	Homeless Families	No

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2020	Population Served	RAD?
Eastridge House	40	Leased	Low Income Seniors/Disabled	No
Evergreen Court	30	Leased	Low Income Families, Elderly, or Disabled	No
Green Leaf	27	Leased	Low Income Families, Elderly, or Disabled	No
Avondale Manor	20	Leased	Low Income Families, Elderly, or Disabled	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
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
Cedarwood	25	Leased	Low Income Families, Elderly, or Disabled	No
Federal Way House #1	1	Leased	Low Income Families, Elderly, or Disabled	No
Federal Way House #2	1	Leased	Low Income Families, Elderly, or Disabled	No
Federal Way House #3	1	Leased	Low Income Families, Elderly, or Disabled	No
Forest Grove	25	Leased	Low Income Families, Elderly, or Disabled	No
Glenview Heights	10	Leased	Low Income Seniors/Disabled	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
Kings Court	30	Leased	Low Income Families	No
Kirkwood Terrace	28	Leased	Low Income Families, Elderly, or Disabled	No
Pickering Court	30	Leased	Low Income Families, Elderly, or Disabled	No
Riverton Terrace I	30	Leased	Low Income Families	No
Shoreham	18	Leased	Low Income Families, Elderly, or Disabled	No
Victorian Woods	15	Leased	Low Income Families, Elderly, or Disabled	No
Vista Heights	30	Leased	Low Income Families, Elderly, or Disabled	No

Project-based Voucher Contracts

Property Name	Number of Project-based Vouchers	Status as of End of 2020	Population Served	RAD?
Wellswood	30	Leased	Low Income Families, Elderly, or Disabled	No
Young's Lake	28	Leased	Low Income Families	No
Sophia's Home - Bellepark East	1	Leased	Homeless Individuals	No
Green River Homes	59	Leased	Low Income Families, Elderly, or Disabled	No
Bellevue Manor	66	Leased	Low Income Seniors/Disabled	No
Vashon Terrace	16	Leased	Low Income Seniors/Disabled	No
Northwood Square	24	Leased	Low Income Families, Elderly, or Disabled	No
Patricia Harris Manor	41	Leased	Low Income Seniors/Disabled	No
Gilman Square	25	Leased	Low Income Families	No
Woodcreek Lane	20	Leased	Low Income Families, Elderly, or Disabled	No
Southwood Square	104	Leased	Low Income Families	No
Foster Commons	4	Leased	Homeless Families	No
Linden Highlands	2	Leased	Homeless Families	No
New Arcadia	5	Leased	Homeless Young Adults	No
Renton Commons	12	Leased	Homeless Families	No
Renton Commons	14	Leased	Homeless Veterans	No
30Bellevue	23	Leased	Homeless Non-Elderly Disabled	No
30Bellevue	8	Leased	Low Income Families	No
Kent PSH	36	Leased	Homeless Veterans	No
Kent PSH	44	Leased	Homeless Non-Elderly Disabled	No
Shoreline Veteran's Center	25	Leased	Homeless Veterans	No
Somerset Gardens	8	Leased	Low Income Families	No
Juanita View	51	Leased	Low Inome Families	No
Kirkland Heights	106	Leased	Low Income	No
Highland Village	8	Leased	Low Income Families	No
Island Center Homes	8	Issued through AHAP	Homeless Non-Elderly Disabled	No
Esterra Park	8	Issued through AHAP	Homeless Families	No
Total Units	<u>2,892</u>			
Issued through AHAP	<u>16</u>			
Leased	<u>2,876</u>			

APPENDIX D

EVALUATIONS



Implementing Creating Moves to Opportunity

Jonathan Bigelow

January 2021

mdrc
BUILDING KNOWLEDGE
TO IMPROVE SOCIAL POLICY
■

Implementing Creating Moves to Opportunity

Jonathan Bigelow



JANUARY 2021

FUNDERS

The funding for this report was provided by grants from the Surgo Foundation and the Bill & Melinda Gates Foundation.

Dissemination of MDRC publications is supported by the following organizations and individuals that help finance MDRC's public policy outreach and expanding efforts to communicate the results and implications of our work to policymakers, practitioners, and others: The Annie E. Casey Foundation, Arnold Ventures, Charles and Lynn Schusterman Family Foundation, The Edna McConnell Clark Foundation, Ford Foundation, The George Gund Foundation, Daniel and Corinne Goldman, The Harry and Jeanette Weinberg Foundation, Inc., The JPB Foundation, The Joyce Foundation, The Kresge Foundation, and Sandler Foundation.

In addition, earnings from the MDRC Endowment help sustain our dissemination efforts. Contributors to the MDRC Endowment include Alcoa Foundation, The Ambrose Monell Foundation, Anheuser-Busch Foundation, Bristol-Myers Squibb Foundation, Charles Stewart Mott Foundation, Ford Foundation, The George Gund Foundation, The Grable Foundation, The Lizabeth and Frank Newman Charitable Foundation, The New York Times Company Foundation, Jan Nicholson, Paul H. O'Neill Charitable Foundation, John S. Reed, Sandler Foundation, and The Stupski Family Fund, as well as other individual contributors.

The findings and conclusions in this report do not necessarily represent the official positions or policies of the funders.

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OVERVIEW

The Creating Moves to Opportunity (CMTO) Demonstration evaluated new services designed to increase the number of families with young children leasing in areas with historically high upward income mobility, or “high-opportunity areas,” in the city of Seattle and King County, Washington. In two phases, King County Housing Authority (KCHA), Seattle Housing Authority (SHA), and a service provider called InterIm CDA offered three CMTO programs to families when they applied to the Housing Choice Voucher program. This report presents staff insights on CMTO.

In Phase 1, families randomly assigned to receive CMTO services were offered a comprehensive package of high-opportunity-area education, rental application coaching, housing search planning and assistance, financial assistance to cover rental application and lease-up costs, and landlord engagement to promote CMTO and expedite the public housing agencies’ (PHAs’) administrative processes. “Navigators” at InterIm CDA delivered the services, coaching families to obtain their desired housing. Phase 2 tested this comprehensive program plus two less intensive, lower-cost programs. Select findings include:

- Navigators believed that many families found CMTO attractive because it improved their chances of leasing in the voucher program and affording costs like security deposits; they also overwhelmingly welcomed the focus on high-opportunity neighborhoods.
- Following high participation in initial CMTO service interactions, some families engaged lightly with the navigators during their housing search either because they were searching independently in high-opportunity areas or because they were not actively searching or were searching outside of high-opportunity areas. Other families engaged intensively with the navigators as partners during the search process.
- The navigators initially struggled to serve a minority of families who appeared to expect them to take the lead in their housing search. Adjustments were made during Phase 1 to reinforce CMTO’s emphasis on coaching families to lead housing searches with navigator support.
- Navigators observed that families seemed to have uniform, favorable perceptions of SHA’s relatively clustered high-opportunity areas. KCHA’s high-opportunity areas were more dispersed and varied, and many KCHA participants initially searched in more familiar and less affluent high-opportunity areas. These families often faced challenges finding affordable rental housing through the voucher program and so expanded their searches to other areas.
- Navigators aimed at influencing rental application screening outcomes for families in engaging landlords. Many families had barriers to approval, but although rental application denials were common, family and staff appeals to landlords could reverse them.
- The navigators asserted that the full array of Phase 1 services contributed to the program’s effectiveness and emphasized the importance of coaching families to communicate with landlords. Streamlined Phase 2 programs led to less vigorous family engagement and fewer opportunities to support families encountering setbacks, but motivated families who were comfortable dealing directly with landlords could overcome rental application barriers.
- Navigators and PHA staff members underscored the importance of empathy, flexibility, and culturally competent approaches to delivering family-centered, landlord-responsive services.

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ACKNOWLEDGMENTS

Field research into program implementation hinges on the active contributions of many individuals who are juggling other responsibilities simultaneously. The findings presented in this report reflect the time and care invested by staff members of King County Housing Authority, Seattle Housing Authority, and InterIm CDA not only in interviews and observations but also in their efforts to support the families they served as part of the Creating Moves to Opportunity (CMTO) Demonstration in Seattle and King County, Washington. Those families are also owed immeasurable gratitude for their voluntary participation in CMTO's efforts to learn from their experiences exploring and pursuing their housing options. Thank you.

MDRC is grateful for funding from the Surgo Foundation and the Bill & Melinda Gates Foundation to support its role in the CMTO Seattle-King County Demonstration. It also thanks the demonstration's principal investigators at Opportunity Insights at Harvard University for their partnership with MDRC on the CMTO demonstration: Peter Bergman (Columbia University), Raj Chetty (Harvard University), Stefanie DeLuca (Johns Hopkins University), Nathaniel Hendren (Harvard University), Lawrence F. Katz (Harvard University), and Christopher Palmer (Massachusetts Institute of Technology).

MDRC's overall contributions to the demonstration were supported by numerous committed individuals across CMTO partner institutions: King County Housing Authority, Seattle Housing Authority, InterIm CDA, Opportunity Insights, Abdul Latif Jameel Poverty Action Lab, and MEF Associates. MDRC is grateful to those individuals for their ideas, dedication, and collaboration.

Many partners provided valuable input and support for the implementation research activities and contributed directly to this report by providing critical input and review at various stages: David Forte, Jenny Le, and Annie Pennucci at King County Housing Authority; Sarah Birkebak, Andria Lazaga, and Jodi Speer at Seattle Housing Authority; Stefanie DeLuca at Johns Hopkins University; and Sebi Devlin-Foltz, Nathaniel Hendren, and Sarah Oppenheimer at Opportunity Insights.

At MDRC, Andrew Rock provided vital support for a host of research activities, including conducting data analysis, drafting case studies, and coauthoring an early version of findings prepared for the APPAM 2019 Fall Research Conference. Nandita Verma, project adviser, and James Riccio, project reviewer, weighed in on report drafts and provided invaluable guidance on all phases of the implementation research. Former MDRC-ers David Greenberg, Alissa Gardenhire, and Gloria Tomlinson led and conducted early project activities, notably the formative fieldwork that is summarized in this report, with partnership from Asaph Glasser, Kimberly Foley, and Angela Gaffney. Gilda Azurdia supported the implementation research as MDRC's data manager, and Stephanie Rubino and Simran Vazirani oversaw the budget and work plan. Alice Tufel led the publication process, Rebecca Bender edited the report, and Ann Kottner created exhibits, did the layout, and prepared the report for publication.

The Author

Executive Summary

The Creating Moves to Opportunity (CMTO) Seattle–King County Demonstration represents the work of a practitioner-researcher partnership involving King County Housing Authority (KCHA), Seattle Housing Authority (SHA), and a coalition of research organizations led by Opportunity Insights at Harvard University. The goal of the partnership was to design, field, and rigorously evaluate the effects of housing mobility services provided to families with children under age 15 who were served by the Housing Choice Voucher (HCV) program.¹ The services were designed to enhance access to the range of geographic choices that were available to these families by mitigating the barriers to their leasing in private rental markets. Through these efforts, CMTO sought to increase the number of families leasing in “high-opportunity areas” within the city of Seattle and King County, Washington, areas with historically high rates of upward income mobility.²

Across two study phases, two public housing authorities (PHAs) in Seattle and King County and their service partner, InterIm CDA, offered three service bundles to families who were on HCV program waitlists. The services were evaluated through randomized controlled trials. Families who elected to enroll in the CMTO study were assigned randomly to receive either regular voucher program services only (that is, a control group) or regular voucher program services plus CMTO services (one or more program groups) designed to support families who pursued moves to high-opportunity areas. In Phase 1 of the demonstration—and in a five-month pilot of services that preceded its launch—the PHAs offered families a comprehensive bundle of services that they theorized would support families in pursuing “opportunity moves.” In Phase 2, this “kitchen sink” CMTO approach would continue to be offered alongside two programs that streamlined and varied the original model. This test of multiple programs in parallel furthered a learning agenda that sought to yield a deeper understanding of the effectiveness of specific components of the CMTO model and the ways they were delivered.

Phase 1 study enrollment was conducted between April 2018 and February 2019, and Phase 2 enrollment was conducted between June 2019 and March 2020. In 2019, early findings were

1. The study’s investigators are directors or academic affiliates of Opportunity Insights at Harvard University. Research partners included MDRC, Abdul Latif Jameel Poverty Action Lab (JPAL), and MEF Associates.

The HCV program is the federal government’s major program for providing rental assistance to very low-income families, the elderly, and the disabled in the private market. Housing choice vouchers are administered locally by public housing agencies, which receive federal funds from the U.S. Department of Housing and Urban Development (HUD) to administer the voucher program.

2. For a description of the CMTO intervention and findings from the study, see Peter Bergman, Raj Chetty, Stefanie DeLuca, Nathaniel Hendren, Lawrence F. Katz, and Christopher Palmer, “Creating Moves to Opportunity: Experimental Evidence on Barriers to Neighborhood Choice,” NBER Working Paper No. 26164 (Cambridge, MA: National Bureau of Economic Research, 2020). A nontechnical summary of the paper’s findings and descriptions of the areas and their selection criteria are provided at https://opportunityinsights.org/wp-content/uploads/2019/08/cmto_summary.pdf.

released from the impact, participation, cost, and qualitative analyses of Phase 1 of the CMTO Seattle–King County Demonstration. Notably, investigators found that family involvement in the CMTO program increased the share of families who moved to high-opportunity areas, from 15 percent among peers in the experimental control group to 53 percent in the CMTO group.³ This report draws on interviews with program staff members to describe important perspectives from both phases of the demonstration and to identify the factors that shaped service delivery and the ways families and landlords responded to CMTO.⁴

THE CMTO MODEL

In designing the CMTO approach and services for Phase 1, the PHAs and research partners referred to existing evidence as well as the experiences and insights of PHA staff members, existing voucher holders, and landlords to identify the likely barriers to families accessing low-poverty neighborhoods and the mechanisms that might counter those barriers. The partners also consulted with operators of housing mobility programs to learn more about effective approaches from existing programs. From these efforts, a core set of CMTO services emerged:⁵

- **High-opportunity-area education** to increase families’ knowledge about these areas and inform their perceptions of neighborhood desirability. Staff members offered informational materials, such as neighborhood guides; led neighborhood tours; and held discussions with families about their neighborhood preferences.
- **Rental application coaching** to identify families’ barriers (for example, past evictions or low credit scores) to leasing in rental markets and to provide guidance to families on mitigating those barriers or communicating with landlords about them. Staff members offered to pull credit reports with families, educated families about completing rental applications, and cocreated tools families could use to communicate with prospective landlords about their circumstances.
- **Housing search planning and assistance** to help families plan and execute searches for rental housing in high-opportunity areas. This support included helping families identify and differentiate between their housing “needs” and “wants,” providing training on how to search and filter listings of available rental units online, and sharing referrals of available units that staff members thought might match each family’s preferences.

3. Bergman et al. (2020a).

4. The MDRC implementation findings are primarily derived from staff interviews, observations of service delivery, analyses of program documents, and technical assistance experience. These findings do not summarize the direct viewpoints of participating families or address Phase 2 implementation after the COVID-19 pandemic altered service delivery beginning in March 2020.

5. For additional details about the program model and approaches to service delivery, see https://opportunityinsights.org/wp-content/uploads/2019/08/cmto_programoverview.pdf.

- **Flexible financial assistance** to cover up to \$3,500 in costs associated with rental applications and screening, plus lease-up costs like security deposits.⁶
- **Landlord engagement** to identify units in high-opportunity areas and promote landlords' participation in CMTO. These interactions entailed brokering on behalf of families to influence (or change) the outcomes of rental applications, promoting the advantages of participation in the HCV and CMTO programs, and expediting housing authority lease-up processes. A mitigation fund was set up to pay for any future tenant damages beyond what would be covered by security deposits.

Four full-time InterIm CDA staff members performed these essential activities. Two family navigators, the primary points of contact for families, provided education about high-opportunity areas, coaching on completing rental applications, and assistance planning and conducting housing searches. Two housing navigators conducted outreach to landlords to promote CMTO and “influence rental application decisions” on behalf of CMTO families. They also administered expedited lease-up processes through the housing authorities once families were approved to lease.

CMTO deployed an individualized approach to coaching families toward achieving their desired housing outcomes. Navigators held in-person meetings with families at locations that were convenient to them, and the frequency of assistance given between and following those meetings was tailored to each family's need. The PHAs and navigators drew distinctions between their approach and other program models in which staff complete many activities, such as housing searches, without much involvement expected from families. Service delivery spanned the four-to-eight-week period before a family's voucher was issued and continued for up to 120 days (or longer if vouchers were extended). If families leased up in high-opportunity areas, the family navigator would hold one consultation within the first two weeks of families moving in to offer guidance on topics such as accessing local resources. This concluded CMTO service delivery, and families were informed about the PHAs' typical voucher supports that would still be available.

Phase 2 of the demonstration was set up to test three alternative service delivery strategies: the comprehensive approach featured in Phase 1, which continued under the name CMTO Coaching and Resources, and the following two less intensive, lower-cost variations:

- **CMTO Financial Assistance.** Families who were assigned to this group were offered financial assistance identical to what families received in Phase 1, as well as light education about high-opportunity areas. Families did not receive any rental application coaching, housing search assistance, or expedited lease-up supports from CMTO.
- **CMTO Toolkit.** Families in this group received “lighter-touch, streamlined” services from CMTO staff: one in-person meeting with a family navigator who was dedicated to this program, a packet of rental application coaching materials, and access to online housing search tools that they could use independently. The amount of security-deposit assistance was pared back

6. A “lease-up” generally refers to a successful lease outcome for an HCV program participant wherein the participant receives program rental assistance.

relative to the Phase 1 model, and customized unit referrals were provided only to families with vouchers for units with three bedrooms or more.⁷

LESSONS FROM IMPLEMENTING CMTO IN PHASE 1

- **The PHAs and InterIm built a productive partnership for CMTO, enhanced by their efforts to codevelop the operational strategies for delivering program services and entailing significant investments in staff training related to the model and to HCV program procedures.**

The partnership required more time and effort than the PHAs initially forecast, partly to accommodate the hiring and training of three of the four navigators during the service delivery pilot. The pilot period was extended in order to ensure the navigators could be trained on HCV program procedures and gain familiarity with the high-opportunity areas in the PHAs' jurisdictions. Moreover, taking on the role of the CMTO service provider required InterIm CDA to reorient its regular service delivery approach from one that emphasized more holistic social service provision to one that emphasized coaching families within the specific CMTO service framework.

- **Most families seemed to find CMTO attractive because it would improve their chances of using (as opposed to losing) their voucher, and they welcomed the focus on “opportunity moves” as a bonus.⁸**

The navigators related that many families were surprised to learn that their vouchers could be used in more affluent, higher-cost areas, and they noted that families' preferences in housing searches overwhelmingly included access to good schools and safe neighborhoods. According to the navigators, most families were not focused on whether to participate in CMTO; rather, they were more concerned with whether they would be able to secure stable, affordable housing that met their preferences through the voucher program.⁹ Further, many HCV program families were experiencing homelessness, unstably housed, or experiencing financial strain and seemed pleased that CMTO could help them afford lease-up costs, especially security deposits, that might otherwise be difficult for them to cover.¹⁰

7. For a full summary of the program interventions that were offered and tested in Phase 2, see <https://opportunityinsights.org/wp-content/uploads/2020/09/CMTO-Phase-II-Intervention-Details.pdf>.

8. Although the risk of failing to lease up in the voucher program motivated families to participate in CMTO, overall lease-up rates in the voucher programs at SHA and KCHA were similar. See Bergman et al. (2020a).

9. In addition to perceptions and preferences related to location and neighborhood characteristics, families typically had specific preferences related to unit and building features (for example, dedicated parking or an in-unit washer and dryer) that could inform where they searched for rental housing.

10. KCHA offered security-deposit assistance widely in its regular HCV program; SHA offered it more selectively and to fewer households overall. Neither agency covered rental application-related costs.

- **Families' participation in initial service meetings was consistently high; engagement with navigators during the subsequent housing search phase varied widely from family to family.**

Factors that influenced families' engagement with CMTO during the housing search period included outside stressors (for example, health issues, housing instability), varying experiences in housing searches (including setbacks such as rental application denials), different levels of familiarity with high-opportunity areas, and the availability of family resources or external housing supports. According to staff members, these same factors also affected families' interest in moving to high-opportunity areas versus other areas. Common participation patterns emerged: Some families engaged less with navigators because they were more proactive in searching independently in high-opportunity areas, while others engaged less (or not at all) because they were not searching for housing or were searching outside of high-opportunity areas. Staff members said a subset of seemingly disengaged families eventually reengaged, often within one month of their initial voucher search period ending. Other families engaged intensively with the navigators as partners during searches, communicating frequently (sometimes daily) about their search efforts.

- **A nontrivial minority of families expected the navigators to play a more direct role in searching on behalf of families than was intended by the model. This expectation posed challenges to staff workloads and partly motivated a realignment of staff roles and practices to reinforce the program's focus on coaching families to search independently, with scalable staff supports.**

The navigators observed that some families—perhaps up to one-third of participants in the first several months after the program launch—believed that CMTO would conduct significant housing search activities on their behalf, including accompanying families on multiple unit tours, taking the lead in searching for units, and communicating with landlords. Fulfilling these high expectations increased the workloads of the housing navigators and clashed with the goal of supporting *family-led* housing searches. This was one factor that influenced a reconfiguration of responsibilities for the family navigators and housing navigators, with the former continuing to assist families throughout the housing search period and the latter focusing on generating unit referrals and landlord engagement in support of family rental applications. The navigators also enacted changes to the way services were described and delivered to reflect the fact that although CMTO supports could be intensive and were scalable to a family's needs, there were limits to how much staff members would do in lieu of family engagement in their housing searches.

- **Family attendance on staff-guided, group tours of high-opportunity areas was low, and the program finally stopped providing the tours and deemphasized other in-person staff-family interactions during housing searches.**

Many families expressed an interest in attending monthly, staff-guided tours of high-opportunity areas that were organized for groups of families, but the no-show rate was high. Although the families who did attend these tours responded well to their content, it became difficult to reconcile the time that was invested in executing the tours against the overall workloads of the

navigators once the program reached scale. Staff members attempted to include some more informal, individualized neighborhood tours when they joined families on unit tours, but the program ultimately ended both the group tours and staff accompaniment on unit tours during Phase 1. Instead, families were offered itineraries for self-guided tours.

- **Families' preferences for high-opportunity areas varied and often proved to be flexible in response to the experience of searching for and applying for housing. Some families initially prioritized searching and leasing up in high-opportunity areas that were close to their current residences or were otherwise more familiar, but many of these families had a difficult time finding affordable units in those areas.**

To the surprise of the family navigators, few families expressed concerns about the racial or economic makeup of high-opportunity neighborhoods, although the navigators noted that many families expressed affirmative preferences for neighborhoods that staff members suggested were more racially diverse. SHA families seemed to have more uniform perceptions of SHA's high-opportunity areas, and many families appeared to have impressions of certain of these areas as favorably diverse. In contrast, KCHA families faced a vastly larger and more varied set of high-opportunity-area options. KCHA families often initially prioritized searching in the less affluent south King County areas of Kent, Auburn, and Newcastle, and staff members believed this was because many families already lived in or near those areas. However, many families experienced challenges in finding rental units in these high-opportunity areas that would be affordable under the voucher program. The navigators frequently counseled families in this position to expand their searches to neighborhoods on the east side of the county, such as Bellevue, but they said this could be a point at which some families began exploring rental options outside of high-opportunity areas.

- **The housing navigators focused on engaging landlords who had available, listed units, rather than on building relationships with a pool of interested landlords in the hope that future vacancies would become options for CMTO participants. Denials of families' rental applications were common, yet they could lead to engagement with landlords that reversed those outcomes.**

Although the housing navigators frequently interacted with landlords who did not have any current vacancies, they found that the CMTO proposition resonated more with landlords who had units available to lease because they were motivated to fill the vacancies, even if that meant relaxing their application screening criteria. Landlord engagement efforts were often customized to address the concerns landlords expressed about leasing to a CMTO family or to respond to denials of rental applications. Despite the advance engagement of landlords by CMTO, denials of families' rental applications were common. However, a denial often provided a chance for CMTO families and the housing navigators to communicate about the circumstances that led to denials and successfully advocate for reconsideration.

EARLY INSIGHTS FROM IMPLEMENTING CMTO IN PHASE 2

- **After roughly one year of working with families in the CMTO Financial Assistance program, the coordinator who served these families observed that those with income from employment fared comparatively better in the rental application process. They noted that families who had more rental barriers could also be approved to lease up in the absence of more robust CMTO supports if they were comfortable communicating with and attempting to persuade landlords.**

Working with families and landlords to process financial assistance payments was straightforward, with few challenges reported other than the occasional incomplete submission of documentation. The PHAs and InterIm began sending email reminders about the program during the course of implementation, which resulted in an increase in family engagement but also some calls from families who were struggling in their housing searches. The coordinator suggested that providing referrals of available units in high-opportunity areas might have been a low-cost way to increase supports for these families.

- **The reduced intensity of service interactions for the CMTO Toolkit group resulted in less vigorous family engagement overall relative to Phase 1, although family participation in the initial meetings remained high. Opportunities to assess how families' housing searches were progressing and to coach families through any challenges were limited relative to both navigator expectations and the more comprehensive CMTO program.**

The family navigator serving families in the CMTO Toolkit program succeeded in condensing the activities of two initial service meetings from Phase 1 into one session in Phase 2, but this resulted in a more one-sided conversation between the navigator and families. Families seemed less deeply engaged in both those meetings and in follow-up check-ins, and they were less likely to share the challenges they encountered in their housing searches than were families who were offered more intensive services. Two types of families seemed more likely to be engaged with the family navigator in relation to the progress of their searches: those who were very motivated to move to high-opportunity areas and those who experienced at least one rental application denial and asked the family navigator for help.

TAKING STOCK AND LOOKING FORWARD

In reflecting on their experiences supporting families and engaging landlords across both study phases, PHA and InterIm staff members emphasized the importance of placing families' needs at the center of CMTO's service delivery efforts while coaching them toward agency in leading their housing searches in high-opportunity areas. Family navigators reported serving families who had a variety of lived experiences, a wide range of approaches to searching for housing and engaging with CMTO, and sometimes high expectations of their service providers. Housing navigators similarly stressed the individualized approach that was required to engage landlords on behalf of CMTO and its participating families, with landlords expressing various

concerns about leasing to voucher holders and different degrees of comfort with relaxing their application-screening criteria or working through their concerns about partnering with PHAs. Staff members underscored that providing effective services to families and landlords required staff to be flexible in their ways of working (and in their work schedules), deeply knowledgeable about the HCV program, and both patient and culturally competent.

As Phase 2 enrollment ended—with many families still searching for housing—PHA and InterIm staff members remarked that their success in implementing lower-cost and lighter-touch service approaches had supported some families in each of the two new programs in moving to high-opportunity areas. Staff members suggested that many families in these programs who had more rental barriers experienced more challenging housing searches than their counterparts who had access to more robust supports. However, staff members also noted that families who had more barriers could nevertheless succeed in obtaining landlord approvals to lease up in high-opportunity areas.

At a time when new efforts are being launched in jurisdictions across the country to establish and evaluate housing mobility programs serving voucher recipients, implementation lessons from the CMTO Seattle–King County Demonstration may be especially instructive. With CMTO Seattle–King County research activities continuing, forthcoming analyses describing the costs and outcomes of the CMTO program, as well as the experiences of the families and landlords who participate, will offer further insights to inform both housing mobility research and practice.

INTRODUCTION AND BACKGROUND

The Creating Moves to Opportunity (CMTO) Seattle–King County Demonstration was formed in late 2015 as a partnership between the King County Housing Authority (KCHA), the Seattle Housing Authority (SHA), and a research coalition led by Opportunity Insights at Harvard University.¹ The demonstration designed, fielded, and tested a set of housing mobility services intended to enhance residential choices for families who were newly enrolled in the federally funded Housing Choice Voucher (HCV) program, which helps eligible low-income households cover their rental costs in the private rental market. More specifically, CMTO aimed to enable new voucher families to lease and continue living in “high-opportunity areas” that, according to research, historically offer better chances for economic mobility for children of low-income families.² These areas can be difficult for many voucher holders to access on their own due to discrimination, lack of knowledge, and limited resources, among other reasons.³ A nonprofit housing services and community development organization called InterIm CDA, in partnership with KCHA and SHA, provided various mobility services to families.

The CMTO demonstration is testing three distinct yet related service models across two phases of research.⁴ Randomized controlled trials are being used to test the program’s effectiveness in promoting families’ sustained moves to high-opportunity areas. Phase 1 is testing the effects of a single bundle of services and financial support to help new voucher families lease in high-opportunity areas. Phase 2 is testing that same comprehensive approach alongside two alternative strategies, each of which includes a subset of the features that are part of the comprehensive package. In 2019, early findings from Phase 1 were released, showing that the CMTO intervention increased the number of families who were moving to high-opportunity areas by 38 percentage points: 53 percent of families in the program group, who were offered CMTO services, moved to these areas, compared with 15 percent of families in the study’s control group, who were not offered CMTO services.⁵

This report, undertaken as part of the CMTO evaluation, describes the partners’ experiences with designing the CMTO model and putting it into practice. Its findings show what was done

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1. The study’s investigators are directors or academic affiliates of Opportunity Insights at Harvard University. Abdul Latif Jameel Poverty Action Lab (JPAL) provided demonstration project management and supported cost analyses. In addition to implementation research activities, MDRC (with MEF Associates) conducted rapid qualitative fieldwork in the formative and pilot phases of the demonstration, provided technical assistance and implementation monitoring in support of research and program design, developed study recruitment and random assignment procedures, and provided random assignment and management information system (MIS) software.
 2. Chetty, Hendren, and Katz (2016).
 3. See Bergman et al. (2020a) for a description of the high-opportunity area selection criteria.
 4. Opportunity Insights has compiled an array of online resources for practitioners, including summary descriptions of program practice during the first and second experimental phases of the demonstration, technical and nontechnical summaries of findings from the demonstration, and other materials that describe CMTO service delivery. See, for example, Bergman et al. (2020a) and Opportunity Insights (2020b).
 5. Bergman et al. (2020a).

to try to help families achieve “opportunity moves,” and it offers lessons and insights that may be useful to other public housing agencies (PHAs) and their partners that are designing and operating mobility programs of their own.⁶

Demonstration Timeline

With the support of the research partners, and in consultation with existing housing mobility practitioners, SHA and KCHA jointly developed and refined the CMTO model, beginning in 2015. The intervention was initially launched and assessed during a pilot period at each PHA before families were enrolled into the Phase 1 randomized controlled trial. After Phase 1 operations concluded, the partners took some time to assess the program’s operation and outcomes and to design the Phase 2 multiarm trial that would test different treatment options against a control group. (See Table 1 for a timeline of the demonstration’s main phases.) In Phase 2, families were randomly assigned to a group that would receive one of three services packages (discussed in more detail later in the report), or to a control group that did not receive any CMTO assistance.⁷

CONCEIVING AND FORMING THE CMTO SEATTLE-KING COUNTY PARTNERSHIP

Trends in the Geographic Location of Voucher Families

For both PHAs, enhancing geographic choices in the HCV program was a long-standing goal, dating back years before CMTO was conceived. At SHA, internal research beginning in the mid-2000s revealed that large numbers of voucher holders used their vouchers in the southeast portion of Seattle, where poverty rates were relatively high. This finding sparked an increased focus on identifying ways in which the agency could support families who sought to move to areas that might better promote upward economic mobility. KCHA had observed patterns of growing income segregation in recent decades: Poverty was becoming more concentrated in the south of the county, while communities east of Seattle faced a loss of economic diversity as the number of higher-income households grew in those areas. Recognizing, in the words of one PHA leader, that “your zip code is your destiny,” both PHAs began introducing policies that were intended to counteract the concentration of their clients in high-poverty areas.

6. MDRC’s implementation findings are informed by analyses of qualitative data gathered over the course of the evaluation: semistructured interviews with staff members of the two housing authorities and Interlm CDA in two rounds, occurring primarily in January 2019 and June 2020; operational insights from MDRC and MEF Associates to support demonstration planning and operations—including observations of practice—as well as summaries from formative fieldwork; and case studies based on group interviews with Interlm CDA staff members plus reviews of baseline and MIS data. Case study findings do not directly represent the viewpoints of families, which are identified using pseudonyms.

7. See Opportunity Insights (2020a) for further details about Phase 2.

TABLE 1
CMTO Seattle–King County Demonstration Timeline
and Key Milestones

Partnership formation and CMTO planning	Late 2015 to late 2017	<ul style="list-style-type: none"> • PHAs and research team begin partnership in 2015. • Bill & Melinda Gates Foundation grant awarded October 2016. • InterIm CDA selected as service provider in August 2017.
CMTO pilot	Late 2017 to mid-2018	<ul style="list-style-type: none"> • InterIm CDA service delivery staff identified or newly hired between August 2017 and February 2018. • PHAs pilot CMTO service delivery December 2017 through April 2018.
CMTO Phase 1	Mid-2018 to early 2019	<ul style="list-style-type: none"> • PHAs enroll families into randomized controlled trial of CMTO services beginning in April (SHA) and May (KCHA) 2018. • Enrollment concludes in February 2019 with 499 families enrolled into study.
CMTO Phase 2	Mid-2019 through 2020	<ul style="list-style-type: none"> • PHAs and research team convene in February 2019 to begin assessing early evidence and determine Phase 2 research and program design. • Phase 2 enrollment begins in late June / early July 2019 and ends in March 2020 with 337 families enrolled into study.

NOTES: CMTO is Creating Moves to Opportunity. PHA is public housing agency. SHA is Seattle Housing Authority. KCHA is King County Housing Authority.

Partnership Formation and Early Demonstration Planning

The partnership between SHA and KCHA for CMTO began to take shape following a 2015 convening of large PHAs and researchers. This gathering was motivated in part by newly released long-term findings showing that children whose families used vouchers to move to low-poverty areas as part of the U.S. Department of Housing and Urban Development (HUD) Moving to Opportunity (MTO) demonstration had higher earnings and other positive outcomes as adults when compared with their peers in randomly assigned control-group households who were not exposed to those neighborhoods.⁸ The PHA leaders who attended the 2015 meeting recognized the policy implication of these findings: The voucher program could be used as a platform for promoting economic mobility by supporting the moves of families with young children to neighborhoods of higher opportunity.

⁸. Chetty, Katz, and Hendren (2016).

SHA and KCHA have a long legacy of collaboration. According to PHA staff members, the agencies understood the value of cooperation given the combined scale of their voucher programs, the inclusion of both urban and suburban rental markets in each of their jurisdictions, and the institutional flexibility afforded to the agencies as a result of their participation in HUD's Moving to Work (MTW) demonstration.⁹ A major benefit of this administrative designation, according to PHA staff members, was the budgetary flexibility to fund policy units whose staff drove evidence-based practice and new initiatives. These units coordinated the exploration, planning, and execution of their institutions' joint CMTO demonstration.

Another factor supporting the focus on innovation was the agencies' relationship with the Bill & Melinda Gates Foundation, which had supported pilot programs at each agency through its grant-making work in the greater Pacific Northwest region.¹⁰ The PHAs and research partners secured program and research funding from the foundation in 2016. The research team subsequently secured a grant from the Surgo Foundation to further support a rigorous evaluation of the program.

DESIGNING THE CMTO SERVICE MODEL

The process of forming a joint research partnership with the CMTO-affiliated research team continued into 2016. Brainstorming sessions addressed the considerable, essential question of which program features were likely to drive successful opportunity moves at scale. Tackling this question took on critical importance for the PHAs and research team in early planning conversations in 2016 and gained momentum in 2017 after funding was secured for the CMTO program.

Turning to the development of a particular intervention model for CMTO, PHA staff members and the research team began by considering the kinds of barriers voucher families typically faced in leasing in high-opportunity areas, and how those barriers might be addressed. They reviewed existing literature and held conversations with other programs across the nation—including Abode in San Mateo County, California, and the Baltimore Regional Housing Program—to understand more about their particular service approaches. One PHA leader observed a critical limitation of the existing evidence base: It had “less of a focus on what’s been done and more of a focus on what have been the outcomes of what has been done, but that makes it really hard for agencies to actually duplicate it.” That missing information made direct consultations with the operators of other mobility programs even more valuable.

The planners developed a theory of change that identified the major factors that seemingly constrained voucher holders' lease-ups in local high-opportunity areas, and suggested service strategies that could reduce or remove those barriers.¹¹ (See Table 2.) The goal of the pilot

9. See U.S. Department of Housing and Urban Development (2020) for additional information about MTW.

10. The foundation's prior grants funded education and homelessness initiatives, not housing mobility work.

11. A “lease-up” generally refers to a successful lease outcome for an HCV program participant wherein the participant receives program rental assistance.

TABLE 2
Anticipated Family Barriers to Accessing High-Opportunity Areas and
Corresponding Proposed Services

CONSTRAINTS TO FAMILY LEASE-UPS IN HIGH-OPPORTUNITY AREAS	PROGRAM SERVICE COMPONENT	MAIN PLANNED PROGRAM ACTIVITIES
Limited knowledge of high-opportunity areas	High-opportunity-area education	<ul style="list-style-type: none"> • Informational materials (e.g., neighborhood guides) • Discussions with staff about family priorities and neighborhood options • Neighborhood tours
Competitive disadvantages in the rental application process	Rental application coaching	<ul style="list-style-type: none"> • Identification of rental application screening barriers (e.g., low credit scores, past evictions) • Guidance on barrier mitigation • Coaching and tools for landlord communication
Challenges navigating the housing search process	Housing search training, planning, and assistance	<ul style="list-style-type: none"> • Completion of housing search plans • Referrals of available rental units • Family accompaniment and landlord-family brokering • Enhanced housing authority issuance briefings
Difficulty affording application and lease-up costs in high-opportunity areas	Flexible financial assistance	<ul style="list-style-type: none"> • Application financial assistance (e.g., application fees) • Lease financial assistance (e.g., security deposits)
Low landlord participation in HCV program in high-opportunity areas	Landlord engagement	<ul style="list-style-type: none"> • Marketing and relationship-building among landlords in high-opportunity areas • Expedited housing authority lease-up processes • Mitigation fund to cover costs beyond security deposits, in case of unit damage

SOURCE: Housing authority planning documents.

NOTE: HCV is Housing Choice Voucher.

and Phase 1 CMTTO program was to take what the PHAs called a comprehensive, “kitchen sink” approach to serving families and engaging landlords in support of driving high-opportunity-area lease-ups. That is, the partners would try to address all the identified barriers, ultimately using preliminary analyses of program impacts, program costs, and families’ and landlords’ responses to the intervention to inform exploration in a second phase. This subsequent phase would study variations in the program design to generate further evidence about which pro-

gram approaches might be, as described in the PHAs' application to the Gates Foundation for program funding, the "most essential, most cost-effective, and most scalable" to help families move to high-opportunity neighborhoods.

As the model began to take shape, the PHAs' CMTO leads engaged in multiple rounds of discussion with HCV program managers and PHA leadership to ensure that the model would appeal to families and landlords. In addition, the research team conducted systematic, exploratory fieldwork with PHA staff members, families, and landlords who were served by each PHA to identify useful perspectives on the emerging approaches that were being considered for the demonstration. See Box 1 for a summary of the main takeaways from this work.

Integrating CMTO Within HCV Program Practice

Launching a new mobility program raised questions within the PHAs related to the agencies' broader missions and HCV program policies, including:

- To what extent would CMTO override existing HCV program priorities?
- How could a randomized controlled trial be implemented in HCV program settings?
- Would promoting access to certain neighborhoods for a subset of HCV program clients—families with young children—represent an equitable allocation of program resources?
- Might CMTO services risk meeting problematic standards for "steering" families to certain neighborhoods?

The CMTO lead staff members within the PHAs believed these overarching concerns about the mobility program needed to be addressed in order to obtain the support and participation of their colleagues during the planning phase.

As planning conversations progressed, the CMTO teams also held many meetings with HCV program stakeholders to consider where modifications, enhancements, or special attention would be needed in the HCV program process. Particular consideration was given to ensuring voucher program affordability in high-opportunity areas, expediting voucher lease-up procedures, and modifying HCV program intake procedures.

Ensuring Voucher Program Affordability in High-Opportunity Areas

Before the CMTO demonstration began, KCHA had implemented tiered payment standards for subregions of the county that made it more feasible for voucher families to rent housing units in more expensive areas of King County. This policy increased the likelihood that voucher holders could afford units up to the 40th percentile on the rent distribution in any given tier, and thus, in greater King County. KCHA's staff believed this policy would be sufficient to promote affordability for families who were receiving CMTO services in high-opportunity areas.

BOX 1

Select Takeaways from Exploratory Fieldwork to Inform the CMTO Program Design

In February 2017, MDRC and its partner MEF Associates conducted 50 interviews with managerial and line staff members at King County Housing Authority (KCHA) and Seattle Housing Authority (SHA), with voucher holders with children who were new to the program and who either had recently leased up in high-opportunity areas or were still searching, and with landlords. The goal of the discussions was to develop insights that would help to refine and implement the emerging CMTO service design. These important takeaways were presented to the partners:

- **Participating families would likely benefit from engaging in services before the housing search “clock” starts.** Interview respondents believed that the voucher issuance briefings presented valuable information to new-admissions families, but they expressed concerns that this information could be overwhelming and suggested that CMTO participants would benefit from having dedicated time to engage in neighborhood exploration and rental application coaching. MDRC and MEF recommended that SHA and KCHA attempt to align the Housing Choice Voucher (HCV) program operations in support of this objective. They predicted that service staff members may need to do intensive outreach in order to ensure that all families who were offered CMTO would be able to access the services.
- **Families would likely benefit from custom and individualized service delivery.** Voucher holders identified common features of “desirable” neighborhoods, but their weightings of these characteristics and their awareness of how high-opportunity areas could match their preferences varied widely. Most voucher families prized good schools, safety, neighborhood resources and amenities (for example, grocery stores, parks), access to transportation, and proximity to work. However, respondent families differed in both their familiarity with and their stances toward moving to high-opportunity areas. Some families were highly familiar with these areas and were inclined to move. Others were well informed but had very specific and narrow neighborhood preferences. Still others (especially those who were coming from outside of King County) had very little knowledge of Seattle and King County. This variation suggests that education and engagement about high-opportunity areas need to be customized to each family’s circumstances.
- **A wide range of high-opportunity-area options is desirable to meet diverse family preferences and ensure an adequate supply of rental units that are affordable to the voucher program.** Interview respondents flagged rental unit affordability under the voucher program as a significant possible constraint to the success of the program, even with increased voucher payment standards. They specifically expressed concerns about certain areas in north Seattle and in higher-income areas of King County. Some staff members emphasized the importance of including some areas of south King County and south Seattle in CMTO.
- **Various potential advantages were identified for landlords who participate in CMTO and the voucher program, as well as some potential pitfalls.** Landlords appeared to be motivated to lease to voucher holders by the prospect of rental income stability, altruism, and the possibility of lower unit turnover. However, interview respondents perceived a greater risk of unit damages from leasing to voucher holders and indicated that housing authorities could often be slow or unresponsive in their interactions with landlords. This suggests that there are opportunities for enhanced messaging about the features of CMTO and about its benefits beyond the typical voucher program’s offerings.

SHA's leaders also saw a need to adopt an approach that would enable voucher affordability in relatively more expensive rental markets in the city of Seattle, while being mindful of the cost implications of such a policy. The agency developed, and its board adopted, a policy called a Family Access Supplement that would allow families with children (of any age) to rent higher-cost units in high-opportunity areas by applying a supplement in excess of the standard voucher payment—just enough to make the tenant portion affordable within a maximum amount.¹² At the conclusion of Phase 1 enrollment, PHA staff members reported no concerns regarding SHA's payment standard supplement and expressed the belief that it had clearly succeeded in promoting affordability in high-opportunity areas. Consequently, members of the CMTO study's program and control groups could all benefit from it.

These approaches to enhancing the affordability of the voucher program reflected a notable difference in the HCV program policies that were applicable to CMTO participants, one that would have some implications for the housing searches of families. KCHA's payment standards were determined largely by the costs of rental housing in local markets, but the clusters of zip codes that composed each tier did not account for CMTO high-opportunity area map boundaries. In contrast, SHA's Family Access Supplement was available in CMTO's targeted high-opportunity areas only.

Expediting Voucher Lease-Up Procedures

Both PHAs initially explored outsourcing crucial lease-up processes, such as analyses of rent reasonableness and housing quality inspections, to the CMTO program to ensure that they would run quickly and smoothly. KCHA ultimately elected not to outsource most tasks to CMTO-dedicated staff, acknowledging that its existing operations could give priority to expedited lease-up processes for CMTO participants; the housing navigators still conducted some preinspection work, such as completing necessary forms, in advance of the formal inspection. In contrast, despite initial objections by its existing inspections team, SHA chose to hand off many procedures, including inspections, to CMTO staff at InterIm. In addition to the CMTO staff becoming Nan McKay & Associates-certified housing quality standards (HQS) inspectors,¹³ SHA and KCHA lead inspectors provided training and support to the housing navigators who conducted these functions.

Modifying HCV Program Intake Procedures

HCV housing counselors were assigned the responsibility for educating voucher applicants about CMTO and its evaluation during HCV program intake, securing informed consent and administering a baseline survey for families who elected to enroll in the study, and conducting random assignment. Each PHA identified a housing counselor who would execute these tasks,

12. SHA's Family Access Supplement was available to all eligible voucher program recipients with children of any age in the household. As such, and like KCHA's HCV program-wide tiered payment standards, members of both the study's program group and the control group could benefit from it.

13. Nan McKay & Associates is an independent firm that offers training services to HCV program practitioners at PHAs.

which entailed significantly altering and customizing each PHA's typical HCV program service flows for CMTO. PHA staff and the research team believed that the efficacy of CMTO family service delivery would be improved if families could be engaged in education about opportunity areas and coaching on rental applications before vouchers were issued. This arrangement would entail procedural changes at both agencies, but KCHA had already adopted policies that reduced the amount of time between the determination of a family's eligibility for the voucher program and the issuance of a voucher to the family. While the two PHAs sought to align their policies on a common preissuance service period, KCHA's voucher program leadership was hesitant to introduce significant new delays in the issuance of vouchers. With the research team's concurrence, the agencies adopted alternative time frames. SHA would schedule the issuance of vouchers roughly two months after families' initial CMTO intake briefings, while KCHA would issue vouchers to families about two to four weeks after their CMTO intake sessions (at the soonest CMTO-dedicated voucher issuance briefing following the determination of family eligibility).¹⁴ See Figure 1 for a summary of the timing of various service milestones in Phase 1.

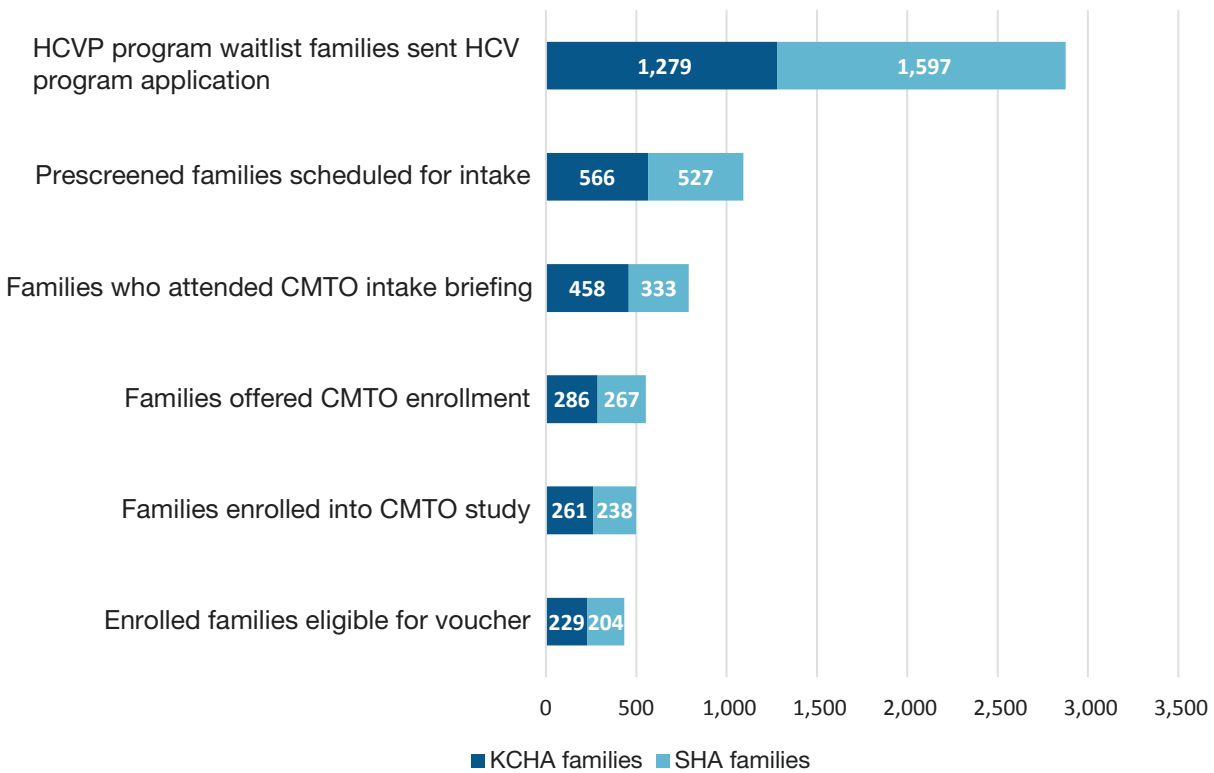
In reflecting on the time families were given to prepare for their housing search and engage in CMTO, the navigators strongly preferred the two-month preissuance service period offered to SHA's families. They emphasized not only the perceived benefits to families of having more time to invest in housing search preparation but also the advantages afforded to families of knowing when their vouchers would be issued when they enrolled.

Selecting a Service Provider and Staffing CMTO

From the outset of their planning efforts, the PHAs expected that CMTO services would be delivered by an outside agency with which they would contract. They viewed this option as a way to establish the flexibility to adapt staff job descriptions and work schedules as needed. At the same time, choosing the right vendor was complicated by the need for CMTO to address the requirements of landlords as well as families. During the service provider procurement process, PHA staff members anticipated that most local social service agencies that had the capacity to coach and support voucher holders may not also have the in-house capacity to engage landlords effectively. Similarly, they anticipated that organizations such as for-profit rental brokers or entities with skill navigating rental housing markets may not have the ability to deliver family-centered coaching services to voucher families. One PHA leader noted that this reality would see the PHAs either "teaching a private sector company to do social services...or teaching a community-based organization to have a private market lens." Ultimately, the winning bid came from a community-based agency, InterIm CDA, with a history of delivering services—including rapid rehousing and affordable housing property management—to low-income and vulnerable populations. InterIm's pursuit of the CMTO service contract reflected a growth opportunity for the agency, which had not contracted to provide services at such a scale before.

14. KCHA's "enhanced" voucher issuance briefings for CMTO families were initially held on a biweekly basis. However, as implementation progressed, various operational factors led the agency to hold monthly issuance briefings. This schedule change had the effect of lengthening the period.

FIGURE 1
Phase 1 Recruitment Funnel



NOTE: HCV is Housing Choice Voucher. CMTO is Creating Moves to Opportunity. KCHA is King County Housing Authority. SHA is Seattle Housing Authority.

The process of partnership formation between InterIm and the PHAs took longer than the PHAs initially expected; staff members at InterIm recalled that becoming familiar with the expectations for service delivery staffing and approaches required time, effort, and communication. For example, InterIm staff needed to consider what it would mean to deliver a specific set of housing mobility services as opposed to the more holistic, wraparound social services that the agency typically provided to its clients. The PHAs emphasized that the service provider would focus on coaching and assisting families with their housing searches, and would not take on the responsibility for addressing other service needs families might present; those issues would have to be dealt with by referring families to other programs.

The PHAs worked together with InterIm leadership to draft position descriptions, interview candidates, and decide which candidates would receive offers. It was decided that, in addition to part-time executive, program manager, and administrative support, CMTO positions at InterIm would include two family navigators, each dedicated to families who had been issued vouchers by one of the two PHAs, and two housing navigators, each engaging landlords across the CMTO high-opportunity areas and supporting families who were served by both PHAs. (See Box 2 for

BOX 2

CMTO Navigator Roles

Two primary groups of staff members provided the CMTO services families received from InterIm CDA.

Family navigators were the first point of contact for families after they enrolled in the study; they were charged with building a relationship with families. After families were referred from the public housing agencies (PHAs), family navigators provided a range of support services:

- information on CMTO and the voucher program
- education about opportunity areas
- rental application coaching to help families make a strong case for tenancy
- housing locator services geared toward training and supporting families in conducting housing searches and applying for rental housing
- financial planning and financial assistance to cover search-related and lease-up expenses

Family navigators also contacted families within two weeks after they moved to assess their service needs and provide information about local resources such as schools and how to sign up for utilities.

Housing navigators conducted outreach to landlords in high-opportunity areas to promote CMTO and improve the likelihood of families leasing up in those areas. They also provided support to families as they searched for housing. They offered landlord and unit referrals to families, often serving as an intermediary between families and landlords. And, they administered the program's expedited lease-up processes for landlords, facilitating or executing certain PHA administrative processes and processing payments such as security deposits.

further details on these two program roles.) With the exception of a family navigator who was already an InterIm employee, these navigators were hired between December 2017 and February 2018, and they immediately began working with families as part of a pilot of CMTO services that started in December 2017 at SHA and in January 2018 at KCHA.

Piloting the CMTO Intervention

In the CMTO pilot, which began in late December 2017 and early January 2018 at SHA and KCHA, respectively, 46 families were offered CMTO services before the random assignment study was launched. The pilot provided an opportunity for the PHAs and InterIm to refine and finalize the operational procedures for recruiting, enrolling, and serving families, and to boost the training of InterIm staff, most of whom were hired just before or right as the pilot began. For the navigators, this was a useful chance to translate service protocols that for them felt “really hazy” into live program activity by serving families and engaging landlords on their behalf.

After a few months of preliminary service delivery experience, the PHAs decided to pause new family enrollment into the CMTO pilot and invest in a full month of additional staff training, including intensive training on both HCV program policies and procedures and the CMTO service model. This break also granted time for InterIm staff members to improve their familiarity with the KCHA high-opportunity areas.¹⁵ The PHAs increased their overall monitoring of service delivery, making observations of CMTO service and holding regular meetings, called “learning circles,” during which PHA and InterIm staff members discussed family and landlord cases and worked through any challenges or unanticipated scenarios that were occurring.¹⁶ This period culminated in a “train-back” session, during which the navigators role-played the program’s intended approaches to service delivery back to PHA staff. A brief resumption in pilot enrollment and service delivery for new KCHA families occurred in May 2018, before the PHAs launched Phase 1 enrollment.

During the pilot, the CMTO navigators took what they described as a very “hands-on” approach to serving families who were actively searching for housing, including accompanying families on many unit and property tours. Although some navigators recall feeling that this approach served families well—especially those who had never leased independently in private-market housing before—a small share of participating families were consuming disproportionate amounts of staff time during housing searches. In the words of one navigator, this degree of involvement “was not going to be sustainable once our caseloads grew.”

PHASE 1: EARLY IMPLEMENTATION TO STEADY STATE

With confidence that CMTO service delivery and associated voucher program procedures were generally working as intended, the PHAs began recruiting eligible families and enrolling them into the Phase 1 study in April (SHA) and May (KCHA) of 2018.

Recruiting HCV Waitlist Families into CMTO

The PHAs marketed CMTO to potentially eligible families who were on HCV program waitlists at each agency. They began by mailing an HCV application packet that included information about CMTO in a cover letter (SHA) or in a half-page flyer (KCHA). Families who responded were screened for basic CMTO eligibility and invited to an in-person, individualized HCV intake briefing, typically lasting between one and two hours.¹⁷

During intake, housing counselors assessed applicants’ eligibility for the HCV program and CMTO based on the information in their application (including their income and the presence of

¹⁵. PHA staff members noted that InterIm CDA historically focused its work in the city of Seattle.

¹⁶. These learning circles would continue throughout the remainder of the CMTO demonstration.

¹⁷. All SHA families who received this HCV mailing were provided a date and time for intake, which could be rescheduled at the family’s request. KCHA families were instructed to make intake briefing appointments through that agency’s call center staff.

a child under the age of 15). Unless a family was clearly ineligible, the housing counselors followed the standard HCV program intake briefing with a five-minute PowerPoint presentation and accompanying talking points to introduce the CMTO demonstration. As part of this presentation, the counselors described the PHAs' motivations for supporting families who were searching for housing, the significance of neighborhoods to family members' lives, and a summary of the services that CMTO could provide. The counselors also briefly introduced the study (including explaining the conditionality of families' receipt of CMTO services on their study enrollment and random assignment) and asked families if they were interested in learning more about it. If families expressed interest, the counselors immediately reviewed the study's informed consent forms and, if voucher heads of household consented, collected further information through an approximately 15-minute baseline survey, then conducted random assignment.¹⁸ If families were assigned to CMTO, they were given a flyer describing the program (see Appendix A for an example of a flyer given to families assigned to CMTO), told that a family navigator would contact them within two days, and informed about their next steps with the voucher program. If families were assigned to receive standard PHA services, they were told about the next steps in the processes for determining voucher eligibility and issuing vouchers.

Before recruitment mailings were sent out to the Phase 1 families, each PHA projected how many families would need to be "pulled" from their respective waitlists to yield the number of monthly study enrollees that would meet their overall sample-size targets and service delivery caseload projections. Within the first few months of beginning enrollment, it was apparent that these projections would be difficult to meet. Fewer families than needed were responding to the initial HCV program mailings, and no-shows at appointments further decreased the number of families who were considering enrollment.

In response, the PHAs expanded their outreach efforts. Housing counselors began phoning and emailing families after their voucher application packets were sent; this contact also offered counselors an opportunity to further screen families for ineligibility conditions before asking them to appear at the PHA in person. The PHAs also increased the number of families who were mailed application packets each month and added staffing for the recruitment effort, shifting from one housing counselor to two at each PHA.

The sample enrollment targets were ultimately achieved, but meeting this goal required contending with considerable attrition at each stage of the recruitment and enrollment processes. Using PHA data, Figure 1 illustrates the challenge, showing the funnel-shaped flow of families into the study. For example, the PHAs mailed HCV program applications to 2,876 HCV waitlist families who were potentially eligible for CMTO. Of this group, 38 percent were scheduled for an intake briefing, but only 72 percent of those who were scheduled attended the briefing. Of

18. Non-head-of-household adults also consented to participation in the study in person, if they attended voucher intake briefings, or by mail, if they were not present. Parents and guardians separately consented to the collection of certain data describing children in the household.

the attendees, 30 percent were deemed not eligible for either the voucher program or CMTO.¹⁹ Of the remaining families who were offered CMTO enrollment, almost 10 percent declined to enroll in the study. Finally, of the families who enrolled in the CMTO study and were randomly assigned, 13 percent were found to be ineligible for vouchers. In all, 433 families (15 percent) out of the 2,876 who had been sent applications both enrolled in the CMTO study and were eligible to receive a voucher.

Implementing CMTO Services for Families

Families who were randomly assigned to the CMTO program were referred to InterIm by the housing counselors within two days of their intake briefings. Family navigators then contacted the families to set up an individualized in-person meeting. Families typically had to wait between one and two months after random assignment to receive their vouchers.²⁰ During this period, family navigators began to educate families about high-opportunity areas, coach them on their rental applications, and prompt them to begin planning for their housing searches. After vouchers were issued, families searched for housing with the support of both family and housing navigators. The program covered the rental application fees that some landlords charged. Once families were approved for a unit, the housing navigators expedited the PHAs' lease-up processes. Once families leased up and moved into their units, the family navigators contacted them over a two-week period to offer information and referrals to support families' needs. Figure 2 illustrates this process.

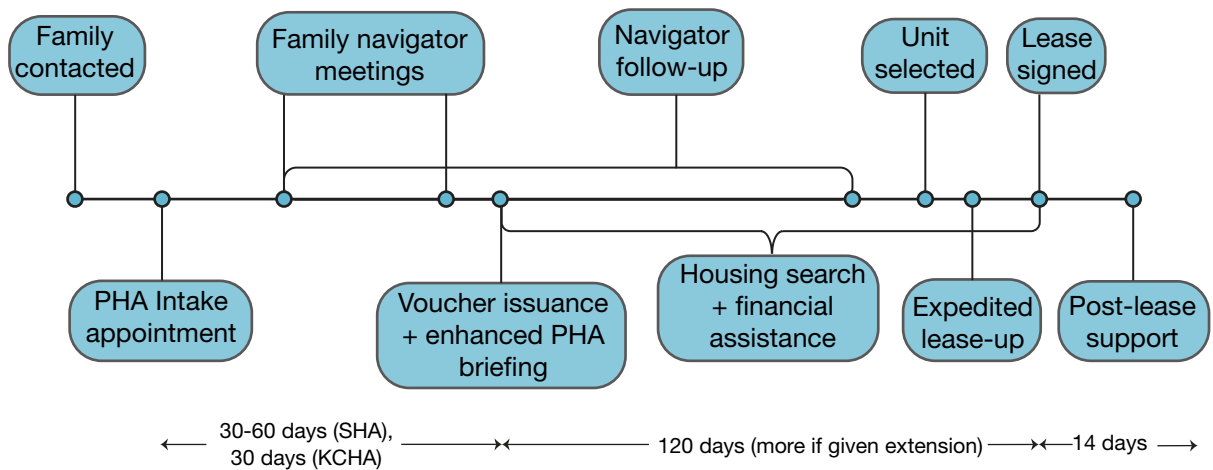
Structuring Family Search Preparation

Critical to CMTO service delivery were two in-person meetings with families, each of which lasted between one and two hours, with regular, remote check-ins occurring between and after the two meetings. The intent of these meetings and check-ins, as the family navigators explained, was to provide each family with sufficient information to help them “make a really informed choice about what feels right for their family” and with skills to help them “advocate for themselves when they start talking to potential landlords” during their housing search.

19. In order to ensure that HCV- and CMTO-eligible families who were randomly assigned to CMTO would be able to engage in some CMTO services before receiving their vouchers, the PHAs and research team elected to enroll families before final HCV program eligibility determinations could be made. Housing counselors used voucher application information to judge if families were likely to be found eligible for vouchers and decided accordingly whether to describe the CMTO program and demonstration and offer study enrollment to families. The partners accepted that some enrolled families would later be determined to be ineligible to receive a voucher, expecting that postenrollment ineligibility would be evenly distributed across the program and control groups.

20. Families who were enrolled into CMTO by SHA were scheduled to receive their voucher roughly two months later, and enrolled families who were eligible to receive a voucher at KCHA could experience periods of two to four weeks between their random assignment and the issuance of their vouchers. KCHA initially held biweekly issuance briefings for CMTO families—with families scheduled for briefings as soon as they were confirmed to be eligible for the HCV program—but eventually joined SHA in conducting monthly issuance briefings during Phase 1. This change lengthened the preissuance service period for KCHA families to approximately one month.

FIGURE 2
CMTO Phase 1 Service Flow Diagram



SOURCE: Opportunity Insights.

NOTES: CMTO is Creating Moves to Opportunity. SHA is Seattle Housing Authority. KCHA is King County Housing Authority.

The first meeting, which family navigators described as being, in part, a “getting to know you” session, encompassed a mix of program orientation and assessments, family goal-setting exercises, education about program high-opportunity areas, and the start of rental application coaching. These meetings were scheduled within one to three days after the receipt of a referral from the PHAs and were typically held either at InterIm CDA’s Seattle office or at a location convenient to where families lived.²¹ To prepare for the meetings, the family navigators reviewed the study’s baseline survey data on each family; they noted that information about the family’s composition, language-access needs, and initial neighborhood preferences and perceptions was especially useful. In the meetings, the family navigators explained why the CMTO program sought to support high-opportunity moves, and they reviewed the high-opportunity areas using maps and guides that described neighborhood features and amenities. The navigators also explained what CMTO services were available to families who were pursuing moves to and leasing in those areas, while also ensuring that families were aware that they could still use their vouchers in neighborhoods within their PHAs’ jurisdictions that were not designated as high-opportunity areas, although without CMTO assistance. Next, the family navigators assessed the families’ familiarity with the high-opportunity areas, their neighborhood and housing preferences, and what information and resources would be most important for families to factor into their housing searches. After forming a preliminary understanding of family preferences, and asking families to begin defining and making distinctions between their housing “wants” and “needs,” the navigator suggested

21. In Phase 1, families who were randomly assigned to receive CMTO services were referred to InterIm CDA staff using the program’s MIS shortly after completing an application review and study enrollment meeting with SHA staff. In contrast, KCHA staff conditioned a family’s referral upon the determination of each family’s eligibility for the HCV program. This process remained the same in Phase 2, except in the version of the CMTO intervention that did not provide access to family coaching, thus eliminating the need for service referrals from the PHAs.

that families conduct independent reviews of high-opportunity-area guides and recommended staff-guided or independent opportunity-area tours if families were unfamiliar with any areas.

After covering the general orientation content, family navigators asked about each family's rental history, beginning to assess any past evictions, potential credit-related issues, or other conditions that could represent leasing barriers. Family navigators offered to pull and review families' credit reports, and they provided information about local housing discrimination laws.²² In discovering issues that could cause problems in having rental applications approved, the family navigators conveyed to families that it was critical for them to proactively communicate about these potential barriers in their upcoming conversations with prospective landlords, before and during the process of applying for rental housing.

As the final task in this first meeting, the family navigators worked to assess each family's financial resources through a cursory household budgeting exercise. This evaluation provided a starting point for discussing what financial assistance could be available through CMTO and highlighting the costs—notably certain move-in expenses, such as moving van rental fees or new furniture costs—that would be the family's responsibility.²³ In concluding the meeting, the family navigators would identify steps for families to complete before their next meeting, such as contesting credit report items, beginning to pay off debts, and gathering documentation in support of future rental applications.²⁴ Families were encouraged to prepare a testimonial letter explaining the family's circumstances and contextualizing their possible rental barriers or a “rental résumé” that summarized a family's rental history; these documents could be used to communicate with potential landlords in high-opportunity areas. These letters or lists were intended to be family-driven activities that the family navigators described as “setting the stage” for a productive, family-led, staff-supported housing search.

The second meeting between family navigators and families, ideally held soon before vouchers were issued by the PHAs, was described by InterIm staff members as an important “getting ready” moment for families. The family navigators shared some best practices for communicating with landlords by phone, by email, and in person (for example, while on property tours) and checked on families' independent preparations for addressing barriers they might encounter during their housing searches. If the rental explanation or history documents were not ready, the family navigators offered to work on them together with families during the meeting. Family navigators then modeled or role-played effective landlord communication in an effort to build

22. Washington State enacted source-of-income protections in 2018, and the city of Seattle prohibits landlords from considering criminal justice involvement as a factor in screening rental housing applications.

23. The program allocated up to \$3,500 to cover the costs of applying for housing and leasing up in high-opportunity areas.

24. Staff members at InterIm reported that even though most credit-related issues and significant outstanding debts could not be resolved before a family applied for rental housing, they encouraged families to begin taking steps to deal with them in order to demonstrate to landlords that they were being proactive in addressing factors that landlords might view as risks during application screening.

families' confidence in their communication skills.²⁵ Family navigators also walked through the process of searching for housing, often demonstrating how to search online unit listings. Reviewing live, online rental listings with staff often led families to reassess their initial housing preferences, which the family navigators believed help families anticipate trade-offs that might need to be made when they later decided which units to pursue during their housing searches.

In modeling the use of online rental housing search websites, such as Zillow or HotPads, the family navigators encouraged families to search *broadly* across their PHA's jurisdiction—for example, searching the entirety of King County outside of Seattle for KCHA families—as a way of anticipating factors besides a family's preferences that might eliminate units from consideration. To that end, family navigators discussed the central concept of search filters related to unit characteristics that would likely be prescribed by the voucher (for example, the contract rent amount, the unit size) and those that were important to the family (for example, on-site parking, the number of bathrooms in the unit, zoned schools). This exercise was geared toward encouraging families to explore how they might develop and refine a working list of prospective properties. Family navigators also demonstrated navigating a customized CMTO website, which offered a tool for families to screen addresses for their location within a high-opportunity area. In general, families tended to develop expansive lists of available units that matched their basic criteria, which they then cross-referenced with the online CMTO high-opportunity area map, eliminating units that were not in high-opportunity areas and that they could not pursue with CMTO assistance.

Following the second family meetings, the family navigators continued to maintain contact with families—mostly by text, email, or phone, on at least a biweekly basis—checking in on the status of their searches or preparations, and reinforcing the supports that were available. In addition, the family navigators attended the PHAs' special “enhanced” voucher issuance briefings solely for CMTO families, during which they gave a short presentation reiterating the services that were available from CMTO. These briefings included presentations by PHA staff members on content that was customary for all voucher waitlist families to receive at the time vouchers were issued, plus additional content from CMTO staff members at InterIm that recapped CMTO services, including through a high-quality motivational video.

Supporting Families During Housing Searches

Once families were issued their vouchers and actively began searching for housing—when “the wheels hit the road” for families, in the words of one navigator—service delivery became less standardized and more family-driven. Family navigators continued to attempt to contact families who were still searching roughly every two weeks, but they were as responsive and engaged as

²⁵. Family navigators noted that many families seemed nervous about speaking with landlords; they shared that many foreign-born participants who were proficient English speakers in meetings with staff seemed to doubt their communication skills in the context of a housing search.

a family requested.²⁶ According to the family navigators, common interactions with families at this stage consisted of the following:

- **answering basic questions** about the search process or the voucher program, such as how to request an extension of the voucher housing search period
- **facilitating contact between families and housing navigators** when families requested (or staff members at InterIm thought families would benefit from) referrals of available units identified by CMTO staff
- **coordinating payment** of prelease rental application fees on behalf of families
- **reiterating and reinforcing concepts** that had been previously covered in meetings, especially for families who experienced application denials

The navigators emphasized that rental application denials were common, even for families who were prepared and who would eventually be successful in realizing opportunity moves. They also stressed that families who engaged erratically or who disengaged and subsequently reengaged in services could still ultimately make an opportunity move.

Low credit scores or past evictions were cited as the most common barriers to the approval of families' rental applications. But, the navigators also expressed the belief that families' ability to address these barriers openly in their communications with landlords was the most effective

Once families were issued their vouchers and actively began searching for housing—when “the wheels hit the road” for families, in the words of one navigator—service delivery became less standardized and more family-driven.

tactic for overcoming them. Emphasizing the importance of rental application coaching in successful housing searches, the navigators noted that the documents families prepared during the up-front coaching sessions—especially the letters explaining the circumstances of rental barriers that a landlord might see in a screening report—were particularly helpful in persuading landlords to lease to CMTO families who had what may be perceived as problematic

backgrounds. More generally, the navigators believed that, when taken together, the full set of CMTO services could support virtually any type of family in making an opportunity move.

Family Participation Motivations and Patterns

When families began participating in the up-front CMTO meetings, the family navigators observed a high degree of buy-in from families for the prospect of making an opportunity move. In fact, the family navigators observed that the prevailing concern for most families was not whether they should participate and consider moving to a high-opportunity area, but, as one

26. Families received this periodic outreach from their family navigator until they leased up or their voucher expired, regardless of a family's intent to move to a high-opportunity area. Waitlist families at both KCHA and SHA had 120 days to search for and secure housing under the voucher program, but families could extend those search periods to 240 and 180 days, respectively, upon request.

navigator put it, “Can I make a move happen [in the voucher program]?” In other words, could families successfully lease with their vouchers, which they had waited a long time to receive? The family navigators described a sense of near-universal appreciation for the fact that families would have a partner in their housing search, someone “going through this with me because I don’t know what to do.”²⁷ They believed that the benefits of successfully attaining subsidized rents was a powerful motivator for families to participate in CMT0, and they attributed this feeling to a few major concerns:

- anxiety over the time limits the voucher program placed on the initial housing search period, and an awareness that not all families succeeded in leasing up with a voucher
- financial stress on the part of families, including current difficulty paying rent or a strong desire to secure a more stable housing arrangement
- a belief that lease-up costs, especially security deposits, would be unaffordable to the family anywhere in Seattle or King County without the support of CMT0

Despite these motivations, family navigators did not discount the idea that many families were genuinely motivated to pursue opportunity moves, and they observed that families were generally surprised to learn that voucher holders were able to use their vouchers in many of the more affluent high-opportunity areas. The most common preferences expressed during housing searches were proximity to good schools, at least one family-specific desired unit feature (such as a dedicated parking space or an in-unit washer and dryer), and neighborhood safety.

The family navigators observed that the prevailing concern for most families was not whether they should participate and consider moving to a high-opportunity area, but, as one navigator put it, “Can I make a move happen [in the voucher program]?”

Still, not all families fully engaged in CMT0. Although the navigators acknowledged the difficulty in forecasting a given family’s level of engagement, they identified several broad factors to explain why some families may have participated in the program and pursued opportunity moves with greater or lesser intensity:

- a family’s level of interest in pursuing a move to a high-opportunity area
- the presence or absence of external stressors or barriers, such as homelessness or family health concerns
- a family’s confidence in conducting independent search activities, and especially in communicating with landlords about rental barriers

27. See Bergman et al. (2020a) for an analysis of families’ perspectives on the benefits of CMT0 participation, including the feeling that CMT0 staff provided welcome emotional support during the housing search process.

- preexisting family familiarity with high-opportunity areas
- the availability of strong family or social supports or significant external support from other service agencies that strengthened a family's preferences for certain neighborhoods, including neighborhoods that were not CMTO high-opportunity areas, over others

Navigators recalled that families who were experiencing homelessness or who lacked access to regular means of transportation could be less consistently engaged in CMTO and in independently searching for housing. In addition, families with larger household sizes frequently experienced longer housing searches, given the limited supply of sufficiently large rental units on the market at any given time.

“I want to empower families to be able to do this for themselves,” underscored one family navigator.

Among families who engaged with CMTO services, the family navigators described four common participation patterns in the housing search phase:

- Searching mostly independently in high-opportunity areas. Some families were likely to have successfully leased in the rental market before, to have a strong grasp of the details of participation in a voucher program, and to complete many search activities independently, with only light staff supports. In the housing search phase, many such families contacted the program after they had themselves identified a desirable rental unit and required CMTO financial assistance to cover prelease application fees. Navigators observed that this group of searchers was largely composed of families with fewer significant rental barriers or with access to more family resources than other types of searchers. See Box 3 for a family case study that exemplifies this search pattern.
- Drawing heavily on staff assistance. Many highly engaged families were unfamiliar with the housing search process or were very uncomfortable independently completing fundamental steps in that process, such as communicating with landlords. These families checked in frequently with the navigators—a few were in touch with their family navigator virtually every day until they were approved for a unit—and they depended on CMTO for ongoing coaching and motivation while they were searching. The program intentionally accommodated this type of family need and engagement. See Box 4 for a family case study that exemplifies this search pattern.
- Relying on navigators to take the lead. Some families were interested in leveraging CMTO supports but expected CMTO staff to go beyond the role of providing coaching and supports and to work with landlords to secure a unit that matched the family's preferences.²⁸ Family navigators said that these families were likely to have engaged less intensively in presearch preparatory activities and were more likely to receive remedial review of rental application coaching concepts during the housing search phase. They worked with these families to em-

²⁸. Family navigators observed that some families had previously received intensive case management from other programs and seemed to assume that CMTO supports would be similarly structured, with staff taking the lead in coordinating housing searches.

BOX 3

Case Study: Serving the Touré Family

The Touré family was living in a shelter outside of the Seattle area when they began receiving CMTO services. According to the navigators, the head of household was not familiar with Seattle or the opportunity areas but was looking for a fresh start and a neighborhood with good schools and outdoor space for her children. The navigators said the family had no rental history and had recently filed for bankruptcy.

According to the navigators, the family engaged in CMTO services fully and had two in-person meetings, with the family navigator traveling outside of the Seattle area to meet with the family. The family completed independent housing search preparation work between those meetings and signed up for a staff-led high-opportunity-area tour. Staff members also described the family making a reasonable accommodations request to the Seattle Housing Authority (SHA) for an increased voucher size due to a child's disability before their voucher was issued and the housing search began.

Once the family's housing search was underway, the navigators recalled the head of household being very proactive in her efforts to find housing in opportunity areas. After identifying one unit that was willing to accept the family, she ultimately continued looking for a larger home, based on the advice of the navigators. The Touré family finally found and was approved for a unit in north Seattle. Upon meeting the landlord, the housing navigators discovered that the landlord was amenable to accepting voucher holders but was uninformed about the voucher program and appreciated guidance on its basic details. The landlord has remained in contact with CMTO, notifying the navigators about units as they become available.

The Touré family received financial assistance to cover the security deposit, parking spot fee, renter's insurance, and application fee. The navigators reported receiving holiday season well-wishes from the head of household, who had found employment, enrolled her children in school promptly, and was happy in her new neighborhood.

phasize their role in coaching families to conduct staff-supported housing searches, rather than performing family-informed, staff-led searches. "I want to empower families to be able to do this for themselves," underscored one family navigator. See Box 5 for a family case study that exemplifies this search pattern.

- Engaging inconsistently or disengaging. Some families were not actively or intensively engaged in the program during the housing search phase, and they could either be actively searching outside of high-opportunity areas or unresponsive to CMTO outreach. Navigators were keen to point out that some of these families were experiencing difficult circumstances in their lives that disrupted their ability to search for housing. One family navigator said, "A lot of [CMTO] centers around planning for the future, and many families just can't do that because they're trying to survive today." See Box 6 for a family case study that exemplifies this search pattern.

In describing less consistent searchers and those who more transparently disengaged from the CMTO program, navigators highlighted that a subset of disengaged families eventually reengaged in response to continued staff outreach efforts, often about one month before the expiration of their vouchers. Such families often realized that their vouchers would soon expire and were eager

BOX 4

Case Study: Serving the Loyola Family

The Loyola family attended the two initial meetings with their family navigator, and the navigator recalled the family being especially motivated to find a new unit due to persistent maintenance issues at their current address; they connected the family with a legal services agency that assisted them in breaking their existing lease. Staff members also described some disagreement within the family about where to focus their housing search; the voucher head of household was attracted to areas in east King County due to the quality of the schools there, while her husband preferred to lease in south King County opportunity areas.

Staff members described the head of household as being very active in her search, staying in contact with the navigators and attending property tours. However, she often asked the navigators to speak with landlords on her behalf because she was unfamiliar with how to discuss the voucher program. Although the Loyolas had good credit and no history of evictions, staff members said the family received numerous rental application denials and in some instances had landlords tell them not to apply for units because the landlord did not accept vouchers. The navigators supported the family in filing local housing discrimination complaints. During the housing search, a staff member spoke to the head of household “two to three times a day, almost every day,” including weekends.

Ultimately, the family found a unit in an opportunity area in south King County owned by an independent landlord who, according to the navigators, was personally impressed by the head of household and lowered the contract rent after working with the navigator to understand the voucher program. The family leveraged CMTO program assistance for their security deposit but not to cover many of their application fees. The navigators acknowledged that the head of household was not completely satisfied with the area she leased up in but had resigned herself to living in south King County after failing to lease up in her preferred areas.

Although some families were inclined to stay close to their current neighborhoods, CMTO’s messaging about the potential benefits of moving to the high-opportunity areas targeted by the program resonated with most families.

for CMTO assistance. The navigators observed that these families were likely to make significant compromises against their ideal unit and neighborhood preferences, and they wondered whether such families who leased up in high-opportunity areas would be inclined to persist in their new environments or would shortly move again.

Family Geographic Preferences

HCV families could only leverage CMTO services in seeking to move to high-opportunity areas that were defined by their own PHA.²⁹ Navigators observed that families’ existing knowledge of

²⁹ New-admissions families served by SHA were not allowed to transfer their voucher to another jurisdiction upon initial HCV program lease-up, but KCHA families faced no such limitation. It was not expected that many KCHA families would shift to Seattle and SHA, and such families would not be eligible to receive CMTO services if they did so.

BOX 5

Case Study: Serving the Asad Family

The Asad family was living in south King County when they enrolled in CMTO services. At two in-person meetings before their voucher was issued, Interlm staff and the Asads met for the typical suite of preissuance services. According to Interlm staff members, the head of household was resolute about staying in south King County because he and his family were familiar with the area and had strong community connections there.

After the Asads' voucher was issued, Interlm staff members reported that the family asked for and was given listings of available units. Although initially they did not like many of the suggested listings in south King County high-opportunity areas, the Asads decided to apply for a unit. The family asked Interlm staff members to contact the unit's property manager on the family's behalf while they prepared the application. Interlm staff did so and encouraged the family to submit their application quickly. However, by the time the family had completed the application, the unit had been leased. In response to this setback, and seemingly overwhelmed by the housing search process, the family decided to stay in their current unit.

Upon inspection of the Asads' current housing, the King County Housing Authority (KCHA) found that the two-bedroom unit was too small for the Asads' family size of two adults and four children. According to CMTO staff members, the family then resolved to give up their voucher so that they could stay in their current home, although the navigators urged them to continue looking for other units. In the end, the family was approved for a unit in a high-opportunity area, for which the navigator completed much of the application on behalf of the family.

After moving, the family contacted Interlm with a request that they find the family a new unit because of the lack of parking in their new area. Interlm staff members told the family that their engagement with CMTO was complete, but they encouraged the family to conduct an independent housing search in accordance with KCHA policies.

high-opportunity areas, or the proximity of these areas to their current neighborhoods, strongly informed their opinions about the desirability of the areas. Although some families were inclined to stay close to their current neighborhoods, CMTO's messaging about the potential benefits of moving to the high-opportunity areas targeted by the program resonated with most families.

The navigators described SHA families' perceptions of high-opportunity areas as fairly uniform because those neighborhoods were all located in north Seattle. They also observed that some families viewed certain of these neighborhoods as favorably diverse ethnically and culturally. KCHA families, faced with vastly more varied and geographically dispersed high-opportunity-area options, seemed more likely to identify certain areas, including the northern and eastern King County suburbs, as more affluent and less diverse relative to families' existing communities. Notably, navigators reported that many KCHA families initially prioritized searching in

BOX 6

Case Study: Serving the Khalid Family

At the time of their enrollment into CMTO, the Khalid family of two adults and four children was living in temporary housing in south Seattle arranged by another housing services organization. Staff members reported that throughout the early service meetings between the Khalids and the family navigators, the prospect of making an opportunity move resonated with the family. However, the household heads were resistant to leaving their community in south Seattle, to which they were strongly connected; securing permanent housing there was their primary goal. The Khalids told staff members that they would “do their own research” on opportunity areas while prioritizing a lease-up in south Seattle.

Scheduling a meeting between the family and the navigators was challenging, but CMTO staff members recalled meeting with the family in person four times before their voucher was issued. They covered the standard sequence of services and also discussed various aspects of the voucher program. At one point, the family considered submitting a request to transfer their voucher from the Seattle Housing Authority (SHA) to the King County Housing Authority (KCHA) but ultimately did not follow through. Staff members suggested this was because a transfer would have made the Khalids ineligible for CMTO financial assistance.

After the family’s voucher was issued, the Khalids were not responsive to outreach by the navigators, and staff assumed that they were receiving supports from their other service providers. CMTO staff finally heard from the family that they had been approved for a unit in an area in south Seattle that was not a high-opportunity area.

high-opportunity areas in the south-county neighborhoods of Kent, Auburn, and Newcastle because they already lived in or near south King County.

The family navigators had expected many families to be reluctant to move to high-opportunity areas that were predominantly white and affluent.³⁰ A few families did question whether their children would be accepted in new school environments because of their differences or receive fewer opportunities relative to other children in high-opportunity areas. However, the family navigators said that to their surprise, families rarely expressed such concerns about the demographics of the high-opportunity areas. At the same time, families tended to affirm a preference for more diverse or familiar high-opportunity areas, especially if they had close family or community ties in or near those areas. In particular, families with East African heritage (for example, Somali or Ethiopian) often seemed to be “firmly rooted” in those cultural communities in south King County.³¹ Finally, in thinking through the role of race and class in informing families’ neighborhood preferences, some of the navigators expressed their belief that communities in the

30. Approximately 75 percent of heads of household in the Phase 1 experimental sample identified as nonwhite. See Bergman et al. (2020a).

31. Approximately 35 percent of heads of household in the Phase 1 experimental sample identified as having been born outside of the United States. See Bergman et al. (2020a).

Seattle and King County region may be inherently more diverse and inclusive than communities in many other parts of the United States, especially those characterized by historical patterns of deeply segregated housing markets.

Although KCHA families frequently found the Kent and Auburn high-opportunity areas appealing and focused their searching there, navigators also observed many families encounter difficulty leasing up in those areas, in large part because voucher-affordable units were not in large supply there. When families faced these challenges, navigators often counseled them to consider areas such as those in King County’s “east side,” including Bellevue, which they observed were more likely to have more rental units that were affordable to KCHA voucher holders. Staff members at InterIm described this kind of decision as a critical inflection point for some families, with some electing to pursue searching in areas that were not high-opportunity areas.

Engaging Landlords and Expediting Lease-Ups

Once CMTO was under way, the process of engaging landlords in the program departed from the original expectations. The PHAs originally envisioned that, through marketing and targeted outreach, the housing navigators would develop a pool of supportive landlords in high-opportunity areas who would refer available units to the program for families’ consideration. To develop this pipeline, housing navigators intended to contact, first, existing landlord partners of each PHA, then local and regional property owner associations and attendees at real estate industry events. Next, they would communicate with community institutions, such as religious and community centers, and finally would pursue direct, one-on-one engagement with landlords with available unit listings. In practice, this last type of outreach—to landlords with active and public unit listings—was the main and most effective method of engaging landlords on behalf of CMTO and its participants. Contrary to expectations, a pool of amenable landlords did not materialize during Phase 1.

The housing navigators identified their main goal to be “influencing rental application approval decisions” on behalf of families.

Engaging Landlords with Available Units

The housing navigators identified their main goal to be “influencing rental application approval decisions” on behalf of families, with much of their landlord engagement focused on targeting landlords with available, publicly listed units in high-opportunity areas. They described using online rental listing services such as Zillow, Craigslist, HotPads, and Doorsteps, in addition to perusing the listings of available units on corporate property management websites. The housing navigators attempted to reach the contact person associated with the unit to introduce the CMTO and HCV programs and assess the landlord’s general interest in accepting CMTO families. They then sought to understand the landlord’s rental screening criteria and leasing requirements and to identify factors among those criteria that might be flexible. In cases where landlords responded positively and units were deemed to be likely good matches for certain families, the housing navigators would usually then describe specific participating families who might be interested in leasing the unit in question. If a family was interested in a rental unit under management by the landlord, the housing navigator’s engagement would ideally culminate

in direct outreach by families to the landlord, followed by their submission of a rental application. The housing navigators also spent time broadly engaging the landlord community, which they felt was a useful investment.

The housing navigators underscored that “every landlord just wants to occupy a unit.”

Although the housing navigators typically contacted landlords with available units before families did, they preferred to interact with landlords *after* CMTO families had independently identified and communicated with the landlords, or even applied for tenancy without the prior knowledge of staff. The navigators considered this approach to be the ideal engagement scenario, one in which families were actively representing their own interests—an emphasis of CMTO’s up-front rental application coaching—with staff members at InterIm working with landlords in a family-supporting role. Although this family-initiated sequence was not the prevailing one, it was increasingly the model that navigators encouraged in their coaching.

Drivers of Landlord Participation in CMTO

The housing navigators asserted that a significant incentive for landlords to lease to CMTO families was the prospect of filling vacant units; they were motivated either by occupancy quotas—as was the case with leasing agents at corporate property management companies—or by the need for rental income, in the case of owners of single units or smaller rental portfolios. The housing navigators’ work to engage landlords could be highly customized to the circumstances of both landlords and prospective tenant families, although the navigators observed overall that every landlord “just wants to occupy a unit.” In taking a tailored approach, the housing navigators observed some common landlord responses to the prospect of leasing to CMTO families who would likely not meet one or more of the rental screening criteria. These responses are summarized in Box 7.

A common worry among landlords in both PHA jurisdictions, according to the housing navigators, was that their participation in the voucher program would be administratively burdensome. However, the housing navigators noted that education about the voucher program—including about CMTO’s expedited lease-up supports and Washington State’s source-of-income discrimination law—could counter those negative perceptions. In particular, the navigators reported that landlords responded especially well to the prospect of serving as liaisons and facilitating or directly conducting basic lease-up functions on behalf of the PHAs.

The housing navigators also led occasional negotiations about rents and lease terms to ensure they were aligned with families’ voucher amounts and other program requirements. Some families who obtained rental application approvals without prior intervention by the housing navigators were surprised to be reminded that their approved family share of rent—a calculation informed by their income, family composition, utility allowance schedules, and applicable payment standards—would make the unit in question unaffordable under HCV program rules.³² In certain

32. Housing navigators suggested that a few families mistakenly believed that they could pay any difference between the actual rent and the maximum rent the voucher program would cover “on the side.”

BOX 7

Customizing Landlord Engagement to Promote Leasing to CMTO Families

The CMTO housing navigators described various landlord conditions that could inform their engagement of landlords after families expressed interest and applied for tenancy.

- **Motivation to meet occupancy targets.** Leasing agents, property managers, and brokers representing owners, especially for multifamily apartment buildings, were described as primarily motivated by leasing quotas or occupancy targets. They could thus be encouraged to consider relaxing their screening criteria, persuaded in part by the availability of mitigation funds and the program supports provided to families. These types of actors sometimes need to secure the approval of regional or managerial staff or unit owners to make an exception to screening criteria or to ensure that their institution's fair housing standards were satisfied, which usually involved additional work from the navigators to communicate with or educate other stakeholders.
- **Aversion to risk.** Some landlords were less willing to take a chance on certain CMTO families who had more rental barriers than other families did. However, staff members suggested that many of these stakeholders could be persuaded by education about the voucher program and about the landlord mitigation fund. Moreover, some landlords fitting this description might be inclined to accept families who had fewer or less serious apparent rental barriers than families who had significant, prevalent barriers. In at least one case, a landlord who was hesitant to relax the screening criteria for one CMTO family approved another CMTO family who had fewer rental barriers; after the successful lease-up, this landlord seemed to be more receptive to considering additional CMTO families.
- **Prioritizing income stability.** Independent, "mom-and-pop" landlords were characterized as being motivated by a common desire to secure stable rental income streams; they were eager to avoid any risk to their own financial circumstances when they considered leasing to voucher holders. Housing navigators noted that these types of landlords often responded positively to education about the voucher program, which emphasized the reliability of housing assistance payments from the public housing authorities (PHAs). Some of these landlords shared their concerns about the possibility that families might fall behind on utility payments, as this could result in liens against the property. Staff members addressed such concerns by providing information and suggestions: (a) Utility costs such as water and gas might be included in the contract rent amount, in effect making the housing authority the payee; (b) families with extremely low or no incomes may receive utility allowances from the Housing Choice Voucher program; and (c) some utilities offer grants in the form of account credits to low-income families such that their account balances would be net positive upon lease-up.
- **Persuasion following positive family interactions.** The navigators also noted that "landlords are people." They observed that some families, despite their barriers, persuaded landlords to "override their requirements" after making positive, personal impressions on the landlords. These successes suggest that altruism could be a factor in some landlords' decision-making processes.

cases, the housing navigators said that they were able to negotiate the contract rent amount with landlords—such as by suggesting that utility costs be bundled within contract rents—in order to render the unit affordable.

Housing navigators viewed negative responses to CMTO—including formal denials of family rental applications—as potentially valuable opportunities to establish long-term relationships with leasing agents and property managers, which was a main goal of their outreach efforts. They emphasized that a “no” from a landlord now could turn into a “yes” in the future. They observed that professional leasing agents and property managers employed by institutional landlords could frequently change employers or move to different properties, and the housing navigators saw the potential for cultivating a network of stakeholders who were informed about CMTO and who might be willing to consider CMTO families as tenants.

The housing navigators emphasized that a “no” from a landlord now could turn into a “yes” in the future.

One year after their hiring, the housing navigators described efforts to expedite lease-up processes as working smoothly at both PHAs, noting that “landlords are really pleased because we’re keeping our word.” The prompt responsiveness of CMTO to the needs of landlords was singled out as a major contributing factor to this perception. One navigator explained, “If there’s any issue, something comes up where they haven’t gotten their payment from the housing authority, I’m like, ‘Okay, let me get back to you,’ instead of them having to wait three weeks to hear from someone.” Indeed, the housing navigators described with a sense of pride responding to texts, emails, and phone calls from landlords on nights and weekends.

The success of expediting PHA lease-up processes for CMTO was measured by the speed at which CMTO and PHA staff conducted these activities. This speed may have also been partly enabled by the housing navigators’ ability to foresee and prevent any issues that might slow down or disrupt leasing approvals, from simple paperwork errors to needed unit repairs. The housing navigators identified crucial tactics that allowed them to avoid delays, including their ability to assess unit affordability before official “rent reasonable” analyses were conducted; to ensure that forms submitted to the housing authorities were free from error; and to “preinspect” units—that is, to visit units and recommend improvements before official HQS inspections occurred.³³

Notable Shifts in Phase 1 Service Delivery

By early 2019, supported by outcome data, PHA and InterIm staff members were confident that CMTO was on track to support family moves to high-opportunity neighborhoods at scale. The navigators described a sense that service delivery had reached a steady-state effort, especially after some important implementation shifts had been made.

33. Despite preinspections, housing navigators reported that about one-fourth of the units leased by CMTO families required a reinspection, following landlord repair or remediation, after initially failing to pass inspection.

Revising and Clarifying the Roles of the Family and Housing Navigators

Although the CMTO program model inherently emphasized family coaching, it became evident soon after services launched during the pilot that many families—as many as one-third of them in the first months of implementation, estimated one family navigator—expected a degree of staff assistance and accompaniment that was more akin to “hand-holding.” After the start-up phase, CMTO redoubled its efforts to coach families during the housing search, with staff members at InterIm reaffirming their goal to support family-led searching, even though the intensity of CMTO staff supports that were provided during the housing search phase could vary and still be quite high, if this level of involvement was requested by families who were actively engaged in searching.

Through the end of 2018, families were handed off from the family navigators to the housing navigators, with the housing navigators serving as the primary point of contact for many, if not most, families during the housing search period. However, as caseloads matured in the early implementation period, it became clear that the housing navigators were stretched thin and working long hours and weekends to be responsive to both families and landlords. Program operators finally decided that family navigators should continue to be the main point of family contact through, roughly, the approval of the rental application, with the housing navigators supporting families primarily by providing referrals of available rental units and engaging with landlords. The decision to make this shift occurred in the third quarter of 2018, and the change was implemented throughout the first quarter of 2019.

Eliminating Guided Area Tours

CMTO initially aspired to offer guided tours of high-opportunity areas to individual families, with families selecting how many and which areas to tour with the family navigators. In Phase 1, this vision proved infeasible given the large number of families who were served. InterIm ultimately adopted monthly, standardized group tours in each PHA jurisdiction, with morning and afternoon options offered for convenience. Family interest in these tours was described as high, and sign-up lists for the tours were almost always full. However, in practice, family attendance at the tours was very low—even though navigators pointed out that attending families “loved” the tours—and often there would be only “one or two” families in attendance. For a time, the navigators emphasized conducting in-person tours when they accompanied families on unit tours, but even this task became time-intensive as the caseloads reached scale. When family navigator activities became short-staffed, in late 2019, the housing authorities decided to end in-person staff-led area tours and most staff-accompanied unit or property tours. For the duration of the demonstration, the family navigators offered printouts of the group-tour itineraries to families who were interested in visiting high-opportunity areas on their own.

PHASE 2: VARYING CMTO DESIGN TO FURTHER LEARNING

Taking Stock and Advancing the CMTO Learning Agenda

After Opportunity Insights shared early findings showing CMTO's impacts on the numbers of families moving to high-opportunity areas, the PHAs and research partners convened to take stock of what had been accomplished and learned during the implementation of Phase 1. The objective of this two-day meeting, held in February 2019, was to consider how a second phase of the CMTO study—one using a multiarm, randomized controlled trial—could build evidence on the effectiveness of alternative approaches to delivering housing mobility assistance. A critical learning objective was to determine whether some selective, lower-cost combinations of CMTO features could be effective in producing increases in moves to high-opportunity areas.

The partners agreed to use Phase 2 to test two new CMTO interventions against the original CMTO service bundle as well as a control group that, as in Phase 1, would receive standard HCV program assistance. Following similar recruitment and enrollment approaches as Phase 1, targeted again to HCV waitlist families with children under age 15, enrollees would be randomly assigned to one of the following four research groups:

- **Group 1: CMTO Financial Assistance with no direct staff support.** Families who were assigned to this group would have access to financial assistance—up to \$3,500, the same amount as was offered to families in Phase 1—to support moves to high-opportunity areas. They also received light education about high-opportunity areas from PHA staff members during the issuance of vouchers and through a customized CMTO website. Families would not receive any coaching on rental applications, assistance with housing searches, or expedited lease-up supports from CMTO staff. A staff point of contact at InterIm CDA would coordinate the financial assistance once families were ready to access it.
- **Group 2: CMTO Toolkit, with reduced staff support and reduced financial assistance.** Families would receive “lighter touch, streamlined” services from CMTO staff through one in-person meeting with a family navigator dedicated to serving this program. In addition, supportive tools and resources—generally identical to those used by the existing CMTO program—would be provided to families in a packet and online through a customized CMTO website. The CMTO Toolkit would offer reduced security-deposit assistance (specific to the voucher's bedroom size) to streamline program costs.
- **Group 3: CMTO Coaching and Resources.** The Phase 1 CMTO intervention would be provided largely as is, with some opportunities for streamlining service delivery. One family navigator would be tasked with serving a smaller caseload, composed of families from both housing authorities.
- **Group 4: PHA Standard Services (no CMTO support).** These families formed the Phase 2 control group and, as in Phase 1, only received voucher program information and supports that the PHAs normally provided outside of CMTO.³⁴

³⁴. See Opportunity Insights (2020a) for a full summary of the program interventions that were offered and tested in Phase 2.

Appendixes A through C present the typical information provided to families who were randomly assigned to receive each of the CMTO programs offered in Phase 2.

Preparing for and Launching CMTO Phase 2 Implementation

The PHAs led the task of translating the broad intervention design objectives that emerged from the design conference into operationally sound and distinct programs. They met with CMTO staff members at InterIm CDA to develop lower-effort alternatives, which then allowed the PHAs to estimate the total time and, thus, cost of each intervention. Although reducing costs was a primary design imperative in Phase 2, PHA staff members recalled that the priority was designing effective interventions that would require less staff time, the costs of which were then projected.

Website Redesign and Program Document Digitization

During the program redesign period, revisions were made to the CMTO website as well as the program materials that would be uploaded to provide families with online access to program resources. In Phase 2, the PHAs decided to create three password-protected CMTO website portals, one for each of the distinct interventions. This work entailed producing program documents that families could access and complete digitally. It also presented an opportunity for the CMTO staff to revisit and refine the tools they used to coach families.

Enhancing Program Communication

In addition to making coaching and search tools available online to families in the CMTO Toolkit group, staff members at InterIm CDA developed a process for conducting broad email outreach to participants in that program. These emails would complement direct outreach by the family navigators to families, to occur roughly every few weeks, and would ask families about the progress of their housing searches. InterIm staff members selected a commercial e-marketing platform to enable this email outreach, created the email templates, and developed a schedule for transmitting this content, starting after a family was referred to the program and continuing every two weeks until the family leased up or had its voucher expire.³⁵

Streamlining Service Delivery

To streamline or eliminate service delivery for the CMTO Toolkit group, the PHAs needed to explore whether and how to support families with referrals of available units without fully involving the housing navigators. They decided to send generic (that is, not individualized or customized) lists of rental units in high-opportunity areas to families with vouchers for units with three bedrooms or more; these families often had a harder time finding available units. The family navigators would also be allowed to pass along a list of landlords who had previously leased to CMTO families to any CMTO Toolkit family who indicated that they were struggling with the housing search. However, the landlords renting these units would not be engaged by the housing navigators in advance.

35. The first several emails were transmitted to KCHA's client families on a weekly basis, given the faster timeline for issuing vouchers to those families.

Another important pivot from Phase 1 concerned the practice of having the housing navigators hand-deliver to landlords financial assistance payments, especially security deposits, in check form. This method of delivery became common practice in Phase 1 out of a desire to meet the program's high standards for landlord responsiveness, but it was identified as an investment of staff time and effort that conflicted with the cost-efficiency objectives of Phase 2. After rejecting alternatives to using paper checks, the PHAs decided that any checks would be sent by next-day parcel post.³⁶ The PHAs also decided to no longer pay lease holding fees, if applicable and required by landlords, until a family's rental application was approved.

Finally, the PHAs modified the comprehensive set of CMTO services (those offered to Group 1) by formalizing the elimination of staff-led opportunity-area tours. In the second up-front family meeting, they also added tools and training on how to complete rental applications, in response to the observed challenges some families had in completing this task.

Staffing Shifts

Modest changes were made to the staffing plan in support of the new program requirements and in anticipation of significantly lower caseloads in each program group than in the Phase 1 program:

- The CMTO Coaching and Resources and CMTO Toolkit programs would each be staffed by one of the two existing family navigators, meaning that all families participating in a given program were served by one family navigator, regardless of which PHA offered them a voucher.
- The CMTO Coaching and Resources group would continue to be served by both housing navigators, who would also be responsible for providing only expedited lease-up supports for families leasing in high-opportunity areas in the CMTO Toolkit intervention.
- The housing authorities would use additional administrative staff support at InterIm CDA—at 50 percent of one staff member's time—to coordinate services to families in the CMTO Financial Assistance program.

Recruiting Families in Phase 2

As in Phase 1, the PHA CMTO teams worked with their HCV program counterparts to assess the capacity of each agency to offer and issue vouchers to eligible waitlist families in order to estimate the number of families who could be enrolled in Phase 2. SHA—which would continue to issue new vouchers in support of CMTO only—had around 850 potentially CMTO-eligible families remaining on its active HCV program waitlist. For its part, KCHA projected that it could issue a maximum of 300 vouchers. Using assumptions developed from the Phase 1 recruitment

³⁶. In addition to assuming next-day shipping fees, the housing authorities also encouraged the navigators not to worry excessively over any credit card processing fees that were being charged when payments were made using InterIm CDA corporate credit cards, given the relatively higher cost of hand-delivering checks.

experience, the housing authorities estimated that they might together enroll between roughly 560 and 700 families into the Phase 2 study, with between 485 and 600 families issued vouchers.

Upon launching recruitment and study enrollment operations in early July 2019, both PHAs experienced lower-than-expected sample build-up performance relative to their targets and to the Phase 1 experience. Trends included the following:

- lower-than-expected attendance at CMTO intake briefings at SHA
- fewer families who did respond meeting the voucher program eligibility criteria, such as income requirements or other local preferences, like homelessness
- more families who were eligible for the voucher being willing to forgo voucher assistance because their incomes fell just under voucher eligibility thresholds, and voucher assistance would have been shallow

In response to these challenges, the PHAs undertook some corrective actions—such as increasing the number of families who were drawn from waitlists and expanding their proactive outreach to families—that began to improve the study enrollment rates. However, the onset of the COVID-19 pandemic prompted the PHAs and research partners to end enrollment in Phase 2 in March 2020. In the end, the PHAs enrolled a combined total of 300 families (nearly evenly split between SHA and KCHA), who made up just over 24 percent of the 1,229 waitlist families who were sent a CMTO and HCV application.

Perspectives on Implementing the CMTO Financial Assistance Intervention

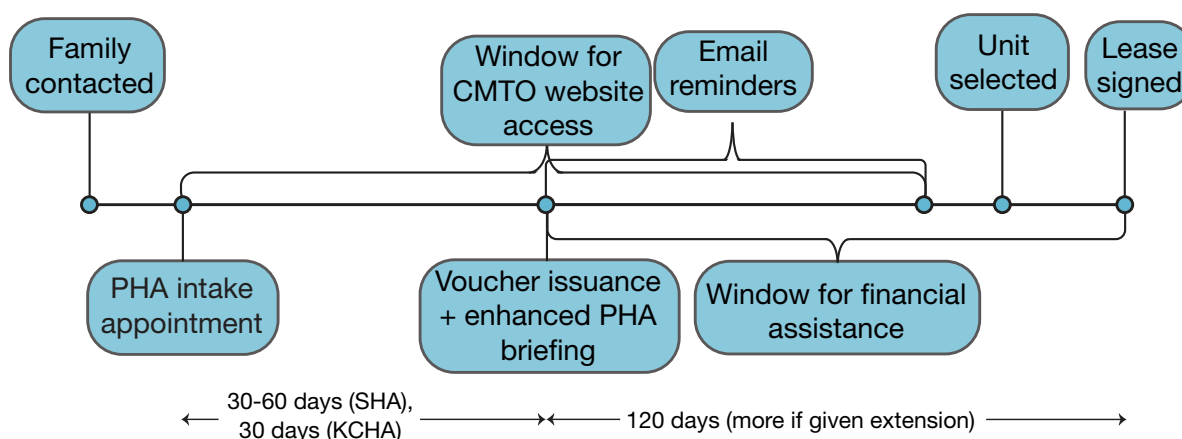
The CMTO Financial Assistance program was the most pared-down of the Phase 2 intervention bundles that were offered to families. It offered financial assistance to families who were pursuing moves to high-opportunity areas and staff engagement only in support of the financial assistance administration.

Service Delivery

Families who were assigned to receive CMTO Financial Assistance services generally had had two main service interactions with PHA staff in the past and as their housing searches began. Families received a basic orientation to the CMTO Financial Assistance option during the voucher program intake and CMTO enrollment briefing. After their random assignment, families who were placed in this version of the program received a flyer summarizing the program (reproduced in Appendix B) and were told that they would receive more information about CMTO at their voucher issuance briefing. These group voucher issuance briefings at the PHAs were customized and conducted exclusively for families who were offered CMTO Financial Assistance. At those briefings, the CMTO housing counselors explained the CMTO initiative overall, demonstrated how to navigate the CMTO website—including how to access it and how to use the CMTO address lookup tool—and explained the steps for getting in touch with the CMTO Financial Assistance

coordinator.³⁷ After this issuance briefing, the only proactive outreach made to participating families was through regular email communications that reminded families how to use the program’s financial supports. See Figure 3 for an overview of the CMTO Financial Assistance program service flow.

FIGURE 3
CMTO Financial Assistance Flow Diagram



SOURCE: Opportunity Insights.

NOTES: CMTO is Creating Moves to Opportunity. SHA is Seattle Housing Authority. KCHA is King County Housing Authority.

Email outreach was instituted as a midcourse adjustment to practice in order to ensure that families were reminded of the services that were available to them. The CMTO Financial Assistance coordinator described most of the inquiries she received from families as basic in nature, easily addressable, and often in response to the emails that were sent by the program. Common family questions centered on practical concerns:

- How much financial assistance is available?
- Could the program cover application and holding fees?
- Is a specific rental unit located within a high-opportunity area?
- How do I access and use the website?

³⁷ PHA staff held the primary responsibility for orienting families who were offered CMTO financial assistance during the issuance of vouchers—a major difference between this and the other CMTO programs, in which the navigators oriented families to the services and reinforced the service offer at the time the vouchers were issued.

The CMTO Financial Assistance coordinator's observation supported the perspectives of other staff members at InterIm. They said that the CMTO-specific messages that were being targeted to families in this program were getting lost among all the other information that the PHAs were "throwing at them" during up-front voucher service delivery. At the same time, the PHA housing counselors believed that they had gone as far as they could possibly go in highlighting CMTO content through standard HCV program interactions. Some PHA staff members wondered if families would better understand the services that were being offered and be more inclined to consider pursuing opportunity moves if CMTO staff held just one individualized consultation with each CMTO family after their voucher was issued.

For families who identified a rental unit located in a high-opportunity area and who requested assistance, the CMTO financial coordinator verified the unit's location and instructed the family to complete a financial assistance request form and provide supporting documents. The coordinator then contacted the landlord, explained that the program would arrange the financial assistance payments on behalf of the family, and requested from the landlord a breakdown of application and lease-up costs and other associated documentation. The coordinator also explained to the landlord the process for scheduling a rental unit inspection from the PHA and, ultimately, made payments by mailing checks. The coordinator shared that the most common challenge stemmed from the incomplete submission of required documents by families. Roughly one year into program implementation, the coordinator believed that the amount of financial assistance offered was sufficient to support opportunity moves, with no family leveraging the maximum amount of assistance available, \$3,500.

"Some phone calls from families ... were pretty intense, because their backs are up against the wall, they're stressed out, they're crying, they're frustrated because their voucher is going to end soon."

Perceptions of Family Participation and Housing Searches

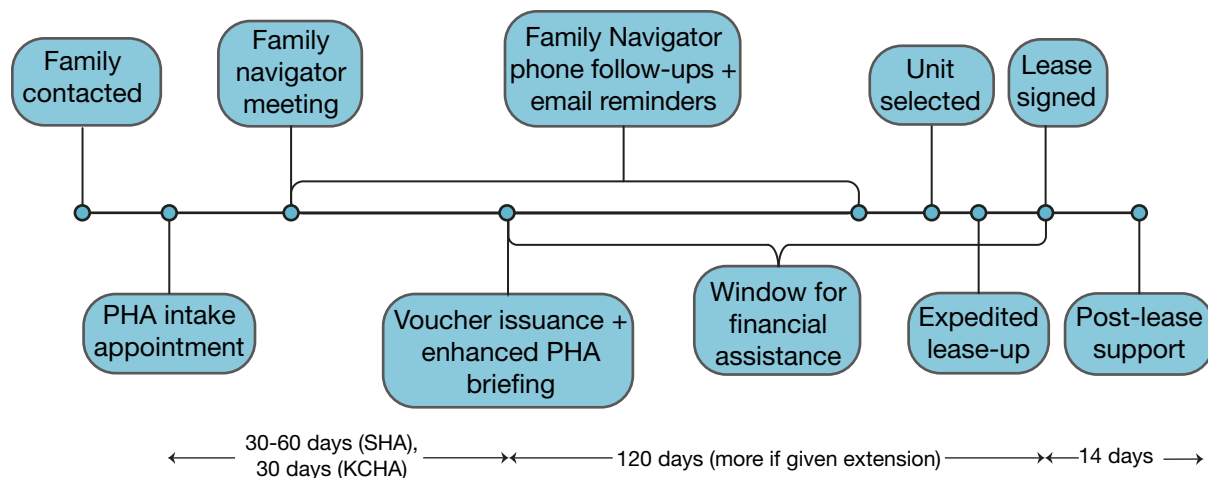
After about one year of delivering CMTO Financial Assistance program services, the CMTO team member coordinating those services observed that participation in the program was pretty "cut and dried" for families in its focus on covering rental application and lease-up costs once families reached those points in their housing searches. She noted that once program reminder emails began going out to CMTO Financial Assistance participants, she received an increase in engagement from families who were still searching for housing, including "some phone calls from families that were pretty intense, because their backs are up against the wall, they're stressed out, they're crying, they're frustrated because their voucher is going to end soon." Overall, the coordinator observed that "[a family's] credit and income have a lot to do with whether the landlords want to lease to them." Although she reflected that families with income from employment were probably more likely to see their applications approved, she also noted that any family *could* be approved by landlords if they were diligent in their housing search and capable of independently communicating and negotiating with landlords. Indeed, several families in the program leased up at properties that other CMTO families had already leased up in, underscoring that families with significantly fewer supports could achieve the same outcomes as their peers with access to more supports. Even though more intensive staff housing search supports could not be provided to such families, the coordinator did believe that compiling and sending customized lists of

available rental units to bolster families' search efforts would represent a low-touch approach to supporting families who were searching in high-opportunity areas.

Perspectives on Implementing the CMT0 Toolkit Intervention

Families who were offered the CMT0 Toolkit program received “lighter touch, streamlined” services from CMT0 relative to the CMT0 Coaching and Resources program: one in-person meeting with a family navigator dedicated to serving this intervention, a packet of rental application coaching and housing search tools in hard copy and also available through a customized CMT0 website, and regular phone or email follow-ups from program staff. The CMT0 Toolkit offered a smaller amount of security-deposit assistance to further streamline the program, and customized unit referrals were available only to families with voucher bedroom sizes of three or more. Other families could receive only a list of landlords who had previously participated in CMT0. The housing navigator role in this program was limited to expedited lease-up and security-deposit administration. See Figure 4 for an overview of the CMT0 Toolkit service flow.

FIGURE 4
CMT0 Toolkit Service Flow Diagram



SOURCE: Opportunity Insights.

NOTES: CMT0 is Creating Moves to Opportunity. SHA is Seattle Housing Authority. KCHA is King County Housing Authority.

Service Delivery and Family Engagement

The content that was conveyed by family navigators in two up-front, in-person family meetings during CMT0 Phase 1 translated into one 60- to 90-minute family meeting for families in the CMT0 Toolkit program. A crucial difference between the two meetings was a big reduction in modeling or practicing landlord interactions. The family navigator delivering CMT0 Toolkit services described families' engagement in this single in-person meeting as very high, and she

viewed this result as remarkable given that families were only offered a meeting at the offices of InterIm CDA or the PHAs, rather than at a location that was convenient to families' homes (as was the case during Phase 1). The family navigator further described her surprise that so much could be "crammed" into one in-person meeting and observed that families "across the board" expressed appreciation for the services that were described and offered. However, the navigator also noted that these conversations were significantly more staff-driven than in her Phase 1 experience, given the amount of information that had to be conveyed.

The family navigator described fairly high engagement in follow-up phone calls—she was generally able to get in touch with a majority of participants—although some families were easier to communicate with by email or text messaging after being unresponsive to phone calls. The navigator expressed that, relative to the family-staff exchanges in Phase 1, the conversations were less rich and more superficial because they occurred less frequently, about once per month. She noted that "it felt like we were only getting a snapshot, whereas in CMTO Coaching and Resources it felt like you were going through the journey with families." Notably, fewer families seemed to be raising questions about or challenges relating to their housing searches. Although the family navigator made efforts to prompt families to discuss such challenges, she believes that there were simply fewer natural opportunities for families to reflect on their search preparations or progress, resulting in less productive interactions. When families did point out challenges to their searches, the program's response was to reinforce the CMTO resources that were available on the website and in the hard-copy program packet, with customized links sent in a follow-up email. The result was, in the words of the family navigator, "a much, much shallower level of support in the housing search phase" compared with Phase 1, but one that was significantly more straightforward and less time-intensive to deliver.

The family navigator for the CMTO Toolkit described "a much, much shallower level of support in the housing search phase," compared with Phase 1, but one that was significantly more straightforward and less time-intensive to deliver.

At InterIm's recommendation, the PHAs and research team implemented an adaptation to the program, in January 2020, to cover family rental application fees with CMTO Toolkit program funds. This change came in response to the family navigator's experience working with families who were hesitant to expend their resources by applying to units in high-opportunity areas or who required significant time to save up specifically for these costs and may have missed out on desirable units as a result. All families who were searching with active vouchers at the time of this change were informed by email of the program shift, and many families responded positively. Finally, the housing navigators noted that the existing CMTO processes for conducting or coordinating HCV unit inspections for CMTO Toolkit families who were leasing in high-opportunity areas worked seamlessly for the landlords.

Family Search Trajectories

Many of the CMTO Toolkit families' search experiences were unknown to program staff because of the lighter-touch approach to the program. However, the family navigator observed two distinct categories of families who were especially engaged in services overall:

- **Families who were firmly committed to moving to high-opportunity areas** were comfortable searching independently—that is, using financial assistance supports only—and seemed likely to lease quickly.
- **Families who experienced rental application denials** generally experienced discouraging (or discriminatory) landlord interactions, and asked the navigator for assistance.

The family navigator described the first type of participant as likely to have fewer rental application barriers and more household resources, such as earned income. She believed that the CMTO Toolkit program was best suited to supporting these types of searchers.

As was the case with many families who experienced rental application denials in the Phase 1 program, the family navigator noted that her engagement with such families frequently involved a “remedial” review of materials and approaches that had been covered in her initial meeting with families, with some specific advice about how to engage with the landlord who had denied the family. In response to denials, families were encouraged to request a copy of the screening report. They were also sent links to tools such as a template letter that families could use to explain the circumstances of any barriers, their recent rental history, and their commitment to responsible tenancy.

What seemed “more difficult” to the family navigator was when families requested unit referrals. Unless they had a larger voucher size, the navigator could only provide lists of properties that CMTO had worked with in the past and suggest that families use the CMTO address lookup tool in combination with online housing search resources to identify units independently. For families who did have large bedroom sizes, the family navigator sent listings of available rental units in high-opportunity areas that she found, but these lists were usually not highly screened against a family’s preferences, often just matching a family’s PHA jurisdiction and voucher bedroom size.

The navigator observed that she often found out about rental application denials well after the fact, when opportunities to reverse the denial outcomes usually seemed to have faded. She posited that even after the program announced that it would cover rental application fees, families were simply less inclined (and less motivated by staff outreach) to venture to apply to units in higher-opportunity areas—or to continue applying after experiencing an application denial—with many opting instead to search in more familiar areas that were not high-opportunity areas. Despite these trends, the family navigator emphasized that the CMTO Toolkit had demonstrated success in supporting some families with significant barriers to leasing in high-opportunity areas. She noted that some of the families with significant rental application barriers persisted and had their rental applications approved in high-opportunity areas. From the perspective of the family navigator, if families are highly motivated and can make the effort and “lean in,” then they can succeed in being approved by landlords.

Pared-Down Financial Assistance

In the opinion of some staff members at both InterIm CDA and the PHAs, families were motivated, in part, to engage with CMTO in Phase 1 because it offered more financial assistance, especially security deposit assistance, than the standard Housing Choice Voucher programs at the PHAs

could. However, at both PHAs, the Phase 2 CMTO Toolkit program provided, by design, the same amount of security-deposit assistance that KCHA provided as part of its standard HCV program services—that is, less than was offered to CMTO families in Phase 1 and less than the other Phase 2 CMTO programs offered. SHA did not make security-deposit assistance widely available to HCV families in its standard program, while KCHA offered security-deposit assistance to all new-admissions voucher holders. Since families who were offered CMTO Toolkit services at KCHA could receive the same amount of security deposit assistance whether or not they moved to high-opportunity areas, staff members reasoned that fewer KCHA families in the CMTO Toolkit program, compared with their SHA peers, were inclined to look for housing outside of high-opportunity areas, all other things being equal, and early program participation trends supported this theory. In characterizing the potential for a lack of service contrast on financial assistance in the CMTO Toolkit, the family navigator serving CMTO Toolkit families asserted her belief that financial assistance did not primarily motivate families' engagement with CMTO. She reiterated that most voucher heads of household were, at minimum, somewhat “on board” with the rationale for moving to high-opportunity areas as a way to promote opportunities for their family members, but she viewed the offer of increased financial assistance as an added incentive for families to pursue opportunity moves. Nonetheless, some respondents reasoned that, given KCHA's generous assistance with security deposits outside of CMTO's high-opportunity areas, moves to these areas represented an easy alternative to families whose overriding concern might be to lease up anywhere they could.

Some respondents remembered having “anxiety” about the reduced amount of financial assistance that was available in the CMTO Toolkit relative to the Phase 1 CMTO program, and they specifically worried that if security deposits were greater than the amounts that were available, families would not be able to pay them. However, once service delivery began, they were somewhat relieved to learn that this was not an issue. They theorized that some families were able to leverage security-deposit assistance from other service agencies, which they generally perceived as widely available in the Seattle region, or that families were able to save or had access to sufficient resources to fill any gaps in their security-deposit assistance.

Perspectives on Refining and Continuing the CMTO Coaching and Resources Intervention

CMTO Coaching and Resources, as the original CMTO program would be called in Phase 2, was conceived largely to carry over the existing practices from Phase 1, offering the partners an opportunity to continue to evaluate that program as it matured. Its continuation would also enable direct comparisons against the two new CMTO strategies that were being offered to similar families and in parallel. Thus, in contrast to the significant adaptations to practice that the CMTO Financial Assistance program and CMTO Toolkit program reflected, only modest refinements were needed for the Coaching and Resources program. In sharing their perspectives on implementation and the families' and landlords' responses to the continuation of the program, staff members at InterIm generally remarked that most earlier experiences and trends were continuing to play out, with some noteworthy exceptions.

Enhancing Up-Front Rental Application Coaching

After identifying during Phase 1 that many families were unfamiliar with the process of applying for rental housing, the navigators incorporated up-front training for all families on how to complete and submit rental applications in the second family navigator meeting. This training entailed family navigators reviewing a stylized example of an application and discussing how to complete commonly required fields. Of note, they provided the specific guidance that families report their Housing Assistance Payment amount—referencing their voucher estimate sheet—as family income; family navigators thought this was important guidance that many families otherwise lacked. Staff members at InterIm generally remarked that service delivery was proceeding as it had in Phase 1, but the housing navigators did observe that a larger share of families in Phase 2 were very proactive in conducting independent housing searches. They reasoned that this outreach was a result of the maturing of CMTO’s approaches to delivering up-front coaching on rental applications and preparation for housing searches.

Landlord Reengagement

After successfully supporting a critical mass of CMTO lease-ups in high-opportunity neighborhoods, the housing navigators in Phase 2 were now reengaging at scale with landlords who had already successfully leased to CMTO programs. Roughly two years after launching Phase 1 services, the housing navigators guessed that at least 50 landlords had leased to two families or more. They also shared that landlords who were open to reengagement were more likely to be those who were willing to look past family barriers to rental application approval, and they suggested that by the end of Phase 2, families with fewer barriers were more likely than families with present barriers to lease with landlords who were new to CMTO participation. Finally, reengagement with past landlords was rarely initiated by the landlords, according to the housing navigators. Most often, the housing navigators said, they noticed available listings from these landlords and made new outreach efforts, rather than hearing directly from the landlords.

Streamlining Financial Assistance

In the transition to Phase 2, the PHAs identified two issues related to the administration of financial assistance that would be addressed:

- **Unit holding fees.** Some landlords asked that unit holding fees be paid at the time the application for the unit was submitted. Such fees would typically be applied to security deposits if rental applications were approved and refunded if applications were denied. However, although these funds were often paid by CMTO on behalf of families, they would be refunded directly to families, and it could be difficult and time-consuming for CMTO staff to coordinate families returning these payments to the program. At the request of the PHAs, CMTO staff in Phase 2 sought to negotiate delays of holding-fee payments with landlords until units passed inspection and the lease-up was guaranteed; they offered promissory letters instead of payment at the time the application was submitted. This approach was not successful, however, and the PHAs finally decided to pay holding fees without restriction, accepting any lost funds as trivial relative to the overall program budget.

- **Hand-delivering landlord payments.** In Phase 2, the PHAs requested that InterIm adopt next-day shipping as a means of delivering financial assistance payments to landlords when paper checks were required. This transmittal method was partially adopted in the CMTO Coaching and Resources program and was perceived as successful. However, the housing navigators still delivered many checks by hand, underscoring the importance to them of making in-person contact with landlords and of delivering payments rapidly “because many landlords won’t give families their keys” until they had received security deposits.

Staffing and Caseload Reductions

The housing navigators mentioned that reduced caseloads in the CMTO Coaching and Resources program and a limited role in expediting lease-ups for CMTO Toolkit families resulted in a much more manageable and predictable workload, with notably fewer weekend or late-night hours spent helping families or responding to landlords. A related operational improvement was the adoption of joint family and housing navigator communication with families during the housing search phase, copying one another when both the family navigator and one housing navigator were in touch with a given family. As a consequence, staff members at InterIm could be more responsive to families, share some tasks, and deliver services as a more unified team. In reflecting on staff-family interactions in the housing search phase, staff members observed that service relationships often developed organically in response to the family’s needs. For reasons unknown, certain families might be more inclined to communicate with either the family navigator or the housing navigator, and the staff accommodated this preference. Indeed, because supporting families through a housing search sometimes meant giving advice to families that they may not want to hear or coaching families to do tasks that they might prefer be completed by staff, it was often ideal for a less-engaged team member to interact with families. Given these family-specific dynamics, navigators emphasized the importance of flexibility and collaboration among themselves.

The Availability and Use of Online Resources

The availability of online high-opportunity-area education, rental application coaching, and housing search program tools was viewed as a worthwhile investment by PHA and CMTO staff, although they were uncertain about the extent to which those resources were accessed, used, and found helpful by families. “I was hoping the website would be more useful than it was,” the CMTO Coaching and Resources family navigator said. “Even though I walked through the website with families up front, they generally would ask basic questions later that indicated they weren’t really using it.” Both she and the CMTO Toolkit navigator described initially sending families direct email links to tools that were available on the website, but they also stated that they later adopted the approach of directly attaching files in emails to families to ease family access to the information.

Overarching Impressions as Phase 2 Entered Maturity

Staff members at InterIm CDA and the housing authorities reflected broadly on a productive and successful effort to build on the demonstrated success of CMTO implementation in a second

phase. The PHAs and InterIm CDA described following through on the design objectives that emerged from the February 2019 convening of the housing authorities and research partners to launch, in July 2019, an experimental test of three CMTO programs against a control group. A challenging sample build-up effort began to see improvement in late 2019 but ended prematurely in March 2020, following COVID-19 outbreaks in Washington State. Before the service delivery adaptations that were necessitated by COVID-19—service delivery continued during the pandemic,

“Even though it’s Saturday, if I don’t respond to this landlord about this family’s rental application right now, then the family might lose this home.”

with modifications that are not addressed in this report—staff members described seeing continued success in implementing the full-fledged CMTO Coaching and Resources program plus the two new variations on CMTO that were unique to Phase 2. As this report was being written in 2020, many participating families were still being offered services and supported in pursuing moves to high-opportunity areas.

Confronting Trade-Offs in Economizing Service Delivery

The CMTO navigators, who generally preferred to use more intensive approaches to supporting families, found the new, pared-down interventions developed for Phase 2 to be inherently “less exciting” than their work in Phase 1, although they described adhering faithfully to the new program designs. These staff members also described some significant lessons about what motivates families and what supports might be most critical in creating moves to high-opportunity areas:

- A narrow focus on helping families afford the costs of applying for and moving into housing will likely not address the range of challenges that most families face during housing searches in high-opportunity areas; helping families “continually process their housing search journey” was seen as critical to the efficacy of the CMTO Coaching and Resources program.
- Sending proactive program reminders and program content through digital communications seemingly resulted in marginal improvements in family engagement during Phase 2. However, family navigators suggested that family participation in the offered services following these reminders could be uneven.
- A mobility program that is centered largely around a family’s independent use of program search materials in lieu of intensive staff coaching and intervention may be less effective with less motivated or more disadvantaged families.
- The more intensive coaching and housing search strategy may succeed because it “focuses families on their own objectives” and “doesn’t leave a lot of down-time for folks to get off track.”

Reflecting on Critical Staff Competencies

With roughly two and a half years of implementation experience, staff members at the housing authorities and InterIm CDA shared some impressions about what staff attributes and skills contributed to the success of CMTO’s implementation.

- Supporting families in the Housing Choice Voucher program requires empathy, patience, and follow-through. Working knowledge of the HCV program is critical for both family-facing and landlord-facing staff.
- Taking a family-centered approach to coaching means asking families to “tell their story” at the start of the service relationship and then “repeating that story back in everything staff do” by adapting the program’s services to the family’s own goals. It also means setting clear boundaries that define what assistance can and cannot be provided. Having knowledge of external resources can be valuable in helping to meet families’ additional needs.
- Successfully engaging landlords requires a committed and flexible mindset that recognizes, “Even though it’s Saturday, if I don’t respond to this landlord about this family’s rental application right now, then the family might lose this home.”
- “Culturally competent” service delivery was viewed by CMTO staff members as crucial. They described serving a diverse population possessing a variety of lived experiences, a wide range of approaches to conducting housing searches, and sometimes very high expectations of service providers.
- Finally, staff members emphasized the importance of familiarity with high-opportunity areas as critical to supporting families in pursuing opportunity moves. Most navigators had some preexisting familiarity with many of the areas, but they emphasized that superficial awareness of any given neighborhood’s attributes or amenities was not sufficient. Rather, they described needing to have an appreciation for “what life would be like for a voucher holder” living in a particular high-opportunity area.

Perceived Challenges to Accessing Rental Markets in High-Opportunity Areas

As the navigators continued to implement successful housing mobility services promoting family choice in high-opportunity areas, they predicted that recent and ongoing rental market and demographic trends in the Seattle area would continue to require more attention and adaptation. They observed that contract rent amounts in Seattle and King County rose over the course of the program’s implementation and would probably continue to do so. They also predicted constant challenges in supporting larger families, given the limited supply of sufficiently large rental units. Finally, although the navigators had confidence in the benefits to children of residing in high-opportunity areas, some noted that north Seattle, and in particular the Northgate high-opportunity area, was undergoing rapid demographic change as a result of new light-rail development in the area, and they were uncertain about how this transformation might affect long-term family persistence there.

Despite the overall accomplishments of CMTO in helping families to overcome external barriers to leasing up in high-opportunity areas, the housing navigators remarked that landlords were increasingly altering rental application screening criteria in ways that might preclude most voucher households from ever being approved for rental units. They noted that many landlords were now requiring applicants to have four times a unit’s annual rent amount in earned income,

a standard that they said most voucher families would not meet, even if PHA payments were treated as family income. Another application screening criterion the housing navigators had encountered required applicants to have at least \$10,000 in annual income.

LOOKING FORWARD

With an eye toward detailing the partners' experiences in designing and implementing the CMTO model, this report documents what was done to help families achieve "opportunity moves." These findings shed light on the experiences of staff members, families, and landlords in offering and engaging with the CMTO program, especially during Phase 1. With many Phase 2 families still searching for housing at the conclusion of the implementation study, ongoing evaluation efforts will continue to offer findings and lessons from both study phases.

As shown, the CMTO demonstration in Seattle and King County represents a path-breaking and successful partnership across two PHAs, a service partner, and several research institutions to study the effort required to support HCV families with young children in making moves to high-opportunity areas across a large and varied metropolitan region. Numerous PHAs across the country are beginning to undertake similar mobility initiatives, and the design choices about and experiences of implementing CMTO in Seattle and King County that are described in this report can provide helpful insights to inform those efforts. Looking forward, the CMTO Seattle–King County Demonstration serves as an important template for endeavors funded by Congress and private foundations to advance the housing mobility learning agenda.

APPENDIX

A

CMTO Coaching and Resources Program Flyer



Coaching and Resources

Explore new opportunities for your family!

Now that you are part of Creating Moves to Opportunity (CMTO), don't miss out on these supports to help you and your family make the most of your next move.



Discover Your Choices

Learn about neighborhood choices and identify places where you think your family will thrive.

Open up the possibilities of new communities and choose the best place for your family with the information and resources.



Market Yourself

Make your best impression with landlords during your housing search.

CMTO staff can support you with the application process by helping you create a strong rental resume and organize required documents.



Search for Homes

Find homes in opportunity neighborhoods that match your family's needs.

Create your housing search plan with guidance from CMTO staff. We can help you look for available rental units and connect you to landlords. We will work with landlords to quickly inspect and approve your new home.



Financial Support

Because moving can be costly, we can help you pay for leasing expenses.

Financial assistance is available to support your move to an Opportunity Neighborhood. CMTO can help pay for moving expenses such as application costs, holding fees and security deposits.



continued

Contact info:

[redacted] | www.creatingmoves.org

NEXT STEPS

1. A Family Navigator will contact you within the next few days
2. Meet with the Family Navigator to set goals for your housing search
3. Attend the Voucher Briefing

Meet the CMTO Team

[Author's note: section intentionally left blank for the purpose of this report.]

Login to www.creatingmoves.org with your password: [redacted]

APPENDIX

B

CMTO Toolkit Program Flyer



Toolkit

Explore new opportunities for your family!

Now that you are part of Creating Moves to Opportunity (CMTO), don't miss out on these supports to help you and your family make the most of your next move.



Discover Your Choices

Learn about neighborhood choices and identify places where you think your family will thrive. Open up the possibilities of new communities and choose the best place for your family with the information and resources.



Market Yourself

Make your best impression with landlords during your housing search. Meet with CMTO staff to find out how you can build a rental resume and organize your documents to prepare for rental applications.



Access Resources

Continue working on your housing search plan by using great online tools at www.creatingmoves.org. If you do not have access to a computer or phone with internet data, visit your local library to use the computer for free.



Financial Support

Financial assistance is available to support your move to an Opportunity Neighborhood. Funds can be used to help with lease expenses, such as security deposits.

NEXT STEPS

1. A Family Navigator will contact you within the next few days
2. Meet with the Family Navigator to set goals for your housing search
3. Visit the CMTO website
4. Attend the Voucher Briefing

Meet the CMTO Family Navigators

[Author's note: section intentionally left blank for the purpose of this report.]

Over the Next Few Months:



You will meet with a Family Navigator before you get your voucher to prepare you to make the most of your voucher.



You will receive emails about every two weeks with helpful information and reminders during your housing search.



You will be contacted by a Navigator about two weeks before your orientation to answer your questions about these materials.

Login to www.creatingmoves.org with your password: [redacted]

Updated 6/12/19

APPENDIX

C

CMTO Financial Assistance Program Flyer



Financial Assistance

Explore new opportunities for your family!

Now that you are part of Creating Moves to Opportunity (CMTO), don't miss out on these supports to help you and your family make the most of your next move.



Financial Support

Financial assistance is available to support your move to an Opportunity Neighborhood. CMTO can help pay for rental expenses such as application costs, holding fees and security deposits.



Access Resources

Learn about opportunity areas and get information on how to access financial assistance www.creatingmoves.org. If you do not have access to a computer or phone with internet data, visit your local library to use the computer for free.



continued

Contact info:

[redacted]

www.creatingmoves.org

Over the Next Few Months



Visit the CMTO website:
www.creatingmoves.org
to learn about opportunity
neighborhoods



Attend your voucher
issuance briefing at your
scheduled time to get
your housing voucher!



Find a rental unit in an
opportunity neighborhood
and apply for financial
assistance to help pay for
your leasing expenses.

Types of Financial Assistance:

Here are some of the expenses CMTO can help you pay for through financial assistance. You will get more information on how to request financial support when you get your housing voucher.

Application Fee

Landlords typically charge a fee to submit your rental application. This non-refundable fee allows them to process your application and verify your information.

Holding Deposit

A holding deposit may be required to reserve a rental property before paperwork is completed. Normally this is a non-refundable fee, but it may be dependent on the landlord or property management.

Security Deposit

Landlords will require a security deposit before you move into your unit to ensure that rent will be paid or to cover possible damage caused by the tenant. If you have a pet or service animal you may be required to pay a pet deposit.

Promissory Letter

This letter is a “promise to pay” for leasing fees such as a holding deposit or security deposit. CMTO will issue a promissory letter if your expenses qualify for assistance and you complete the financial assistance request form.

Login to **www.creatingmoves.org** with your password: [redacted]

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ABOUT MDRC

MDRC, A NONPROFIT, NONPARTISAN SOCIAL AND EDUCATION POLICY RESEARCH ORGANIZATION, IS COMMITTED TO finding solutions to some of the most difficult problems facing the nation. We aim to reduce poverty and bolster economic mobility; improve early child development, public education, and pathways from high school to college completion and careers; and reduce inequities in the criminal justice system. Our partners include public agencies and school systems, nonprofit and community-based organizations, private philanthropies, and others who are creating opportunity for individuals, families, and communities.

Founded in 1974, MDRC builds and applies evidence about changes in policy and practice that can improve the well-being of people who are economically disadvantaged. In service of this goal, we work alongside our programmatic partners and the people they serve to identify and design more effective and equitable approaches. We work with them to strengthen the impact of those approaches. And we work with them to evaluate policies or practices using the highest research standards. Our staff members have an unusual combination of research and organizational experience, with expertise in the latest qualitative and quantitative research methods, data science, behavioral science, culturally responsive practices, and collaborative design and program improvement processes. To disseminate what we learn, we actively engage with policymakers, practitioners, public and private funders, and others to apply the best evidence available to the decisions they are making.

MDRC works in almost every state and all the nation's largest cities, with offices in New York City; Oakland, California; Washington, DC; and Los Angeles.

2020 REPORT:
HOUSEHOLDS, NEIGHBORHOODS, AND MOBILITY PATTERNS OF
SEATTLE AND KING COUNTY VOUCHER HOUSEHOLDS
A report to the King County and Seattle Housing Authorities

Report presented by
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Department of Sociology and
Center for Studies in Demography and Ecology
University of Washington

August 2020



Executive Summary

This report provides an update and extension of analyses presented to the Seattle Housing Authority (SHA) and King County Housing Authority (KCHA) in 2016. The report is based on the analysis of administrative records for tenant-based voucher holders between 2008 and 2019 in these jurisdictions and seeks to: 1) describe the frequency, patterns, and trends in residential mobility among households receiving vouchers through SHA and KCHA; 2) develop and describe several strategies for measuring various types of moves that are potentially destabilizing for affected families; and 3) assess the individual, household, and geographic conditions associated with destabilizing moves among voucher holders within the jurisdictions of these public housing authorities (PHAs). Given the well-documented effects of residential mobility and neighborhood location on health and wellbeing, analysis of these patterns and associations are key for understanding the needs of voucher recipients. We focus on the combined populations served by the two PHAs to provide a broader, county-level perspective on mobility patterns, and to assess the mobility patterns of households who move between jurisdictions and receive, at different times, services from both SHA and KCHA.

The analysis supports several key findings:

- The 31,453 unique households receiving a tenant-based voucher at any time between 2008 and 2019 made a total of 23,382 moves between months of observation. Almost 65% of these moves occurred within the KCHA jurisdiction, just over 20% were between locations within the SHA jurisdiction, and 15% were from one agency to another.
- Mirroring declines in mobility nationwide, monthly rates of mobility among housing choice voucher (HCV) householders declined in all areas between 2008 and 2019. By 2019, about 11% of households within the KCHA jurisdiction, and just over 5% of those in the SHA jurisdiction, moved one or more times in the year.
- In most years, monthly residential mobility rates were highest among households with children, but these households also saw the most dramatic declines in rates of mobility across the years of the data.
- Rates of mobility, as well as trends in these rates, also varied substantially by unit size, voucher type, income, race/ethnicity, and language. However, these patterns differed substantially across SHA and KCHA.
- The frequency of several types of potentially destabilizing mobility has also changed significantly over time. Most notably, the percentage of households experiencing two or more moves in any twelve-month period declined sharply between 2008 and 2019, especially in the KCHA jurisdiction.
- Among households without children, the likelihood of originating in a low-opportunity neighborhood, as measured by the Regional Opportunity Index, was greater in KCHA than in SHA. However, the likelihood of downward mobility (moving to a neighborhood with a lower opportunity score) among childless households was greater within SHA than within KCHA. Given the high concentration of high-opportunity neighborhoods in Seattle, downward mobility was especially common for childless households moving from SHA to KCHA, while upward mobility was particularly common for those moving from KCHA to SHA. These patterns of opportunity mobility have remained largely consistent over time.
- More than half of HCV households with children who moved within KCHA, and more than three-quarters of those moving within SHA, originated in a neighborhood with a low or very low level of opportunity as measured using the Opportunity Atlas index from Opportunity Insights. However, mobility patterns within both jurisdictions tended to redistribute households towards destinations with moderate or high levels of opportunity. These patterns of upward mobility have remained largely unchanged over time, as have smaller flows of households moving to lower-opportunity destinations.
- More than half of all moves carried out by SHA households with children of high-school or middle-school ages resulted in a change of school catchment area. A substantial share of moves by KCHA households with adolescents also involved a change in school attendance zones but the share was smaller than in SHA, likely due to a difference in the relative geographic size of school catchment areas in the two jurisdictions.
- The majority of moves carried out by KCHA and SHA households were not characterized by any type of focal disruptions; they did not involve a move to a lower-opportunity neighborhood, necessitate a

change in schools for children in the household, or represent one of several moves over a short span of time. Only 11% of moves were associated with multiple types of potential destabilization.

- Disruptive moves tended to occur relatively close to entry into the HCV program but typically did not prompt an exit from the program within the subsequent two-year period.
- The likelihood of disruptive or destabilizing moves also varied across a number of household characteristics. Most pronounced were variations by race. In comparison to white households, Black households were substantially less likely to move to a high-opportunity neighborhood, more likely to move to a low-opportunity area, and more likely to move with adolescent children to a different school catchment area. Highlighting the persistence of broader processes of residential stratification, these racial differences were pronounced even after controlling for household composition, income, and a range of other mobility-related factors.

In addition to these research findings, key products of this research are a clean, unified dataset for the analysis of residential mobility among HCV participants, and a robust approach to incorporating new waves of administrative data as they become available.

Introduction and Background

This research uses 2008-2019 administrative data from the Seattle (SHA) and King County Housing Authorities (KCHA) to improve our understanding the residential mobility patterns of households receiving housing choice vouchers (HCVs) from these public housing authorities (PHAs). This report is an addendum to a similar report submitted in 2016 that focused on basic characteristics and mobility patterns through 2014. The objectives of the current report are to: 1) update the earlier analysis, focusing on the frequency, patterns, and predictors of residential mobility through 2019; 2) describe the prevalence of several types of moves that are potentially destabilizing for affected families; and 3) assess the individual, household, and geographic conditions associated with destabilizing moves among voucher holders within the jurisdictions of these PHAs. As in the initial analysis, we combine data from KCHA and SHA to provide a more comprehensive, county-wide picture of residential experiences of voucher holders, including those moving between SHA and KCHA jurisdictions.

This analysis of residential location and mobility patterns among households receiving housing assistance is motivated by strong scholarly evidence that changing residence – especially frequent moves – and the characteristics of neighborhoods of residence affect educational attainment, income, health, and a wide range of other outcomes (for reviews, see: Arcaya et al 2016; Minh et al 2017; Sharkey and Faber 2014). We know, for example that frequent mobility is associated with poorer health (Dong et al 2005) and worse social and educational outcomes for children (Metzger et al 2016) and may negatively impact the ability of parents to play an active role in the education of their children (Pena et al 2018). Available evidence also suggests that changing schools is associated with increased disciplinary problems and reduced educational performance for K-12 students (Welsh 2017). At the same time, recent research has provided strong evidence that moving to a higher-opportunity area can have lasting benefits for children, increasing their likelihood of marriage and college attendance, and increasing their earnings later in life (Chetty and Hendren 2018). In contrast, moving to a high-poverty, low-opportunity neighborhood affects exposure to structural conditions linked in past research to a wide range of negative social, economic, and health outcomes, including poorer educational outcomes (Hicks et al 2018; Wodtke et al 2011), lower levels of employment and earnings (Alvarado 2018; Galster et al 2002), increased risk of criminal victimization (Graif and Matthews 2017); higher levels of stress and stress-related illness (Finegood et al 2017; Galiatsatos 2020); and an increased risk of incarceration (Alvarado 2020).

Given these mobility effects on physical, psychological, and socioeconomic wellbeing, comprehensive analysis of mobility frequency and potentially disruptive moves is an important component of efforts to maximize the impact of HCVs on the wellbeing of families served by KCHA and SHA. Accordingly, the current report seeks to address several key questions:

- 1) How many moves occurred among households receiving HCVs, how are these moves distributed across geographic areas, and how has the geographic pattern of mobility changed over time?
- 2) How many moves do HCV households experience each year, and how does this move frequency vary across sociodemographic groups?
- 3) How often do households using HCVs make one of several types of destabilizing moves: moving multiple times over a short period of time; moving to a neighborhood with poorer opportunity structures; and moving children outside of the school catchment area?
- 4) How has the frequency of these destabilizing moves changed over time?
- 5) What is the timing of these moves relative to each other, entry into the HCV program, and the start of the school year?
- 6) In what geographic areas are destabilizing moves most likely to occur?
- 7) Is the occurrence of a destabilizing move associated with exit from the HCV program?
- 8) What household characteristics are associated with the likelihood of various types of destabilizing moves?

DATA AND METHODS

To investigate these questions, we compiled and analyzed administrative data collected by SHA and KCHA from HCV recipients between 2008 and 2019. These data were supplied in several files with individuals appearing in multiple files. We combined these datafiles into a single person-level datafile using either unique PHA-supplied identifiers for each individual in the household or, when consistent unique identifiers were not available, a process of “fuzzy matching,” which matches individuals on first name and birth year.

Once all data sources were merged, we removed: (i) individuals who were not heads of households so that the data could be analyzed for each household served rather than all individuals; (ii) observations associated with an issuance of voucher or an expiration of voucher; and (iii) non-tenant-based voucher observations. With the longitudinal data, we organized the datafile in person-month observations, with each record representing an individual HCV householder in a particular month. This data structure allows us to examine changes in household characteristics across time and to assess several moves by the same household. Our effective sample includes 2,100,574 household-months, representing 31,453 unique tenant-based voucher households. For both the move frequency and destabilizing move analyses, we defined a move as a change of residential address from one month to the next and when it was not associated with a new admission, an issuance of voucher, an end-participation record, and a port-in from outside King County or Seattle. From 2008 to 2019, there were 23,382 moves among tenant-based voucher households in KCHA and SHA combined. Where possible we present results for the entire sample, but several parts of the analysis focus on specific years in which key variables are available in the data.

To characterize the destinations of mobile HCV households, we supplemented the individual-level data with neighborhood-level (tract) data from the Regional Opportunity Index from the Puget Sound Regional Council (PSRC).¹ The index is designed to summarize place-based opportunities for socioeconomic advancement by combining information about local economic conditions, education, housing and neighborhood quality, health and environmental conditions, and transportation. For ease of interpretation, we categorized the original continuous measure by distinguishing neighborhoods with very low/low opportunity (below the 40th percentile of the distribution of Opportunity Index scores for all tracts in King County), moderate opportunity (between the 40th and 60th percentile) and very high/high opportunity (above the 60th percentile).

For households with children, we further characterized local opportunity structures using Opportunity Atlas scores produced through the collaboration of Opportunity Insights and the U.S. Census Bureau.² These scores estimate local opportunity structures by assessing the level of economic mobility of individuals born between 1978 and 1983 and growing up in the given census tract. Again, for interpretability we categorized the Opportunity Atlas scores as very low/low (below the 40th percentile of the distribution of Opportunity Atlas scores for all tracts in King County), moderate (between the 40th and 60th percentile) and very high/high (above the 60th percentile).

¹ <https://www.psrc.org/opportunity-mapping>

² <https://opportunityatlas.org/>

FINDINGS

Questions: How many moves occurred among households receiving HCVs vouchers, how are these moves distributed across geographic areas, and how has the geographic pattern of mobility changed over time?

Figure 1 summarizes the types of moves made by HCV households between 2008 and 2019. The figure combines households beginning the household-month in either the SHA or the KCHA jurisdiction as indicated by the household's street address at the beginning of the household month. The figure does not include moves associated with new admission, issuance of voucher, end of participation in the HCV program, or port-ins from a housing authority other than KCHA or SHA.

With these exclusions, HCV households from SHA and KCHA engaged in 23,382 moves in months between 2008 and 2019. Almost two-thirds (64.8%) of these moves – 15,163 monthly moves in total – involved households within the KCHA jurisdiction moving to another location within the KCHA jurisdiction. About one-fifth (20.2%) of all moves were households in the SHA jurisdiction moving to another SHA location, representing 4,721 moves. Between 2008 and 2019, there were 1,817 monthly moves from SHA to KCHA areas, representing almost 8% of all moves, and just under 4% were from KCHA to SHA, representing 838 moves. The remainder of moves were to outside of KCHA and SHA jurisdictions.

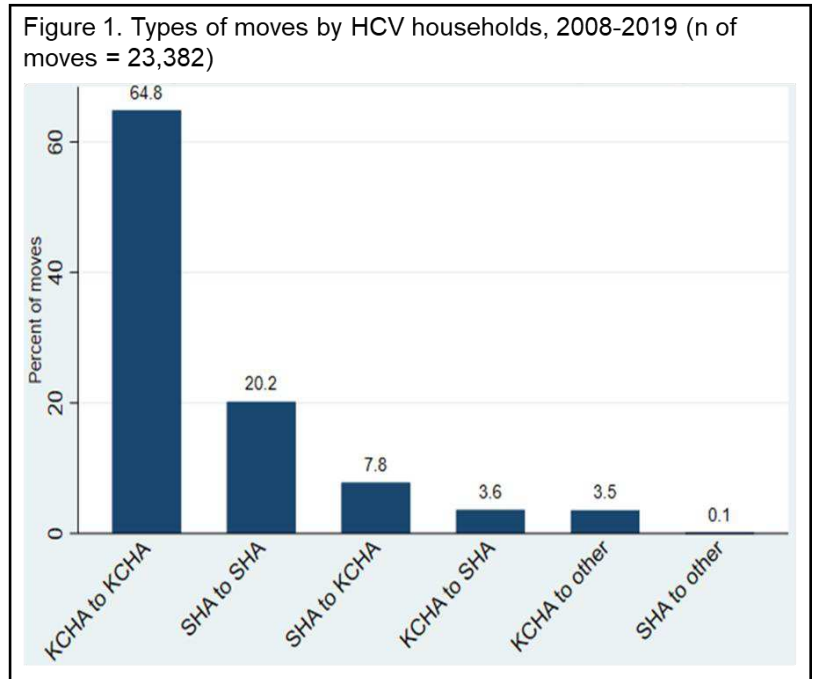
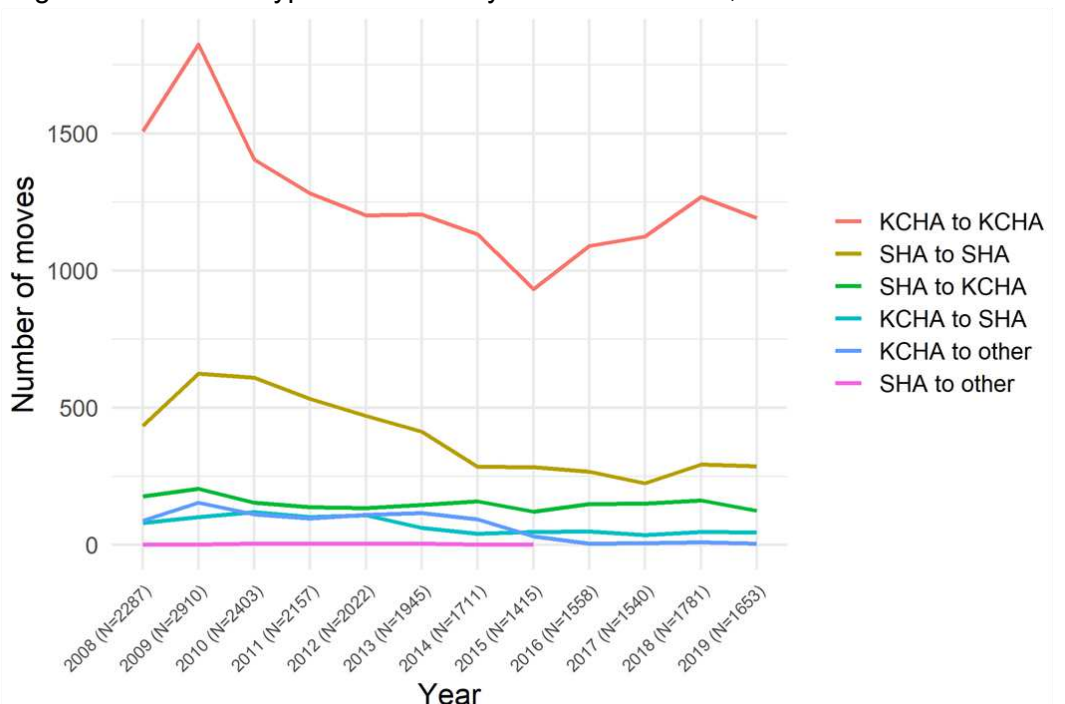


Figure 2 shows changes in the number and composition of moves over time. The overall number of monthly moves among HCV households has dropped sharply, from a high of 2,910 moves in 2009 to 1,558 moves in 2016, before rising slightly to 1,653 moves by 2019.

Declines in moves to addresses within the SHA jurisdiction have been particularly sharp, from 434 moves in 2008 to 286 moves in 2019. As a result, as shown in Appendix Figure A1, an increasing share of all moves involve a move

Figure 2. Trends in types of moves by HCV households, 2008-2019.



between addresses within the KCHA jurisdiction. In 2008, just under two-thirds (65.9%) of all HCV moves were between addresses within KCHA areas. By 2019, moves within the KCHA jurisdiction constituted just over 72% of all moves. In contrast, the share of moves within SHA area declined unevenly, from 19% of all moves in 2008 to 17.3% of all moves in 2019.

Moves from KCHA to SHA has remained largely stable over time, from 80 in 2008 (3.5% of all moves) to 46 (2.8% of moves) in 2019. Similarly, while the proportion of moves involving relocation from SHA to KCHA areas has fluctuated over time, they constituted a similar percentage of moves in 2019 (7.5%) and 2008 (7.7%). As shown in Appendix Figures A2 and A3, the proportion of moves into SHA areas that represent port-ins from KCHA has remained fairly stable (Appendix Figure A2) as has the proportion of moves into KCHA areas that are port-ins from SHA (Appendix Figure A3). The number and percentage of moves to outside of SHA and KCHA areas have been more dramatic. For example, there were 88 moves (3.8% of all moves) in 2008, but only 5 moves (0.3% of all moves) in 2019, from a KCHA area to outside King County.

Questions: How many moves do HCV households experience each year, and how does this move frequency vary across sociodemographic groups?

We shift now from the examination of the preceding summary of the distribution of all moves lumped together to an analysis of the frequency of moves made by individual HCV households. Figure 3 shows the frequency of the number of moves made per year for HCV respondents originating in the SHA jurisdiction. We focus on years between 2012 and 2019 because these are the years in which complete information with which to match individual householders across monthly observations is complete.

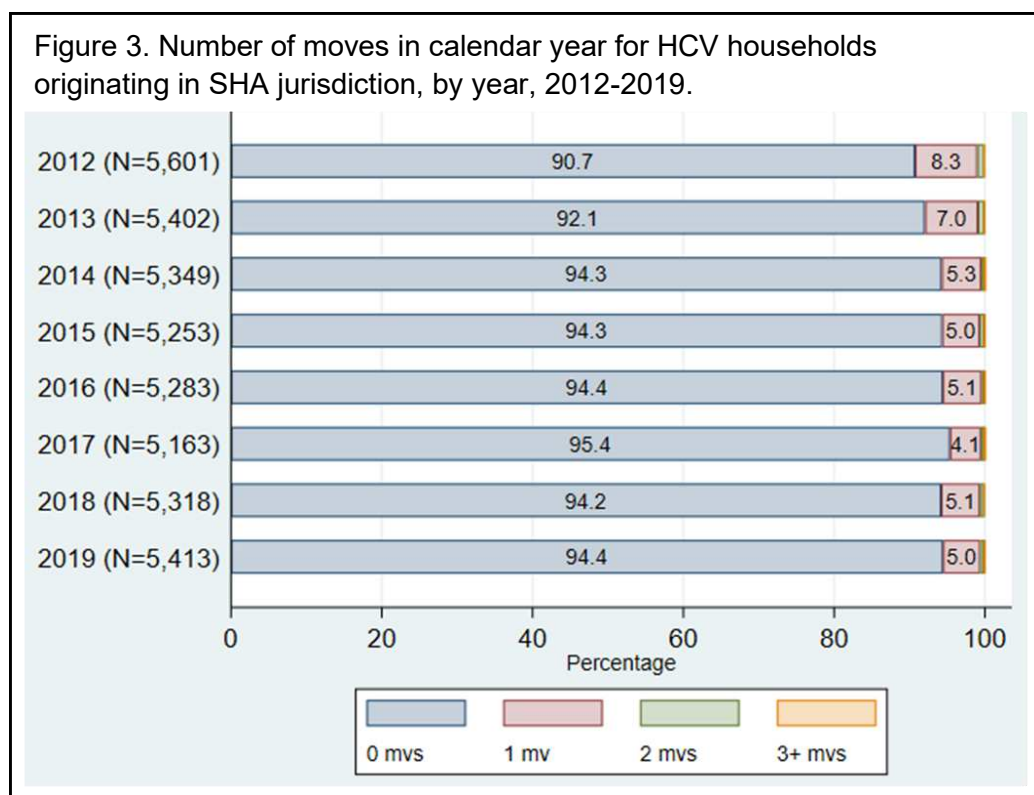


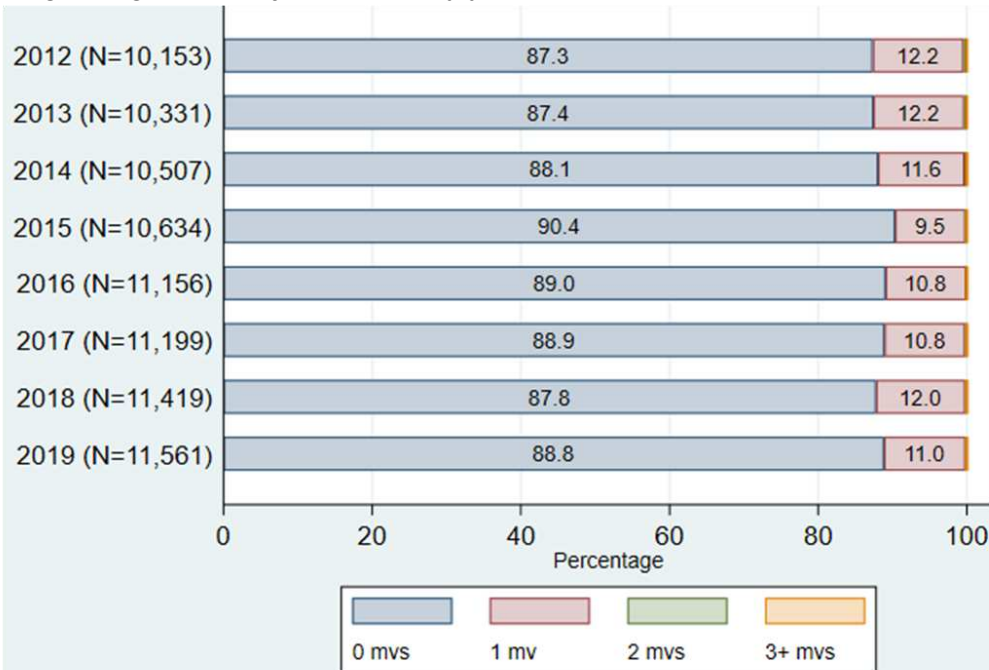
Figure 3 shows that the relative number of SHA voucher recipients remaining at the same address has increased over time. In 2012, 90.7% of HCV households in the SHA area experienced no moves during the calendar year. By 2019, the percentage experiencing no moves had increased to 94.4%.

Moreover, the relative number of households that move more than once has declined. Excluding moves related to admission, issuance of voucher, end participation, and port-ins from outside King County or Seattle, 8.3% (463 households) moved once during the 2012 calendar

year, and 1% (56 households) moved two or more times. In 2019, 5% of households (268 households) in SHA moved one time during the calendar year and 0.6% (32 households) moved more than once.

The overall mobility rate – the percentage of households moving at least once – also declined among households in the KCHA jurisdiction but more modestly than in SHA, and the rate remains slightly higher in KCHA than in the SHA jurisdiction. This difference likely, in part, reflects the greater availability of housing

Figure 4. Number of moves in calendar year for HCV households originating in KCHA jurisdiction, by year, 2012-2019.

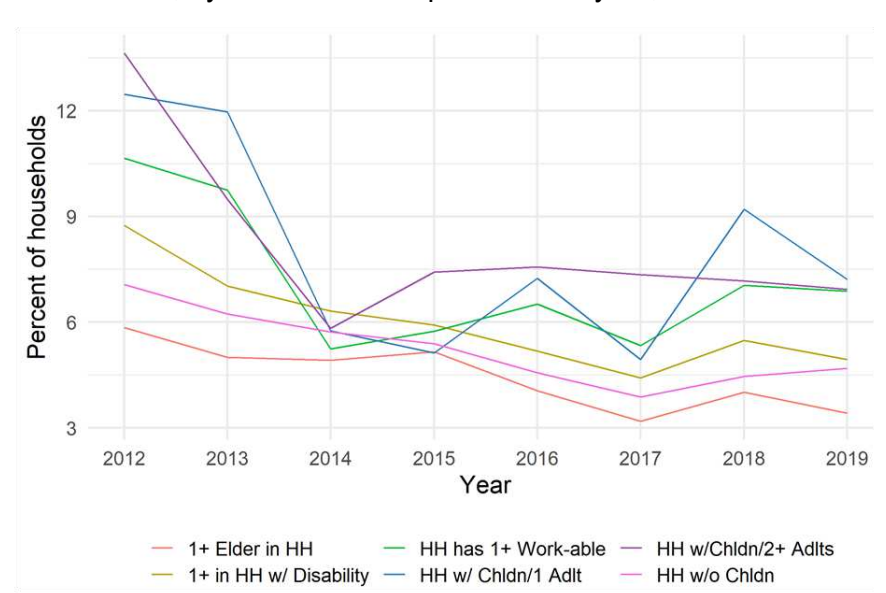


options, especially affordable housing options, across the larger and more diverse residential landscape of the KCHA jurisdiction (Crowder et al 2012). In combination with the fact that there are almost twice as many households receiving HCVs per year in KCHA than in the SHA, this higher rate of mobility means that a much larger number of households in the KCHA jurisdiction experience mobility in any year. The mobility patterns for HCV households in the KCHA jurisdiction are summarized in Figure 4. In 2012, 12.2% of all HCV households originating in the KCHA jurisdiction changed addresses once during the calendar year and 0.5%

moved more than once. In other words, 1,241 of the 10,153 households served by KCHA in 2012 moved at least once during that year. In 2019, a similar number of households (1,269) moved at least once during the calendar year but, with the larger number of households served (N=11,561), the overall mobility rate declined slightly from 12.7% in 2012 to 11.2% in 2019. Moreover, the relative number of households moving more than once has declined slightly over time, from 0.5% in 2012 to 0.2% in 2019.

In both KCHA and SHA, rates of mobility vary sharply across a number of characteristics of HCV households.³ Figures 5 and 6 summarize differences in mobility rates across several categories related to the composition of the household, and trends in these differences across time in the SHA and KCHA jurisdiction, respectively. Specifically, the figures compare mobility rates for households with: at least one elder (person age 65+); at least one work-able adult; at least one person with a disability; no children; children plus one adult; and children plus two or more adults. These household types are not mutually exclusive. For example, a household can contain both children and at least one person with a disability. Figure 5 shows that, among HCV households in

Figure 5. Percent of households in SHA jurisdiction making one or more moves, by household composition and year, 2012-2019.



³ Numbers of cases and mobility rates are presented in Appendix Tables A5 to A16. Table numbers correspond with figure numbers. For example, Appendix Table A5 provides mobility rates and sample sizes for Figure 5.

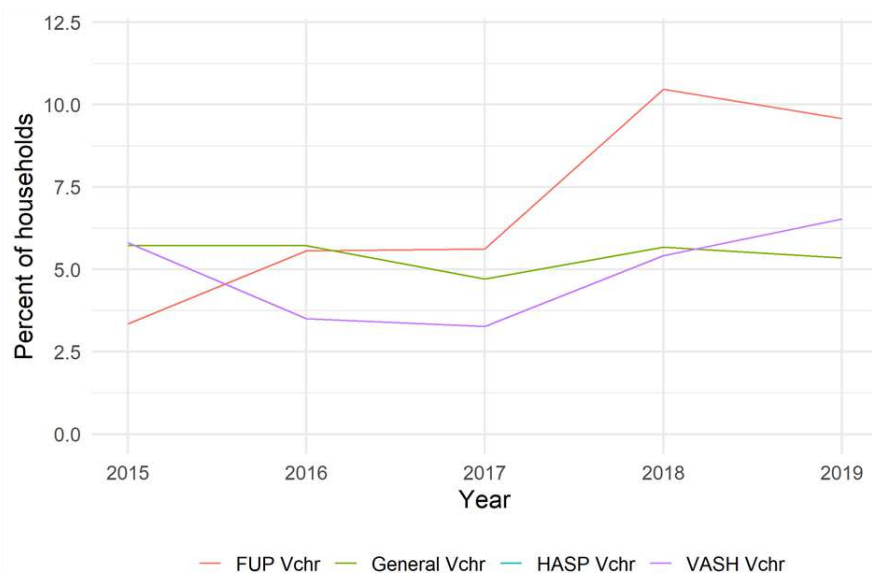
the SHA jurisdiction, the highest level of mobility is among households with children, with those with a single adult slightly higher than those with at least two adults in most years. However, these groups have also seen the most dramatic decline in mobility over time. Specifically, the mobility rate for single-parent households dropped from 12.5% in 2012 to 7.2% in 2019, while the mobility rate for households with children and at least two adults dropped from 13.6% to 7% during this time. For both groups, levels of mobility were particularly low in 2014. Rates of mobility are lower for SHA households without children, those with at least one person over the age of 65, and those with at least one person with a disability. For all of these groups, mobility rates declined slightly from 2012 to 2017 before rising modestly.

Similar patterns exist among households in the KCHA jurisdiction. As shown in Figure 6, rates of mobility are highest among households with single-parent households – those households with children and one adult – in each year since 2012, followed by households with children and at least two adults, and households with at least one workable adult. Households with a member living with a disability and households with no children show a similar pattern of mobility. Following the age pattern of mobility observed in the general population (c.f., Crowder et al 2012), households with at least one member age 65 or older have lower mobility than other households. For all of these groups in the KCHA jurisdiction, mobility rates declined between 2012 and 2015 before increasing slightly through 2018.

Figure 6. Percent of households in KCHA jurisdiction making one or more moves, by household composition and year, 2012-2019.



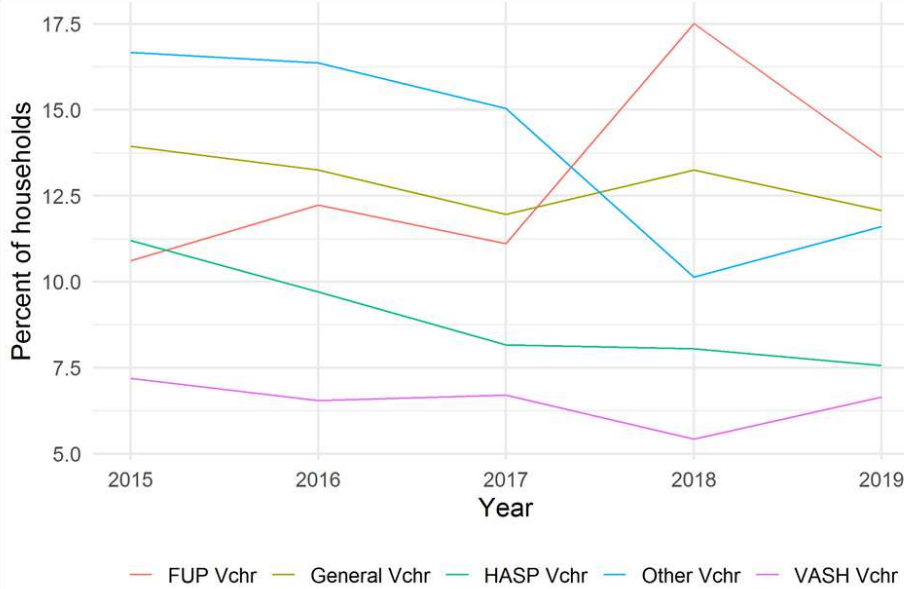
Figure 7. Percent of households in SHA jurisdiction making one or more move, by voucher type and year, 2015-2019.



These differentials are echoed in the patterns of mobility across households receiving different types of vouchers across years in which data on voucher type are consistently available (2015-2018). Figure 7 shows that the increase in mobility rates since 2015 has been most pronounced among SHA households receiving vouchers under the Family Unification Program (FUP). Almost one in ten of these households changed residence at least once in 2019. In this most recent year of data, rates of mobility were slightly lower for households receiving vouchers under the Veteran Affairs Supportive Housing (VASH) program. Among this group, the percentage moving declined slightly through 2017 before increasing to about 6% in 2019. In contrast, householders receiving

assistance through SHA's general voucher program had mobility rates that were consistently between 4.7% and 5.7% between 2015 and 2019.

Figure 8. Percent of households in KCHA jurisdiction making one or more move, by voucher type and year, 2015-2019.



As shown in Figure 8, rates of mobility among FUP participants also rose sharply in the KCHA jurisdiction, from 11% in 2015 to 17.5% in 2018, before falling slightly in the most recent year of data. This stands in contrast to the more stable rate of mobility among households receiving support from the general voucher program. For this group, levels of mobility were slightly higher than general-voucher participants in the SHA, with rates of mobility fluctuating slightly between 12% and about 14%. Participants in the VASH program had the consistently lowest levels of mobility with rates below 7.5% in every year. Finally, participants in King County's Housing Access and Services Program (HASP) for individuals with disabilities access had lower

mobility than general-voucher recipients, with mobility rates dropping from about 11% in 2015 to 7.6% in 2019.

Part of the variation in mobility rates across household types also likely reflects variation in mobility across the size of units occupied by different types of households. Figure 9 summarizes levels and trends in mobility rates across households moving to units with one, two, three, and four or more bedrooms. The figure shows that in 2012 the likelihood of mobility was positively related to the size of units occupied by households; over 17% of households moved to 4-bedroom units during the 2012 calendar year, compared to just under 11% for those moving to 3-bedroom units, about 9% for those moving to 2-bedroom units, and about 8% for those moving to a one bedroom unit. Over time, however, rates of mobility dropped most dramatically for those moving to larger units so that by 2014 there was almost no variation in mobility rates across units of different sizes. Since then, rates of mobility have fluctuated similarly and non-systematically for households in all sizes of units so that mobility appeared to be unrelated to unit size among SHA households in 2019.

Figure 9. Percent of households in SHA jurisdiction making one or more move, by size of unit and year, 2015-2019.

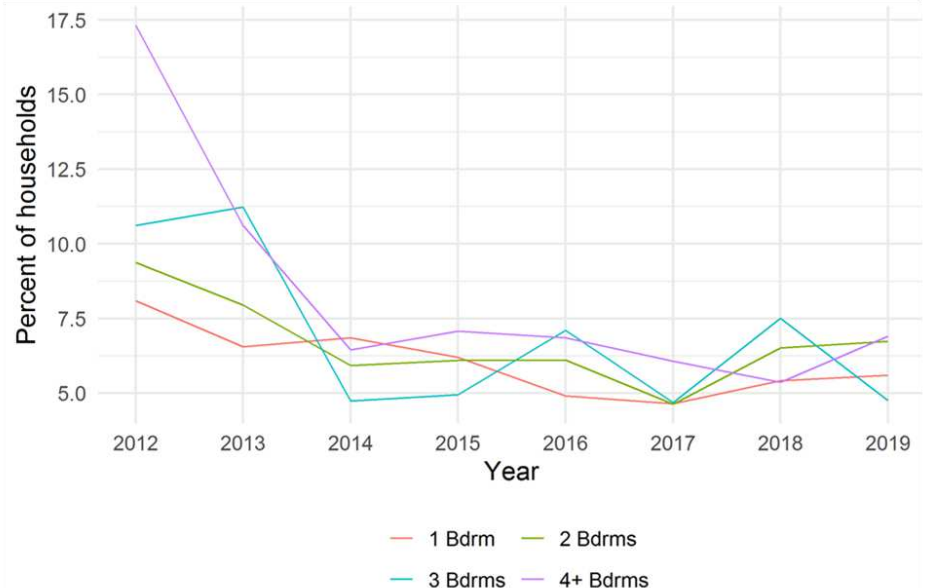


Figure 10 shows variations in mobility across unit size among households in the KCHA jurisdiction. In most years, levels of mobility were higher across most unit sizes for households in KCHA than in SHA. Moreover, trends in these mobility levels differed quite sharply between the two organizations. In contrast to the clear association between unit size and mobility in SHA in 2012, levels of mobility were quite similar in 2012 across KCHA households living in units with two, three, or four or more bedrooms; around 15% of households in each of these unit types moved in 2012. In contrast, only about 9% of households occupying one-bedroom apartments moved in 2012. Over time, however, rates of mobility among households occupying two-bedroom units declined more sharply than did rates of mobility for households occupying larger units, creating a clearer positive association between unit size and mobility in the latest years of data. In 2019, for example, about 14% of household in units with at least three bedrooms moved, compared to about 11% of those in two-bedroom apartments, and 9% of those in one-bedroom units. These differences in mobility rates are likely to be related to differences in the composition and program participation of households occupying different types of units. For example, one-bedroom apartments may be more common among HASP participants or households with older individuals who generally move less often. However, these differences may also reflect more volatility in rent for larger units or more frequent changes in the composition and other circumstances of larger households that may increase the likelihood of moving.

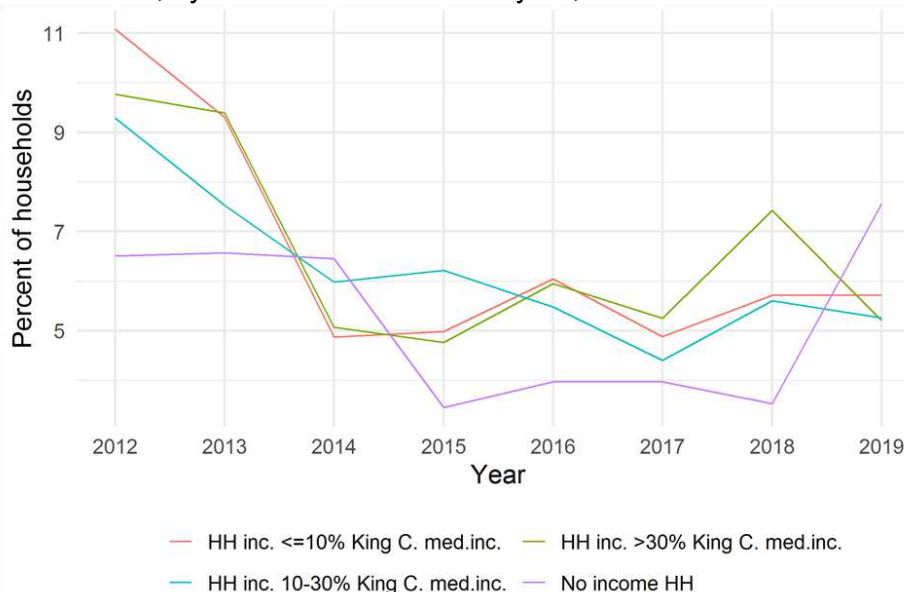
Figure 10. Percent of households in KCHA jurisdiction making one or more move, by size of unit and year, 2015-2019.



Rates of mobility also vary modestly by income. Figure 11 shows annual mobility rates between 2012 to 2019 for households in the SHA jurisdiction in four income groups:

no annual income; income less than or equal to 10% of King County's median income for the year; income greater than 10%, but less than 30% of the county's median income; and income greater than 30% of the county median. The figure shows that, overall, differences in annual rates of mobility across SHA households with different income levels were modest. In most years, households with no income had the lowest rates of mobility, with mobility rates below 4% in several years. In 2012, households with incomes in the next lowest category – less than 10% of King County median – had the highest rate of mobility at 11%, followed by the highest-income

Figure 11. Percent of households in SHA jurisdiction making one or more move, by household income and year, 2015-2019.



group (more than 30% of the county median income) at 9.8%, and the second-highest income category (10-30% of the county median) at 9.3%. For all of these groups, rates of mobility dropped after 2012 and group differences were muted, with mobility rates for households in these income categories fluctuating between 5% and 7% starting in 2014.

Figure 12. Percent of households in KCHA jurisdiction making one or more move, by household income and year, 2015-2019.

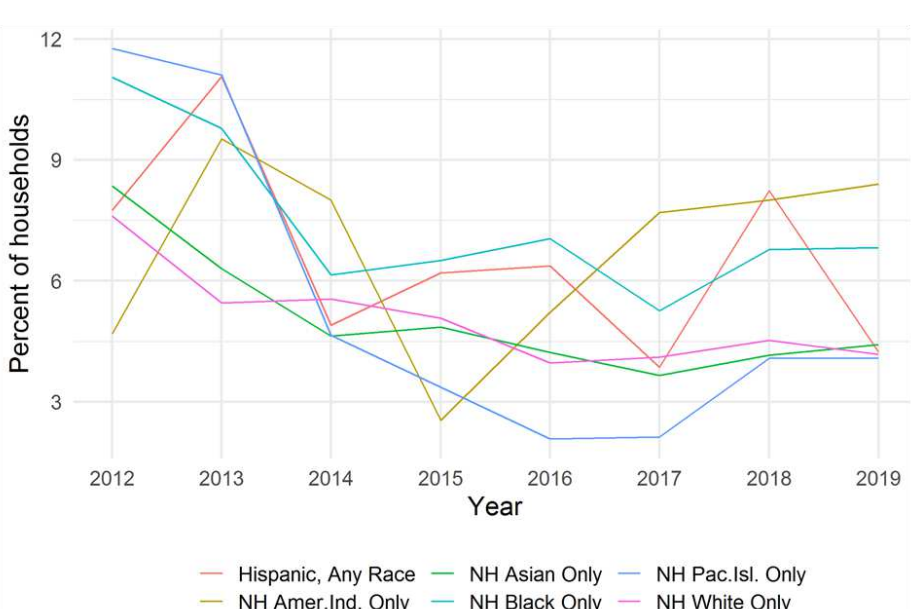


Mobility differences across income groups were slightly more pronounced among households in the KCHA jurisdiction, but the overall association between income and mobility still appears to be fairly weak. As shown in Figure 12, rates of mobility were highest for households with incomes in the highest category – above 30% of the county’s median income – in every year except 2012. In that year, households in the second-lowest category – with incomes less than 10% of the county median income – had the highest level of mobility, with 15.8% moving in 2012. However, the mobility rate among this group dropped substantially in subsequent years and were, in fact, lower than all other groups by the

latest year of data. In 2019, the three lowest income groups all had mobility rates between 10.2% and 12.1%. In contrast, 14.3% of KCHA households in the highest income category moved in that year. The higher mobility among households in this category is consistent with research on more general populations, showing that renters with more economic resources typically have access to more potential destinations and, therefore, tend to move more often than do lower-income renters (c.f., Clark 2012).

Figures 13 and 14 present variations in levels and trends in mobility by race and ethnicity for households in the SHA and KCHA jurisdiction, respectively. Comparisons across groups are constrained by small numbers of members of some groups (see Appendix Tables A13 and A14); for small groups even a few moves can result in large swings in the percentage of people moving in a given year. Nevertheless, Figure 13 shows potentially important variations in mobility across groups within the SHA jurisdiction. In every year between 2012 and 2019, rates of mobility were higher for households headed by Black householders than for households headed by white householders. For example, about 7.6% of white households moved in

Figure 13. Percent of households in SHA jurisdiction making one or more move, by race/ethnicity of household head and year, 2015-2019.

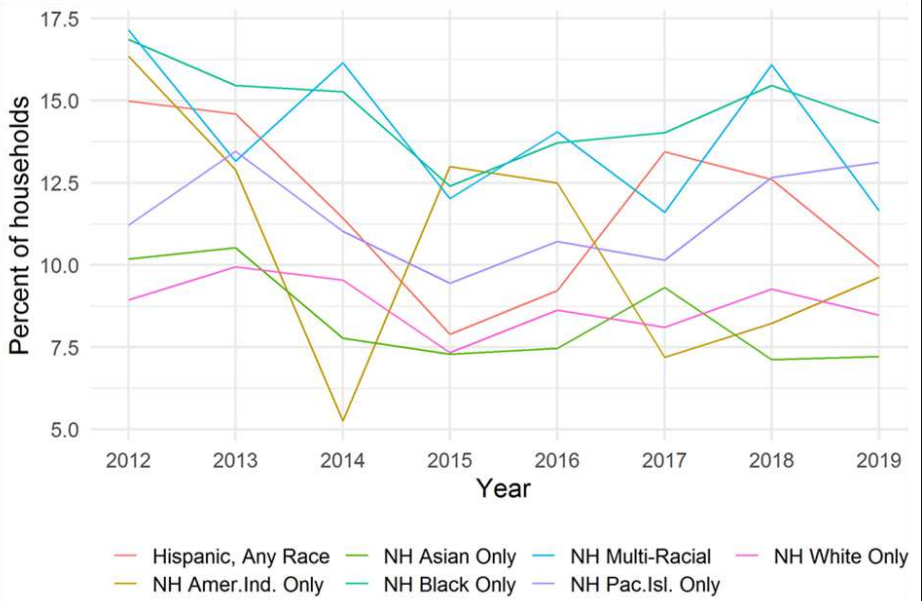


2012, compared to almost 11% for Black households. By 2019, the mobility rates for both groups were lower but the racial gap was similar, at 4.2% for white households 6.8% for Black households. Across all years, Asian-headed households had rates of mobility similar to those of white-headed households. Patterns of mobility were less clear and more volatile for households headed by members of other racial and ethnic groups. However, in general, households headed by individuals identifying as Pacific Islanders had rates of mobility that were lower than other groups in most years, while households headed by individuals identifying as Hispanic/Latinx or Native American had mobility rates between those of Black and white households. For virtually all of these groups of SHA households, rates of mobility declined between 2012 and 2019.

As shown in Figure 14, rates of mobility were somewhat higher for all racial and ethnic groups in the KCHA jurisdiction than in the SHA area and did not decline as much over time. However, similar racial/ethnic differences in mobility rates were still apparent. KCHA households headed by Asian and white householders had among the lowest rates of mobility in most years. In 2012, about 9% of HCV households headed by white individuals, and about 10.2% of those headed by an Asian individual, moved from one address to another.

In contrast, 16.9% of households headed by a Black householder moved that year. By 2019, this racial gap had shrunk slightly with the rate of mobility for Black households declining slightly more than the rates for Asian or white households, but these groups still experienced substantially different rates of mobility. About 14.3% of the Black HCV households in the KCHA jurisdiction moved at least once in 2019. In contrast, 8.5% of white

Figure 14. Percent of households in KCHA jurisdiction making one or more move, by race/ethnicity of household head and year, 2015-2019.



households and 7.2% of Asian households moved in 2019. Levels of mobility for other groups fluctuated between those of Black and Asian or white households but, again, comparisons across time and across groups must be made with caution given the relatively small numbers of individuals in these groups in each year.

Finally, Figures 15 and 16 focus on the association between mobility rates and the primary language spoken in the household. Figure 15 shows that about 6.4% of households in the SHA jurisdiction for whom something other than English was the primary language moved in 2015 – slightly higher than the 5.6% mobility rate among

Figure 15. Percent of households in SHA jurisdiction making one or more move, by primary language and year, 2015-2019.

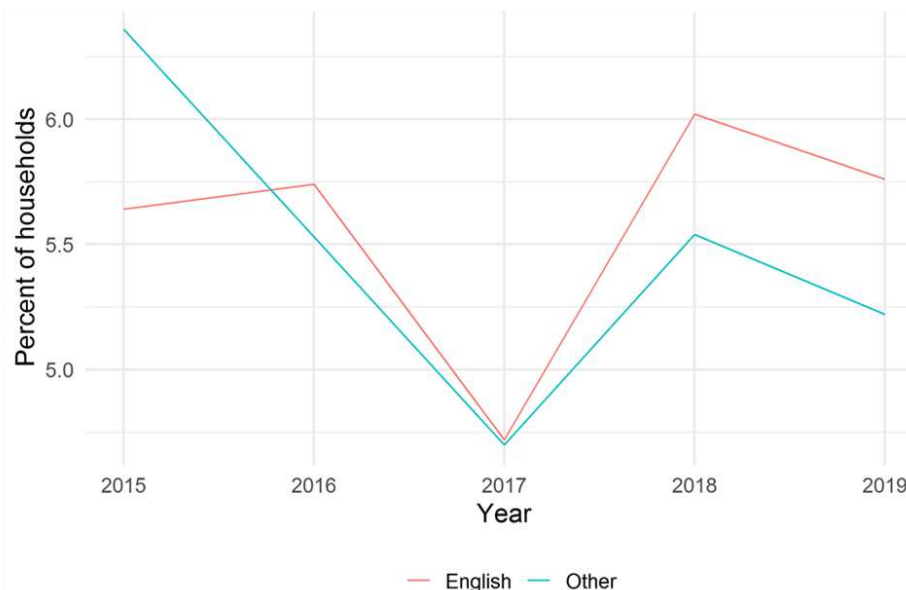
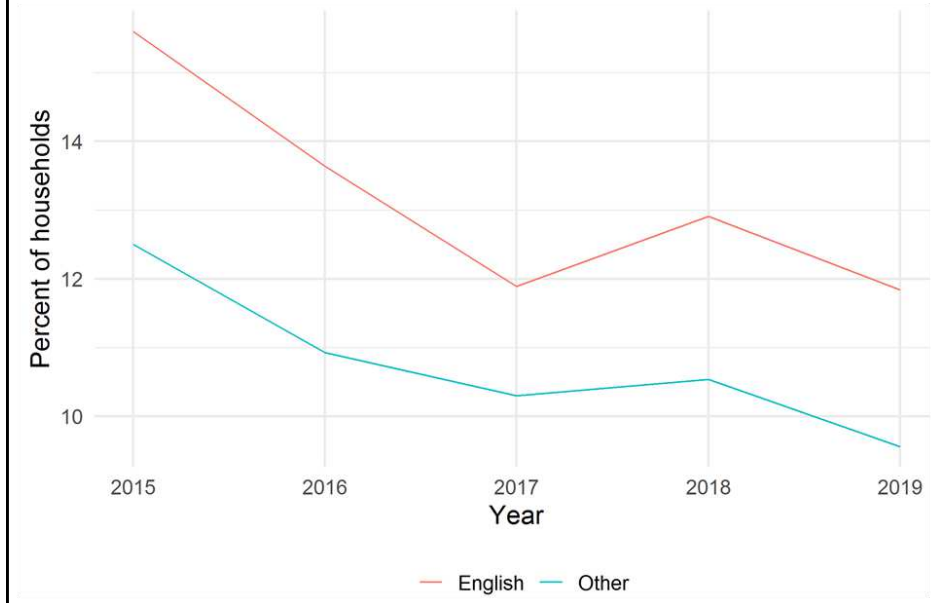


Figure 16. Percent of households in KCHA jurisdiction making one or more move, by primary language and year, 2015-2019.



households in which English was primary. For both groups, mobility rates dropped to about 4.7% in 2017 before increasing again slightly in subsequent years. By 2019, the rate of mobility among households in which English was the primary language spoken was slightly higher than the mobility rate for households in which another language was spoken, but the difference was small – 5.8% to 5.2%.

Differences in mobility rates across language groups in households in the KCHA jurisdiction were only slightly larger. In 2015, about 15.6% of households in which English was the primary language moved, compared to 12.5% of households in which some other language was primary. Rates of mobility for the

two groups declined in similar ways from 2015 to 2017, and again from 2018 to 2019. As of the last year of data, the gap in mobility rates between the two groups was just over two percentage points, 11.8% for English-speaking households and 9.6% for householders in which another language was the primary language spoken.

In sum, rates of mobility were higher among households in the KCHA jurisdiction than among those in the SHA jurisdiction. These rates of mobility have also dropped more dramatically in SHA than in KCHA. Most importantly, rates of mobility in both jurisdictions appear to be stratified across similar household characteristics, with at least moderate variations in the likelihood of mobility by household composition, voucher type, unit size, and race/ethnicity.

Questions: How often do households using HCVs make destabilizing moves, how has the frequency of destabilizing moves changed over time, and where do these destabilizing moves happen?

For the remainder of the analysis we shift from the general assessment of residential mobility to a specific focus on moves that, according to past research, may be associated with increased social or financial stress, reduced access to resources, and/or negative social or economic outcomes for families and individuals within these families. These destabilizing moves include, moving multiple times over a short period of time, moving to a neighborhood with poorer opportunity structures, and, for families with children, moving to a different school catchment area.

Moving multiple times over a short period of time

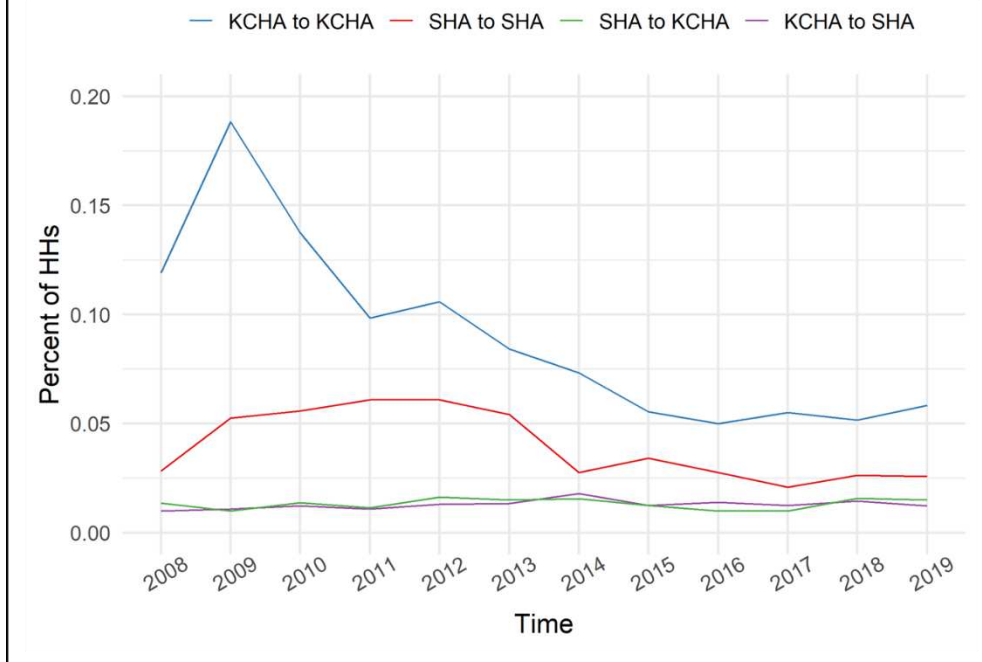
Figure 17 presents trends in the percentage of households moving more than once in a twelve-month period. These figures are presented for each month and are disaggregated into four groups: households remaining in the KCHA jurisdiction from the beginning to the end of the twelve-month period; households remaining in the SHA jurisdiction during the period; households moving from the KCHA to the SHA jurisdiction during the period; and households moving from the SHA to KCHA jurisdiction during the preceding twelve months.

For households remaining in the KCHA jurisdiction, the likelihood of experiencing multiple moves in a single year rose substantially between 2008 and 2009, following the tumult of the housing crisis. Even so, the vast majority of KCHA households were able to avoid making multiple moves in a single year. By 2009, at the peak rate of multiple moves, about one-fifth of one percent of householders had moved more than once in the

preceding twelve-month period, and this percentage declined sharply thereafter. By 2019, approximately 5 in 10,000 KCHA households moved multiple times in a year. Appendix Figure A4 shows that the relative number of KCHA households making two or more moves in the preceding two-year period is lower but followed a similar temporal pattern.

Rates of multiple moves have remained steadier over time in the SHA jurisdiction, but at a lower level than in the KCHA jurisdiction. Rates of multiple moves increased for SHA households after 2008 and peaked at about 0.06% in 2011 to 2012. Since then, the percentage of SHA households moving multiple times in the previous year has declined and fluctuated around or below 0.025% between 2014 and 2019. Again, Appendix Figure A4 shows that the percentage of SHA households making two or more moves in the preceding two-year period peaked at about 0.034% in 2011 and declined thereafter. By 2019, fewer than 0.02% of SHA householders had moved over the preceding two-year period. Figure 17 shows that multiple moves are very rare among households porting between the KCHA and SHA jurisdictions.

Figure 17. Percent of households moving more than once in the preceding twelve-month period, by year and jurisdiction, 2008-2019.

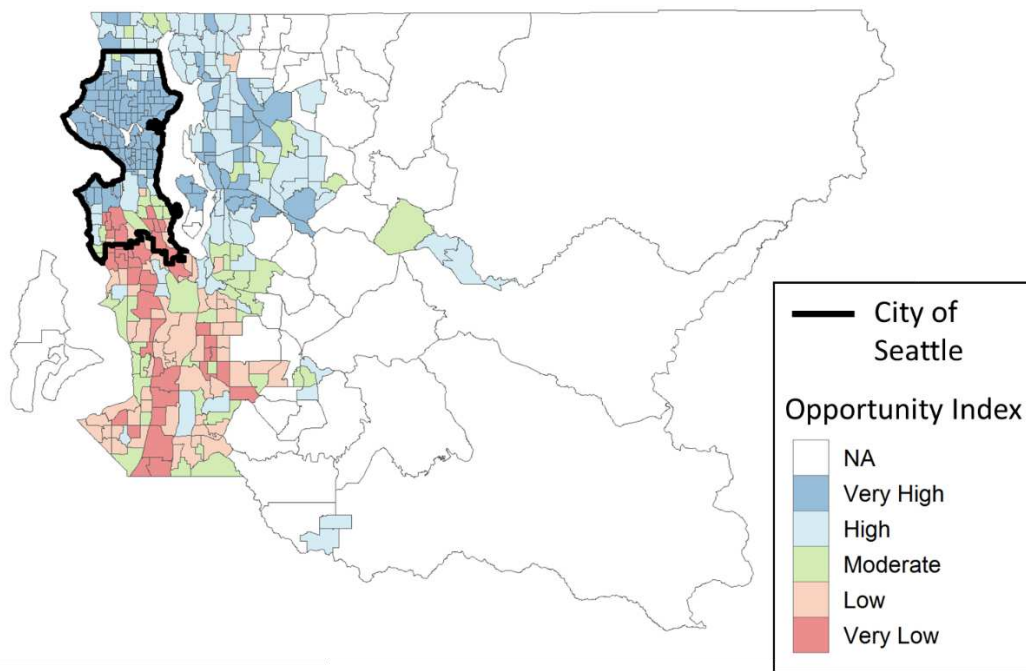


Moving to an area with a poorer opportunity structure among childless households

In the next stage of the analysis we examine the residential destinations of HCV households that move. Consistent with the interest in potentially destabilizing moves, we focus primarily on movement into neighborhoods with opportunity structures that are poorer than the neighborhoods they left. While such moves may be motivated by a wide range of factors, they are assumed to diminish social, economic, and health opportunities for members of affected households. Here we examine patterns of two measures of downward-opportunity moves for two different groups of families, changes in these patterns over time, and differences in these moves across jurisdictions.

In the first set of analysis we focus on families without children and assess opportunity structures of origin neighborhood – the census tract occupied before the move – and the destination neighborhood – the census tract occupied after the move. To measure opportunity levels in origins and destinations, we use scores on the Regional Opportunity Index (ROI) developed by the Puget Sound Regional Council. Again, this index combines information on five dimensions of neighborhood opportunity – economic conditions, education, housing and neighborhood quality, health and environmental conditions, and transportation access – to summarize local opportunities for socioeconomic attainment. Figure 18 presents ROI scores for each census tract in King County, categorized by quintiles in the distribution of all King County tracts. The figure shows that the majority of neighborhoods within Seattle are categorized as very-high opportunity (80th percentile or higher in the distribution of ROI scores) or high opportunity (between the 60th and 80th percentile). The exceptions are a cluster of census tracts with very low (bottom 20% in the distribution), low (20th to 40th percentile), or

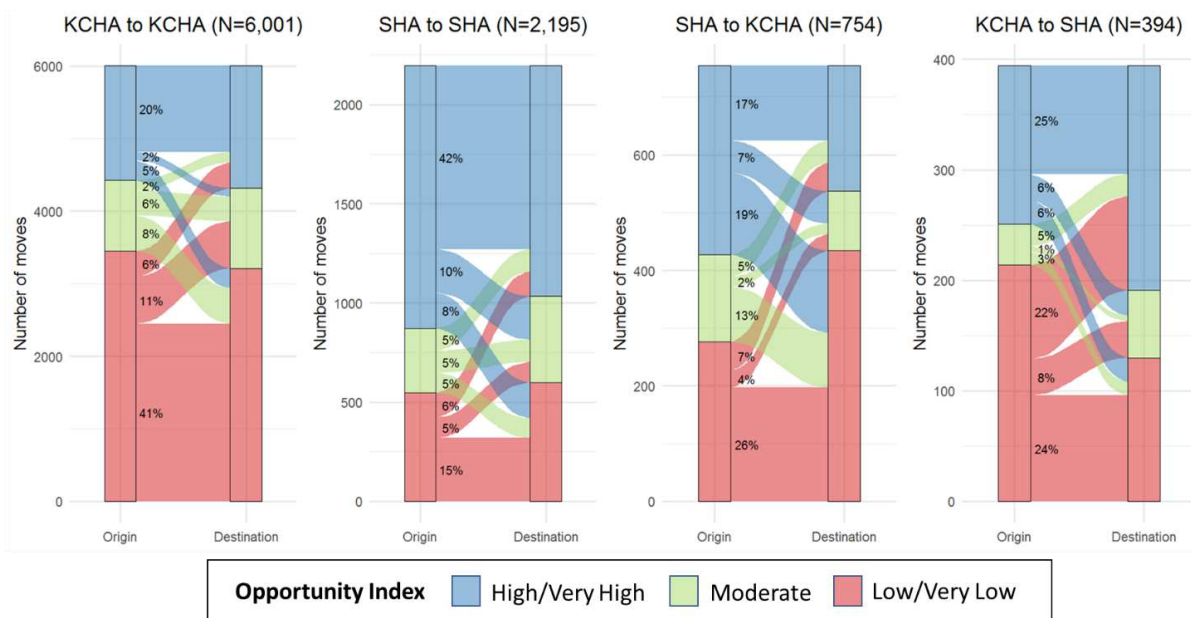
Figure 18. Regional Opportunity Index scores for census tracts in King County.



moderate (40th to 60th percentile) opportunity levels in the southern portion of the city. In contrast, while there are significant numbers of higher-opportunity neighborhoods on the Eastside, a much higher share of King County neighborhoods is near the bottom of the distribution in terms of ROI scores. The prevalence of Seattle neighborhoods with relatively high Opportunity Index scores means that, all else being equal, households within Seattle are more likely to reside in, or move to, an opportunity-rich neighborhood.

Figure 19 summarizes the flow of childless HCV households between neighborhoods with different opportunity levels. For ease of interpretation, we group together neighborhoods with low and very-low ROI scores, and neighborhoods with high and very-high ROI scores. The figure also shows separate flows for households remaining in the KCHA jurisdiction, households moving within the SHA jurisdiction, and households moving between jurisdictions. Basic sociodemographic characteristics of childless households making moves between these types of neighborhoods are presented in Appendix Tables A17 and A18.

Figure 19. Opportunity Index scores of origin and destination neighborhoods for mobile HCV households without children in SHA and KCHA jurisdictions, 2008-2019.



Among the 6,001 moves occurring within the KCHA jurisdiction, 27% originated in a high- or very-high-opportunity neighborhood and, among these, most childless households moved to another high-opportunity area. Only 7% of all moves were from a higher-opportunity to a moderate- or low-/very-low-opportunity area. In contrast, those within-KCHA moves originating in a moderate-opportunity area were just as likely to end in a lower-opportunity neighborhood than in a moderate- or higher-opportunity area. Finally, 58% of all moves within KCHA originated in a low or very-low-opportunity neighborhood, and in the vast majority of these moves the household moved to another low-/very-low-opportunity neighborhood. This tendency for childless households to move laterally between neighborhoods with similar ROI scores likely reflects, in part, the geographic clustering of neighborhoods with similar opportunity structures and the fact that most moves occur over relatively short geographic distances (Crowder and South 2008).

Among the smaller number (N=2,195) of moves occurring within the SHA jurisdiction, a much higher share – 60% of all moves – originated in tracts with high or very-high ROI scores. Again, this reflects the higher concentration of higher-opportunity neighborhoods within the city of Seattle. Moreover, 42% of moves within the SHA jurisdiction were moves between higher-opportunity neighborhoods, 5% were from moderate- to higher-opportunity neighborhoods, and 6% were from lower- to higher-opportunity neighborhoods. At the same time, despite a relative paucity of moderate- and lower-opportunity neighborhoods in the Seattle area, there was still considerable downward mobility of SHA households without children; 10% of all moves within the SHA jurisdiction were from higher-opportunity to moderate-opportunity neighborhoods and 8% were from higher-opportunity to neighborhoods with low or very-low ROI scores. Another 5% of moves were from moderate- to lower-opportunity neighborhoods.

Patterns of mobility for childless households moving between SHA and KCHA also reflect the relative distribution of lower-, moderate-, and higher-opportunity neighborhoods in the two jurisdictions. Among the 754 household moves from SHA to KCHA, more than half moved into a low- or very-low-opportunity neighborhood. About 7% of the moves were from a high- or very-high-opportunity neighborhood in the SHA jurisdiction into a moderate-opportunity neighborhood in SHA, and 19% were from a high- or very-high-opportunity neighborhood to a low- or very-low opportunity neighborhood in the KCHA jurisdiction. Approximately two-thirds of the childless households moving out of a moderate-opportunity neighborhood in SHA to KCHA ended up in a neighborhood with a low or very low ROI score.

In contrast, more than half of the 394 households moving from the KCHA jurisdiction to the SHA jurisdiction ended up in a Seattle neighborhood with a high or very high level of opportunity. About 25% of moves were from a high-opportunity neighborhood in KCHA to a high-opportunity neighborhood in SHA, but 5% were moves from a moderate-opportunity neighborhood to a higher-opportunity neighborhood, and 22% were moves from a KCHA with a low or very-low level of opportunity to a Seattle neighborhood with high or very-high opportunity. Downward mobility was much less common among those moving from KCHA to SHA; only 15% of these moves involved households moving into a neighborhood with an ROI score lower than in their origin tract, including 6% who moved from high- or very-high-opportunity areas in KCHA to a moderate-opportunity neighborhood in SHA. Given the relative paucity of low- or very-low-opportunity neighborhoods in SHA, it is perhaps not surprising that only 9% of all moves from KCHA to SHA involved a household moving from a neighborhood with a moderate, high, or very high ROI score to a neighborhood with a low or very low opportunity score.

Perhaps the most prominent pattern emerging from Figure 19 is the high level of lateral mobility from neighborhood origins to destinations. With few exceptions the most likely residential outcome is for mobile households to move into a neighborhood with an opportunity structure similar to the neighborhood they left. For example, among households moving within KCHA, the percentage moving from a low-opportunity neighborhood to another low-opportunity area (41% of all moves) is over twice as large as the percentage moving from a low-opportunity neighborhood to any other type of destination (17% of all moves). Similarly, SHA and KCHA households moving from high-opportunity neighborhoods are more than twice as likely to move to another high-opportunity neighborhood than to any other type of destination. This tendency toward lateral mobility likely reflects two complimentary dynamics, both highlighted in emerging theories of residential stratification (Crowder and Krysan 2016; Krysan and Crowder 2017). First, origins and destinations tend to be

similar because most residential moves cover fairly short distances, often into an adjacent neighborhoods which, given the geographic clustering of similar neighborhoods, tend to have characteristics similar to the origin neighborhood. Second, the tendency for households to move to nearby neighborhoods and other areas with similar compositional characteristics likely reflects the development of social networks and daily activities that generate the greatest familiarity with neighborhoods similar to the origin. Regardless of the source, the strong tendency for households to move between similar neighborhoods has important programmatic implications, especially in relation to efforts to improve access to high-opportunity neighborhoods.

Figures 20 and 21 provide summaries of trends in mobility between neighborhoods with different opportunity structures for residential moves occurring among childless households remaining in the KCHA jurisdiction (Figure 20) and those moves occurring within the SHA jurisdiction (Figure 21). To assess these trends, we focus on flows between neighborhood origins and destinations for moves occurring within three equal time periods: 2008 to 2011, 2012 to 2015, and 2016 to 2019. While the number of moves within the KCHA jurisdiction differed across these time periods – declining from 2,149 in 2008-2011 to 1,803 in 2012-2015 before rising again to 2,049 in 2016-2019 – the relative size of flows between different types of neighborhoods remained remarkably stable. For example, in 2008-2011, about 12% of all moves by childless HCV households in the KCHA jurisdiction involved mobility from neighborhoods with a low or very-low opportunity score to a neighborhood in the moderate-opportunity range. This type of move became slightly less common in the 2012-2015 period – dropping to 9% of all moves – but this percentage increased again to 12% by 2016-2019. Moreover, the percentage of moves that involved relocation from a very-low- or low-opportunity neighborhood to a high- or very-high-opportunity neighborhood dropped from 5% to 4% between the first two time periods but rebounded to 8% by the 2016-2019 period. More important, given our focus on destabilizing moves, is the fact that downward mobility, in which the destination has a poorer opportunity structure than the origin area, did not change appreciably over time for moves within the KCHA jurisdiction. For example, 7% of all moves by childless households between 2012 and 2015 were from moderate- to lower-opportunity areas, and 4% were from high- or very-high-opportunity places to low- or very-low-opportunity areas. These figures were, respectively, 9% and 5% in the 2012-2015 period, and 8% and 4% in the 2016-2019 period.

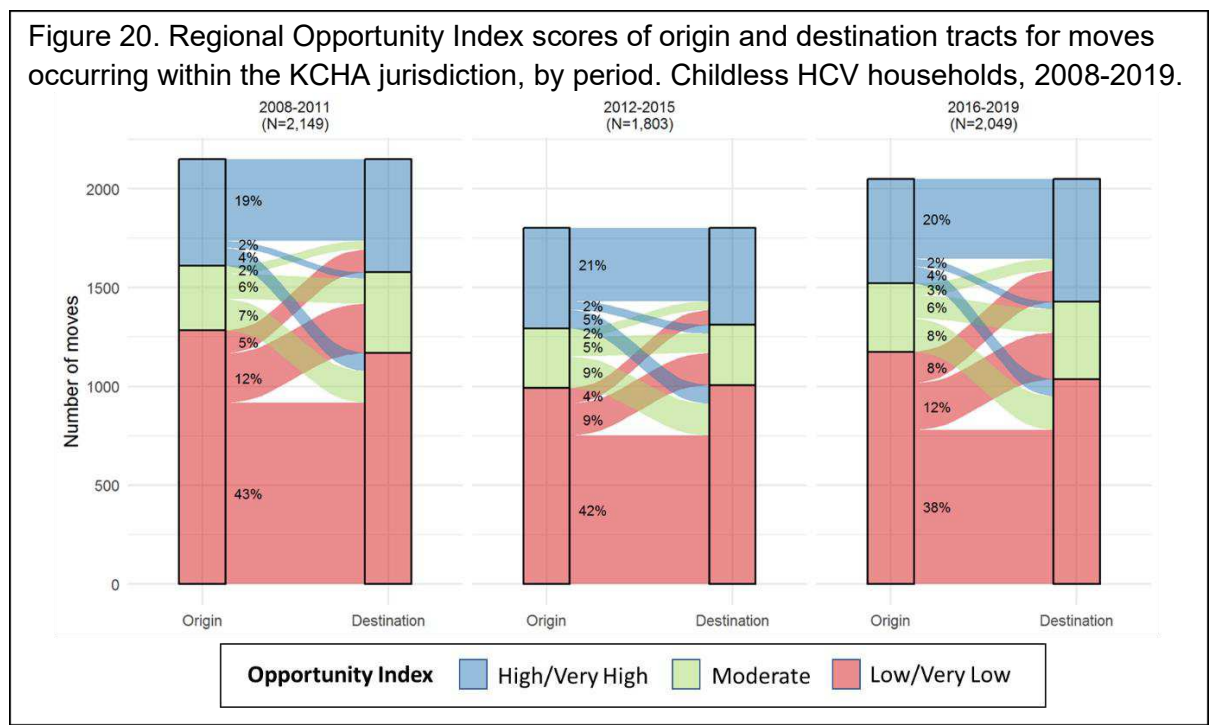
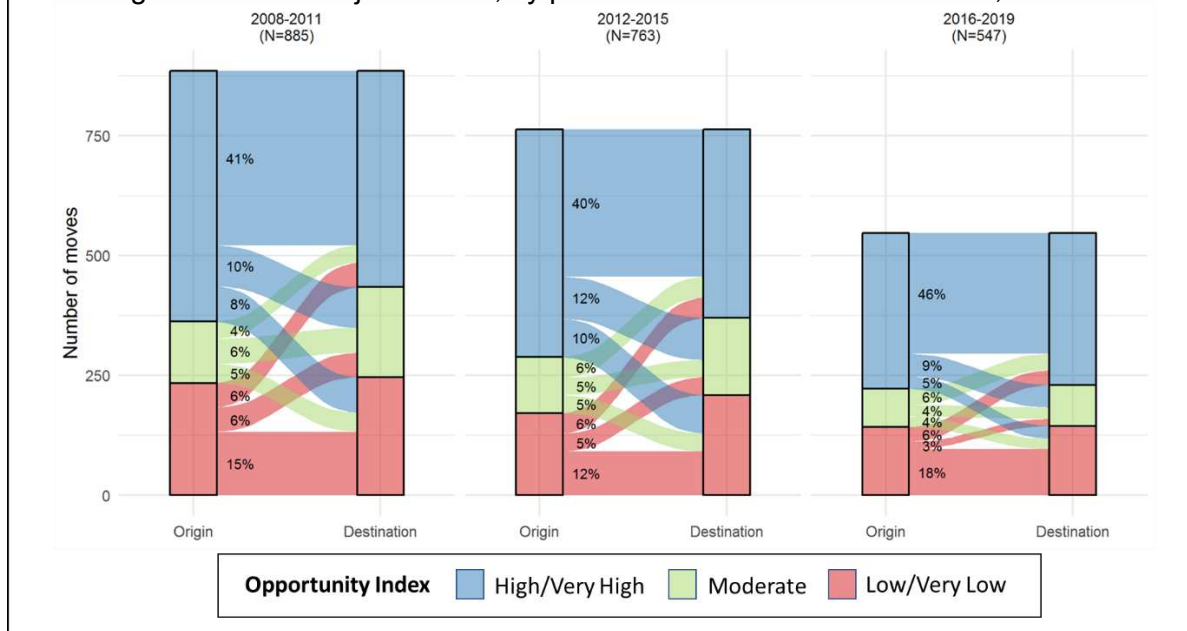


Figure 21. Regional Opportunity Index scores of origin and destination tracts for moves occurring within the SHA jurisdiction, by period. Childless HCV households, 2008-2019.

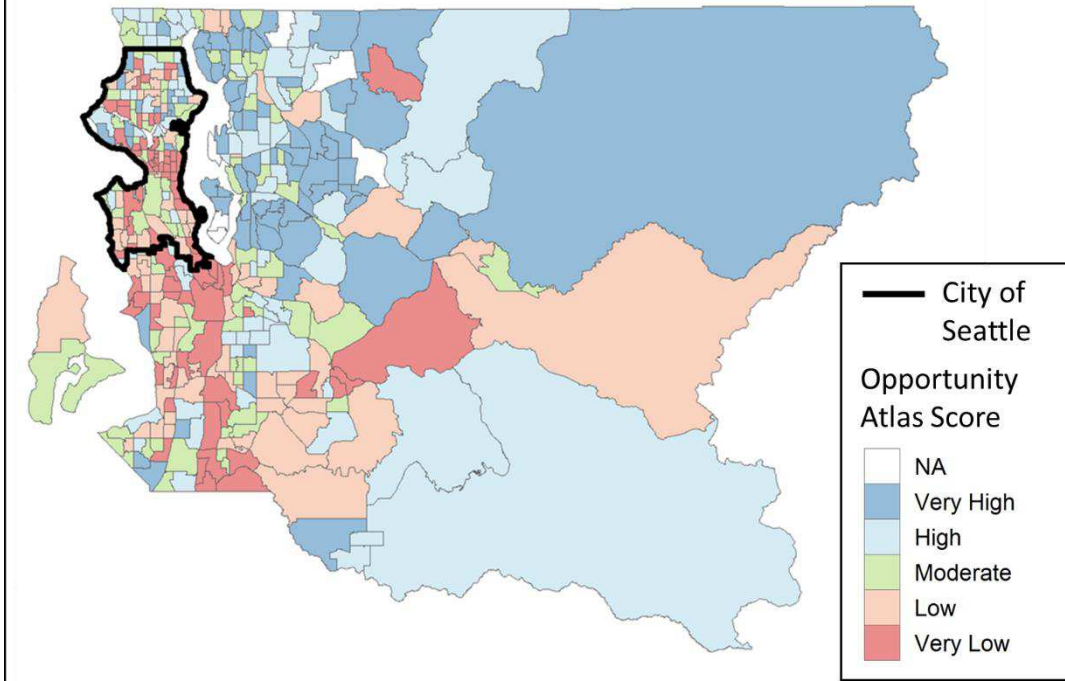


Patterns of downward mobility among childless households remaining in the SHA jurisdiction were also fairly stable over time, but also showed some potentially important reduction in the latest period. For example, about 5% of all moves within the SHA jurisdiction in both the 2008-2011 and the 2012-2015 periods were from moderate-opportunity neighborhoods to low- or very-low-opportunity neighborhoods, and this percentage dropped just slightly, to 4%, by the 2016-2019 period. More pronounced was the change in downward mobility out of higher-opportunity neighborhoods. In 2008-2011, about 10% of all moves were from higher-opportunity to moderate-opportunity neighborhoods and this rate increased slightly, to 12%, in the 2012-2015 period. In the 2016-2019 period, this type of downward mobility had declined to 9% of all moves by childless SHA households. In contrast, in 2016-2019, 46% of all moves for childless SHA households were from one high-opportunity neighborhood to another, up from 40% in 2012-2015 and 41% in 2008-2011. Thus, the overall decline in mobility among childless SHA households – from 885 moves in 2008-2011 to 547 moves in 2016-2019 – was accompanied by an increasing prevalence of lateral moves.

Moving to an area with a poorer opportunity structure among households with children

We now turn to a parallel analysis of neighborhood flows for families with children remaining in the same PHA jurisdiction. Given the focus on households with children, we shift to the use of a measure of neighborhood opportunity related to child outcomes. Specifically, in this segment we measure neighborhood opportunity structures using Opportunity Atlas (OA) scores produced through the collaboration of Opportunity Insights and the U.S. Census Bureau. Rather than measuring specific characteristics of neighborhoods, OA scores are reflective of the adult economic attainment of people who lived in the neighborhood as children.

Figure 22. Opportunity Atlas (OA) scores for census tracts in King County.



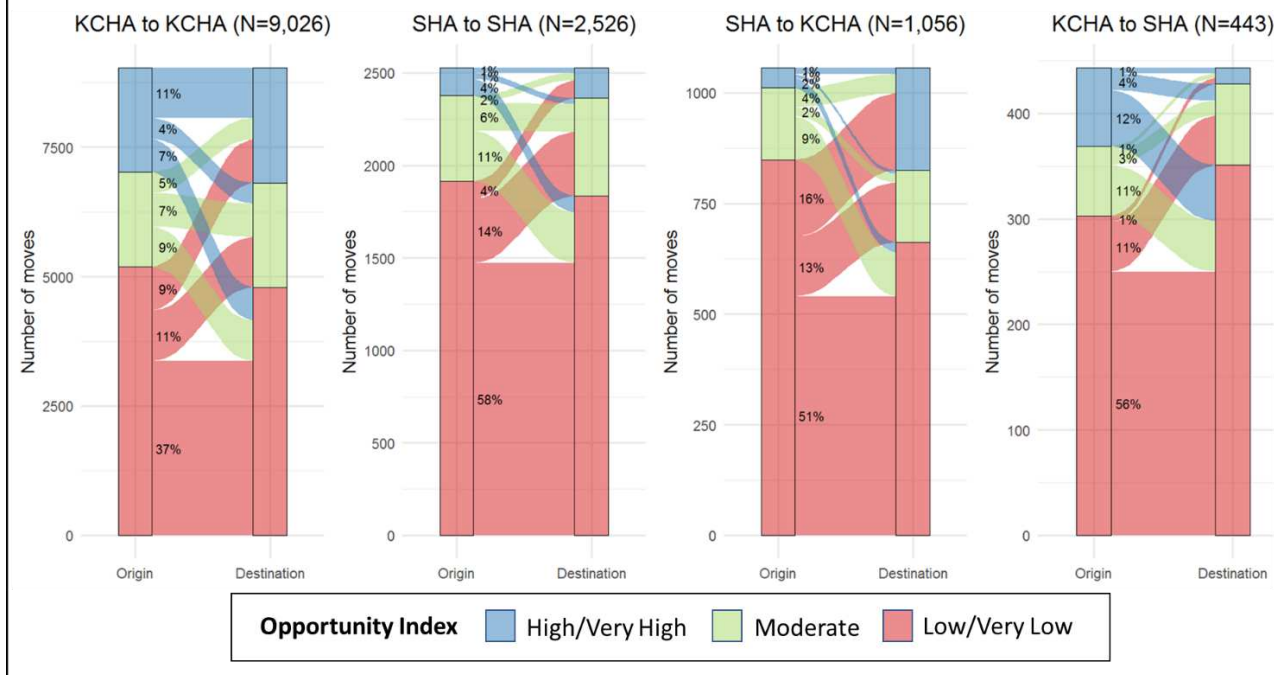
The spatial distribution of OA scores in King County are displayed in Figure 22. This map shows that high- and low-opportunity neighborhoods, as measured by the OA score, are widely distributed across the county. The southern half of the city of Seattle, for example, contains a mixture of high-, moderate, and low-opportunity neighborhoods. While there are more high- and very-high-opportunity neighborhoods in the northern half of the city, this area also contains many lower-opportunity neighborhoods. Similarly, in Kent, Renton, and other

communities south of Lake Washington, there are clusters of neighborhoods with low OA scores, but also a substantial number of neighborhoods with moderate and high OA scores. This relatively low spatial clustering of OA scores stands in sharp contrast to the spatial distribution of neighborhood opportunity as measured using the Regional Opportunity Index. For the OA scores, the most substantial spatial clustering is represented by groups of high- and very-high-opportunity neighborhoods in Kirkland, Bellevue, and other Eastside communities within the KCHA jurisdiction.

For the analysis of mobility between these types of neighborhoods, we again focus on three categories of OA scores, categorizing neighborhoods with OA scores below the 40th percentile of the distribution for all tracts in King County as having very low/low opportunity, those with OA scores between the 40th and 60th percentile as moderate-opportunity, and those with OA scores above the 60th percentile as providing high/very high opportunity. Sociodemographic characteristics of households with children making moves between these types of neighborhoods are presented in Appendix Tables A19 and A20.

Figure 23 summarizes origins and destinations of moves made by households with children within the KCHA jurisdiction, within the SHA jurisdiction, and between the two jurisdictions between 2008 and 2019. Of the 9,026 moves between neighborhoods within the KCHA jurisdiction, 57% originated in a tract rated as have low or very low opportunity and 22% originated in a high- or very-high opportunity. Once again, lateral mobility was the rule among mobile households with children. For example, 37% of KCHA moves by households with children were from one low-opportunity to another. Among those households with children moving to a different type of neighborhood within the KCHA jurisdiction, upward mobility was more common than downward mobility. About 11% of moves were from neighborhoods with low or very low opportunity scores to neighborhoods with a moderate level of opportunity, 9% were from the lowest opportunity category to the highest opportunity category, and 5% were from moderate- to higher-opportunity areas. Thus, in 25% of the moves within KCHA, the family moved to a neighborhood with a higher level of opportunity than found in their origin neighborhood. In contrast about 20% of all moves among KCHA households resulted in reduced opportunity exposure. About 4% of the moves originated in a high-opportunity neighborhood and ended in a moderate-opportunity area, 7% were from a high-opportunity to a low- or very-low-opportunity neighborhood, and 9% were from a moderate-opportunity neighborhood to a neighborhood with low opportunity.

Figure 23. Opportunity Atlas scores of origin and destination neighborhoods for mobile HCV households with children in SHA and KCHA jurisdictions, 2008-2019.



There were far fewer moves between neighborhoods within the SHA jurisdiction; families with children moved 2,526 times between 2008 and 2019. Among these moves, the vast majority – about 76% – originated in a low- or very-low-opportunity area, whereas only about 6% originated in a high- or very-high-opportunity area. More than half of all moves – 58% – were from one low-opportunity to another. However, the remaining residential moves resulted in a slight redistribution of these households towards higher-opportunity neighborhoods, with upward mobility (20% of all moves) slightly outweighing downward mobility (16% of moves). About 14% of moves were by families moving away from a lower-opportunity neighborhood to a moderate-opportunity neighborhood, and another 4% were moves from low-opportunity areas to areas rated as high- or very-high opportunity. About 2% of moves were from a moderate- to a high-opportunity neighborhood. The most common type of downward moves in the SHA jurisdiction were those in which the family with children moved from a moderate-opportunity neighborhood to a low- or very-low-opportunity neighborhood. Such moves accounted for 11% of all moves. Moves from high-opportunity areas to low-opportunity areas were 4% of all moves, more common than moves from high-opportunity to moderate-opportunity neighborhoods (1% of moves).

In contrast to dynamics among families without children, mobility from the SHA jurisdiction to the KCHA jurisdiction has been associated with increased exposure to high-opportunity neighborhoods for families with children. While still far less common than lateral residential moves to a similar type of neighborhood, about 16% of all moves from SHA to KCHA for families with children are from a low-opportunity neighborhood to a high/very-high neighborhood, and 13% are from neighborhoods with low/very-low opportunity to neighborhoods with moderate opportunity. Another 4% of moves are from a moderate-opportunity SHA neighborhood to a high/very-high-opportunity neighborhood. In contrast, 9% of families relocating from SHA to KCHA move from a moderate-opportunity area to a low-opportunity area, and a total of only about 3% originate in a high-opportunity area and end up in either a low- or moderate-opportunity neighborhood.

Moves of families with children from KCHA to SHA (N=443) were less common than moves from SHA to KCHA (N=1,056) but were generally more likely to result in a reduced exposure to neighborhood opportunity. About 16% of the moves from KCHA to SHA resulted in movement to a neighborhood destination with an opportunity score higher than that in the neighborhood of origin, and the majority of these (11%) involved the movement of the household from a low-opportunity neighborhood to a moderate-opportunity neighborhood. In

contrast, 27% of moves from KCHA to SHA involved downward mobility. About 12% of moves of families with children from KCHA to SHA were moves from high-opportunity areas to low-opportunity neighborhoods and another 4% were from high-opportunity to moderate-opportunity areas. Another 11% of these KCHA-to-SHA moves among households with children were from moderate-opportunity to low-opportunity neighborhoods.

Figures 24 and 25 present temporal trends in mobility flows between neighborhood types for households with children. Again, we focus on moves between neighborhoods within the KCHA jurisdiction (Figure 24) and moves within the SHA jurisdiction (Figure 25). We capture trends by comparing flows across three time periods: 2008-2011, 2012-2015, and 2016-2019.

Figure 24. Opportunity Atlas scores of origin and destination neighborhoods for moves occurring within the KCHA jurisdiction, HCV households with children, 2008-2019.

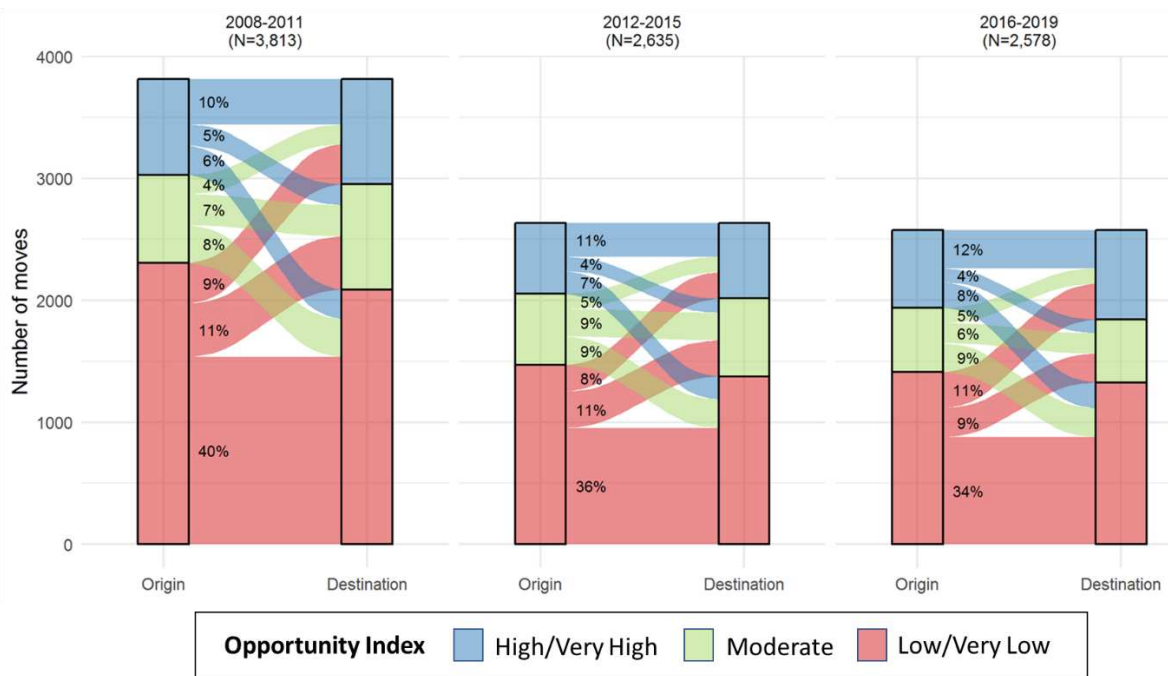


Figure 25. Opportunity Atlas scores of origin and destination neighborhoods for moves occurring within the SHA jurisdiction, HCV households with children, 2008-2019.

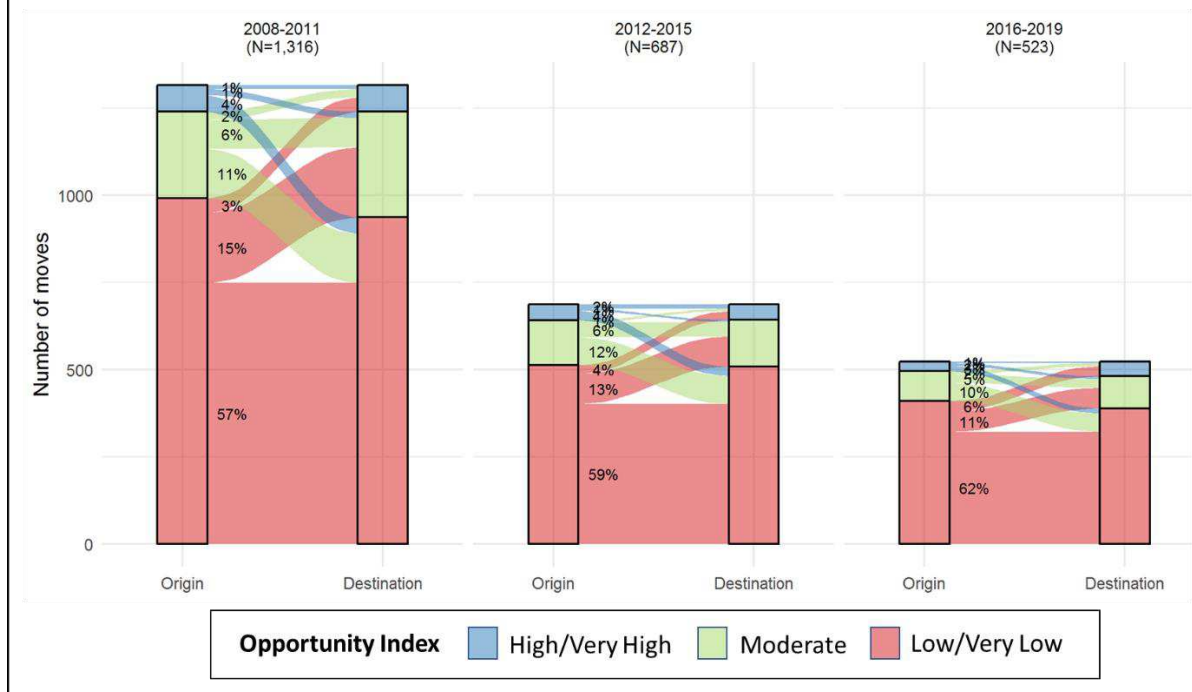


Figure 24 shows that the number of moves carried out by households with children dropped sharply over time. Between 2008 and 2011, there were 3,813 moves by such households, compared to 2,635 in 2012-2015, and 2,578 in 2016-2019. Yet, patterns of downward mobility were quite similar across the three periods. About 5% of all moves carried out by families with children within KCHA between 2008 and 2011 were from high-opportunity to moderate-opportunity neighborhoods. This is just a single percentage point higher than in each of the subsequent periods. Similarly, 6% of moves in 2008-2011 were from high-opportunity to low-opportunity neighborhoods, increasing slightly to 7% in 2012-2015 and 8% in 2016-2019. Patterns of upward mobility within KCHA were also remarkably similar over time. In each time period, 24-25% of moves were to neighborhood destinations with opportunity scores higher than the origin neighborhood, 3 to 4 percentage points higher than the overall rate of downward mobility.

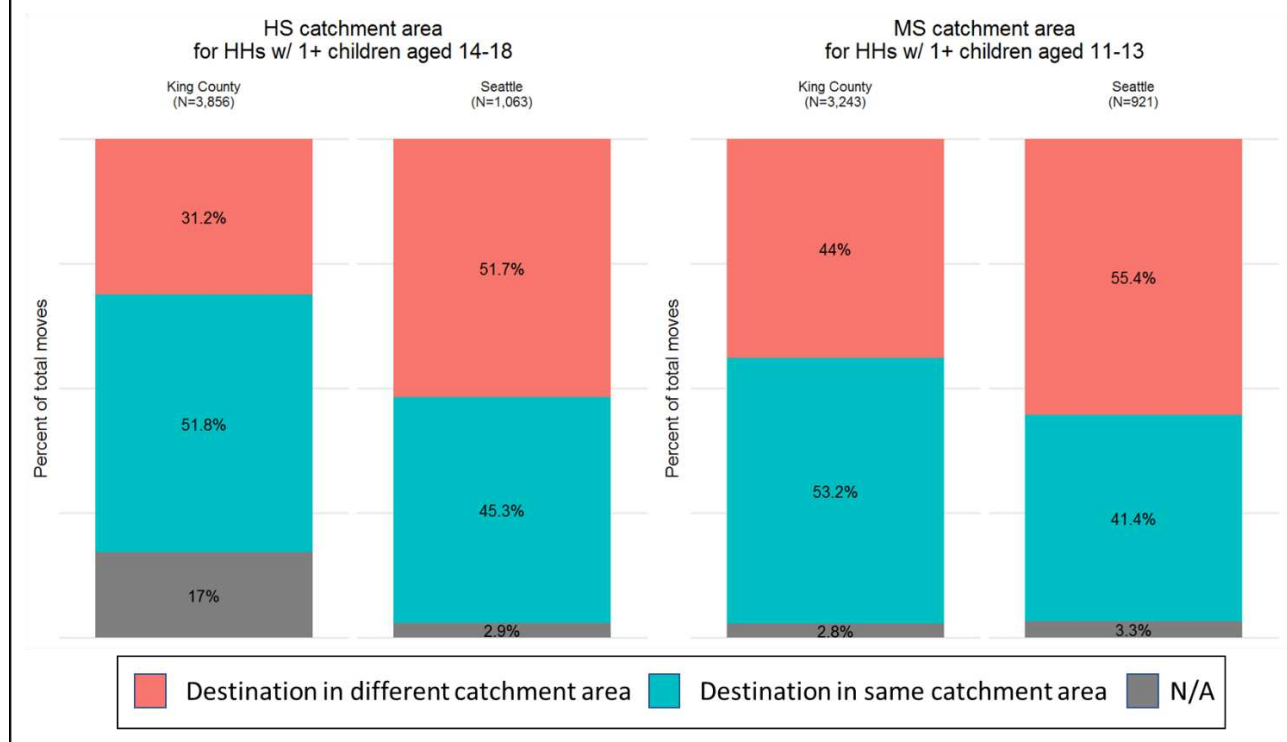
For households with children remaining in the SHA jurisdiction (Figure 25), levels of mobility have declined more dramatically over time, with almost twice as many moves in the 2008-2011 than in the 2012-2015 period, and 2.5 as many moves as in 2016-2019. Despite the decline in mobility volume, patterns of upward and downward mobility have changed very little over time. In each of the three time periods, between 18% and 20% of all moves were into a neighborhood with a higher level of opportunity, with moves from low-opportunity neighborhoods to moderate-opportunity neighborhoods the most common. Patterns of downward mobility were also quite similar across time. In 2008-2011, 11% of moves were from moderate- to low-opportunity neighborhoods, compared to 12% in 2012-2015 and 10% in 2016-2019. Moreover, between 5% and 6% of moves were from high-opportunity to a moderate- or low-opportunity neighborhood.

Moving to a different school catchment area

While some moves are likely motivated by the attempt to access better educational resources, available evidence suggests that the very process of changing schools can be socially and educationally disruptive for children, increasing the risk of negative outcomes, including dropping out (Gasper et al. 2012). While we do not have access to information about changes in school enrollment for individual students, we are able to assess whether moves carried out by households with children take the household to a different school catchment area, presumably precipitating a change in schools.

Figure 26 reports the relative number of moves that involve a change in school catchment area for HCV voucher households between 2008 and 2019. For this figure we include only moves within the same PHA jurisdiction; we do not include moves associated with port-out. We focus on two sets of catchment areas – those defining attendance boundaries for high schools and those defining attendance boundaries for middle schools. Finally, we limit the analysis to moves by households with children within the age category likely to be affected by the change of catchment area. That is, we focus on moves by households with high-school-aged children (age 14-18) in the analysis of changes in high school catchment areas, and moves made by households with middle-school-aged children (age 11-13) in examining moves between middle school catchment areas.

Figure 26. Percent of moves resulting in change of school catchment area, HCV households with children in SHA and KCHA, 2008-2019.



The results show that 31.2% of the moves by households with high-school-aged children in the KCHA jurisdiction involved a move to a different high school catchment area while 51.8% of moves are within the same high school attendance zone. Among moves made by households with younger adolescents in the KCHA jurisdiction, 44% crossed school attendance boundaries and 53.2% involved a move within the same middle-school-catchment area.⁴ In contrast, more than half of moves by households with middle- or high-school-aged children within the SHA jurisdiction involved a potential change in schools; 51.7% of moves for households with high-school children and 55.4% of moves by households with middle-school children were to a different school catchment zone. The trend lines in Appendix Figure A5 indicate some increase from 2008 to 2019 in the tendency for HCV households to change school catchment zones when they move.

Part of the difference in mobility dynamics between jurisdictions may be due to differences in relative geographic size of catchment areas in the two areas. With denser population concentrations, school catchment areas are smaller in Seattle than in the remainder of King County. This means that a move of any distance is more likely to cross a school attendance boundary in Seattle than in King County. Nevertheless, these differences suggest that the challenges associated with changing schools may be a more common problem for mobile households served by SHA than for those served by KCHA.

⁴ N/A in Figure 26 refers to moves that originated outside of a defined school catchment area.

Seasonality of disruptive moves

Existing research suggests that residential mobility tends to be higher in some seasons than in others, typically peaking in spring and summer months (Ngai and Tenreyro 2014; Tucker et al 1995). More importantly, the impact of various types of moves may vary depending on when in the year it occurs. For example, moving to a lower-opportunity neighborhood with fewer resources may be particularly difficult in the winter if reliance on neighborhood-based resources may be greatest, and changes in school catchment areas that occur during the school year are likely to be particularly disruptive for children.

Figures 27-30 present variations in the relative frequency of various types of disruptive moves across months of the year. Here we pool together all moves occurring in the SHA and KCHA jurisdictions, focusing on moves with origins and destinations within the same jurisdiction. We also pool moves across all years from 2008 to 2019. We present the percentage of all moves of a particular type that occurred in each month of the year.

Figure 27 shows a moderate level of seasonality for moves that are part of a string of multiple recent moves. Moves that represent the second (or more) move in the preceding twelve months and moves that are the third (or more) move in the preceding twenty-four months are most likely to occur in spring and summer. For example, 9.5% of all moves that are the second in one year, and 9.3% of those that are the third in two years, occur in May. In contrast about 8% of both kinds of moves happen in December. These patterns align fairly well with the seasonality of mobility in general, but may be slightly more modest than would be expected given the strong tendency for American households to carry out moves during warmer and drier months. The fact that multiple moves are not *more* seasonally clustered suggests that these multiple moves may be beyond the volition of voucher households.

Figure 28 shows a similar patterns for downward mobility into neighborhoods with lower opportunity scores for families without

Figure 27. Seasonality of multiple recent moves, SHA and KCHA, 2008-2019.

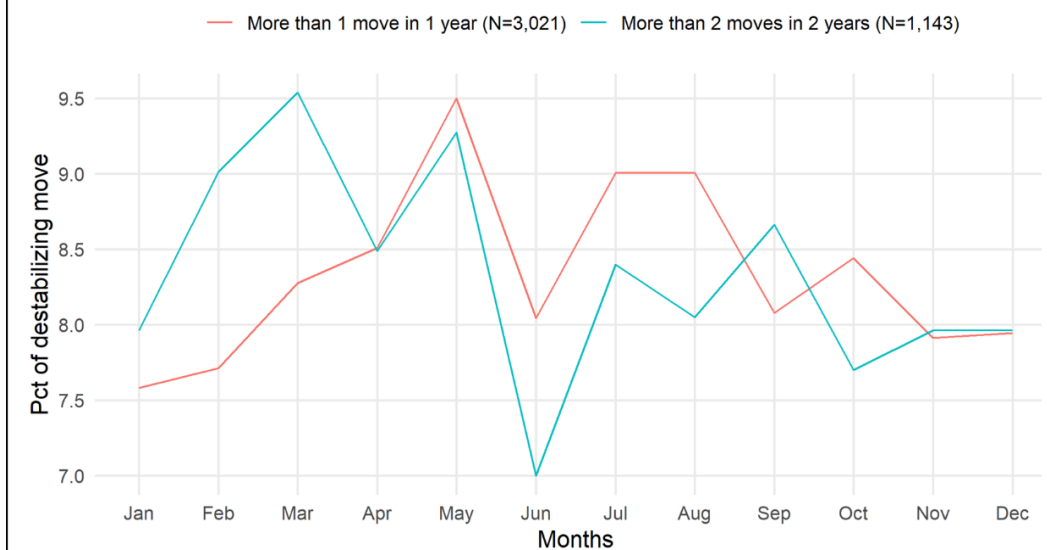
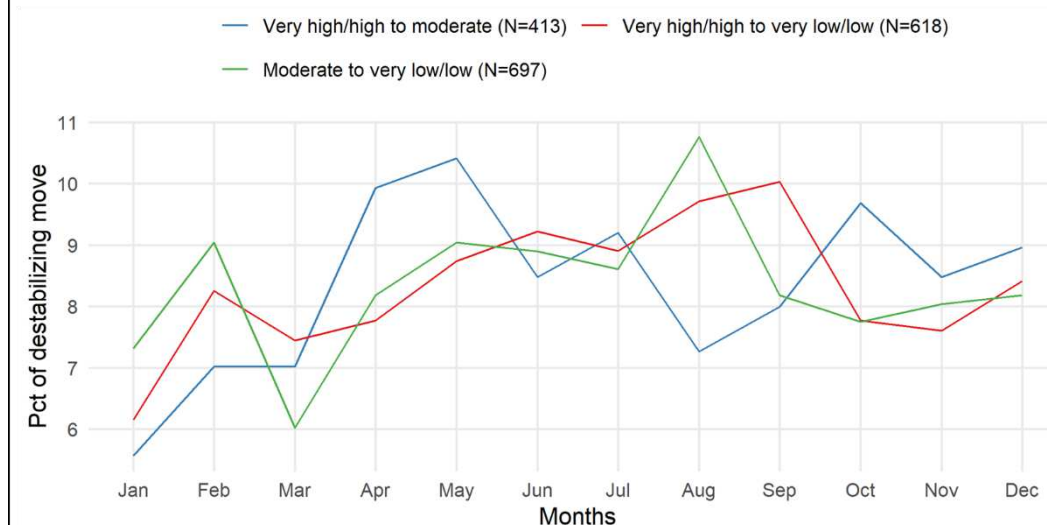


Figure 28. Seasonality of downward neighborhood-opportunity mobility for households without children, SHA and KCHA, 2008-2019.



children. Downward moves are least common in December and January, and most common in late-spring and summer months, but the overall level of seasonality is quite modest.

Downward residential moves are slightly more seasonally clustered for families with children. As shown in Figure 29, rates of mobility from higher- to lower-opportunity areas among households with children are relatively low in winter months and increase through the spring and fall. Interestingly, moves from moderate-opportunity neighborhoods to low-opportunity areas among households with children tend to be most common in October, near the beginning of the school year. The correspondence of these events – moving, transitioning to a low-opportunity neighborhood, and starting school – is likely to be particularly stressful for children in these families.

This stress may be compounded for children that may be forced to change schools as a result of residential mobility. As shown in Figure 30, moves that involve a relocation to a different school catchment area are least likely to occur in the middle of the school year, in January and February, and most common at the beginning of the school year in September. This suggests that families are often able to time moves to a new school area so as to minimize disruption for their kids. At the same time, moves to different catchment areas are fairly common in the later half of the school year. For example, 10% of all moves by high-school-aged kids to a different catchment area happen in April. To the extent that they necessitate an immediate change in schools, these moves are likely to generate considerable educational disruption.

Figure 29. Seasonality of downward neighborhood-opportunity mobility for households with children, SHA and KCHA, 2008-2019.

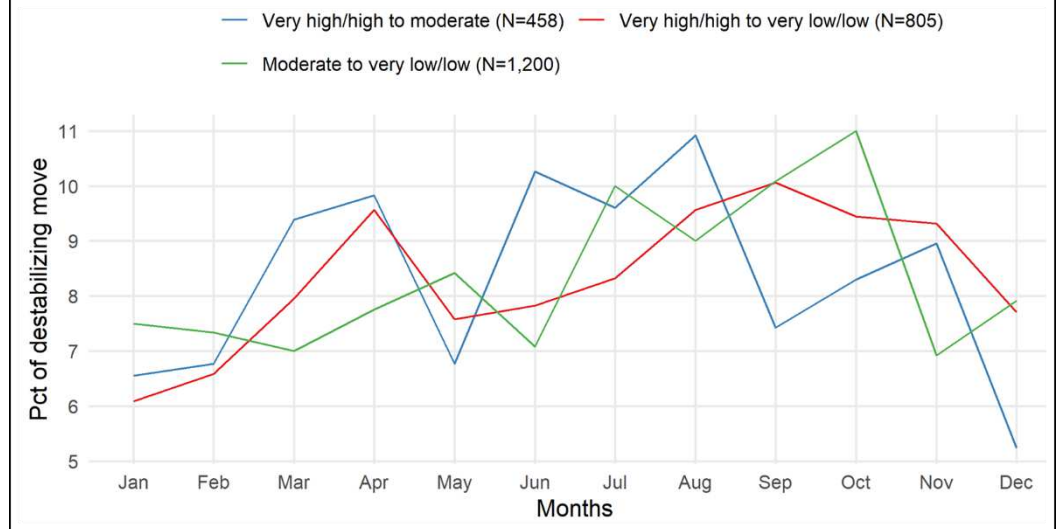
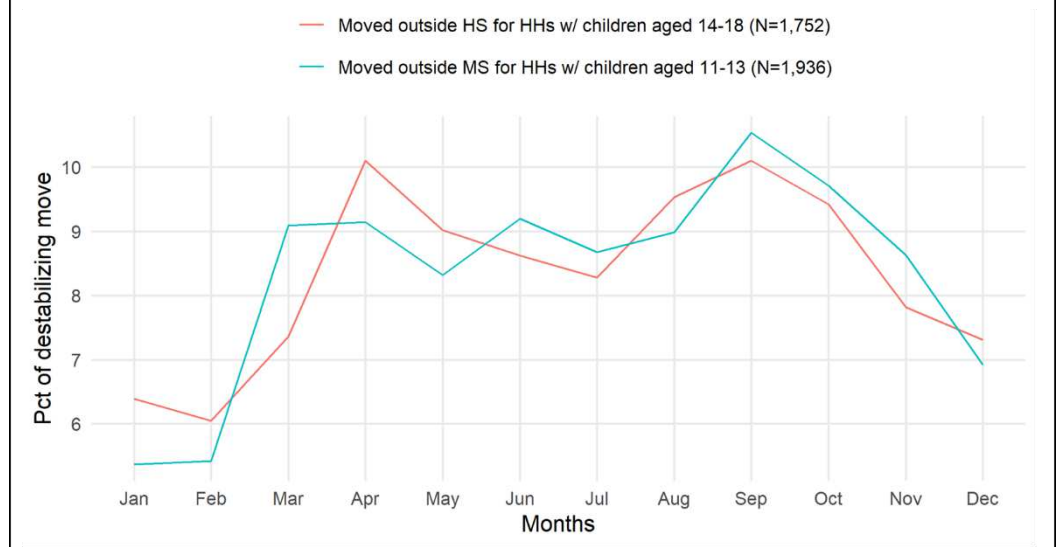


Figure 30. Seasonality of mobility to a different school catchment area, SHA and KCHA, 2008-2019.

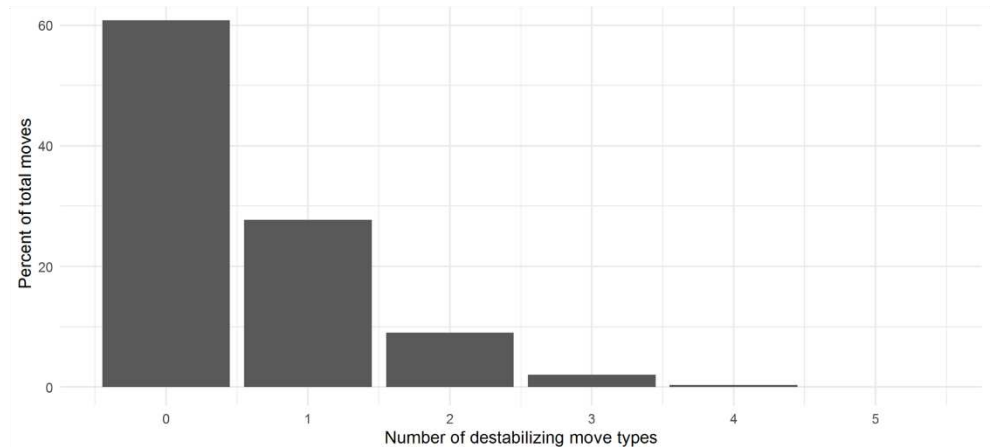


Correspondence of multiple disruptive moves

As argued earlier, prevailing research indicates that each type of move examined above has potentially detrimental impacts on the well-being of families and children. These deleterious impacts may be compounded by the coincidence of multiple mobility-related disruptions. For example, the impact of moving to a lower-opportunity neighborhood may be exacerbated if that move is one of multiple moves occurring in the recent past or forces a child to switch to a different school.

Accordingly, Figure 31 presents an analysis of the relative number of disruptions represented by moves undertaken by HCV households. Here we summarize information on five different types of disruptions that could characterize each move: 1) second (or more) move in preceding 12 months; 2) third (or more) move in the preceding 24 months; 3) relocation to different high school catchment area with a high-school-aged child; 4) move to a different middle school catchment area with a middle-school-aged child; and 5) downward opportunity mobility with entry into a neighborhood destination with an opportunity structure poorer than that in the origin neighborhood.⁵ Theoretically, all five of these disruptions could occur with any single move.

Figure 31. Number of disruptions in moves by HCV households in SHA and KCHA, 2008-2019. (N of moves = 22,359)



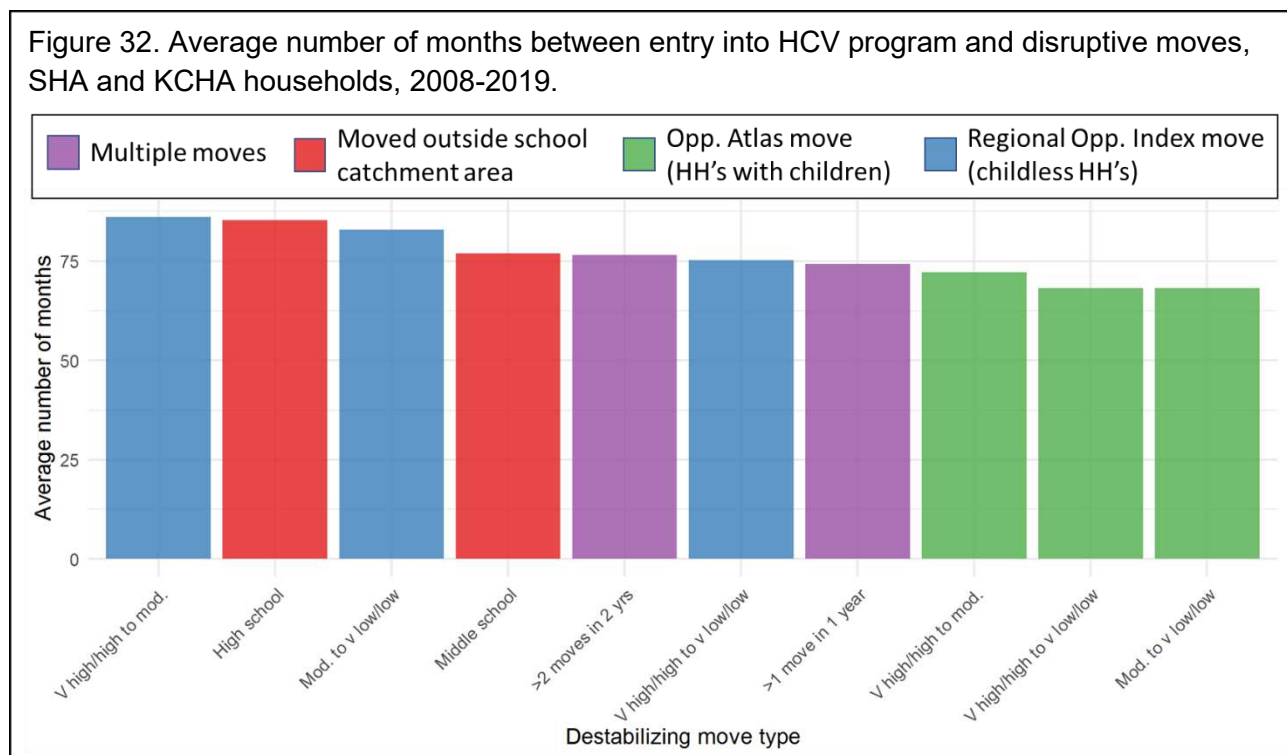
The analysis shows that just over 60% of all moves undertaken by HCV households between 2008 and 2019 were associated with no major disruption, at least as defined here. That is, in the majority of moves, the household is not making one of multiple moves over a short period of time, is not moving an adolescent child to a different school attendance area, and is not entering a neighborhood with appreciably lower opportunity than in the neighborhood of origin. About 28% of the moves undertaken by HCV households were characterized by a single potential disruption. Only 11% of all moves were associated with multiple types of potential disruption and for most of these – 9% – the move was characterized by a pair of disruptions. Less than one percent of all moves produced all five types of disruption and only about 2% were characterized by more than two disruptions. In sum, while moves characterized by multiple different types of disruption are likely to be particularly consequential for the well-being of families and individuals, these types of moves are relatively rare for HCV households in SHA and KCHA.

Timing of disruptive moves relative to program entry and exit

Given their potential effects on individual and family wellbeing, it is important to understand how these moves fit into the lifecycle of HCV program participation. In Figure 32 we present an analysis of the timing of various types of disruptive moves relative to entry into the HCV program. Specifically, we examine the month and year of each type of disruptive move and compare it to the month and year of the household's first receipt of assistance through the HCV program. Again, we combine all disruptive moves occurring with SHA or KCHA

⁵ Downward opportunity mobility is defined as moving from a high/very-high opportunity neighborhood to either a moderate- or low/very-low-opportunity neighborhood, or moving from a moderate-opportunity neighborhood to a low/very-low-opportunity neighborhood. For families without children, opportunity levels for origin and destination neighborhoods are based on percentile rank for the Regional Opportunity Index (see Figure 18). For households with children, neighborhood opportunity levels are based on scores for the Opportunity Atlas Index (see Figure 22).

between 2008 and 2019, and we exclude moves associated with entry into the HCV program or porting to a different jurisdiction.



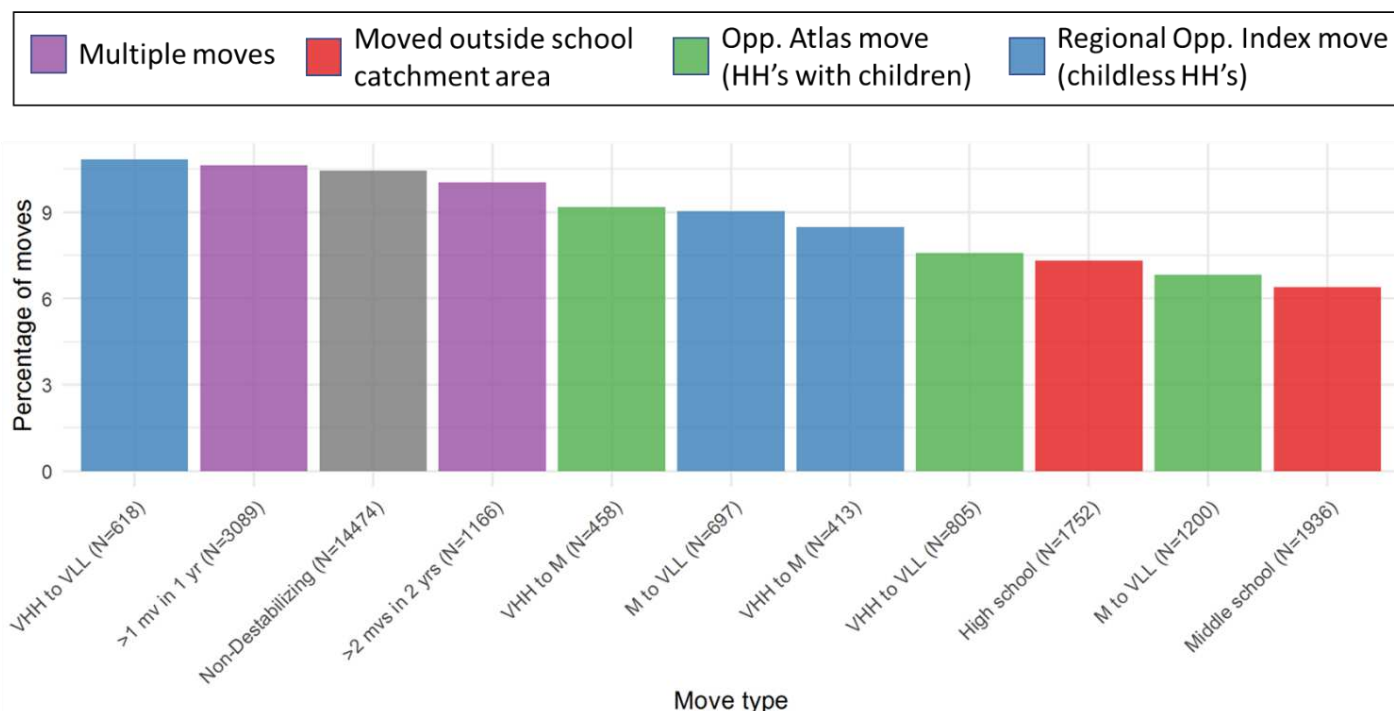
The figure shows that the disruptive moves that tend to happen in closest temporal proximity to program entry are downward opportunity moves for households with children. On average, when these households move to a neighborhood with a low or very low opportunity score, from either a moderate-opportunity neighborhood or a higher-opportunity neighborhood, they do so an average of just under six years (69 months) after program entry. Similarly, moves by households with children move from high-opportunity neighborhoods to moderate-opportunity areas do so an average of 72 months after first receiving HCV assistance. At the other end of the spectrum are moves from higher-opportunity to moderate-opportunity neighborhoods among households without children which occur, on average, about 7 years and 2 months after program entry. Moving a high-school-aged child to a different high school catchment area has a similar average timing, while moving a middle-school-aged child to a different middle school attendance zone tends to happen slightly sooner – an average of about 75 months after program entry. When it occurs, making a second move within a twelve-month period happens, on average, 74 months after entry into the HCV program, while making a third move over a 24-month period tends to occur slightly later.

Timing of disruptive moves relative to program exit

Figure 33 presents an analysis designed to assess the link between various types of disruptive moves and exit from the voucher program. Specifically, we examine the percentage of different types of moves that are followed by a program exit within 24 months after the move. For example, the figure shows that about 10.5% of all non-disruptive moves – that is, moves that are not one in a recent series of moves, involve movement to a lower-opportunity area, or take a family with children to a different catchment area – are followed by exit from the program over the subsequent two years. In other words, in almost 90% of all non-disruptive, the household remains in the voucher program for at least two years following the move. Somewhat surprisingly, in comparison to non-disruptive moves, most types of disruptive moves were associated with slightly *lower* rates of subsequent exit from the program. Among households with children, for example, just over 9% that move from a high- to a moderate-opportunity area, 7.6% of those that move from a high- to a low-opportunity neighborhood, and 6.8% of those that move from a moderate- to a low-opportunity neighborhood leave the voucher program in the following two years. Similarly, among families without children, short-term program exit

follows about 9% of moves from a moderate- to a low-opportunity neighborhood, and 8.5% of moves from high- to moderate-opportunity neighborhoods. Moves by households with children to a different school catchment area are especially unlikely to be followed by program exit; only 7.3% of families moving to a different high-school catchment area, and 6.4% of families changing middle-school catchment areas leave the voucher program within two years after the move. Only two extreme types of disruptive moves – those that are one of multiple moves within a one-year period and moves by childless families from high- to low-opportunity areas – are associated with a higher frequency of program exit than are non-disruptive moves.

Figure 33. Percent of moves followed by exit from voucher program within 24 months, SHA and KCHA households, 2008-2019.



Again, these differences are slight and reflect only the raw association between mobility and subsequent program exit. It very well could be the case that part of the relative longevity of households in the voucher program following some types of moves reflect the effects of household- and individual-level factors associated with those types of moves.

Characteristics associated with the likelihood of various types of destabilizing moves

For the final part of the analysis of disruptive or destabilizing moves, we present a set of regression models that predict each type of destabilizing move as a function of sociodemographic characteristics of HCV households. These regression results are presented in Appendix Tables A21 through A26. In all of these analyses we build the regression models sequentially, starting with models with predictors related to household composition and then adding, in groups, variables related race-ethnicity, unit characteristics, household resources, and other demographic and neighborhood-level characteristics. All results are presented in odds ratios, so coefficients below 1 indicate that the variable tends to reduce the likelihood of the outcome of interest and coefficients greater than 1 indicate an increased likelihood associated with the variable. In our discussion of results, we focus our description on the general pattern of the effects of these variable groups across the various types of disruptive moves.

Household composition appears to have modest effects on most types of disruptive moves. Households with two or more children are slightly less likely than households without children to move more than once in a

twelve-month period, but this effect emerges only after controlling for all other variables (Appendix Table A21). After accounting for differences related to race/ethnicity and unit size, households with two or more children are substantially – and statistically significantly – less likely than are households with one child to move to a different middle-school or high-school catchment area (Appendix Tables A25 and A26). However, household composition has no appreciable effect on the likelihood of moving to a lower-opportunity neighborhood once the effects of other variables are controlled (Appendix Tables A23 and A24).

Net of the effects of household composition and other factors, patterns of mobility between neighborhoods with different opportunity structures is significantly associated with the type of unit a household occupies. Among households with children, those residing in 2-, 3- and 4-bedroom units are all more likely than are those occupying 1-bedroom units to move to a moderate-opportunity than a low-opportunity area, as defined by the Opportunity Atlas scores (Appendix Table A24), and this effect persists even after controlling for the composition of the household and other destination drivers. This effect stands in contrast to the effects of unit size for households without children, for whom neighborhood opportunity is measured using the Regional Opportunity Index. Among these childless households, the likelihood of moving to a high-opportunity neighborhood versus a low-opportunity neighborhood is lower for households living in 2- and 3-bedroom units than for those in 1-bedroom units (Appendix Table A23). This effect, which persists with all other controls, likely reflects the relative distribution of affordable larger units in high- and low-opportunity neighborhoods across the region.

Household income appears to have no effect, net of other household characteristics, on mobility between neighborhoods with different levels of opportunity (Appendix Table A23 and A24), or exit from the school catchment area (Appendix Tables A25 and A26), but does appear to influence the occurrence of multiple moves over short periods. Households with any level of income are about 1.3 to 1.6 times as likely as those with no income to make two or more moves in a twelve-month period (Appendix Table A21), and 1.5 times more likely to make three or more moves over a two-year period (Appendix Table A22). These differences across income groups persist even after controlling for other household characteristics and opportunity level in the origin neighborhood.

Racial/ethnic difference in mobility outcomes are more pronounced and apparent across a large number of outcomes. Even after controlling for household composition, income, neighborhood conditions, and all other available characteristics, the odds of moving with a middle-school child out of the middle-school catchment area are about 29.7% ($1 - .703 = .297$) lower for white households than for Black households (Appendix Table A26). Other group differences on this outcome are not statistically significant. Racial differences in the likelihood of moving with a high-school-aged child to a different attendance zone are even more pronounced. All else being equal, the odds of moving to a different high school catchment area are only about 60% as high for white-headed households as for Black-headed households (Appendix Table A25). Moving to a different catchment area also appears to be somewhat less common among Asian households than among Black-headed households, but this contrast is smaller than the Black-white difference and is only marginally statistically significant under some model specifications.

The odds of entering a high-opportunity neighborhood rather than a low-opportunity neighborhood are about 2.5 times greater for mobile white families without children than for mobile Black families without children (Appendix Table A23). These odds of entering a high-opportunity area are also about twice as high for Latinx households without children than for Black households without children. Among mobile families with children, the odds of moving to a high-opportunity neighborhood instead of a low-opportunity neighborhood are about 74% higher for white-led households than for households with a Black householder, all else equal. These racial differences persist and, in fact, becomes stronger, with controls for other household characteristics and the opportunity level of the neighborhood of origin (Appendix Table A24). These racial variations in the likelihood of disruptive moves point to the continuation of substantial stratification in residential opportunity structures and housing processes (Krysan and Crowder 2017).

Perhaps the most important predictor of potentially disruptive or advantageous moves are the residential origins of households. For example, as shown in Appendix Table A24, the odds of moving to a moderate-

opportunity neighborhood are 2.25 times higher for a household with children starting out in a moderate-opportunity neighborhood than for a comparable household originating in a low-opportunity neighborhood. Similarly, in comparison to households with children starting out in low-opportunity neighborhoods, the odds of moving to a high-opportunity neighborhood are almost twice as high for households with children originating in moderate-opportunity neighborhoods, and over five times higher for households with children originating in high-opportunity areas. The impacts of origin neighborhood are even more dramatic for households without children. According to the results in Appendix Table A23, the odds of moving to a high-opportunity neighborhood are 2.6 times higher for childless households originating in a moderate-opportunity neighborhood than for those starting out in a low-opportunity area, and the odds are 13.9 times higher for those originating in a high-opportunity neighborhood. Thus, there is considerable persistence in residential exposures, with a strong association between origin and destination conditions among households who move, and these origin effects remain strong even after controlling for a wide range of individual-level and household characteristics that shape mobility outcomes. In other words, the tendency for households to move laterally, from one disadvantaged neighborhood to another, or from one high-opportunity neighborhood to another, cannot be attributed to observable characteristics of households starting out in different types of places.

Conclusions

This report provides a broad picture of the residential mobility experiences of households receiving voucher-based assistance from public housing authorities in Seattle and King County. The data developed for this project are extensive, drawing on administrative records for more than two million monthly observations of more than thirty thousand unique households. Data from multiple sources have been cleaned and deduplicated to provide a reliable source of rich, longitudinal data on the characteristics and mobility experiences of voucher recipients and their households between 2008 and 2019. It is important to note that these data exclude residential moves associated with entry into the program and between periods of voucher use. The data may miss significant residential instability as households attempt to identify units that will allow them to use their housing vouchers. As a result, the results presented here likely provide conservative estimates of the residential disruptions experienced by households served by SHA and KCHA voucher programs.

Nevertheless, these data point to some clear patterns and trends in patterns of mobility among voucher holders. The overall number of moves for households within both SHA and KCHA has declined markedly since 2008, corresponding with a continued decline in mobility for the U.S. population in general. The decline in mobility has been especially strong among households in SHA, but in both jurisdictions, the likelihood of moving remains stratified across a host of individual- and household-level factors. In both SHA and KCHA, rates of mobility tend to be highest for households with children and for households with at least one work-able adult, but at least in SHA these households have also shown the most dramatic declines in rates of mobility since 2008. Among households using vouchers through KCHA, mobility is highest for households headed by a Black or mixed-race individual and tend to be lowest for households renting one-bedroom units.

Perhaps more importantly, the results of the analysis highlight clear lines of stratification in types of moves that are potentially disruptive to voucher users and their families – moving to a lower-opportunity area, switching children to a different school area, or making multiple moves over a short period of time. These kinds of moves are relatively rare for families in both KCHA and SHA but, according to existing evidence, may stifle education, reduce economic mobility, and undermine health.

The results of this analysis indicate that, in comparison to households with multiple children, households with no children are more likely to move multiple times over a short period of time, and families with a single child are more likely to move to a different school catchment area. These differences, which hold even after controlling for the effects of unit size and other mobility predictors, likely reflect the fact that smaller families tend to develop fewer social and logistical ties that bind them to places and schools.

However, these effects of household composition pale in comparison to racial stratification in mobility outcomes. In comparison to households headed by white and Asian voucher holders, Black householders are substantially more likely to move multiple times over a short period of time, and more likely to make moves that

take their children to a different school catchment zone. Moreover, Black householders are substantially more likely than white and Asian households to experience downward residential mobility – moving into neighborhoods with relatively few opportunities for socioeconomic advancement and well-being. These racial differences in mobility outcomes remain large and statistically significant even after controlling for economic resources, household composition, unit size, and a wide range of other mobility determinants, and highlight the dire need to address discriminatory treatment by landlords and other factors that limit residential opportunities for many families of color.

The effects of race and other household characteristics may justify the development of services and interventions to increase residential stability for voucher users who are particularly susceptible to a variety of disruptive moves. But the results of the analysis also point to the potential importance of general strategies to establish initial residential placements that positively shape subsequent mobility experiences. The results of the analysis show remarkable persistence of residential location across time; the vast majority of householders move infrequently, and when they do move, they tend to relocate to neighborhoods that are quite similar to those they left. Largely regardless of their individual and family characteristics, households that start out in low-opportunity neighborhoods are very likely to move to another low-opportunity area, and those that originate in a higher-opportunity area are more likely to end up in another higher-opportunity area when they move. These patterns likely reflect the social dynamics of mobility (Crowder and Krysan 2016; Krysan and Crowder 2017). Residential location has important impacts on social networks and daily activities that shape information about, and perceptions of, residential opportunities. As a result, households starting out in lower-opportunity neighborhoods are likely to develop knowledge of residential options that is heavily slanted towards opportunities in similar neighborhood environments. Thus, as the results of our analysis suggest, once a family resides in a relatively disadvantaged neighborhood, it is exceedingly unlikely that they will move to a higher-opportunity area. In this sense, a focus on efforts to enhance opportunities to gain access to higher-opportunity areas at lease-up is likely to be impactful in establishing mobility trajectories that help to ensure well-being and upward educational and economic mobility for families using vouchers.

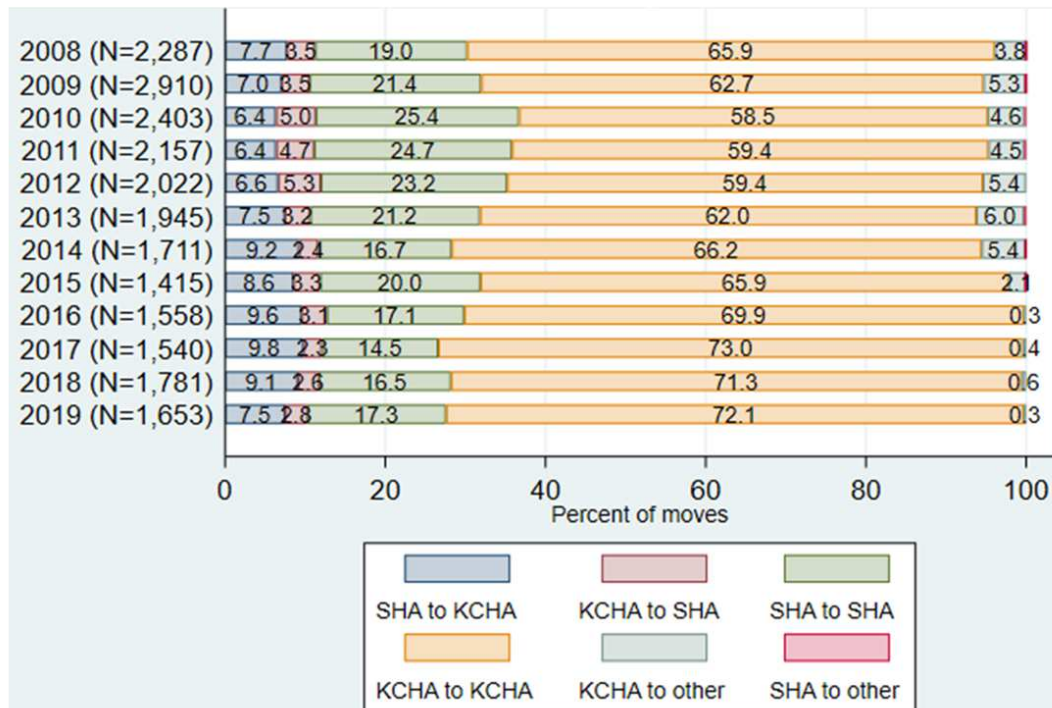
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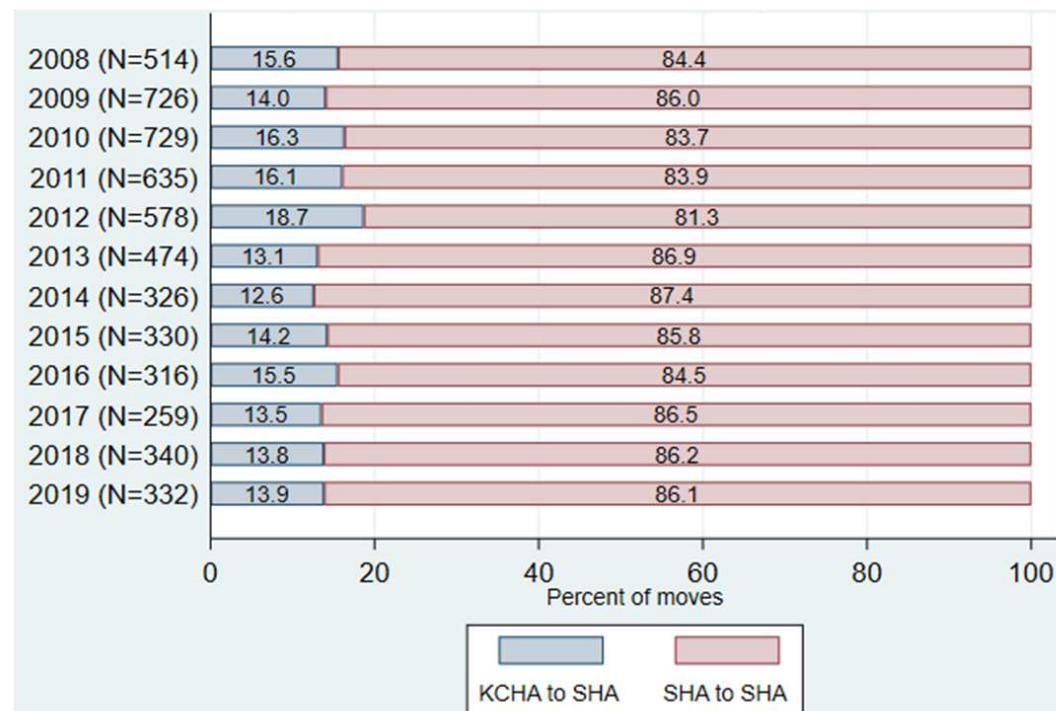
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APPENDIX

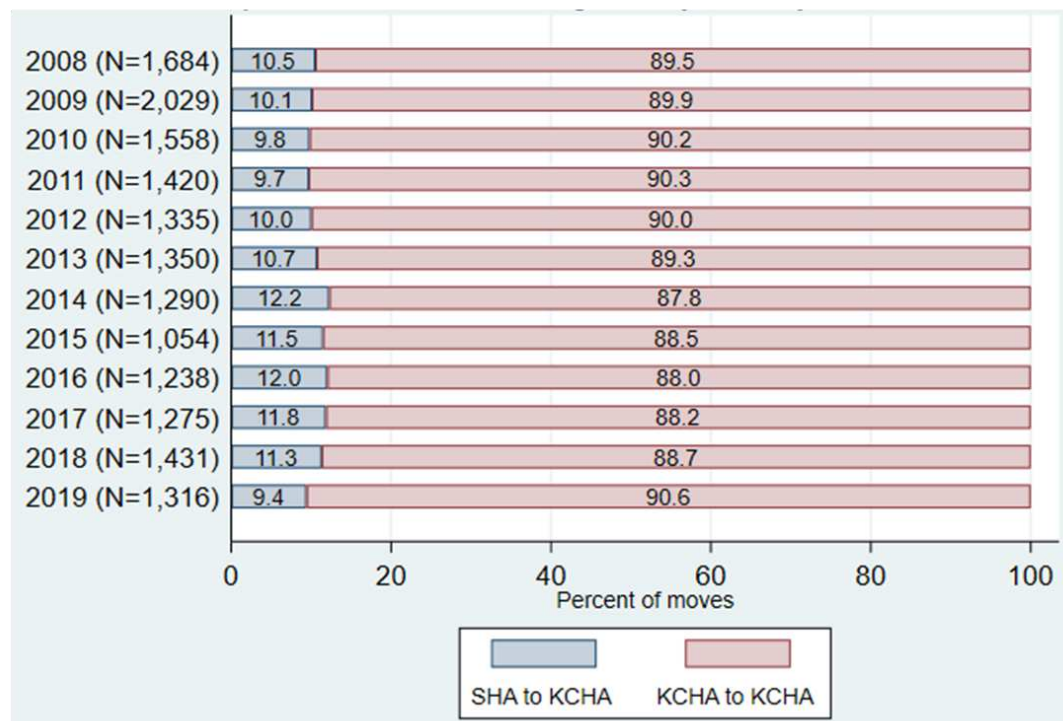
Appendix Figure A1. Types of moves by HCV households, by year, 2008-2019.



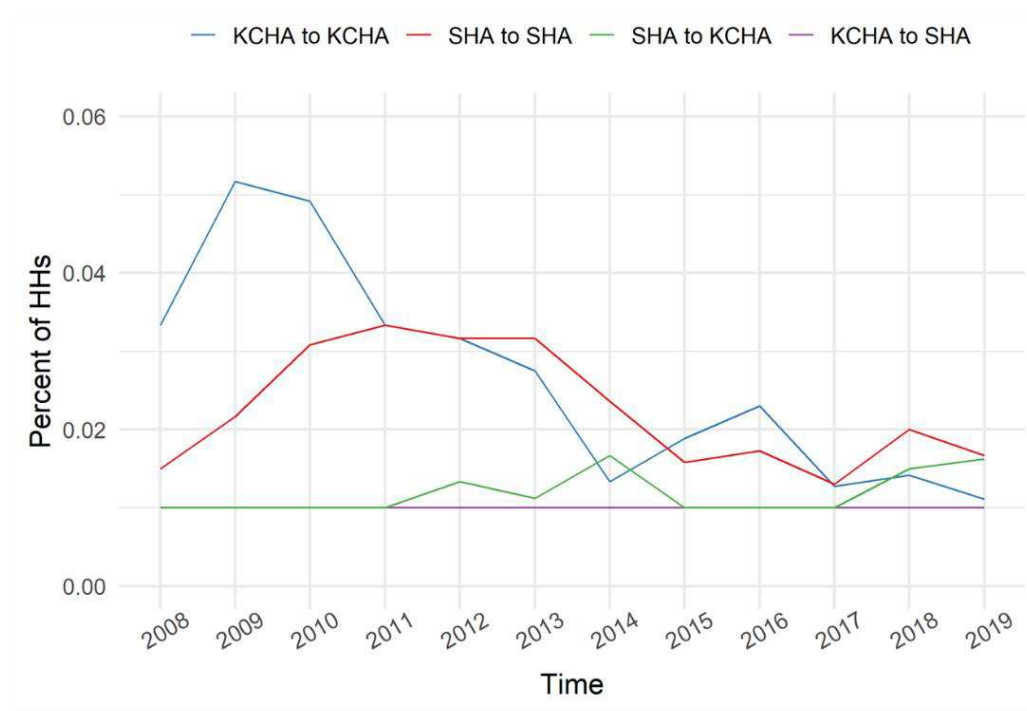
Appendix Figure A2. Types of moves by HCV households moving to areas in SHA jurisdiction, by year, 2008-2019.



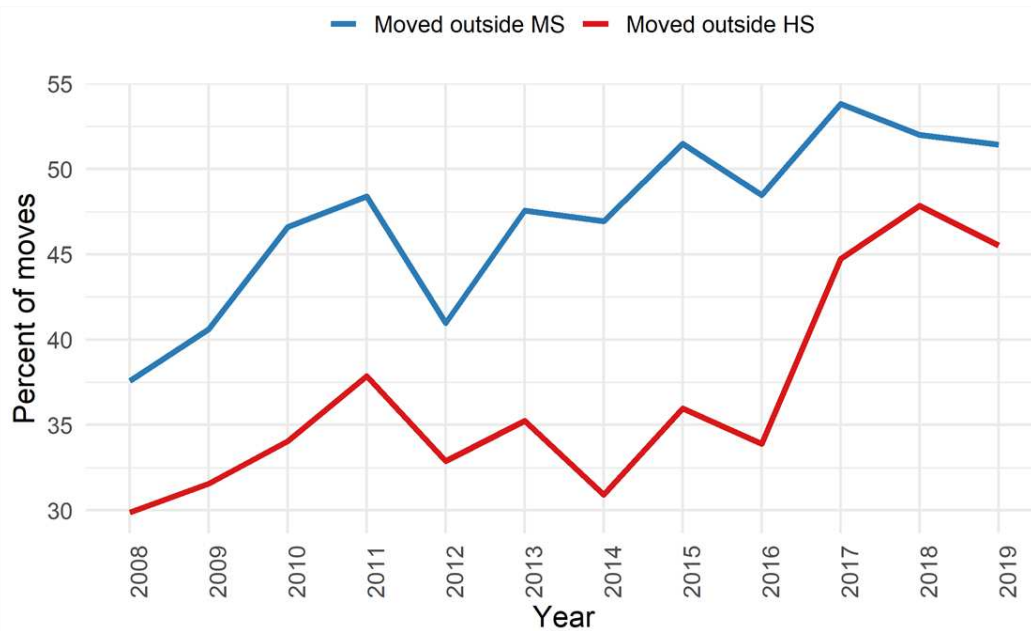
Appendix Figure A3. Types of moves by HCV households moving to areas in KCHA jurisdiction, by year, 2008-2019



Appendix Figure A4. Percent of households moving more than twice in the preceding twenty-four-month period, by year and jurisdiction, 2008-2019.



Appendix Figure A5. Percent of residential moves by households with children involving a change in school catchment area, by month, SHA and KCHA, 2008-2019.



Note: Only moves within jurisdictions are included

Appendix Table A5. Percent moving (sample sizes in parentheses) by year and household composition for SHA.

Year	HH w/o Chldn	HH w/ Chldn/1 Adlt	HH w/Chldn/2+ Adlts	1+ in HH w/ Disability	1+ Elder in HH	HH has 1+ Work-able
2012	7.07% (3508)	12.47% (1227)	13.63% (866)	8.74% (3181)	5.85% (1589)	10.65% (2751)
2013	6.23% (3433)	11.97% (1136)	9.48% (833)	7.03% (3131)	5% (1579)	9.75% (2606)
2014	5.72% (3412)	5.75% (1079)	5.83% (858)	6.32% (3116)	4.92% (1646)	5.24% (2594)
2015	5.39% (3376)	5.13% (1014)	7.42% (863)	5.92% (3107)	5.16% (1647)	5.74% (2507)
2016	4.57% (3389)	7.24% (1049)	7.57% (845)	5.18% (3128)	4.05% (1677)	6.51% (2519)
2017	3.88% (3348)	4.94% (971)	7.35% (844)	4.42% (3078)	3.19% (1694)	5.34% (2434)
2018	4.46% (3434)	9.2% (1033)	7.17% (851)	5.48% (3100)	4.01% (1795)	7.05% (2554)
2019	4.69% (3452)	7.21% (1095)	6.93% (866)	4.94% (3136)	3.42% (1813)	6.88% (2618)

Appendix Table A6. Percent moving (sample sizes in parentheses) by year and household composition for KCHA.

Year	HH w/o Chldn	HH w/ Chldn/1 Adlt	HH w/Chldn/2+ Adlts	1+ in HH w/ Disability	1+ Elder in HH	HH has 1+ Work-able
2012	9.23% (5601)	17.91% (2686)	15.43% (1866)	10.3% (4776)	7.47% (2129)	15.36% (5943)
2013	9.2% (5838)	17.84% (2607)	15.69% (1886)	10.68% (4756)	8.08% (2314)	15.14% (6082)
2014	9.11% (6003)	17.16% (2541)	13.81% (1963)	10.11% (4874)	8.26% (2469)	14.05% (6143)
2015	7.47% (6012)	14.31% (2586)	10.17% (2036)	7.89% (4624)	6.36% (2610)	11.39% (6358)
2016	9.08% (6310)	15.4% (2682)	10.91% (2164)	9.5% (5094)	7.95% (2829)	12.45% (6492)
2017	8.64% (6381)	15.57% (2659)	12.74% (2159)	9.34% (5203)	7.81% (2934)	13.14% (6432)
2018	9.26% (6577)	17.99% (2663)	14.09% (2179)	10.14% (5396)	8.31% (3092)	14.62% (6452)
2019	8.38% (6739)	16.27% (2600)	13.59% (2222)	9.25% (5601)	7.34% (3255)	13.4% (6404)

Appendix Table A7. Percent moving (sample sizes in parentheses) by year and voucher type for SHA.

Year	FUP Vchr	General Vchr	VASH Vchr	HASP Vchr
2015	3.35% (179)	5.73% (4802)	5.81% (258)	NA
2016	5.56% (180)	5.72% (4809)	3.5% (286)	NA
2017	5.62% (160)	4.71% (4693)	3.27% (306)	NA
2018	10.47% (172)	5.67% (4848)	5.42% (295)	NA
2019	9.58% (167)	5.35% (4953)	6.53% (291)	100% (1)

Appendix Table A8. Percent moving (sample sizes in parentheses) by year and voucher type for KCHA.

Year	FUP Vchr	General Vchr	HASP Vchr	Other Vchr	VASH Vchr
2015	10.61% (132)	13.94% (3200)	11.2% (259)	16.67% (24)	7.19% (139)
2016	12.23% (376)	13.25% (7553)	9.7% (1227)	16.36% (110)	6.55% (397)
2017	11.11% (414)	11.96% (8418)	8.17% (1579)	15.04% (133)	6.7% (463)
2018	17.51% (417)	13.25% (8601)	8.05% (1627)	10.14% (148)	5.43% (497)
2019	13.61% (404)	12.07% (8691)	7.57% (1758)	11.61% (155)	6.65% (481)

Appendix Table A9. Percent moving (sample sizes in parentheses) by year and unit size for SHA.

Year	1 Bdrm	2 Bdrms	3 Bdrms	4+ Bdrms
2012	8.09% (2065)	9.37% (1505)	10.62% (1064)	17.32% (560)
2013	6.55% (2016)	7.95% (1446)	11.23% (1024)	10.61% (537)
2014	6.86% (1996)	5.92% (1453)	4.74% (992)	6.45% (527)
2015	6.2% (1969)	6.1% (1460)	4.94% (952)	7.08% (480)
2016	4.91% (1975)	6.11% (1490)	7.1% (930)	6.86% (452)
2017	4.65% (1935)	4.63% (1489)	4.69% (874)	6.07% (412)
2018	5.41% (1978)	6.52% (1595)	7.51% (865)	5.37% (410)
2019	5.6% (1964)	6.73% (1680)	4.75% (885)	6.91% (405)

Appendix Table A10. Percent moving (sample sizes in parentheses) by year and unit size for KCHA.

Year	1 Bdrm	2 Bdrms	3 Bdrms	4+ Bdrms
2012	9.22% (4035)	15.16% (3515)	14.57% (1860)	14.97% (735)
2013	9.18% (4227)	14.44% (3519)	15.72% (1851)	15.17% (725)
2014	8.63% (4285)	14.29% (3570)	14.26% (1880)	14% (757)
2015	7.16% (4343)	10.58% (3565)	12.85% (1938)	11.37% (774)
2016	8.87% (4227)	11.76% (3785)	13.55% (2147)	11.41% (973)
2017	8.92% (3756)	10.4% (4097)	14.69% (2212)	13.98% (1080)
2018	10.35% (3834)	11.68% (4144)	16.04% (2288)	13.39% (1098)
2019	9.06% (3898)	11.13% (4188)	13.69% (2309)	13.92% (1106)

Appendix Table A11. Percent moving (sample sizes in parentheses) by year and income for SHA.

Year	No income	Income ≤10% AMI	Income 10-30% AMI	Income >30% AMI
2012	6.51% (568)	11.08% (641)	9.29% (3552)	9.77% (829)
2013	6.57% (335)	9.3% (645)	7.53% (3624)	9.39% (788)
2014	6.45% (310)	4.87% (616)	5.98% (3627)	5.07% (789)
2015	3.45% (348)	4.98% (603)	6.22% (3539)	4.76% (756)
2016	3.97% (302)	6.04% (1175)	5.48% (3046)	5.95% (756)
2017	3.97% (302)	4.88% (1598)	4.4% (2479)	5.25% (781)
2018	3.53% (283)	5.71% (1820)	5.6% (2392)	7.43% (821)
2019	7.56% (344)	5.72% (1904)	5.26% (2318)	5.2% (846)

Appendix Table A12. Percent moving (sample sizes in parentheses) by year and income for KCHA.

Year	No income	Income ≤10% AMI	Income 10-30% AMI	Income >30% AMI
2012	12.66% (553)	15.84% (1521)	11.67% (6621)	13.85% (1458)
2013	12% (525)	13.02% (1521)	12.02% (6829)	14.84% (1456)
2014	9.51% (526)	12.88% (1545)	11.33% (6917)	14.55% (1519)
2015	8.83% (385)	8.44% (1528)	9.31% (7215)	12.68% (1506)
2016	8.55% (351)	10.12% (2648)	10.45% (6423)	14.59% (1734)
2017	10.11% (376)	9.16% (3581)	11.25% (5459)	14.58% (1783)
2018	11.98% (359)	11.26% (3871)	11.45% (5196)	16.11% (1993)
2019	12.14% (346)	10.18% (3999)	10.59% (5127)	14.27% (2089)

Appendix Table A13. Percent moving (sample sizes in parentheses) by year and race/ethnicity for SHA.

Year	Hispanic, Any Race	NH Amer.Ind. Only	NH Asian Only	NH Black Only	NH Pac.Is. Only	NH White Only
2012	7.75% (258)	4.69% (128)	8.35% (659)	11.05% (2616)	11.76% (34)	7.61% (1906)
2013	11.07% (244)	9.52% (126)	6.3% (635)	9.78% (2506)	11.11% (36)	5.45% (1853)
2014	4.9% (245)	8% (125)	4.63% (626)	6.15% (2504)	4.65% (43)	5.55% (1803)
2015	6.2% (258)	2.54% (118)	4.85% (598)	6.51% (2456)	NA	5.08% (1770)
2016	6.37% (267)	5.22% (115)	4.22% (592)	7.05% (2495)	2.08% (48)	3.96% (1766)
2017	3.86% (259)	7.69% (117)	3.65% (576)	5.26% (2414)	2.13% (47)	4.11% (1750)
2018	8.24% (279)	8% (125)	4.16% (577)	6.78% (2494)	4.08% (49)	4.52% (1794)
2019	4.23% (307)	8.4% (131)	4.42% (566)	6.82% (2567)	4.08% (49)	4.18% (1793)

Appendix Table A14. Percent moving (sample sizes in parentheses) by year and race/ethnicity for KCHA.

Year	Hispanic, Any Race	NH Amer.Ind. Only	NH Asian Only	NH Black Only	NH Multi-Racial	NH Pac.Is. Only	NH White Only
2012	14.98% (514)	16.35% (159)	10.18% (511)	16.86% (4016)	17.14% (105)	11.21% (116)	8.94% (4732)
2013	14.59% (514)	12.9% (155)	10.53% (513)	15.46% (4192)	13.16% (114)	13.45% (119)	9.95% (4724)
2014	11.43% (525)	5.26% (152)	7.77% (528)	15.27% (4317)	16.15% (130)	11.02% (127)	9.54% (4728)
2015	7.89% (532)	12.99% (154)	7.29% (549)	12.4% (4404)	12.02% (183)	9.45% (127)	7.34% (4685)
2016	9.22% (575)	12.5% (160)	7.47% (562)	13.72% (4649)	14.05% (306)	10.71% (140)	8.63% (4762)
2017	13.44% (588)	7.19% (153)	9.32% (547)	14.03% (4746)	11.6% (319)	10.14% (148)	8.11% (4698)
2018	12.6% (619)	8.22% (146)	7.12% (562)	15.46% (4859)	16.09% (348)	12.66% (158)	9.27% (4726)
2019	9.95% (623)	9.62% (156)	7.22% (582)	14.32% (4930)	11.65% (352)	13.12% (160)	8.47% (4757)

Appendix Table A15. Percent moving (sample sizes in parentheses) by year and primary language for SHA.

Year	English	Other
2015	5.64% (3561)	6.36% (1477)
2016	5.74% (3674)	5.53% (1483)
2017	4.72% (3621)	4.7% (1448)
2018	6.02% (3740)	5.54% (1498)
2019	5.76% (3835)	5.22% (1512)

Appendix Table A16. Percent moving
(sample sizes in parentheses) by year
and primary language for KCHA.

Year	English	Other
2015	15.6% (1776)	12.5% (568)
2016	13.64% (6754)	10.93% (2041)
2017	11.89% (7671)	10.3% (2397)
2018	12.91% (7694)	10.54% (2448)
2019	11.84% (7810)	9.56% (2479)

Appendix Table A17. Household characteristics of opportunity moves within KCHA for households without children, household-months, 2008-2019

Characteristic	VHH to M/VLL	VHH to VHH	M to VHH	M to M	M to VLL	VLL to M/VHH	VLL to VLL
Avg # of bedrooms	1.45	1.43	1.43	1.47	1.47	1.45	1.5
% NH White	50.77	70.2	59.31	49.56	44.9	47.65	40.65
% NH Black	38.66	17.51	30.34	37.24	45.71	43.86	48.24
% NH Asian	2.58	6.14	4.83	7.62	2.45	2.3	3.92
% NH Amer.Ind.	0.77	0.93	0.69	0.88	1.02	1.1	1.18
% NH Pac.Isl.	0.26	0.25	0	0.29	0.82	0.6	0.65
% NH Multi-Racial	3.09	1.43	2.76	0.88	0.61	1.3	1.67
% Hispanic	3.87	3.54	2.07	3.52	4.49	3.2	3.68
% No HH income	2.84	1.68	0.69	1.47	3.06	2.9	2.33
% HH inc. <=10% King C. median	19.33	16.67	22.07	19.94	18.98	20.28	19.04
% HH inc. 10-30% King C. median	67.78	72.05	71.72	70.38	69.39	68.43	70.38
% HH inc. >30% King C. median	10.05	9.6	5.52	8.21	8.57	8.39	8.25
Avg # of months since admission	82.14	78.9	90.41	92.67	85.97	88.47	84.97
N	388	1188	145	341	490	1001	2448

Note: VHH = very high/high, M = moderate, and VLL = very low/low.

Appendix Table A18. Household characteristics of opportunity moves within SHA for households without children, household-months, 2008-2019

Characteristic	VHH to M/VLL	VHH to VHH	M to VHH	M to M	M to VLL	VLL to M/VHH	VLL to VLL
Avg # of bedrooms	1.42	1.29	1.49	1.6	1.74	1.52	1.71
% NH White	38	58.07	33.63	26.79	10	19.74	14.11
% NH Black	46	29.36	49.56	59.82	57	56.14	52.35
% NH Asian	9	4.44	9.73	8.04	27	17.11	23.82
% NH Amer.Ind.	4	2.38	2.65	0.89	0	1.32	2.82
% NH Pac.Isl.	0	0.65	0	0	2	0.44	0.63
% NH Multi-Racial	0	0	0	0	0	0	0
% Hispanic	3	5.09	4.42	4.46	4	5.26	6.27
% No HH income	4.5	4.12	1.77	3.57	4	3.95	3.76
% HH inc. <=10% King C. median	12.25	17.01	17.7	10.71	18	20.61	17.87
% HH inc. 10-30% King C. median	78.75	73.78	75.22	78.57	76	67.98	66.77
% HH inc. >30% King C. median	4.5	5.09	5.31	7.14	2	7.46	11.6
Avg # of months since admission	108.5	91.76	102.35	100.46	118.32	101.43	108.85
N	400	923	113	112	100	228	319

Note: VHH = very high/high, M = moderate, and VLL = very low/low.

Appendix Table A19. Household characteristics of opportunity moves within KCHA for households with children, household-months, 2008-2019

Household characteristic	VHH to M/VLL	VHH to VHH	M to VHH	M to M	M to VLL	VLL to M/VHH	VLL to VLL
Avg # of bedrooms	2.86	2.83	2.85	2.63	2.72	2.8	2.6
% 1 adult	58.06	58.46	60.58	70.23	66.41	60.74	66.76
% 2+ adults	41.94	41.54	39.42	29.77	33.59	39.26	33.24
% NH White	28.89	37.49	32.85	31.78	25.38	24.17	23.03
% NH Black	57.1	43.82	50.36	55.66	61.67	61.84	63.28
% NH Asian	2.3	3.32	3.16	2.48	3.46	2.86	2.85
% NH Amer.Ind.	1.63	1.66	1.46	1.71	1.15	1.21	1.69
% NH Pac.Is.	1.44	1.35	1.95	0.93	1.15	1.71	1.57
% NH Multi-Racial	0.96	2.08	1.46	2.48	1.67	2.48	2.17
% Hispanic	7.68	10.28	8.76	4.96	5.51	5.73	5.4
% No HH income	1.25	2.28	0.49	3.1	1.79	2.2	2.34
% HH inc. <=10% King C. median	13.53	13.08	12.41	20.62	17.82	14.92	18.37
% HH inc. 10-30% King C. median	47.89	45.69	41.61	47.29	49.62	48.18	51.29
% HH inc. >30% King C. median	37.33	38.94	45.5	28.99	30.77	34.69	27.99
Avg # of months since admission	71.04	66.16	75.03	70.8	70.66	68.21	65.9
N	1042	963	411	645	780	1816	3369

Note: VHH = very high/high, M = moderate, and VLL = very low/low.

Appendix Table A20. Household characteristics of opportunity moves within SHA for households with children, household-months, 2008-2019

Characteristic	VHH to M/VLL	VHH to VHH	M to VHH	M to M	M to VLL	VLL to M/VHH	VLL to VLL
Avg # of bedrooms	2.93	2.48	2.95	2.95	3.14	3.03	2.94
% 1 adult	57.85	77.78	48.72	51.66	54.21	62.9	61.85
% 2+ adults	42.15	22.22	51.28	48.34	45.79	37.1	38.15
% NH White	22.31	29.63	38.46	15.89	11.72	14.71	10.18
% NH Black	60.33	37.04	46.15	66.23	70.33	69.68	73.73
% NH Asian	7.44	25.93	7.69	9.27	10.62	8.6	7.94
% NH Amer.Ind.	3.31	0	2.56	0	1.47	1.36	2.99
% NH Pac.Is.	0	0	0	0	0.73	0.68	0.68
% NH Multi-Racial	0	0	0	0	0	0	0
% Hispanic	6.61	7.41	5.13	8.61	5.13	4.98	4.48
% No HH income	9.09	3.7	2.56	7.28	5.13	7.47	5.3
% HH inc. <=10% King C. median	18.18	33.33	10.26	17.88	14.29	15.16	17.31
% HH inc. 10-30% King C. median	47.11	37.04	51.28	41.06	50.92	53.17	47.73
% HH inc. >30% King C. median	25.62	25.93	35.9	33.77	29.67	24.21	29.67
Avg # of months since admission	74.84	84.74	82.69	85.89	79.57	78.42	80.88
N	121	27	39	151	273	442	1473

Note: VHH = very high/high, M = moderate, and VLL = very low/low.

Appendix Table A21. Odds ratios from logistic regression of whether moved 2+ times in twelve months, HCV households in SHA and KCHA, 2008-2019.

	(1)	(2)	(3)	(4)	(5)	(6)
HH w/ no Chld (Reference)	-	-	-	-	-	-
HH w/ Chld/ 1 Adlt	1.521***	1.441***	1.403***	1.396***	0.996	0.995
HH w/ Chld/ 2+Adlts	1.187	1.132	1.070	1.053	0.827	0.827
1+ Elder in HH	0.643***	0.672***	0.672***	0.662***	0.957	0.960
1+ in HH w/ Disability	1.151	1.178	1.172	1.152	1.162	1.161
1+ Work-Able in HH	1.312**	1.242*	1.226*	1.232*	1.093	1.095
NH Black Only (Reference)	-	-	-	-	-	-
NH White Only		0.603***	0.608***	0.607***	0.658***	0.660***
NH Asian Only		0.592***	0.591***	0.593***	0.749*	0.754*
Hispanic, Any Race		0.705*	0.709*	0.710*	0.743	0.744
NH Amer.Ind. Only		0.676	0.681	0.684	0.733	0.732
NH Pac.Isl. Only		0.392	0.389*	0.390*	0.411*	0.413*
NH Multi-Racial		0.277*	0.279*	0.275**	0.289**	0.293*
Unit has 1 bedroom (Reference)			-	-	-	-
Unit has 2 bedrooms			1.011	1.012	1.000	1.003
Unit has 3 bedrooms			1.052	1.058	1.069	1.083
Unit has 4+ bedroom			1.191	1.202	1.208	1.228
HH with no income (Reference)				-	-	-
HH inc. <=10 perc. of King CMI				1.590***	1.340*	1.339*
HH inc. b/w 10-30 perc. of King CMI				1.645***	1.424***	1.427***
HH inc. gt 30 perc. of King CMI				1.525***	1.585***	1.590***
Age in Years					0.983***	0.983***
Female					1.544***	1.551***
Count of months since first record (2008-2019)					0.990***	0.990***
Num Mvs 1/2008-Last Mnth					1.355***	1.354***
Total Individual Annual Income, in 1000s of dollars					0.998	0.998
Tenant rent - 20b					1.001	1.001*
Year Building Built					0.996***	0.996***
No income (Reference)					-	-
Inc from Wages					0.935	0.933
Inc from Bnfts					1.382***	1.376***
Othr Inc Srce					0.940	0.937
Lives in KCHAs Juris					-	-
Lives in SHAs Juris					0.758***	0.733***
Regional Opportunity Index (3 levels)=1 (Reference)					-	-
Regional Opportunity Index (3 levels)=2					0.966	
Regional Opportunity Index (3 levels)=3					0.947	
Opportunity Atlas (3 levels)=1 (Reference)						-
Opportunity Atlas (3 levels)=2						1.088
Opportunity Atlas (3 levels)=3						0.817*
Insig2u	3.213***	3.170***	3.162***	3.131***	1.631***	1.629***
Observations	971948	971948	971948	971948	971948	971948
BIC	23650.3	23682.4	23721.4	23735.7	23501.5	23494.3

Exponentiated coefficients

Note: For Regional Opportunity Index and Opportunity Atlas, 1 = very low/low, 2 = moderate, and 3 = very high/high.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix Table A22. Odds ratios from logistic regression of whether moved 3+ times in twenty-four months, HCV households in SHA and KCHA, 2008-2019.

	(1)	(2)	(3)	(4)	(5)	(6)
HH w/ no Chld (Reference)	-	-	-	-	-	-
HH w/ Chld/ 1 Adlt	1.788***	1.662***	1.724***	1.714***	1.151	1.157
HH w/ Chld/ 2+Adlts	1.418*	1.334*	1.272	1.249	0.883	0.886
1+ Elder in HH	0.668**	0.693**	0.703*	0.695**	1.037	1.041
1+ in HH w/ Disability	1.565***	1.608***	1.637***	1.620***	1.494**	1.483**
1+ Work-Able in HH	1.284	1.203	1.263	1.256	1.150	1.149
NH Black Only (Reference)	-	-	-	-	-	-
NH White Only		0.518***	0.521***	0.522***	0.617***	0.600***
NH Asian Only		0.625*	0.626*	0.629*	0.771	0.774
Hispanic, Any Race		0.728	0.733	0.732	0.743	0.731
NH Amer.Ind. Only		0.590	0.601	0.602	0.638	0.631
NH Pac.Isl. Only		0.121	0.118	0.118	0.138	0.141
NH Multi-Racial		0.103*	0.106*	0.104*	0.191	0.190
Unit has 1 bedroom (Reference)			-	-	-	-
Unit has 2 bedrooms			0.792	0.793	0.817	0.813
Unit has 3 bedrooms			0.959	0.970	0.919	0.932
Unit has 4+ bedroom			1.112	1.127	1.031	1.061
HH with no income (Reference)				-	-	-
HH inc. <=10 perc. of King CMI				1.620**	1.423*	1.430*
HH inc. b/w 10-30 perc. of King CMI				1.556**	1.316	1.322
HH inc. gt 30 perc. of King CMI				1.526*	1.382	1.391
Age in Years					0.981***	0.981***
Female					1.647***	1.662***
Count of months since first record (2008-2019)					0.990***	0.990***
Num Mvs 1/2008-Last Mnth					1.536***	1.536***
Total Individual Annual Income, in 1000s of dollars					1.010*	1.010
Tenant rent - 20b					1.001*	1.001*
Year Building Built					0.995***	0.995***
No income (Reference)					-	-
Inc from Wages					1.015	1.010
Inc from Bnfts					1.578***	1.571***
Othr Inc Srce					0.991	0.984
Lives in KCHAs Juris (Reference)					-	-
Lives in SHAs Juris					1.766***	1.700***
Regional Opportunity Index (3 levels)=1 (Reference)					-	-
Regional Opportunity Index (3 levels)=2					0.813	
Regional Opportunity Index (3 levels)=3					0.868	
Opportunity Atlas (3 levels)=1 (Reference)						-
Opportunity Atlas (3 levels)=2						1.185
Opportunity Atlas (3 levels)=3						0.939
Insig2u	4.438***	4.334***	4.294***	4.270***	1.679***	1.676***
Observations	971948	971948	971948	971948	971948	971948
BIC	11662.3	11705.0	11740.0	11770.1	11565.4	11566.0

Exponentiated coefficients

Note: For Regional Opportunity Index and Opportunity Atlas, 1 = very low/low, 2 = moderate, and 3 = very high/high.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix Table A23. Odds ratios from multinomial logistic regression of opportunity level (Regional Opportunity Index) for childless HCV households in SHA and KCHA, 2008-2019.

	(1) ROI		(2) ROI		(3) ROI		(4) ROI		(5) ROI		(6) ROI	
	2	3	2	3	2	3	2	3	2	3	2	3
ROI=1 (Reference)	-	-	-	-	-	-	-	-	-	-	-	-
ROI=2	3.063***	2.557***	3.035***	2.519***	3.034***	2.495***	3.027***	2.521***	3.031***	2.546***	2.910***	2.327***
ROI=3	3.461***	13.91***	3.389***	13.10***	3.295***	11.57***	3.268***	11.59***	3.287***	11.81***	2.997***	10.50***
1+ Elder in HH			1.052	0.884	1.074	0.860	1.092	0.882	1.099	0.888	0.939	0.823
1+ in HH w/ Disability			1.024	0.929	1.015	0.842	1.051	0.892	1.059	0.908	1.002	0.985
1+ Work-Able in HH			0.904	0.632***	0.939	0.719**	1.018	0.828	1.023	0.832	1.023	0.896
NH Black Only (Reference)					-	-	-	-	-	-	-	-
NH White Only					1.249*	2.583***	1.231	2.545***	1.231	2.541***	1.267*	2.712***
NH Asian Only					0.880	1.128	0.893	1.132	0.889	1.128	0.831	1.125
Hispanic, Any Race					1.126	2.030***	1.109	1.995***	1.108	1.980***	1.096	1.945**
NH Amer.Ind. Only					1.348	1.805*	1.342	1.769*	1.344	1.792*	1.308	1.877*
NH Pac.Is. Only					0.401	0.374	0.396	0.373	0.400	0.368	0.359	0.350
NH Multi-Racial					2.592*	2.295	2.567*	2.332	2.540*	2.238	2.906*	2.561
Unit has 1 bedroom (Reference)							-	-	-	-	-	-
Unit has 2 bedrooms							0.927	0.752**	0.929	0.753**	0.917	0.803*
Unit has 3 bedrooms							0.688*	0.670*	0.694*	0.675*	0.653*	0.748
Unit has 4+ bedroom							0.892	1.257	0.907	1.274	0.807	1.328
HH with no income (Reference)									-	-	-	-
HH inc. <=10 perc. of King CMI									1.048	1.258	1.141	1.640**
HH inc. b/w 10-30 perc. of King CMI									0.968	1.053	0.996	1.167
HH inc. gt 30 perc. of King CMI									0.921	1.023	0.850	0.861
Age in Years											1.008	1.008
Female											1.022	0.769**
Count of months since first record (2008-2019)											0.999	0.998*
Num Mvs 1/2008-Last Mnth											1.013	1.057
Total Individual Annual Income, in 1000s of dollars											0.999	1.022*
Tenant rent - 20b											1.000	1.000
Year Building Built											0.999	1.003
No income (Reference)											-	-
Inc from Wages											1.286	0.966
Inc from Bnfts											1.122	0.692*
Othr Inc Sree											1.153	1.084
Lives in KCHAs Juris (Reference)											-	-
Lives in SHAs Juris											1.305*	1.480***
Observations	4160		4160		4160		4160		4160		4160	
BIC	7573.0		7596.0		7565.5		7597.4		7643.7		7753.2	

Exponentiated coefficients

Note: For Regional Opportunity Index, 1 = very low/low, 2 = moderate, and 3 = very high/high.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix Table A24. Odds ratios from multinomial logistic regression of opportunity level (Opportunity Atlas score) for HCV households with children in SHA and KCHA, 2008-2019.

	(1) Opportunity Atlas (3 levels) 2 3		(2) Opportunity Atlas (3 levels) 2 3		(3) Opportunity Atlas (3 levels) 2 3		(4) Opportunity Atlas (3 levels) 2 3		(5) Opportunity Atlas (3 levels) 2 3		(6) Opportunity Atlas (3 levels) 2 3	
Opportunity Atlas (3 levels)=1 (Reference)	-	-	-	-	-	-	-	-	-	-	-	-
Opportunity Atlas (3 levels)=2	2.253***	1.823***	2.241***	1.814***	2.211***	1.779***	2.191***	1.767***	2.191***	1.768***	2.069***	1.664***
Opportunity Atlas (3 levels)=3	1.879***	5.356***	1.883***	5.369***	1.826***	5.068***	1.813***	5.020***	1.805***	4.996***	1.691***	3.962***
HH w/ Chld/ 1Adlt (Reference)	-	-	-	-	-	-	-	-	-	-	-	-
HH w/ Chld/ 2+Adlts	-	-	1.078	1.098	1.085	1.113	1.029	1.049	1.037	1.050	0.991	1.074
1+ Elder in HH	-	-	0.786	0.849	0.801	0.875	0.811	0.877	0.810	0.875	0.705	0.939
1+ in HH w/ Disability	-	-	0.843	0.866	0.835	0.853	0.831	0.849	0.828	0.841	0.828	0.963
1+ Work-Able in HH	-	-	1.101	1.372	1.131	1.446*	1.096	1.410	1.099	1.428*	1.076	1.396
NH Black Only (Reference)	-	-	-	-	-	-	-	-	-	-	-	-
NH White Only	-	-	-	-	1.327**	1.682***	1.347**	1.716***	1.344**	1.712***	1.341**	1.735***
NH Asian Only	-	-	-	-	0.930	0.867	0.920	0.857	0.922	0.858	0.911	0.987
Hispanic, Any Race	-	-	-	-	1.244	1.486*	1.250	1.494*	1.250	1.497*	1.269	1.562**
NH Amer.Ind. Only	-	-	-	-	0.727	0.767	0.727	0.768	0.721	0.769	0.776	0.861
NH Pac.Is. Only	-	-	-	-	0.792	1.340	0.800	1.351	0.793	1.337	0.824	1.404
NH Multi-Racial	-	-	-	-	1.775	2.281*	1.854	2.368*	1.828	2.339*	1.754	1.718
Unit has 1 bedroom (Reference)	-	-	-	-	-	-	-	-	-	-	-	-
Unit has 2 bedrooms	-	-	-	-	-	-	1.475*	1.120	1.483*	1.124	1.463*	0.968
Unit has 3 bedrooms	-	-	-	-	-	-	1.612**	1.299	1.634**	1.309	1.641**	1.190
Unit has 4+ bedroom	-	-	-	-	-	-	1.731**	1.379	1.766**	1.400	1.738**	1.344
HH with no income (Reference)	-	-	-	-	-	-	-	-	-	-	-	-
HH inc. <=10 perc. of King CMI	-	-	-	-	-	-	-	-	1.182	1.145	1.111	1.013
HH inc. b/w 10-30 perc. of King CMI	-	-	-	-	-	-	-	-	1.142	1.176	1.001	0.937
HH inc. gt 30 perc. of King CMI	-	-	-	-	-	-	-	-	1.066	1.068	0.918	0.731
Age in Years	-	-	-	-	-	-	-	-	-	-	1.008*	0.996
Female	-	-	-	-	-	-	-	-	-	-	0.912	1.072
Count of months since first record (2008-2019)	-	-	-	-	-	-	-	-	-	-	0.999	1.003**
Num Mvs 1/2008-Last Mnth	-	-	-	-	-	-	-	-	-	-	1.024	0.949*
Total Individual Annual Income, in 1000s of dollars	-	-	-	-	-	-	-	-	-	-	0.999	1.011*
Tenant rent - 20b	-	-	-	-	-	-	-	-	-	-	1.000	1.000
Year Building Built	-	-	-	-	-	-	-	-	-	-	1.004**	1.002
No income (Reference)	-	-	-	-	-	-	-	-	-	-	-	-
Inc from Wages	-	-	-	-	-	-	-	-	-	-	1.146	1.037
Inc from Bnfts	-	-	-	-	-	-	-	-	-	-	1.049	0.896
Othr Inc Srce	-	-	-	-	-	-	-	-	-	-	1.140	0.980
Lives in KCHAs Juris (Reference)	-	-	-	-	-	-	-	-	-	-	-	-
Lives in SHAs Juris	-	-	-	-	-	-	-	-	-	-	0.877	0.563***
Observations	6243		6243		6243		6243		6243		6243	
BIC	10813.4		10857.9		10917.0		10955.7		11004.1		11083.9	

Exponentiated coefficients

Note: For Opportunity Atlas, 1 = very low/low, 2 = moderate, and 3 = very high/high.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix Table A25. Odds ratios from logistic regression of whether household with children age 14-18 moved to a different high school catchment area, HCV households in SHA and KCHA, 2008-2019.

	(1)	(2)	(3)	(4)	(5)
HH w/ Chld/ 1Adlt (Reference)	-	-	-	-	-
HH w/ Chld/ 2+Adlts	0.887	0.879	0.690***	0.684***	0.701***
1+ Elder in HH	0.813	0.812	0.809	0.807	0.540**
1+ in HH w/ Disability	1.195	1.234	1.220	1.215	0.910
1+ Work-Able in HH	0.861	0.855	0.779	0.782	0.810
NH Black Only (Reference)	-	-	-	-	-
NH White Only		0.574***	0.633***	0.634***	0.610***
NH Asian Only		0.729*	0.731*	0.731*	0.697*
Hispanic, Any Race		0.770	0.795	0.797	0.782
NH Amer.Ind. Only		0.823	0.884	0.890	0.829
NH Pac.Isl. Only		0.371	0.362	0.362	0.380
NH Multi-Racial		1	1	1	1
Unit has 1 bedroom (Reference)			-	-	-
Unit has 2 bedrooms			0.795	0.793	0.786
Unit has 3 bedrooms			1.624	1.609	1.469
Unit has 4+ bedroom			2.218**	2.189**	1.910*
HH with no income (Reference)				-	-
HH inc. <=10 perc. of King CMI				0.934	0.808
HH inc. b/w 10-30 perc. of King CMI.				0.993	0.916
HH inc. gt 30 perc. of King CMI				1.017	1.018
Age in Years					1.021***
Female					1.586**
Count of months since first record (2008-2019)					1.001
Num Mvs 1/2008-Last Mnth					1.044
Total Individual Annual Income, in 1000s of dollars					1.001
Tenant rent - 20b					1.000
Year Building Built					0.994***
No income (Reference)					-
Inc from Wages					0.936
Inc from Bnfts					1.451***
Othr Inc Srce					1.067
Lives in KCHAs Juris (Reference)					-
Lives in SHAs Juris					0.958
Opportunity Atlas (3 levels)=1 (Reference)					-
Opportunity Atlas (3 levels)=2					1.107
Opportunity Atlas (3 levels)=3					0.994
Insig2u	1.444***	1.391***	1.190	1.191	1.046
Observations	437051	433466	433466	433466	433466
BIC	12804.3	12825.4	12767.5	12805.8	12889.7

Exponentiated coefficients

Note: For Opportunity Atlas, 1 = very low/low, 2 = moderate, and 3 = very high/high.

NH Multi-Racial dropped b/c there are 0 obs.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Appendix Table A26. Odds ratios from logistic regression of whether household with children age 11-13 moved to a different middle school catchment area, HCV households in SHA and KCHA, 2008-2019.

	(1)	(2)	(3)	(4)	(5)
HH w/ Chld/ 1Adlt (Reference)	-	-	-	-	-
HH w/ Chld/ 2+Adlts	0.862	0.859	0.674***	0.677***	0.786**
1+ Elder in HH	0.810	0.812	0.811	0.814	0.967
1+ in HH w/ Disability	0.817	0.843	0.828	0.820	0.727*
1+ Work-Able in HH	0.977	0.964	0.885	0.894	0.858
NH Black Only (Reference)		-	-	-	-
NH White Only		0.656***	0.721**	0.721**	0.703***
NH Asian Only		0.700*	0.706*	0.702*	0.825
Hispanic, Any Race		0.780	0.808	0.809	0.814
NH Amer.Ind. Only		0.728	0.783	0.781	0.738
NH Pac.Isl. Only		0.600	0.598	0.597	0.627
NH Multi-Racial		0.769	0.804	0.806	0.619
Unit has 1 bedroom (Reference)			-	-	-
Unit has 2 bedrooms			0.655	0.655	0.661
Unit has 3 bedrooms			1.323	1.319	1.280
Unit has 4+ bedroom			1.715*	1.712*	1.618*
HH with no income (Reference)				-	-
HH inc. <=10 perc. of King CMI				0.852	0.665**
HH inc. b/w 10-30 perc. of King CMI.				0.937	0.813
HH inc. gt 30 perc. of King CMI				0.863	0.813
Age in Years					0.981***
Female					1.231
Count of months since first record (2008-2019)					1.002
Num Mvs 1/2008-Last Mnth					1.072**
Total Individual Annual Income, in 1000s of dollars					1.002
Tenant rent - 20b					1.000
Year Building Built					0.992***
No income (Reference)					-
Inc from Wages					0.894
Inc from Bnfts					1.345***
Othr Inc Srce					1.041
Lives in KCHAs Juris (Reference)					-
Lives in SHAs Juris					0.704***
Opportunity Atlas (3 levels)=1 (Reference)					-
Opportunity Atlas (3 levels)=2					1.024
Opportunity Atlas (3 levels)=3					1.053
Insig2u	0.978	0.955	0.772*	0.777	0.603**
Observations	437051	437051	437051	437051	437051
BIC	13695.0	13749.7	13687.6	13723.9	13774.3

Exponentiated coefficients

Note: For Opportunity Atlas, 1 = very low/low, 2 = moderate, and 3 = very high/high.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

APPENDIX E

COLLATERALIZED FUNDS REPORTS

APPENDIX RELATED TO MTW FUNDS PLEDGED AS COLLATERAL

GREEN RIVER HOMES

Project Description:

- Number of separate housing sites: 1
- Type of Residents: Family
- Number and Type of Units: 59 units total
 - 1-bedroom-8 units
 - 2-bedroom-30 units
 - 3-bedroom-16 units
 - 4-bedroom-4 units
 - 5-bedroom-1 unit
 - Non-dwelling space: none

Financing Terms:

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

Certification: See Attachment C

Bank Statement: See Attachment D

MOVING KING COUNTY RESIDENTS FORWARD

Project Description:

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

Financing Terms:

- Pro forma-see Attachment E
- Amortization schedule-see Attachment F

Certification: See Attachment G

Bank Statement: See Attachment H

ATTACHMENT A



RBC Capital Markets®

ATTACHMENT A

Project Financial Projections

Green River Homes
Auburn, WA

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Revised: 11/22/11

These projections do not guarantee actual operating results. Information herein may be revised based upon changes to assumptions and third-party information. Inapplicable schedules may be omitted. This information is proprietary and may be shared only with RBC's prior consent.

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OPM Version 4-4a, January 28, 2011

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Uses	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11	Yr 12	Yr 13	Yr 14	Yr 15	Yr 16	Yr 17	Yr 18	Yr 19	Yr 20	Yr 21	Yr 22	Yr 23	Yr 24	Yr 25	Yr 26	Yr 27	Yr 28	Yr 29	Yr 30	Yr 31	Yr 32	Yr 33	Yr 34	Yr 35	Yr 36	Yr 37	Yr 38	Yr 39	Yr 40	Yr 41	Yr 42	Yr 43	Yr 44	Yr 45	Yr 46	Yr 47	Yr 48	Yr 49	Yr 50	Yr 51	Yr 52	Yr 53	Yr 54	Yr 55	Yr 56	Yr 57	Yr 58	Yr 59	Yr 60	Yr 61	Yr 62	Yr 63	Yr 64	Yr 65	Yr 66	Yr 67	Yr 68	Yr 69	Yr 70	Yr 71	Yr 72	Yr 73	Yr 74	Yr 75	Yr 76	Yr 77	Yr 78	Yr 79	Yr 80	Yr 81	Yr 82	Yr 83	Yr 84	Yr 85	Yr 86	Yr 87	Yr 88	Yr 89	Yr 90	Yr 91	Yr 92	Yr 93	Yr 94	Yr 95	Yr 96	Yr 97	Yr 98	Yr 99	Yr 100	Yr 101	Yr 102	Yr 103	Yr 104	Yr 105	Yr 106	Yr 107	Yr 108	Yr 109	Yr 110	Yr 111	Yr 112	Yr 113	Yr 114	Yr 115	Yr 116	Yr 117	Yr 118	Yr 119	Yr 120	Yr 121	Yr 122	Yr 123	Yr 124	Yr 125	Yr 126	Yr 127	Yr 128	Yr 129	Yr 130	Yr 131	Yr 132	Yr 133	Yr 134	Yr 135	Yr 136	Yr 137	Yr 138	Yr 139	Yr 140	Yr 141	Yr 142	Yr 143	Yr 144	Yr 145	Yr 146	Yr 147	Yr 148	Yr 149	Yr 150	Yr 151	Yr 152	Yr 153	Yr 154	Yr 155	Yr 156	Yr 157	Yr 158	Yr 159	Yr 160	Yr 161	Yr 162	Yr 163	Yr 164	Yr 165	Yr 166	Yr 167	Yr 168	Yr 169	Yr 170	Yr 171	Yr 172	Yr 173	Yr 174	Yr 175	Yr 176	Yr 177	Yr 178	Yr 179	Yr 180	Yr 181	Yr 182	Yr 183	Yr 184	Yr 185	Yr 186	Yr 187	Yr 188	Yr 189	Yr 190	Yr 191	Yr 192	Yr 193	Yr 194	Yr 195	Yr 196	Yr 197	Yr 198	Yr 199	Yr 200	Yr 201	Yr 202	Yr 203	Yr 204	Yr 205	Yr 206	Yr 207	Yr 208	Yr 209	Yr 210	Yr 211	Yr 212	Yr 213	Yr 214	Yr 215	Yr 216	Yr 217	Yr 218	Yr 219	Yr 220	Yr 221	Yr 222	Yr 223	Yr 224	Yr 225	Yr 226	Yr 227	Yr 228	Yr 229	Yr 230	Yr 231	Yr 232	Yr 233	Yr 234	Yr 235	Yr 236	Yr 237	Yr 238	Yr 239	Yr 240	Yr 241	Yr 242	Yr 243	Yr 244	Yr 245	Yr 246	Yr 247	Yr 248	Yr 249	Yr 250	Yr 251	Yr 252	Yr 253	Yr 254	Yr 255	Yr 256	Yr 257	Yr 258	Yr 259	Yr 260	Yr 261	Yr 262	Yr 263	Yr 264	Yr 265	Yr 266	Yr 267	Yr 268	Yr 269	Yr 270	Yr 271	Yr 272	Yr 273	Yr 274	Yr 275	Yr 276	Yr 277	Yr 278	Yr 279	Yr 280	Yr 281	Yr 282	Yr 283	Yr 284	Yr 285	Yr 286	Yr 287	Yr 288	Yr 289	Yr 290	Yr 291	Yr 292	Yr 293	Yr 294	Yr 295	Yr 296	Yr 297	Yr 298	Yr 299	Yr 300	Yr 301	Yr 302	Yr 303	Yr 304	Yr 305	Yr 306	Yr 307	Yr 308	Yr 309	Yr 310	Yr 311	Yr 312	Yr 313	Yr 314	Yr 315	Yr 316	Yr 317	Yr 318	Yr 319	Yr 320	Yr 321	Yr 322	Yr 323	Yr 324	Yr 325	Yr 326	Yr 327	Yr 328	Yr 329	Yr 330	Yr 331	Yr 332	Yr 333	Yr 334	Yr 335	Yr 336	Yr 337	Yr 338	Yr 339	Yr 340	Yr 341	Yr 342	Yr 343	Yr 344	Yr 345	Yr 346	Yr 347	Yr 348	Yr 349	Yr 350	Yr 351	Yr 352	Yr 353	Yr 354	Yr 355	Yr 356	Yr 357	Yr 358	Yr 359	Yr 360	Yr 361	Yr 362	Yr 363	Yr 364	Yr 365	Yr 366	Yr 367	Yr 368	Yr 369	Yr 370	Yr 371	Yr 372	Yr 373	Yr 374	Yr 375	Yr 376	Yr 377	Yr 378	Yr 379	Yr 380	Yr 3
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Credit Calculation Schedule

Green River Homes

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Low Income Housing Tax Credit Calculation

Item	Rehabilitation	Acquisition
Eligible Basis	\$ 16,019,460	
Less:		
Acquisition Cost	(3,623,958)	3,623,958
Residential Historic Tax Credits	-	-
Grants	-	-
Other Credits adjustment	-	-
Dev. Fee in acquisition	(121,060)	121,060
Relocation	(42,660)	-
Ineligible Soft Costs	(23,750)	-

DDAQCT Adjustme	No
Eligible Basis	
Basis Limitation	
Total Eligible Basis	12,206,032 3,747,018 100%
Low Income Percentage	100.00%
Qualified LIHTC Basis	12,206,032 3,747,018 100.00%
Tax Credit Percentage	3.19%
LIHTC Calculated	508,902 389,372 119,530 3.19%
LIHTC Reservation	508,902 389,372 119,530 3.19%
Allowable LIHTC	508,902 389,372 119,530 3.19%

Historic Tax Credit Calculation

Item	Residential	Commercial	Total
Depreciable Basis	\$	\$	\$
Less:			
Acquisition Cost	-	-	-
Personal Property	-	-	-
Sitework	-	-	-
Bldg. Additionals (Demo)	-	-	-
Ineligible Interest	-	-	-
Other Ineligible Costs	-	-	-
Grants	-	-	-
Historic Tax Credit Basis	-	-	-
Historic Tax Credit %	0%	0%	0%
Total Historic Tax Credit	\$	\$	\$

Tax Credit Delivery	2012	2013	2014	2015
	-	-	-	-
	-	-	-	-
	-	-	-	-
	-	-	-	-

State LIHTC	No
Eligible Basis	-
Adjustments	-
Adjustments	-
Total Basis	0%
Credit Percentage	-
Tax Credits	-
State Historic	No
Depreciable Basis	-
Adjustments	-
Adjustments	-
Total Basis	0%
Credit Percentage	-
Tax Credits	-
Other Credits	-
Basis	-
Adjustments	-
Adjustments	-
Total Basis	0%
Credit Percentage	-
Tax Credits	-

Summary of Operating Partnership Benefits

Green River Homes

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Year	Equity Contribution	Projected Taxable Income (Loss)	Deduct Saverd Cash Flow 100.00%	Projected Tax Benefits 11.00%	Projected Federal Housing Tax Credits	Projected Historic Rehab Tax Credits	Projected Other Tax Credits	Projected State Tax Credits	Federal Tax Effect on State Credits Yes	Projected Total Benefits	0.00% Projected Cash Flow	Total Investing L.P. Benefits
2011	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2012	-	(545,526)	-	190,934	146,619	-	-	-	-	337,553	-	337,553
2013	4,384,970	(396,481)	-	138,768	508,851	-	-	-	-	647,619	-	647,619
2014	-	(370,295)	-	129,603	508,851	-	-	-	-	638,454	-	638,454
2015	-	(353,781)	-	123,823	508,851	-	-	-	-	632,674	-	632,674
2016	-	(342,627)	-	119,919	508,851	-	-	-	-	628,770	-	628,770
2017	-	(331,320)	-	115,962	508,851	-	-	-	-	624,813	-	624,813
2018	-	(329,467)	-	115,313	508,851	-	-	-	-	624,164	-	624,164
2019	-	(335,423)	-	117,398	508,851	-	-	-	-	626,249	-	626,249
2020	-	(319,619)	-	111,867	508,851	-	-	-	-	620,718	-	620,718
2021	-	(308,185)	-	107,865	508,851	-	-	-	-	616,716	-	616,716
2022	-	(303,306)	-	106,157	362,232	-	-	-	-	468,389	-	468,389
2023	-	(360,618)	-	126,216	-	-	-	-	-	126,216	-	126,216
2024	-	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	-	-	-	-	-
Totals	4,884,970	(4,296,648)	-	1,503,825	5,088,510	-	-	-	-	6,592,335	-	6,592,335
Sale	N/A	(588,322)	N/A	205,913	N/A	N/A	N/A	N/A	N/A	205,913	-	205,913
Totals	\$ 4,884,970	\$ (4,884,970)	\$ -	\$ 1,709,738	\$ 5,088,510	\$ -	\$ -	\$ -	\$ -	\$ 6,798,248	\$ -	\$ 6,798,248

The equity contributions have been adjusted for the Limited Partners share of the 1602 exchange fields in the amount of \$

L.P. Income (Loss) % 99.99%
L.P. Cash Flow % 99.99%
L.P. Tax Credit % 99.99%

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Broker	Link Type Quota	% of AM	Average Eq. Pt. per Unit	# of Units	Tenant Paid	Subsidy	Net Rent	Monthly Income	Annual Rental Income	Utility Allowance	Max LIHTC PIET Rent	% Discount to New TC	Metric	% Discount to Market
Low Income Units														
1	Section 8	50.00%	677	4	200	564	764	3,056	36,672	56	758	-0.79%	810	5.68%
1	Section 8	50.00%	881	15	200	676	876	13,140	157,680	71	908	3.31%	925	5.50%
2	Section 8	50.00%	1,346	8	200	999	1,199	9,992	115,104	88	1,040	-15.29%	1,155	-3.81%
3	Section 8	50.00%	1,333	2	200	1,121	1,321	2,642	31,704	112	1,146	-15.37%	1,350	0.66%
4	Section 8	50.00%	1,836	2	200	1,343	1,543	1,543	18,516	112	1,277	-20.83%	1,600	3.16%
5	Section 8	60.00%	677	4	200	564	764	3,056	36,672	56	758	921	810	5.68%
7	Section 8	60.00%	881	15	200	676	876	13,140	157,680	71	1,102	20.51%	925	5.50%
2	Section 8	60.00%	1,146	8	200	999	1,199	9,992	115,104	88	1,266	5.29%	1,155	-3.81%
4	Section 8	60.00%	1,333	2	200	1,121	1,321	2,642	31,704	112	1,398	5.51%	1,330	0.66%

30.21%

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1. Introduction

	79	\$8,403	790,836	Change \ Current	\$	\$	\$
Total Units				Parking	-	-	-
				Storage	-	-	-
				Laundry	-	-	-
				Washing \ Dryer Rental	-	-	-
Vacancy Rate LIHTC:	5.0%	102.00%	102.00%	Fees \ Charges	-	-	-
Vacancy Rate Market:	5.0%	1/1/2023	5.0%	Other \ Misc.	-	-	-
Rental Income Inflation %	102.00%			Total Other Income	\$	\$	\$
				Average Other Income (units/month)	-	-	-
				Other Income Vacancy:	5.0%	5.0%	5.0%
				Other Income Inflation %	102.00%	102.00%	102.00%

Leaseup and Expenses

Green River Homes

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LEASEUP

	2012			2013		
	LL Units	Market Units	Percent Leased	LL Units	Market Units	Percent Leased
January	-	-	0.00%	59	-	100.00%
February	-	-	0.00%	59	-	100.00%
March	-	-	0.00%	59	-	100.00%
April	-	-	0.00%	59	-	100.00%
May	-	-	0.00%	59	-	100.00%
June	-	-	0.00%	59	-	100.00%
July	9	9	15.25%	59	-	100.00%
August	19	19	32.20%	59	-	100.00%
September	29	29	49.15%	59	-	100.00%
October	39	39	66.10%	59	-	100.00%
November	49	49	83.05%	59	-	100.00%
December	59	59	100.00%	59	-	100.00%
Total	204	204		708	708	

	2014			2015		
	LL Units	Market Units	Percent Leased	LL Units	Market Units	Percent Leased
January	59	-	100.00%	59	-	100.00%
February	59	-	100.00%	59	-	100.00%
March	59	-	100.00%	59	-	100.00%
April	59	-	100.00%	59	-	100.00%
May	59	-	100.00%	59	-	100.00%
June	59	-	100.00%	59	-	100.00%
July	59	-	100.00%	59	-	100.00%
August	59	-	100.00%	59	-	100.00%
September	59	-	100.00%	59	-	100.00%
October	59	-	100.00%	59	-	100.00%
November	59	-	100.00%	59	-	100.00%
December	59	-	100.00%	59	-	100.00%
Total	708	708		708	708	

OPERATING EXPENSES

Expenses:	Expenses	Per Unit	Per Unit/Month
Variable Expenses			
Administrative	\$ 24,190	\$ 410	\$ 34
Repairs and Maintenance	51,330	870	73
Utilities	25,960	440	37
Water and Sewer	47,200	800	67
Payroll	129,800	2,200	183
Subtotal Variable Expenses	278,480	4,720	393
Fixed Expenses			Per Month
Insurance	20,000	339	1,667
Other	2,656	45	221
Real Estate Taxes - Total	-	-	-
Subtotal Variable & Fixed	301,136	5,104	-
Management Fee	46,606	790	66
Total Operating Expense	347,742	5,894	-
Replacement Reserve	17,700	300	1,475
Total Expenses & R.R.	\$ 365,442	\$ 6,194	-
Expense Inflation %	103.00%	103.00%	
Real Estate Tax Inflation %	103.00%	103.00%	
Real Estate Tax Abatement	No		
Management Fee			
Percentage of EGI	7.000%	46,606	
Mfn Monthly Fee	\$ -	-	
Fee / unit / month	\$ -	-	
Inflation	103.00%	103.00%	
Replacement Reserve			
Start Date	7/1/2013		
RBC	Per Unit \$ 300	Annual \$ 17,700	Inflation 103.00%
Lender			100.00%

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	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610	1609	1608	1607	1606	1605	1604	1603	1602	1601	1600	1599	1598	1597	1596	1595	1594	1593	1592	1591	1590	1589	1588	1587	1586	1585	1584	1583	1582	1581	1580	1579	1578	1577	1576	1575	1574	1573	1572	1571	1570	1569	1568	1567	1566	1565	1564	1563	1562	1561	1560	1559	1558	1557	1556	1555	1554	1553	1552	1551	1550	1549	1548	1547	1546	1545	1544	1543	1542	1541	1540	1539	1538	1537	1536	1535	1534	1533	1532	1531	1530	1529	1528	1527	1526	1525	1524	1523	1522	1521	1520	1519	1518	1517	1516	1515	1514	1513	1512	1511	1510	1509	1508	1507	1506	1505	1504	1503	1502	1501	1500	1499	1498	1497	1496	1495	1494	1493	1492	1491	1490	1489	1488	1487	1486	1485	1484	1483	1482	1481	1480	1479	1478	1477	1476	1475	1474	1473	1472	1471	1470	1469	1468	1467	1466	1465	1464	1463	1462	1461	1460	1459	1458	1457	1456	1455	1454	1453	1452	1451	1450	1449	1448	1447	1446	1445	1444	1443	1442	1441	1440	1439	1438	1437	1436	1435	1434	1433	1432	1431	1430	1429	1428	1427	1426	1425	1424	1423	1422	1421	1420	1419	1418	1417	1416	1415	1414	1413	1412	1411	1410	1409	1408	1407	1406	1405	1404	1403	1402	1401	1400	1399	1398	1397	1396	1395	1394	1393	1392	1391	1390	1389	1388	1387	1386	1385	1384	1383	1382	1381	1380	1379	1378	1377	1376	1375	1374	1373	1372	1371	1370	1369	1368	1367	1366	1365	1364	1363	1362	1361	1360	1359	1358	1357	1356	1355	1354	1353	1352	1351	1350	1349	1348	1347	1346	1345	1344	1343	1342	1341	1340	1339	1338	1337	1336	1335	1334	1333	1332	1331	1330	1329	1328	1327	1326	1325	1324	1323	1322	1321	1320	1319	1318	1317	1316	1315	1314	1313	1312	1311	1310	1309	1308	1307	1306	1305	1304	1303	1302	1301	1300	1299	1298	1297	1296	1295	1294	1293	1292	1291	1290	1289	1288	1287	1286	1285	1284	1283	1282	1281	1280	1279	1278	1277	1276	1275	1274	1273	1272	1271	1270	1269	1268	1267	1266	1265	1264	1263	1262	1261	1260	1259	1258	1257	1256	1255	1254	1253	1252	1251	1250	1249	1248	1247	1246	1245	1244	1243	1242	1241	1240	1239	1238	1237	1236	1235	1234	1233	1232	1231	1230	1229	1228	1227	1226	1225	1224	1223	1222	1221	1220	1219	1218	1217	1216	1215	1214	1213	1212	1211	1210	1209	1208	1207	1206	1205	1204	1203	1202	1201	1200	1199	1198	1197	1196	1195	1194	1193	1192	1191	1190	1189	1188	1187	1186	1185	1184	1183	1182	1181	1180	1179	1178	1177	1176	1175	1174	1173	1172	1171	1170	1169	1168	1167	1166	1165	1164	1163	1162	1161	1160	1159	1158	1157	1156	1155	1154	1153	1152	1151	1150	1149	1148	1147	1146	1145	1144	1143	1142	1141	1140	1139	1138	1137	1136	1135	1134	1133	1132	1131	1130	1129	1128	1127	1126	1125	1124	1123	1122	1121	1120	1119	1118	1117	1116	1115	1114	1113	1112	1111	1110	1109	1108	1107	1106	1105	1104	1103	1102	1101	1100	1099	1098	1097	1096	1095	1094	1093	1092	1091	1090	1089	1088	1087	1086	1085	1084	1083	1082	1081	1080	1079	1078	1077	1076	1075	1074	1073	1072	1071	1070	1069	1068	1067	1066	1065	1064	1063	1062	1061	1060	1059	1058	1057	1056	1055	1054	1053	1052	1051	1050	1049	1048	1047	1046	1045	1044	1043	1042	1041	1040	1039	1038	1037	1036	1035	1034	1033	1032	1031	1030	1029	1028	1027	1026	1025	1024	1023	1022	1021	1020	1019	1018	1017	1016	1015	1014	1013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Projected Taxable Income/(Loss)

		Period		10/25/2011		10/25/2014		Page	

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Then Ponder This

Cash Flow / Mortgage Amortization Schedules
Green River Homes

Cash Flow Report to Fund Company				Sub-Plan		Period		NOTE	
20				Commitment Dates					
Line Item	Amount	Balance	Payment	Commutative	Cash Flow				
2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 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GP: Loans (on and off) made by GP		Loan	Sol-Chr	units
Less A/c	212,320.00			
Interest Acc				
Interest Expense				
Interest Tax (on)				
Interest Tax (off)				
Interest Payable				
Year	2011	2012	2013	2014
Total Payable	\$	\$	\$	\$
Interest Expense	927	41,359	71,359	73,246
Interest Payable	621	(41,359)	216,481	277,951
Overlapping Balance	212,320.00	\$ 12,454.62	\$ 12,454.62	\$ 11,996.62
Interest Expense				

[illegible]

and transfer to balance		30	Construction Items		cto
		ALPMA, Completed	Month (MAY)	JANUARY	PAID
Less Asset		0			
Interest Rate		100			
Asset's Term value					
Monthly Payment					
Month		2011	2012	2013	2014
Cost Proposed		\$	\$	\$	\$
Interest Expense					
Monthly Payment					
Principal Balance					
Defined system					

[illegible]

Line	Description	Unit	Commemorative Dates				
			SP	2011	2012	2013	2014
100	Annual						
101	Annual						
102	Annual						
103	Annual						
104	Annual						
105	Annual						
106	Annual						
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174	Annual						

[illegible]

Account	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																			
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Business 101

Sticking The Carpet

התאחדות העובדים/התעשייה

Life

Self-Test Questions (Answers)

Final Version of Manuscript

References and Bibliography

David C. Goffman

Maximum Gain

Minimum 1000 Aflatoxin

Abstract

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10

Back From Prior to Final CI

Energy

100

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Estimating the Number of Cases

For Further Research

DEPARTMENT OF THE ARMY

Selected Developmental Needs

Isolated Demersal-Cloud

—

Wages and Unemployment

Assembly and Disassembly

MAY 4 1974

WILLIAMS & WILKINS

Minimum Days

§ 1. परिचय

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Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Outstanding Loan Balance	\$ 11,141.10	\$ 10,881.81	\$ 10,622.52	\$ 10,363.23	\$ 10,103.94	\$ 9,844.65	\$ 9,585.36	\$ 9,326.07	\$ 9,066.78	\$ 8,807.49	\$ 8,548.20	\$ 8,288.91	\$ 8,029.62	\$ 7,770.33	\$ 7,511.04	\$ 7,251.75	\$ 6,992.46	\$ 6,733.17
Seller Conveyance/Advance Loan Part	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10	\$ 4,821.10
Construction Loan 4																		
Construction Loan 5																		
2017 Loan																		
CDP (Loan closing) backlog 2015 loan	\$ 1,864.99	\$ 2,060.79	\$ 2,256.59	\$ 2,452.39	\$ 2,648.19	\$ 2,843.99	\$ 3,039.79	\$ 3,235.59	\$ 3,431.39	\$ 3,627.19	\$ 3,822.99	\$ 4,018.79	\$ 4,214.59	\$ 4,410.39	\$ 4,606.19	\$ 4,801.99	\$ 5,000.00	\$ 5,200.00

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Abstract

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Construction Interest Schedule
Green River Homes

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	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1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ATTACHMENT B

Attachment B
Green River Loan, Collateralized
Amortization Schedule

Month	Beginning Balance	Interest Rate	Interest Charge	Principal	Ending Balance
Jun-11	9,500,000	0.00%	0	0	9,500,000
Dec-11	9,500,000	0.00%	0	0	9,500,000
Jun-12	9,500,000	0.00%	0	0	9,500,000
Dec-12	9,500,000	0.00%	0	0	9,500,000
Jun-13	9,500,000	0.75%	35,625	0	9,500,000
Dec-13	9,500,000	0.75%	35,625	0	9,500,000
Jun-14	9,500,000	1.00%	47,500	0	9,500,000
Dec-14	9,500,000	1.00%	47,500	863,636	8,636,364
Jun-15	8,636,364	1.00%	43,182		8,636,364
Dec-15	8,636,364	1.00%	43,182	863,636	7,772,728
Jun-16	7,772,728	1.00%	38,864		7,772,728
Dec-16	7,772,728	1.00%	38,864	863,636	6,909,092
Jun-17	6,909,092	1.50%	51,818		6,909,092
Dec-17	6,909,092	1.50%	51,818	863,636	6,045,456
Jun-18	6,045,456	1.50%	45,341		6,045,456
Dec-18	6,045,456	1.50%	45,341	863,636	5,181,820
Jun-19	5,181,820	1.50%	38,864		5,181,820
Dec-19	5,181,820	1.50%	38,864	863,636	4,318,184
Jun-20	4,318,184	2.00%	43,182		4,318,184
Dec-20	4,318,184	2.00%	43,182	863,636	3,454,548
Jun-21	3,454,548	2.00%	34,545		3,454,548
Dec-21	3,454,548	2.00%	34,545	863,636	2,590,912
Jun-22	2,590,912	2.00%	25,909		2,590,912
Dec-22	2,590,912	2.00%	25,909	863,636	1,727,276
Jun-23	1,727,276	2.00%	17,273		1,727,276
Dec-23	1,727,276	2.00%	17,273	863,636	863,640
Jun-24	863,640	2.00%	8,636		863,640
Dec-24	863,640	2.00%	8,636	863,640	0

ATTACHMENT C

Attachment C

GREEN RIVER HOMES CERTIFICATION

I, Windy Epps, Director of Finance for the King County Housing Authority (KCHA), do hereby certify that whenever funds held in trust by the Bank of America as collateral against the loan from the Bank of America to KCHA which funded the Green River Homes re-development project are released as collateral, all such funds will be used for an eligible MTW activity or purpose that KCHA has received approval for through its MTW Plan.

Windy H. Epps

Windy Epps, Director of Finance,
King County Housing Authority

3/24/2021

Date

ATTACHMENT D



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Office Servicing Your Account:
101 CALIFORNIA ST
14TH FLOOR
CA5-332-14-00
SAN FRANCISCO, CA 94111
Fax: 980.233.7103

Account Representative:
HEDI MASUOKA
.
HEDI.MASUOKA@BAML.COM

KING COUNTY HOUSING
AUTHORITY GR2 PLEDGE ACCOUNT
600 ANDOVER PARK WEST
SEATTLE, WA 98188

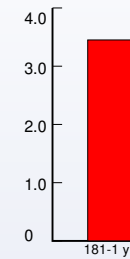
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Account Summary

Current Period Ending Value	\$3,454,546.00
Net Income and Expenses	\$78,590.91

MATURITY SCHEDULE

\$ millions



Portfolio Holdings	Quantity as of 12/31/2020	Market Value as of 12/31/2020	% of Portfolio
Money Market	3,454,546	\$3,454,546.00	100.00
Total Portfolio Value	3,454,546	\$3,454,546.00	

Client Statement
12/01/2020 to 12/31/2020

Account Number
416870

Bank of America, N.A.
P.O. Box 2010
Lakewood, NJ 08701



Page 2 of 5

Disclosure Statement

Account Statement

GENERAL - Securities transactions are recorded in your account on the settlement date shown on the confirmation or statement for such transactions (except in the case of cancellations or corrections where processing dates are used). Securities transactions having trade dates on or before, but settlement dates after, the date of the statement will appear on your next statement. Cash received or paid and securities received or delivered are shown as of the date of the activity. All cash received has been distributed in accordance with your instructions. Unless otherwise agreed, proceeds from pledged securities which mature or are sold are held until the pledge is released. Please advise your account representative promptly in writing of any material change in your investment objectives or financial situation. If you have a complaint, please call 1-888-221-9276 or notify us in writing at Bank of America, Bank of America Tower, One Bryant Park, Attn: Compliance Complaint Department Mail Code: NY1-100-17-01, New York, NY 10036.

DISCLOSURES - Bank of America, N.A. (BANA), is a subsidiary of Bank of America Corporation, the parent company of several banking institutions. BANA is a national bank and has registered a separately identifiable department as a municipal securities dealer with the Securities and Exchange Commission. BANA also has filed notice of its status as a government securities broker-dealer with the Office Comptroller of the Currency. From time to time, BANA or one or more affiliates may lend to one or more issuers whose securities are underwritten, dealt or placed by BANA or one or more of its affiliates. Please refer to the relevant prospectus offering statement or other disclosure document for material information relating to any such lending relationship and whether the proceeds of an issue will be used to repay any such loans. BANA may also from time to time participate in a primary or secondary distribution of the securities offered or sold to you by it. Further, BANA may act as investment advisor to an issuer whose securities may be sold to you by it.

SECURITY INTEREST - BANA shall have a continuing security interest in all securities, funds and other assets now and hereafter held or carried by BANA in your account(s), including any property in transit or held by others on behalf of BANA, and all proceeds thereof, as collateral security for the payment and performance by you of all your obligations to BANA now existing or hereafter arising and whether arising under your securities accounts or any other agreement between you and BANA, together with all costs and expenses of BANA in connection therewith (the "Obligations"). If you fail to perform any Obligation or if you are in default on any agreement between us, BANA may cancel any transaction or may, in a private or a public sale, sell out or buy in the securities shown in this statement, holding you liable for any loss incurred. BANA shall have, in addition to the rights provided herein or by other applicable law, all the rights and remedies provided to a secured party under the Uniform Commercial Code in the State of New York.

CALCULATION METHODOLOGY - The percentage of Portfolio column, the Asset Mix pie chart and the Maturity Schedule bar graph are calculated using the market value of the relevant securities when a market price is available to BANA. When a market price is not available, BANA uses the current par value.

NON-DEPOSIT INVESTMENT PRODUCTS - Non-deposit investment products purchased through BANA are NOT FDIC insured and, subject to the following sentence, are NOT deposits or other obligations of, or guaranteed by, Bank of America Corporation or any of its affiliates. Certain investment products are deposits of BANA or are obligations of Bank of America Corporation or an affiliate, as described at the time of purchase. An investment in securities involves investment risks, including possible loss of the principal amount invested.

RECORD OF OWNERSHIP - Securities held for your account by BANA or held in BANA's account at a securities depository are commingled with the same securities being held for other clients. Your ownership of these securities is reflected on BANA records.

CALLABLE SECURITIES - In the event any securities held by BANA for you in nominee name or in book entry (non-certificated) at a securities depository are called for partial redemption and BANA receives proceeds that belong to more than one person, BANA is authorized in its sole discretion to determine your proportionate share of such proceeds. Call features shown indicate the next regularly scheduled call date and price. Your holdings may be subject to other redemption features including sinking funds or extraordinary calls.

INTEREST, DIVIDENDS, SALE PROCEEDS - Although all figures shown are intended to be accurate, statement data should not be used for tax purposes, BANA is required by law to report to the Internal Revenue Service certain interest, dividend income and sales proceeds. Dividends and interest payments may be subject to country specific withholding taxes.

MARKET VALUATION/PRICE/ESTIMATED FIGURES - Securities positions are valued at or about the close of the statement period if prices are available from reference sources deemed reliable. For money market positions, if price is shown as N/A, a derived valuation (unadjusted for the credit quality) is provided based on the original cost basis reported to BANA and adjusted by the amount of any accrued discount from the purchase date to the end of the statement period. The month-end valuations of your portfolio are for guidance only and do not necessarily reflect prices at which each position could be sold for, if short, covered on the valuation date, particularly in the case of inactively or infrequently traded securities. BANA cannot guarantee the accuracy of such information. Information regarding average cost, unrealized gain or loss, accrued interest, current yield and estimated income figures that appear on your statement are derived from information provided by sources considered reliable by BANA. Contact your Account Representative to obtain current quotations or if you have questions regarding statement account valuations/estimated figures. N/A= Information not applicable or available at the time of statement creation.

ERRORS AND OMISSIONS - Please notify us within ten (10) days if you believe there is any inaccuracy in any entry reflected on this statement. Please include your account number when you notify us in writing. Failure to notify BANA of any error or omission will constitute your waiver of any claim arising as a result of such error or omission.

PROXY DISCLOSURES - Any attempt to vote securities will be void to the extent that such securities are not in the possession or control of BANA including (i) securities not yet delivered to BANA, (ii) securities purchased and not paid for by settlement date, and (iii) securities that BANA has hypothecated, re-hypothecated, pledged, re-pledged, sold, lent or otherwise transferred. Please be advised that for the purposes of proxy voting, customers will not be notified that the securities are not in BANA'S possession or control. Furthermore, BANA will not notify customers that a vote was void.

Client Statement
12/01/2020 to 12/31/2020

Bank of America, N.A.
P.O. Box 2010
Lakewood, NJ 08701



Account Number
416870

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Transaction Activity Summary

Description	Amount
Money Market Purchases	\$(3,454,546.00)
Interest	\$78,590.91
Other Transaction Activity	\$4,318,182.00

Income and Expense Summary

The Income data is provided for informational purposes only. Regularly scheduled payments are reported in the section. Interest income from products which pay interest only at maturity are not reflected.

Description	Reportable Month-to-Date	Non-Reportable Month-to-Date	Total Income Month-to-Date
Money Market Interest	\$78,590.91	\$0.00	\$78,590.91
TOTAL INCOME AND EXPENSES	\$78,590.91	\$0.00	\$78,590.91

Maturity Schedule

Security	CUSIP/ Security #	Coupon	Maturity	Quantity	Market Value	Next Coupon Date	Next Coupon Amount	Pledge	Pledge Units
BANK OF AMERICA N A CERTIFICATE OF DEPOSIT	1885036428	0.15%	12/21/2021	3,454,546	\$3,454,546.00	12/21/2021	\$5,109.85	Y	3,454,546

Client Statement
12/01/2020 to 12/31/2020

Account Number
416870

Bank of America, N.A.
P.O. Box 2010
Lakewood, NJ 08701



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Portfolio Holdings

Securities positions are valued at or about the close of the statement period if prices are available from reference sources deemed reliable. For money market positions, if price is shown as N/A, a derived valuation (unadjusted for the credit quality) is provided based on the original cost basis reported to the Bank and adjusted by the amount of any accrued discount from the purchase date to the end of the statement period. The month-end valuations of your portfolio are for guidance only and do not necessarily reflect prices at which each position could be sold or, if short, covered on the valuation date, particularly in the case of inactivity or infrequently traded securities. Bank cannot guarantee the accuracy of such information. N/A=Information not applicable or available at the time of statement creation.

PENDING STABILIZATION OF THE AUCTION RATE SECURITIES MARKET, BANK OF AMERICA, N.A. ("BANA") HAS CEASED PROVIDING MARKET VALUES AND MARKET PRICE INFORMATION WITH RESPECT TO AUCTION RATE SECURITIES ON CLIENT STATEMENTS. UNTIL BANA RESUMES PROVIDING THIS INFORMATION, NO VALUE WILL BE GIVEN TO AUCTION RATE SECURITIES IN CALCULATING PORTFOLIO VALUE. THIS RESULTS FROM THE "CLOSING MARKET PRICE" AND "MARKET VALUE" FIELDS BEING INPUT AS "N/A"; IT DOES NOT IMPLY THAT YOUR AUCTION RATE SECURITIES HAVE NO VALUE.

Security Description	CUSIP/ Security #	Acquired Ticket #	Quantity	Original Price Market Price	Original Cost Basis	Market Value	Next Coupon Date	Next Coupon Amount	Portfolio %
Money Market									
BANK OF AMERICA N A CERTIFICATE OF DEPOSIT Coupon 0.15% Maturity 12/21/2021	1885036428	N/A 1885036428	3,454,546	N/A N/A	N/A	\$3,454,546.00	12/21/2021	\$5,109.85	100.00
			3,454,546			\$3,454,546.00			\$5,109.85
Total Money Market									
Total Portfolio Holdings						\$3,454,546.00			

Transaction Activity

Date	CUSIP/ Security #	Description	Transaction	Quantity	Price	Net Amount
12/31/2020	1885029423	BANK OF AMERICA N A CERTIFICATE OF DEPOSIT	Maturity	4,318,182	0.00	4,318,182.00
12/31/2020	1885036428	BANK OF AMERICA N A CERTIFICATE OF DEPOSIT	Bought	3,454,546	100.00	(3,454,546.00)
TOTAL TRANSACTION ACTIVITY						\$863,636.00

Income and Expense Activity

The Income data is provided for informational purposes only. Regular scheduled payments are reported in the section. Interest income from products which pay interest only at maturity are not reflected.

Date	Description	Transaction	Tax Withheld	Reportable	Non-Reportable	Net Amount
12/31/2020	BANK OF AMERICA N A CERTIFICATE OF DEPOSIT	Interest	\$0.00	\$78,590.91	\$0.00	\$78,590.91
TOTAL INCOME AND EXPENSE ACTIVITY			\$0.00	\$78,590.91	\$0.00	\$78,590.91

Client Statement
12/01/2020 to 12/31/2020

Account Number
416870

Bank of America, N.A.
P.O. Box 2010
Lakewood, NJ 08701

0 - 5/5: 2169



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Announcements:

USA PATRIOT ACT DISCLOSURE

BANA, like all financial institutions, is required by Federal law to obtain, verify and record information that identifies each customer who opens an account with us. When you open an account, we will ask for your name, address and government-issued identification number and other information that will allow us to form a reasonable belief as to your identity, such as documents that establish legal status.

YOU MAY HAVE NOTICED.....

Beginning with your January 2014 statement, some information on your statement has been modified and new fields have been added.

The new fields are:

Acquired (the date of purchase/transfer of the security)

Ticket # (the ticket number assigned to your security on our system of record)

Original Price (the price paid for the security*)

Original Cost Basis (the original value or purchase price of the security*)

*For transfer in of the security, the information displayed will be limited to the values available to us at the time of the transfer.

Thank you for your business and we look forward to continuing to serve you with your investments.

Account Statement

End of Statement

ATTACHMENT E

Attachment E
Moving King County Residents Forward Pro Forma

Initial Loan Balance	\$18,000,000		
Interest Rate on LOC	6.00%		
Amort Term (Yrs)	20	Net Transaction Costs	
DSCR (stabilized)	1.96	Legal	\$50,000
Net Trans. Costs not available for Rehab	\$1,175,661	Misc	\$125,000
Minimum Rehab needed (\$51K/Unit)	\$25,959,000	Underwriting	\$216,000
Total Rehab needed (\$65,000/Unit)	\$33,085,000	Debt Reserve (6 m	\$784,661
Add'l Capital in 2021 adjusted for infl	\$9,576,748		

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

bal. outstanding

ATTACHMENT F

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 Principal to Amortize per attached schedule	ACT/ACT	CONSTANCE

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 putable advance, the embedded cost of the put option.) In some cases this adjustment will result in interest payments referred to in (ii) above that are lower than those due on FHLBank consolidated obligations or debt obligations of the Seattle Bank with similar terms to maturity, which may produce a higher prepayment fee.

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

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 G

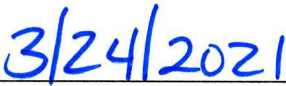
Attachment G

MOVING KING COUNTY RESIDENTS FORWARD COLLATERAL CERTIFICATION

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



Windy Epps, Director of Finance,
King County Housing Authority




Date

ATTACHMENT H

Attachment H

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):



eAdvantage

Housing Authority Of The County Of King #8404
Michael8404

Home

Account ▾

Line of Business ▾

Statements

Settings ▾

User Administration

Logout

HOME / ACCOUNT BALANCES

Summary of Account Balances

Account Profile

Data Updated : 03/24/2021 07:18 PM

Deposit Accounts


840420	Daily Time Non-Member Int/Non-Int	\$0.00
681084173	Demand Non-Member Interest Bearing	\$231,574.15
Term Time Ledger Balance		\$0.00
Term Time Pledged Amount		\$0.00

Advances

Advances	\$11,237,903.25
Letters of Credit	\$0.00
MPF Credit Enhancement	\$0.00
Current FHLB Indebtedness	\$11,237,903.25
Forward Starting Advances	\$0.00
Total FHLB Indebtedness	\$11,237,903.25

100% of the Total FHLB Indebtedness of \$11,237,903.25 must be collateralized by KCHA.

First KCHA pledged the loan between KCHA and MKCRF. This loan currently has an outstanding balance of \$13,650,710.24 but is assigned a market value of \$13,236,661.78. Its Advance Equivalent is 68% of the market value, or \$9,032,698.00.



eAdvantage

Collateral

Current Member

Collateral Summary

Data Updated: 03-24-2021 7:24 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	\$13,650,710.24	\$13,236,661.78	\$9,032,698.00	1	68
Total Loans Pledged:	\$13,650,710.24	\$13,236,661.78	\$9,032,698.00	1	

[Export Loans Pledged](#)

As the minimum collateral requirement is \$11,237,903.25 and the Advance Equivalent of the collateralized loan is \$9,032,698.00, there is a collateral gap of \$2,205,205.25. 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 12/31/2020, the Fair Market Value of the investments was \$3,067,010.00 and the Advance Equivalent \$2,790,979.10. 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	\$3,067,010.00	\$2,790,979.10	3	91
Total Securities/Term Time Pledged:	\$3,000,000.00	\$3,067,010.00	\$2,790,979.10	3	
Securities/Term Time Pledged 					

The Advance Equivalent of \$2,790,979.10 exceeds the collateral gap of \$2,205,205.25. KCHA considers the amount of MTW funds pledged as collateral to be equal to the collateral gap, or \$2,205,205.25.

APPENDIX F

ENERGY PERFORMANCE CONTRACT REPORT

2021 - 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	\$ 199,028	\$ -	\$ 199,028	\$ 1,422
150	Paramount House	70	\$ 23,382	\$ -	\$ 23,382	\$ 334
152	Briarwood & Lake House	140	\$ 232,496	\$ -	\$ 232,496	\$ 1,661
153	Northridge I & Northridge II	140	\$ 136,994	\$ -	\$ 136,994	\$ 979
201	Forest Glen	40	\$ 20,423	\$ -	\$ 20,423	\$ 511
203	College Place & Eastside Terrace	101	\$ 170,949	\$ -	\$ 170,949	\$ 1,693
251	Casa Juanita	80	\$ 125,861	\$ -	\$ 125,861	\$ 1,573
350	Boulevard Manor	70	\$ 64,209	\$ -	\$ 64,209	\$ 917
352	Munro Manor & Yardley Arms	127	\$ 146,297	\$ -	\$ 146,297	\$ 1,152
354	Brittany Park & Riverton Terrace	105	\$ 279,618	\$ -	\$ 279,618	\$ 2,663
401	Valli Kee	115	\$ 203,713	\$ -	\$ 203,713	\$ 1,771
403	Cascade Apartments	108	\$ 152,072	\$ -	\$ 152,072	\$ 1,408
450	Mardi Gras	61	\$ 53,650	\$ -	\$ 53,650	\$ 880
503	Firwood Circle	50	\$ 58,167	\$ -	\$ 58,167	\$ 1,163
504	Burndale Homes	50	\$ 51,102	\$ -	\$ 51,102	\$ 1,022
550	Gustaves Manor & Wayland Arms	102	\$ 38,491	\$ -	\$ 38,491	\$ 377
551	Plaza Seventeen	70	\$ 30,269	\$ -	\$ 30,269	\$ 432
552	Southridge House	80	\$ 116,435	\$ -	\$ 116,435	\$ 1,455
553	Casa Madrona	70	\$ 63,509	\$ -	\$ 63,509	\$ 907
Total		1,719	\$ 2,166,664	\$ -	\$ 2,166,664	

2021 - EPC II: Savings by Incentive Type

AMP	Property Name	Units	Frozen	RPUI	Total Savings by AMP	Total Savings by AMP per Unit
101	Ballinger Homes (RPUI Only) & Peppertree	140	\$ 16,594	\$ 234,919	\$ 251,514	\$ 1,797
105	Park Royal	23	\$ 7,234	\$ 12,152	\$ 19,386	\$ 843
150	Paramount House	70	\$ 347	\$ 37,303	\$ 37,650	\$ 538
152	Briarwood & Lake House	140	\$ -	\$ 125,741	\$ 125,741	\$ 898
153	Northridge I & Northridge II	140	\$ 4,770	\$ 137,881	\$ 142,651	\$ 1,019
156	Westminster	60	\$ 44,540	\$ -	\$ 44,540	\$ 742
180	Brookside Apartments	16	\$ 5,824	\$ -	\$ 5,824	\$ 364
191	Northwood	34	\$ 20,227	\$ 17,221	\$ 37,449	\$ 1,101
201	Forest Glen	40	\$ -	\$ 45,112	\$ 45,112	\$ 1,128
203	College Place & Eastside Terrace	101	\$ -	\$ 158,994	\$ 158,994	\$ 1,574
210	Kirkland Place	9	\$ 53	\$ 4,023	\$ 4,076	\$ 453
213	Island Crest	17	\$ 19,653	\$ 8,240	\$ 27,893	\$ 1,641
251	Casa Juanita	80	\$ 3,996	\$ -	\$ 3,996	\$ 50
290	NorthLake House	38	\$ 22,736	\$ 12,841	\$ 35,576	\$ 936
344	Zephyr	25	\$ 26,567	\$ 8,011	\$ 34,578	\$ 1,383
345	Sixth Place	24	\$ 17,243	\$ 27,181	\$ 44,424	\$ 1,851
350	Boulevard Manor	70	\$ -	\$ 63,940	\$ 63,940	\$ 913
352	Munro Manor & Yardley Arms	127	\$ -	\$ 97,558	\$ 97,558	\$ 768
354	Brittany Park, Riverton Terrace, & Pacific Court	105	\$ 34,624	\$ 50,006	\$ 84,630	\$ 806
390	Burien Park	102	\$ 68,934	\$ 26,821	\$ 95,755	\$ 939
401	Valli Kee	115	\$ 37,606	\$ 122,024	\$ 159,630	\$ 1,388
403	Cascade Apartments	108	\$ -	\$ 155,032	\$ 155,032	\$ 1,435
409	Shelcor	8	\$ (17)	\$ 3,104	\$ 3,087	\$ 386
450	Mardi Gras	61	\$ 16,642	\$ 30,720	\$ 47,362	\$ 776
467	Northwood Square	24	\$ 2,688	\$ -	\$ 2,688	\$ 112
503	Firwood Circle	50	\$ 45,462	\$ 47,305	\$ 92,767	\$ 1,855
504	Burndale Homes	50	\$ 53,599	\$ 59,657	\$ 113,255	\$ 2,265
550	Gustaves Manor & Wayland Arms	102	\$ 4,723	\$ 35,655	\$ 40,378	\$ 396
551	Plaza Seventeen	70	\$ 20,720	\$ -	\$ 20,720	\$ 296
552	Southridge House	80	\$ 6,973	\$ 19,172	\$ 26,145	\$ 327
553	Casa Madrona	70	\$ 1,432	\$ 40,648	\$ 42,080	\$ 601
Total		2,099	\$ 483,167	\$ 1,581,260	\$ 2,064,428	