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Evaluation of the Family Homelessness Systems Initiative: Examining the Effects of Systems Reform on 18-Month Housing Stability and Related Outcomes

Appendices

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Appendix A. Glossary of Key Terms

Access Point for Housing (AP4H) — The centralized intake systems for people experiencing homelessness in Pierce County.

Centralized Intake — A single place or process for people to access prevention, housing, and/or other services they may need.

Child Absenteeism — A school-aged child having missed six or more days of school in the last three months (or, if summer, the last three months of the previous school year).

Continuum of Care (CoC) — A regional or local planning body that coordinates housing and services funding for homeless families and individuals. Continuums of Care represent communities of all kinds, including major cities, suburbs, and rural areas, in all 50 states, plus the District of Columbia, Puerto Rico, and Guam.

Coordinated Case Management — The coordinated entry system for families experiencing homelessness operated by Snohomish County prior to 2010.

Coordinated Entry — A process developed in a Continuum of Care to ensure that all people experiencing a housing crisis have fair and equal access and are quickly identified, have their strengths and needs assessed, are referred, and are connected to housing and assistance based on their strengths and needs.

Diversion — An approach that seeks to divert families seeking homeless assistance from entering the homelessness system or to facilitate their exiting shelter quickly. The diversion process begins with a family's first contact with the homeless response system, when a trained staff member initiates an exploratory conversation to brainstorm solutions to quickly resolving homelessness. When needed, diversion may include a combination of limited or one-time financial and/or case management assistance.

Fair Market Rent — Estimated amount of money a property would rent or lease for if it was available. It is used by the U.S. Department of Housing and Urban Development to determine payment standard amounts for the Housing Choice Voucher program, initial renewal rents for some expiring project-based Section 8 contracts, and initial rents and rental ceilings for other assistance programs.

Head of Household (HOH) — In this study, the adult completing the study interview. This was often the only adult in the household or, if there was more than one adult, the person who was most knowledgeable about all family members, typically the mother.

Homeless Management Information System (HMIS) — A data management system used by continuums of care (CoCs) across the country to collect client-level data on the provision of housing and services to homeless individuals and families and persons at risk of homelessness. The HMIS is used by CoCs to report data to the U.S. Department of Housing and Urban Development.

Homelessness Prevention and Rapid Re-housing Program (HPRP) — A component of the American Recovery and Reinvestment Act of 2009 that provided financial assistance and services to prevent individuals and families from becoming homeless and to help those who are experiencing homelessness to be quickly re-housed and stabilized.

Housing First — An approach in which individuals or families move into permanent housing directly from homelessness rather than spending a period of time in temporary, service-rich interventions, such as transitional housing, before entering housing.

Housing Inventory Count (HIC) — A point-in-time inventory of provider programs within a Continuum of Care that tallies, by program type, the number of beds and units available on the night designated for the count.

Housing Navigators — Staff who work with households experiencing homelessness to locate and maintain housing, helping to address and resolve immediate barriers to housing stability through short-term interventions and connection to mainstream services.

Initial Assistance — The first type of assistance that a family receives from the homeless service system in the demonstration counties. Types of assistance include diversion/navigation, shelter, rapid re-housing, transitional housing, and permanent supportive housing.

Median Household Income — The income level earned by a given household where half of the households in the area earn more and half earn less, measured by the American Community Survey to depict an area's economic status.

Parent-Child Intactness — Having all one’s children in one’s custody.

Permanent Supportive Housing — Housing that combines non-time-limited affordable housing assistance with wrap-around supportive services for people experiencing homelessness, typically single adults, as well as other people with disabilities.

Point in Time (PIT) Count — An annual count of homeless persons on a single night in January, conducted by a set of volunteers canvassing to identify individuals living on the streets and

other outdoor areas as well as in shelters within a specified geographic area. PIT counts are conducted in communities throughout the country.

Prevention — Assistance that provides financial support and services to aid households at risk of homelessness in preserving their current housing situation when they experience some financial instability.

Prevention Navigators — Staff who work with families at risk of homelessness to identify strategies to preserve their current housing or identify new housing and resolve immediate barriers to housing stability through short-term interventions and connection to mainstream services.

Progressive Engagement — An approach to helping households end homelessness with the minimum necessary financial and support resources, offering more supports to households that struggle to stabilize. Families or households are initially a small amount of assistance, tailored to their most critical need, with a keen focus on quickly resolving the housing crisis. The provider regularly re-assesses housing barriers, seeks to quickly close cases that have resolved, and adjusts the amount and intensity of assistance provided to meet the household's needs until the individual or family has obtained permanent housing and housing retention barriers are resolved.

Propensity Score Weighting — A statistical technique used to control for any selection biases in non-experimental studies. A propensity score is the conditional probability of assignment to a treatment condition given a set of observed covariates. When propensity scores are used, the resulting groups have similar characteristics to those created through random assignment. Propensity score weighting controls the influence of the characteristics that were used to construct the propensity scores by weighting participants' responses based on their propensity scores.

Quasi-Experimental Design — A research study used to estimate the causal impact of an intervention on a specific target population, using treatment and control groups to which participants are not randomly assigned.

Rapid Re-housing — An intervention that provides housing relocation and stabilization services and time-limited rental assistance to help individuals or families exit homelessness and quickly return to permanent housing.

Rental Vacancy Rate — The proportion of the rental inventory in a geographic area that is vacant for rent.

School Moves — In this study, the number of times a selected child in the family (the target child) was reported to have changed schools due to a residential move over the 18-months after initial assistance.

Section 8 — A common name for the Housing Choice Voucher Program, which is a federally funded, locally administered rental assistance program that helps low-income families, elderly individuals, and individuals with disabilities afford decent, safe housing in the private market.

Sound Families Initiative — An eight-year, $40 million program launched in 2000, funded by the Bill and Melinda Gates Foundation, aimed at tripling the amount of available transitional housing in Washington State's three most populous counties and pairing it with support services to address family homelessness.

Tailored Services — In the demonstration counties, efforts to assess families for the services they need and connect them to those services through case management and mainstream service providers.

Target Child — One child selected at random from among children between ages 2 and 18 living with the HOH at the time of selection about whom detailed schooling, health, and service need and receipt information was collected.

Temporary Assistance for Needy Families (TANF) — A federal program designed to provide families with financial assistance and related support services. States receive block grants to design and operate programs. State-administered programs may include childcare assistance, job preparation, and work assistance.

Transitional Housing — Time limited housing (typically 18 months to 24 months) with supportive services designed to provide homeless individuals and families with the interim stability and support to successfully move to and maintain permanent housing.

Appendix B. Evaluation Methodology for Systems Change, Organizational Case Studies, and Cost Study

Comparative Case Study Design for Systems Change

The examination of systems change involved the collection of primarily qualitative data on the implementation of the Initiative, guided by the Theory of Action, and the resulting effects on the systems developed. These data were collected over a ten-year period in the three demonstration counties as well as two contrast counties. The inclusion of two comparable contrast counties afforded the opportunity to look at changes that might occur in these counties due to state, federal, and other influences. Analysis of Washington State Integrated Database (ICDB) data over the same ten-year period, in the demonstration counties, as well as other counties in the State of Washington, examined the numbers and characteristics of families receiving services through the homeless system, types of services received, and returns to homelessness in the demonstration counties compared to other counties in the state.

Organizational Case Studies

A companion study of the Comparative Systems Study is the organizational case studies. Seven organizations in the demonstration counties, four homeless service organizations and three other organizations (a housing authority, a community college, and a school district) were followed over time to see if and how the way they served families experiencing homelessness was affected by the Initiative and the system changes that occurred. Data were collected through key informant interviews with leadership, a focus group with staff, and a focus group with families receiving the service. Data were collected each year.

Cost Implications of Systems Change

Using the data collected through the Family Impact Study, the cost study aims to assess the costs of serving a family in the reformed system compared to serving a family prior to the reform. Data on costs were collected through Washington State Department of Commerce, the local area housing authorities, and Building Changes.

Appendix C. Family Impact Study Methodology

This appendix outlines the Family Impact Study design, participant recruitment, data collection methods, and analytic approaches as well as key strengths and limitations that need to be considered when applying the findings.

Study Design

The goal of the Family Impact Study within the Homeless Families Systems Initiative Evaluation is to examine the effects of systems changes aligned with the Initiative's Theory of Action on families' experiences and outcomes. Family outcomes were assessed through a longitudinal cohort quasi-experimental design in which an "intervention" cohort of families (referred to as Cohort 2) is compared with a "baseline comparison" cohort (referred to as Cohort 1). The intervention cohort involves families who were provided with homeless assistance in one of the three Initiative counties (King, Pierce, and Snohomish), starting in May 2015 following a substantial amount of systems reform aligned with the Theory of Action. The baseline comparison cohort involves families who were provided with homeless assistance in one of the three counties prior to any substantial amount of reform (with recruitment beginning in November 2010).

Data were collected for each cohort over time through in-depth, in-person interviews with the Head of Household (HOH) in each family, beginning with a baseline interview conducted as closely as possible to initial receipt of homeless assistance, followed by interviews at 6, 12, and 18 months following receipt of the initial homeless assistance.

To control on the extent to which changes in the families' experiences could be due to factors other than the Initiative, we constructed comparison groups of families from other counties in Washington State from the Department of Social and Health Services' (DSHS) Integrated Client Database (ICDB). These administrative data have been used to enhance the information on the cohort families, especially data on service receipt, income, and employment. We have also collected data from the subset of families from Cohort 2 who received rapid re-housing and shelter assistance 30 months after entry into the system in order to examine the longer-term housing, income, employment, and family well-being outcomes of families that receive rapid re-housing.

This design is open to several threats to validity that we have attempted to address in our analyses, if not in our data collection. Two of the most plausible threats that are likely creating some non-equivalence between the two cohort samples are (1) differences in how families are selected for assistance between the two time periods and (2) differences in the families who

become homeless in each of the time periods. Both of these threats and how we have addressed them are discussed in the sections that follow.

Eligibility, Identification, and Recruitment of Families

Eligibility and Identification: The key research questions for the Family Impact Study involved assessing the impact of the system on the experiences and outcomes of the population of families experiencing homelessness and seeking services. There were no specific inclusion or exclusion criteria relevant to selection, and there were no data sources at the time of our study development (2009) that provided an understanding of the distribution of families receiving homeless services. Therefore, we aimed to recruit as close to a census of families receiving homeless services as possible in Pierce and Snohomish counties. In King County, given the vast number of providers, we worked with the county to select the largest providers that had locations across the county to recruit a sample. These providers were estimated to serve approximately 80 percent or more of families in the system. In each county, our goal was to recruit at least 150 families for each cohort. We first identified all shelter and homeless housing providers serving families in the system during each time period and spent considerable time recruiting them to participate in the study.

All families entering a homeless shelter/housing program in both cohorts were eligible to be included in the study if (1) they had at least one minor child and/or were pregnant and (2) they were able to complete an interview in English or Spanish. We were unable to include non-English/non-Spanish speaking families due to limitations in translating the data collection into the almost 30 other languages that exist in the region, with no one other language being dominant.

Exhibit C-1 lists the providers we worked with in each county. Cohort 1 families were recruited between November 2010 and August 2012. Because shelter was the primary source of initial homeless assistance for families during this time, we worked directly with shelter providers in each county. Families that entered directly into transitional housing with one of these providers were also identified as eligible for participation.

Cohort 2 families were recruited between May 2015 and November 2016, following significant systems changes across the counties. The primary point of first assistance was no longer limited to shelter. Therefore, we worked with each of the counties to determine the key providers of shelter, transitional housing, rapid re-housing, permanent supportive housing (or permanent housing with supports), and diversion or navigation services. We recruited the providers (most of which had been involved in Cohort 1 and which offer multiple supports) and families in the same manner as in Cohort 1.

Exhibit C-1. Providers Participating in Family Impact Study Recruitment

King County	Pierce County	Snohomish County
• Catholic Community Services • Hopelink • Multi-Service Center • Solid Ground • YWCA • Wellspring Family Services • Interim Community Development Association* • Neighborhood House*	• Catholic Community Services--Family Housing Network • Helping Hand House • Lakewood Area Shelter Association • New Phoebe House • Salvation Army • Tacoma Rescue Mission • Associated Ministries* • Courage360* • Metropolitan Development Council* • Share and Care House* • Shared Housing Services* • Step by Step* • Sound Outreach Services* • YWCA*	• Catholic Community Services • Volunteers of America • Housing Hope • Everett Gospel Mission • Interfaith Association • Monroe Gospel Mission • YWCA

* Cohort 2 only

It is important to note that our study is focused only on families who ***received*** some type of homeless assistance in each cohort. We could not track families in Cohort 1 who were turned away because there was not capacity in the shelters, nor could we track families in Cohort 2 who went through coordinated entry in each county but who may not have received assistance. The samples are comparable between the cohorts, but we cannot generalize the findings of the study to all families who were seeking homeless assistance as we do not have information for those who were unsuccessful in receiving assistance.

Family Recruitment: When families conducted their initial intake paperwork with shelter or housing assistance staff, the staff provided information about the study (scripted by our evaluation team) and a ”consent to contact” form to complete. The consent to contact form allowed provider staff to share the HOH’s name, telephone number, and email address with the Westat evaluation team. Forms were sent to us by fax or confidential electronic means. Westat staff would then call the HOHs, screen them for eligibility, and invite them to participate in the study. If the HOH agreed, a baseline interview was scheduled.

In Cohort 1, as noted, we attempted to recruit approximately 150 families from each county. Seventy-eight percent of the families across the three counties (N = 467) who consented to be contacted by Westat staff were eligible and completed a baseline interview. The remaining 21 percent did not participate either because they were unreachable (11%), because they declined participation (5%), or because our recruitment ended before a baseline interview was conducted (5%).

In Cohort 2, 67 percent of families (N=504) who consented to be contacted by Westat staff were eligible and completed a baseline interview. The remaining 33 percent did not participate either because they were unreachable (26%), because they declined participation (6%), or because recruitment had ended (1%). The lower response rate in Cohort 2 may be attributed to the fact that the systems had changed such that fewer families were in shelter at the time of the baseline interview (and thus were less easy to contact), and more families were searching for housing.

Data Collection Methods

In both cohorts, families participated in an in-depth standardized baseline interview and up to three follow-up interviews. All interviews were conducted by trained interviewers in person with the HOH at a location of the HOH's choosing that was convenient to the family, as long as it provided a private setting and was away from the children. When needed, we compensated the HOH for transportation and provided for childcare.

The baseline interviews were to be scheduled as soon as possible following a family's entry into shelter or a housing program. The timing of the baseline interviews averaged 41 days for Cohort 1 and 70 days for Cohort 2. If the baseline interview could not be conducted prior to six months, a six-month interview was conducted with the addition of key questions from the baseline.

Follow-up interviews were conducted within 6, 12, and 18 months following receipt of initial homeless assistance. For some families that were harder to locate for interviews, these timelines were extended by up to three months. If a family could not be reached for an interview for more than three months, that interview was skipped and the subsequent interview was scheduled when the family was contacted.

We collected data from the HOH. If there was more than one adult in the family, we designated the HOH as the person who was most knowledgeable about all family members, typically the mother. We collected some basic descriptive information on all family members and more detailed information on one child, selected at random from among children between

2 and 18 years living with the respondent at the time of selection. The selection strategy gave preference to a school-aged child if one was present in the household.

The baseline interview focused on demographic characteristics; family composition, service needs, and residential history; income, education, and employment history; access to services, housing, and economic opportunities; the length of time to make these connections and the barriers that were experienced; and more detailed demographic, health, and school information on a target child in the family. In Cohort 2, questions were added to measure the extent to which families were being affected by changes in the system such as changes to coordinated entry and homeless assistance options. Follow-up interviews examined changes in family composition and service needs; residential history between interviews; income, education, and employment; access to services and to housing and economic supports; and changes in the target child's health and school activity (attendance and school moves). Key outcome variables are shown in Exhibit C-2.

Exhibit C-2. Family Impact Study Outcomes

Housing and Homeless Outcomes	
Access to housing	# of days to permanent housing # of nights in permanent housing % in housing at certain time periods (e.g., 6 months, 12 months, 18 months)
Returns to homelessness	% who return to homelessness (i.e., shelter, unsheltered)
Length of time homeless	# of nights homeless (i.e., shelter, unsheltered)
Stability	# of moves
Employment and Other Service Outcomes	
Employment	% employed at certain time periods (e.g., 6 months, 12 months, 18 months)
Income	Level of income at certain time periods (e.g., 6 months, 12 months, 18 months)
Family Well-Being Outcomes	
Parent-child intactness	% of those separated from children
Child schooling	# of absences school continuity

All families in Cohort 1 who completed a baseline interview were provided with a gift card for $20 for the baseline and $30 for follow-up interviews. Of those completing the baseline

interview, 85 percent (N= 395) completed the 18-month interview, 72 percent completed all of the follow-up waves, and 84 percent had complete housing data. Exhibit C-3 presents the retention rates for each wave of data collection.

Exhibit C-3. Family Impact Study Sample Sizes and Retention Rates

	Cohort 1	Cohort 2	Total
Baseline sample	467	504	971
6-month sample % of baseline	392 (84%)	370 (73%)	762 (78%)
12-month sample % of baseline	389 (83%)	366 (72%)	755 (78%)
18-month sample % of baseline	395 (85%)	416 (82%)	811 (84%)
At least one follow-up wave % of baseline	432 (93%)	450 (89%)	882 (91%)
All follow-up waves % of baseline	337 (72%)	307 (61%)	644 (66%)
Complete housing data % of baseline	391 (84%)	408 (81%)	799 (82%)

Of Cohort 2 families who completed the baseline interview, 82 percent (N = 416) completed the 18-month interview, 61 percent completed all follow-up waves, and 81 percent had complete housing data. Families received a $30 gift card for completing the baseline and six-month interviews. In order to increase our response rates, we increased the amount of the gift card to $50 for completing the 12- and 18-month interviews. (As seen in Exhibit C-3, this increase as well as other efforts led to higher response rates for the 18-month sample.)

Retention: Interviewers were primarily responsible for tracking and retaining families, but received support from other Westat staff as needed. Many strategies were used to track and maintain contact with families, including:

- Devoting the last 10-15 minutes of each interview to collecting contact information on where the family is staying, emergency contacts, family and friends in the area, employers, local providers, mailing address, aliases, nicknames, hospitals and other areas where services were sought, etc.;
- Obtaining consent from the family during the interview for agency tracking assistance (i.e., from DSHS);
- Providing monetary incentives for each completed interview;

- Having a toll-free telephone line that families could call at any time to update their contact information;
- Attempting to reach families by phone, text message, and emails;
- Sending contact letters with crisp $1 bills;
- Contacting local providers who had served the families in the past for updated contact information;
- Sending field "trackers" to families' last known addresses;
- Posting flyers in the community at service providers, grocery stores, laundromats, etc.;
- Mailing birthday cards/New Year's cards to stay in touch (and also to receive bounce-backs on addresses);
- Providing a self-addressed 'change of address' post card at each interview;
- Providing giveaways (e.g., pens, water bottles, backpacks) with the study phone number;
- Conducting searches on Lexis Nexis;
- Establishing a study Facebook page and conducting Facebook searches (for families that consented); and
- Providing $5 early bird bonuses—if participants responded to an email or phone request to schedule a meeting within 48 hours.

Analytic Approach for Potential Study Confounds and Artifacts

Attrition Analysis: We performed attrition analyses to determine if there are any significant differences in the characteristics of families in the initial baseline sample of families and those who are included in the outcome analyses (84% of Cohort 1; 81% of Cohort 2). Families were included in the outcome analysis if they had at least 517 days of housing information (517 days was selected because it constitutes 95% of the full 545 day follow-up). In these analyses, we examined cohort, respondent and family characteristics, service needs, homeless and housing history, and housing barriers at baseline (e.g., mental health, substance abuse, criminal justice involvement). As Exhibit C-4 indicates, the sample of families included in the outcome analyses is representative of the families in the baseline cohorts.

Exhibit C-4. Comparison of Families in Outcomes Analysis to those Excluded

Characteristic	Excluded from Outcome Analyses (N=172)	Included in Outcome Analyses (N=799)
Cohort		
Cohort 1	44%	49%
Cohort 2	56%	51%
County		
King	34%	35%
Pierce	38%	31%

Snohomish	27%	34%
Age (mean)	32	33
Female	87%	91%
Race		
White	42%	39%
Black/African American	39%	34%
Multiracial/other	21%	22%
Hispanic	13%	14%
Spouse/partner	25%	26%
Number of kids		
0-1	53%	50%
2-3	38%	41%
4+	9%	9%
Education		
Less than HS degree	27%	23%
HS degree	34%	32%
More than HS degree	39%	45%
Employed at entry	25%	28%
Income at entry (median)	$616	$632
Ever convicted of a felony	19%	17%
Domestic violence history	54%	58%
Substance abuse screen	26%	20%
Mental health indicator	44%	53%*
Number of nights in own place in year before entry	118	132
Number of nights homeless in year before entry	55	51
Experienced a prior eviction	11%	14%
Has a subsidy	17%	19%

*$p < 0.05$ **$p < 0.01$ ***$p < 0.001$. In bivariate analyses, Pierce, gender, and substance use were marginally significantly different at $p < .10$.

Multivariate logisitic regression revealed the only variable that significantly distinguished the samples was a history of substance abuse; families reporting a history of substance abuse were sigificantly more likely be excluded from the outcome analysis than families that did not report having a substance abuse history (see Exhibit C-5). No other variables were significantly associated with attrition.

Exhibit C-5. Predicting Probability of Inclusion in Outcome Analysis[+] (N=930)

Covariate[++]	Odds Ratio
Cohort 2 (compared to Cohort 1)	0.75
Age	1.01
Race (compared to White)	
Black/African American	0.99
Multiracial/other	0.93

Hispanic	0.96
Spouse/partner	1.16
Number of kids (compared to 0 or 1)	
2-3	1.05
4+	0.77
Education (compared to HS)	
Less than HS	0.85
More than HS	1.07
Employed at entry	1.22
Income at entry	0.97
Ever convicted of a felony	0.96
History of domestic violence	1.21
Substance abuse screen	0.65*
Mental health indicator	1.42
Number of nights homeless in year before entry	1.00
Experienced a prior eviction	1.19
Has a subsidy	1.13

*** $p < .001$, ** $p < .01$, * $p < .05$. [+]County is included in the model as a covariate but results are not presented in the table; there are no significant differences across the counties. This model was also run with number of nights in own place in year prior to entry as a covariate in place of number of nights in homeless. Number of nights in own place was not a significant predictor (OR = 1.00, p = .876) and the pattern of findings was otherwise consistent.

Analysis of Sample Representativeness: While we aimed to recruit as close to a "census" of families receiving homeless services as possible for each cohort, there were families that were excluded from the evaluation. These include families that were served by providers that did not participate in the evaluation (e.g., domestic violence providers, smaller organizations in King County), families that were not offered the opportunity to participate by providers assisting with recruitment, families that elected not to participate in the evaluation, and families that expressed interest but with whom we were unable to connect for an interview. Additionally, we were only able to conduct interviews in English and Spanish so some families were not eligible for participation. In order to examine how representative families included in the evaluation are of all families served in King, Pierce, and Snohomish Counties during the study period, we conducted analyses using data available from the ICDB comparing our sample to the complete population of families served by a Homeless Management Information Systems (HMIS) service (e.g. shelter, transitional housing, rapid re-housing, and permanent housing) in King, Pierce, and Snohomish Counties during the same period as our two cohorts. Exhibit C-6 presents the results of this analysis.

Exhibit C-6. Comparison of Families in the Families Participating in the Cohorts to Other Families Receiving Homeless Service Assistance in King, Pierce, and Snohomish Counties

	Overall		Cohort 1		Cohort 2	
	Families in Cohorts (N=604)	Other Families (N=2,911)	Families in Cohorts (N=309)	Other Families (N=1,521)	Families in Cohorts (N=295)	Other Families (N=1,390)
DEMOGRAPHIC CHARACTERISTICS						
Female	91%	86%***	90%	88%	92%	85%***
Age (Years)	32	32	31	31	33	33
Hispanic	13%	13%	14%	13%	12%	12%
Race						
White only	43%	40%	45%	41%	40%	38%
Black/African American only	21%	24%*	20%	24%	21%	25%
Asian only	1%	1%	1%	1%	1%	1%
American Indian only	1%	1%	1%	1%	1%	1%
Native Hawaiian/ Pacific Islander only	1%	2%	1%	2%	1%	3%
Other only	0%	<1%	0%	<1%	0%	1%
Multi-racial	33%	31%	31%	31%	36%	31%
FAMILY COMPOSITION						
Children under 19						
%	80%	100%***	78%	100%***	83%	100%***
Avg	2.1	2.1	1.9	2.2**	2.3	2.0**
Among those with children						
child under 6	74%	71%	77%	75%	72%	66%
child under 2	50%	48%	50%	52%	49%	42%
HISTORY OF SERVICE RECEIPT						
Emergency shelter in past 12m	6%	4%	3%	4%	9%	5%*
Transitional housing in past 12m	2%	1%***	1%	1%	3%	<1%***
Rapid re-housing in past 12m	4%	1%***	<1%	1%	7%	2%***
Permanent housing in past 12m	1%	<1%***	0%	<1%	3%	<1%***
STRENGTHS AND VULNERABILITIES						
TANF in 3m before entry	46%	44%	54%	54%	37%	32%
SNAP in 3m before entry	89%	87%	91%	89%	86%	85%

	Overall		Cohort 1		Cohort 2	
	Families in Cohorts (N=604)	Other Families (N=2,911)	Families in Cohorts (N=309)	Other Families (N=1,521)	Families in Cohorts (N=295)	Other Families (N=1,390)
Child Care Assistance in 3m before entry	19%	17%	17%	19%	21%	14%**
Child Support Services in 3m before entry	72%	67%*	74%	71%	70%	64%*
Need for MH treatment at entry	23%	21%	23%	22%	24%	21%
MH Inpatient services in past 12m	<1%	1%	<1%	1%	0%	1%
MH Outpatient services in past 12m	33%	28%*	31%	28%	34%	29%
SA Inpatient services in past 12m	7%	4%**	7%	4%*	7%	4%*
SA Outpatient services in past 12m	13%	8%***	10%	7%*	15%	8%***
HMIS SERVICE RECEIPT OVER TIME						
Emergency shelter Received 0-6m Avg. length of stay	66% 4.3	52%*** 3.5***	73% 3.9	51%*** 3.4*	59% 4.9	53% 3.5***
Transitional housing Received 0-6m Avg. length of stay	24% 11.0	24% 13.3**	32% 10.8	36% 12.9**	15% 11.3	12% 14.8**
Rapid re-housing Received 0-18m Avg. length of stay	32% 9.0	32% 77.2***	15% 8.5	18% 5.0***	51% 9.1	49% 8.0*
Permanent housing Received 0-18m Avg. length of stay	26% 22.1	17%*** 26.6**	34% 25.2	23%*** 28.4	18% 15.8	9%*** 21.7**
SUBSIDY RECEIPT OVER TIME						
PHA subsidy 0-6m	32%	28%*	36%	34%	28%	22%*
PHA subsidy 6-12m	34%	29%**	40%	35%	28%	23%*
PHA subsidy 12-18m	37%	31%**	44%	36%**	31%	25%*
EMPLOYMENT						
Employed in Entry quarter 1st quarter	30% 30%	30% 32%	25% 24%	24% 25%	36% 37%	37% 40%

	Overall		Cohort 1		Cohort 2	
	Families in Cohorts (N=604)	Other Families (N=2,911)	Families in Cohorts (N=309)	Other Families (N=1,521)	Families in Cohorts (N=295)	Other Families (N=1,390)
2nd quarter	32%	33%	25%	28%	39%	39%
3rd quarter	36%	35%	32%	31%	40%	40%
4th quarter	40%	36%	34%	32%	46%	41%
5th quarter	38%	37%	31%	33%	44%	41%
6th quarter	39%	38%	37%	36%	42%	41%
HOURS WORKED						
Hours worked						
Entry quarter	58	67	40	51	77	84
1st quarter	71	79	55	63	88	97
2nd quarter	83	88	63	74	103	103
3rd quarter	99	100	84	86	113	117
4th quarter	109	106	88	93	132	121
5th quarter	103	108	84	93	123	124
6th quarter	111	115	95	106	127	124
WAGES EARNED						
Wages earned						
Entry quarter	$720	$819	$411	$575*	$1,044	$1,085
1st quarter	$914	$993	$603	$712	$1,241	$1,300
2nd quarter	$1,063	$1,117	$678	$854	$1,465	$1,406
3rd quarter	$1,300	$1,302	$940	$1,008	$1,677	$1,625
4th quarter	$1,475	$1,399	$1,018	$1,119	$1,954	$1,704
5th quarter	$1,367	$1,471	$956	$1,163	$1,797	$1,807
6th quarter	$1,418	$1,539	$1,036	$1,251	$1,819	$1,853
CRIMINAL JUSTICE INVOLVEMENT						
Experienced a conviction						
by 6m	8%	7%	11%	8%	6%	6%
by 12m	15%	12%*	16%	13%	14%	10%
By 18m	19%	15%**	21%	17%*	17%	14%
CHILD OUT OF HOME PLACEMENTS						
Out of home placement						
At entry	4%	5%	2%	3%	5%	6%
6m after entry	3%	5%*	2%	4%	4%	6%
12m after entry	3%	5%*	2%	4%	4%	7%
18m after entry	3%	5%*	2%	4%	4%	6%
RETURNS TO HOMELESSNESS+						

	Overall		Cohort 1		Cohort 2	
	Families in Cohorts (N=604)	Other Families (N=2,911)	Families in Cohorts (N=309)	Other Families (N=1,521)	Families in Cohorts (N=295)	Other Families (N=1,390)
Within 6m	7%	8%	8%	7%	7%	8%
Within 12m	11%	11%	11%	11%	10%	12%
Within 18m	13%	14%	15%	13%	12%	14%

*** $p < .001$, ** $p < .01$, * $p < .05$.

Examining and Controlling Non-Equivalence of Cohorts: As indicated in Exhibits 3-1 through 3-7 in Section 3, although the baseline samples for the two cohorts are largely similar to one another, they do differ on some characteristics. Families in Cohort 2 are significantly more likely to be older and Hispanic, more likely to have higher education and be employed at entry as well as to have higher income and higher debt, and more likely to have more recent experiences with homelessness. We believe the non-equivalence is likely due in part to system changes that tightened the eligibility of the system to literally homeless families and due in part to changes in the strength of the economic climate. To address this non-equivalence of the groups, we constructed propensity score weights (Freedman & Berk, 2008). Propensity score weighting is a statistical technique to control for any selection biases in non-experimental studies. A propensity score is the conditional probability of being in the intervention group (Cohort 2 for this evaluation), based on a set of characteristic and background variables (Rosenbaum & Rubin, 1983). There are currently two standard methods of propensity score weighting. The first method of propensity score weighting uses the inverse of the propensity score in one group and the inverse of the complement of the propensity score (one over 1-p) in the other group. This weights the two groups to a mythical combined population and this method is considered appropriate for estimating the *Average Treatment Effect*, ATE, in the combined population. The second method of propensity score estimation gives one group a weight of 1.00 and the other group a weight of the inverse of their propensity score. This method is considered appropriate to measure the *Average Treatment Effect on the Treated*, ATT. For this report the ATE was considered the appropriate measure of effect. It can be interpreted as detecting the effect that would be present if the two cohorts were combined into one population and the treatment applied at random, which is counterfactual to what actually happened. We created propensity scores for members of each cohort using the characteristics that differed across cohorts in the overall sample or within at least one county and were significantly associated with the outcome variables. The scores were used to weight the probability that families in each cohort would have been included in the combined population. To calculate these weights, we used grand mean imputation to address missingness on the relevant variables. Grand mean imputation is replacing a missing value on a variable (such as

age) with the mean for that total sample. Imputation is a standard procedures when few data are missing to provide for more complete samples for analyses, such as propensity score development. Less than five percent of the data were missing for a given variable.

Exhibit C-7 presents the statistical differences across the baseline cohorts in the relevant covariates before and after weighting. The distribution of the propensity scores from this model overlapped to a degree that indicates non-overlap should not be an issue. Overlap is preferable so that every case has a reasonable probability of being in either cohort. The propensity weighting improved the balance for all covariates in the model, as well as for some variables not selected in the models.

Exhibit C-7 Statistical Tests for Covariates in the Propensity Analysis (N=971)

Variable	Unweighted		Weighted	
	t-statistic	p value	t-statistic	p value
Age	-4.05	0.0001	-0.41	0.7306
Female	-1.26	0.2094	-0.03	0.9760
Race				
White	-0.96	0.3387	-0.17	0.8647
Black/African American	-0.33	0.7378	-0.85	0.3950
Other or Multi-race	-0.31	0.7600	0.36	0.7160
Hispanic	2.50	0.0124	1.11	0.2674
Family size	-2.47	0.0138	0.90	0.3688
Spouse[1]	-0.46	0.6444	0.63	0.5313
Pregnant	1.04	0.2977	0.90	0.3707
Children under age 2	1.95	0.5542	0.88	0.2381
Children under age 6	1.08	0.2791	0.49	0.6243
Number of children under 19	-0.66	0.5113	1.88	0.0603
Education				
< HS education	3.22	0.0013	0.37	0.7134
HS education	0.48	0.6347	0.01	0.9955
> HS education	-3.24	0.0012	-0.31	0.7556
Employed at entry	0.33	0.7410	0.71	0.4758
Monthly income	-2.16	0.0312	0.34	0.7307
Family receives SSI/SSDI	-4.03	<.0001	-0.08	0.9357
Debt	-0.77	0.4404	-0.50	0.6180
Domestic violence history	-0.95	0.3413	-0.40	0.6870
Recent domestic violence	0.71	0.4793	0.14	0.8904
Substance use screen	0.77	0.4422	1.01	0.3149
Inpatient substance use	0.59	0.5536	0.63	0.5305
Any mental health indicator	-2.64	0.0084	-0.41	0.6830
Mental health hospitalization	-0.63	0.5273	0.73	0.4669

	Unweighted		Weighted	
Poor physical health	-0.77	0.4424	0.29	0.7718
Child away	-0.54	0.5899	0.04	0.9719
Open CPS plan	0.03	0.9784	0.02	0.9807
History of felony	0.21	0.8302	0.20	0.8447
History of probation or parole	0.70	0.4818	-0.09	0.8512
Eviction history	0.84	0.4000	0.95	0.3416
Nights homeless last 365	-10.38	0.0001	-0.99	0.3216
Any nights homeless last 365	-12.53	0.0001	-0.51	0.6106
Nights own place last 365	2.52	0.0119	0.81	0.4176
Any nights own place last 365	1.28	0.2004	0.54	0.5920
History of homelessness	-0.98	0.3261	0.19	0.8512
Last place stayed before entry				
Own place	2.49	0.0130	0.32	0.7454
Doubled up	9.45	0.0001	0.34	0.7353
Shelter	-7.58	<.0001	-0.26	0.7965
Unsheltered	-8.55	<.0001	-0.84	0.4030
Transitional housing	-0.94	0.3463	-0.27	0.7896
Other location	1.44	0.1504	0.35	0.7250

Missing Values: Rates of missingness for all of the independent and dependent variables in the outcome analyses were less than five percent for any given variable and were comparable across the cohorts. The multivariate models presented here use listwise deletion; that is that they exclude from the analysis any case with missing data on any of the covariates included in the model. This listwise deletion resulted in deletion of less than five percent for the majority of the outcome models with the following exceptions: the regression on income excluded five percent of the data and the regressions on weeks to entry and chronic absenteeism excluded seven percent of the data.

Analytic Approach for the Study Findings

Descriptive and Bivariate Analysis: Descriptive analyses (frequencies, histograms, examination of the shapes of the distribution and variability) were conducted to examine the distribution of predictor and outcome variables of interest. Bivariate analyses (statistical analyses that examine the relationship between two variables) were used to explore the relationship between cohort and different background variables to determine whether the families in the two cohorts differed with regard to sociodemographic characteristics, family composition, strengths and barriers, or housing or homeless history. Cross-tabulations and chi square analysis were used to compare cohorts with regard to dichotomous variables of interest (such

as intactness). Independent samples t-tests were used to compare cohorts with regard to continuous variables (such as age). All cohort comparisons were conducted first as unweighted analyses and then applying propensity weights. In cases where variables were not normally distributed, nonparametric tests (Wilcoxon signed-rank tests) were used. Bivariate analyses (using paired sample t-tests) were also used to examine whether interval level outcomes (such as days homeless) changed significantly over time within each cohort. We also examined these bivariate relationships within county; results are presented in Appendix E.

Multivariate Analysis: A series of weighted linear and logistic regression analyses were conducted to examine whether being in Cohort 2 compared to Cohort 1 (receiving homeless assistance after systems reform compared to before systems reform) predicted outcomes over the six-month follow-up period. Propensity scores were applied as weights to the models to address cohort differences. Linear regression analyses were conducted to examine whether cohort predicted the following continuous outcomes: (1) days in permanent housing, (2) number of moves, (3) days homeless, (4) weeks from first formal help seeking to program entry, and (5) income at six-month wave.

We also conducted a survival analysis of days to permanent housing over the 18-month follow-up to understand if families in Cohort 2 entered permanent housing faster than families in Cohort 1. We conducted a survival analysis of days to return to homelessness to understand if families in Cohort 2 returned to homelessness faster than families in Cohort 1.

Binary logistic regression analyses were conducted to examine whether cohort predicted the following dichotomous outcomes: (1) employment at eighteen months, (2) parent-child intactness at eighteen-month wave, (3) children's chronic absenteeism. Because the distribution of days in own place was heavily weighted with 0s (many people did not spend any days in own place), we additionally conducted binary logistic regression analysis predicting any days in own place over the eighteen-month follow-up period. Because cohort effects were consistent across analyses, we present the results of the linear model.

Multivariate logistic regression analyses were conducted to examine differences in the characteristics of families assigned to different types of assistance in Cohort 2.

In addition to cohort, all multivariate models include relevant covariates, including sociodemographic characteristics (e.g., age, race and ethnicity); family composition (e.g., number of children, presence of a spouse/partner); education, employment, and income; as well as measures of strengths and vulnerabilities (e.g., felony conviction, recent domestic violence, homeless history, and indicators of mental health). Multivariate models predicting

children's school attendance and stability include sociodemographic characteristics (e.g., age, gender); health measures (e.g., very good or excellent health, presence of a special need); and previous schooling attendance and stability measures. Additionally, all of the analyses included county; differences between the counties on the outcomes of interest are noted in footnotes to the models.

When conducting multiple statistical analyses, the probability of observing a false positive increases. To ensure that our key findings with respect to cohort differences were not attributable to false positives, we used a false discovery rate (FDR), a statistical correction used to set a higher threshold for statistical significance. Cohort findings remained significant in all cases and our findings are therefore presented without the application of the FDR so as not to obscure potentially meaningful associations between covariates and key outcomes across models.

Study Strengths and Limitations

There are several key limitations to the findings as well as some important strengths to our design that need to be considered. The non-equivalence between the two cohorts, though balanced for the analyses through propensity score weights and further controlled with covariates, always allows the possibility that hidden or unmeasured biases exist that account for the difference in outcomes. Families were more likely to be employed, have more education, and have higher incomes in Cohort 2 than Cohort 1, but also to have experienced more recent homelessness. It is plausible that they were more able to access and stay in housing due to their enhanced social capital. These variables do relate to their ability to achieve housing, but still do not eliminate the independent effects of cohort. Given the fact that the context tightened considerably between the two cohort time periods, the ability to access housing should have been more difficult, making the added human capital less powerful given the increases in costs of housing.

The nature of the context changed dramatically over the course of the study and continues to change. We attempted to include measures of the context in the models to control for the influences in the economic climate on outcomes. However, because these changes have been highly linear, they correlate almost perfectly with our cohorts. To try to have an understanding of the role of context on a family's ability to exit homelessness, we examined whether quarterly vacancy rate (i.e., the quarterly vacancy rate at the time of a family's receipt of initial assistance) was related to number of nights in housing and number of nights homeless in the eighteen-month period. Quarterly vacancy rate did not relate to either of these variables. Moreover, the eighteen-month findings on permanent housing access (with an increase in Cohort 2 compared to Cohort 1) suggest that changes are occurring despite the tightened

housing market, and that if the context is affecting families' housing outcomes, the change between the cohorts would likely be even greater if the market for Cohort 2 had remained comparable to the market for Cohort 1.

In addition, the reforms occurring under the Family Homeless Systems Initiative in the three counties were not occurring in a vacuum, but rather conterminously with other policy changes occurring at the state and federal level. The design and intent of the evaluation was to understand the role that the Initiative played in fostering reform, not to attribute the findings to it. Our qualitative analysis of the systems changes in the three communities, particularly in comparison to the contrast communities, provides a lens for understanding the contribution of the Initiative to the changes that occurred.

The study is also only a partial test of the system. We only included families who received some type of assistance from a homeless service provider in each cohort. We could not track families in Cohort 1 who were turned away because there was not capacity in the shelters, nor could we track families in Cohort 2 who went through coordinated entry in each county but who may not have been able to receive assistance. The samples are comparable between the cohorts, but we cannot generalize the findings of the study to families who were not successful in receiving assistance.

Additionally, the data included here are self-reported by families, not independently verified (with the exception of date of receipt of initial homeless assistance, which was verified by providers). As a result, they are subject to errors in recall. We ask families to report when they first sought assistance and the number of calls made. These data may differ from that which is recorded in the counties' coordinated entry data systems.

As a mixed-methods longitudinal study, our study has some strengths in our ability to explain outcomes and changes, even if we are not able to control them. We have considerable qualitative data on how the systems change over time and are able to consider the outcome changes within this context.

Additionally, use of the data from ICDB have allowed us to do the following:

- Construct comparison groups for each cohort among families in other counties in Washington State so that we can look at changes in non-Initiative communities to determine whether there are similar secular trends in the population across the state;
- Add additional data to the cohorts we have to amplify service receipt, earned income, and employment; and

- Examine the more complete population receiving homeless services across the study timeframe (2010 to 2018) to learn:
    - The extent to which our sample is representative of the more complete population entering the system during each cohort recruitment period;
    - How the population might vary over time in demographics and background; and
    - Changes in the volume of families served through the system over time, the length of time families receive assistance, and rates of returns to homelessness (findings presented in Rog et al, 2021).

Appendix D. Measuring Secular Trends

In order to determine how the patterns of change we find between families before and after systems reform in King, Pierce, and Snohomish Counties compare to patterns of change in other counties in Washington State, we examined ICDB for families served during the two cohort time periods for the three demonstration counties and six of Washington State's largest counties not participating in the evaluation.

This analysis compares demonostration and non-demonstration counties over time on:

- Population characteristics;
- Economic conditions;
- The charactersitics and history of families served;
- The type of services received and length of time they are received;
- Families' outcomes realized, including
    - Employment
    - Criminal justice involvement
    - Child out-of-home placements
    - Returns to homelessness

Exhibit D-1 presents findings for families in the three demonstration counties over time, and Exhibit D-2 presents findings for families in six non-demonstration counties over time.

Exhibit D-1. Characteristics, Service Receipt, and Outcomes for Families in King, Pierce, and Snohomish, by Cohort

	Tri-county		King		Pierce		Snohomish	
	Cohort 1 (N=1830)	Cohort 2 (N=1685)	Cohort 1 (N=774)	Cohort 2 (N=638)	Cohort 1 (N=665)	Cohort 2 (N=671)	Cohort 1 (N=391)	Cohort 2 (N=376)
POPULATION CHARACTERISTICS[1]								
Population size	--	--	1,969,722	2,117,125	807,904	843,954	722,400	772,501
% over 65	--	--	11%	13%	11%	13%	11%	12%
% 19 and under	--	--	23%	23%	27%	26%	26%	25%
% White	--	--	70%	66%	76%	73%	80%	78%
% non-White including more than one race	--	--	30%	34%	24%	27%	20%	23%
ECONOMIC CONDITIONS[1]								
Area median household income	--	--	$68,775	$81,916	$55,214	$60,167	$63,685	$76,251
% below 100 percent of the federal poverty line	--	--	11%	11%	12%	13%	9%	10%
Employed	--	--	58%	66%	51%	57%	56%	63%
Vacancy rate (rental)	--	--	5%	3%	6%	3%	5%	4%
Fair market rent (2bd)	--	--	$1,176	$1,415	$1,018	$1,093	$1,176	$1,415
DEMOGRAPHIC CHARACTERISTICS								
Female	88%	86%	89%	87%	86%	86%	90%	84%*
Age (Years)	31	33***	32	33**	31	32	31	33***
Hispanic	13%	12%	16%	13%	12%	11%	10%	11%
Race								
White only	42%	39%	30%	25%	44%	39%	62%	61%
Black only	23%	24%	33%	37%	21%	21%	6%	9%
Asian only	1%	1%	2%	1%	1%	1%	0%	<1%

[1] All population characteristics and economic conditions data are from the 2011 and 2015 ACS 1-year estimates, with the exceptions of % below 100 percent of the federal poverty line (from the 2011 and 2015 ACS 5-year estimates) and the fair market rent estimates (from HUD).

	Tri-county		King		Pierce		Snohomish	
	Cohort 1 (N=1830)	Cohort 2 (N=1685)	Cohort 1 (N=774)	Cohort 2 (N=638)	Cohort 1 (N=665)	Cohort 2 (N=671)	Cohort 1 (N=391)	Cohort 2 (N=376)
American Indian only	1%	1%	1%	1%	1%	1%	<1	1%
Native Hawaiian/ Pacific Islander only	2%	2%	1%	2%	4%	4%	1%	1%
Other only	<1%	<1%	1%	1%	<1%	<1%	0%	0%
Multi-racial	31%	32%	32%	33%	29%	34%	31%	28%
FAMILY COMPOSITION								
Children under 19 % Avg.	 96% 2.1	 97% 2.1	 98% 2.2	 97% 2.1	 96% 2.2	 98%* 2.1	 94% 1.9	 96% 2.1
Among those with children Child under 6 Child under 2	 76% 52%	 67%*** 43%***	 75% 52%	 69%** 43%***	 75% 50%	 67%** 42%**	 78% 56%	 66% *** 45%**
HISTORY OF SERVICE RECEIPT								
Emergency shelter in past 12m	4%	6%**	3%	8%***	3%	4%	7%	4%
Transitional housing in past 12m	1%	1%	1%	2%	<1%	<1%	1%	1%
Rapid re-housing in past 12m	1%	3%***	1	3%*	1%	3%**	0%	3%***
Permanent housing in past 12m	<1%	1%**	0%	1%*	0%	<1%	1%	2%
STRENGTHS AND VULNERABILITIES								
TANF in 3m before entry	54%	33%***	55%	32%***	52%	33%***	57%	33%***
SNAP in 3m before entry	90%	85%***	87%	83%*	91%	87%*	93%	87%*
Child Care Assistance in 3m before entry	19%	15%**	23%	17%**	16%	13%	16%	15%

	Tri-county		King		Pierce		Snohomish	
	Cohort 1 (N=1830)	Cohort 2 (N=1685)	Cohort 1 (N=774)	Cohort 2 (N=638)	Cohort 1 (N=665)	Cohort 2 (N=671)	Cohort 1 (N=391)	Cohort 2 (N=376)
Child Support Services in 3m before entry	71%	65%***	65%	61%	77%	67%***	74%	68%
Need for MH treatment at entry	22%	21%	17%	17%	23%	21%	28%	28%
MH Inpatient services in past 12m	1%	1%	1%	1%	<1%	1%	2%	<1%*
MH Outpatient services in past 12m	28%	30%	24%	26%	26%	28%	40%	39%
SA Inpatient services in past 12m	5%	5%	3%	3%	4%	4%	9%	10%
SA Outpatient services in past 12m	8%	9%	4%	7%*	8%	7%	14%	18%
SERVICE RECEIPT OVER TIME								
Emergency shelter Received 0-6m Avg. length of stay	55% 4	54% 4	48% 4	50% 4	62% 3	53%** 3	58% 4	63% 5**
Transitional housing Received 0-6m Avg. length of stay	35% 13	13%*** 14*	41% 13.9	16%*** 16.3*	37% 12.3	11%*** 14.8*	21% 8.3	10%*** 6.6
Rapid re-housing Received 0-18m Avg. length of stay	17% 5.5	49%*** 8.2***	25% 6.7	53%*** 8.7***	14% 3.5	52%*** 7.5***	5% 2.5	35%*** 8.8***
Permanent housing Received 0-18m Avg. length of stay	25% 27.6	11% 20.0***	18% 30.6	8%*** 23.4*	15% 39.6	7%*** 26.2***	58% 21.0	21%*** 14.3***
SUBSIDY RECEIPT OVER TIME								

	Tri-county		King		Pierce		Snohomish	
	Cohort 1 (N=1830)	Cohort 2 (N=1685)	Cohort 1 (N=774)	Cohort 2 (N=638)	Cohort 1 (N=665)	Cohort 2 (N=671)	Cohort 1 (N=391)	Cohort 2 (N=376)
PHA subsidy 0-6m	34%	23%***	31%	26%*	30%	17%***	50%	29%***
PHA subsidy 6-12m	36%	24%***	32%	26%*	31%	17%***	50%	31%***
PHA subsidy 12-18m	37%	26%***	35%	30%*	32%	18%***	50%	34%***
EMPLOYMENT								
Employed in								
Entry quarter	24%	37%***	27%	39%***	24%	38%***	20%	32%***
1st quarter	25%	39%***	28%	42%***	25%	39%***	19%	35%***
2nd quarter	28%	39%***	31%	42%***	27%	37%***	22%	36%***
3rd quarter	31%	40%***	34%	45%***	28%	37%***	28%	36%*
4th quarter	32%	42%***	36%	46%***	31%	41%***	27%	38%**
5th quarter	33%	41%***	35%	44%***	32%	41%**	28%	37%**
6th quarter	36%	41%**	37%	43%***	37%	40%	33%	40%*
HOURS WORKED								
Hours worked								
Entry quarter	50	83***	60	92***	46	83***	34	67***
1st quarter	62	95***	74	106***	60	95***	40	77***
2nd quarter	72	103***	86	116**	66	99***	55	89**
3rd quarter	86	116***	100	137***	78	103**	69	104**
4th quarter	92	123***	110	136*	85	116**	67	113***
5th quarter	92	124***	105	132**	87	120***	72	117***
6th quarter	104	125*	110	133*	111	120	81	119**
WAGES EARNED								
Wages earned								
Entry quarter	$547	$1,078***	$688	$1,209***	$495	$1,095***	$355	$826***
1st quarter	$694	$1,290***	$839	$1,436***	$662	$1,318***	$461	$991***
2nd quarter	$824	$1,416***	$975	$1,582***	$767	$1,405***	$623	$1,155***

	Tri-county		King		Pierce		Snohomish	
	Cohort 1 (N=1830)	Cohort 2 (N=1685)	Cohort 1 (N=774)	Cohort 2 (N=638)	Cohort 1 (N=665)	Cohort 2 (N=671)	Cohort 1 (N=391)	Cohort 2 (N=376)
3rd quarter	$996	$1,634***	$1,171	$1,963***	$927	$1,483***	$768	$1,343***
4th quarter	$1,102	$1,748***	$1,340	$2,013***	$1,019	$1,657***	$772	$1,462***
5th quarter	$1,128	$1,805***	$1,355	$2,002***	$1,025	$1,726	$853	$1,613***
6th quarter	$1,215	$1,847***	$1,402	$1,975***	$1,123	$1,819***	$999	$1,682***
CRIMINAL JUSTICE INVOLVEMENT								
Experienced a conviction								
by 6m	8%	6%**	6%	5%	11%	6%***	10%	8%
by 12m	14%	11%*	8%	10%	18%	11%***	18%	12%*
By 18m	17%	14%*	12%	13%	21%	15%**	22%	15%**
CHILD OUT OF HOME PLACEMENTS								
Out of home placement								
At entry	3%	6%***	2%	6%**	4%	4%	4%	9%**
6m after entry	3%	6%***	2%	7%***	5%	4%	3%	7%*
12m after entry	4%	7%***	2%	7%***	5%	6%	4%	8%*
18m after entry	4%	6%**	2%	6%***	5%	5%	5%	6%
RETURNS TO HOMELESSNESS								
Returns to homelessness								
Within 6m	7%	8%	8%	9%	8%	7%	7%	6%
Within 12m	11%	11%	11%	13%	11%	10%	10%	11%
Within 18m	14%	14%	13%	16%	14%	12%	14%	13%
Within 24 months	16%	15%	16%	19%	15%	13%	15%	14%

*** $p < .001$, ** $p < .01$, * $p < .05$.

Exhibit D-2. Characteristics, Service Receipt, and Outcomes for Families in Non-Demonstration Counties, by Cohort

	Across Six Counties		Clark		Kitsap		Spokane	
	Cohort 1 (N=1592)	Cohort 2 (N=1584)	Cohort 1 (N=335)	Cohort 2 (N=259)	Cohort 1 (N=262)	Cohort 2 (N=191)	Cohort 1 (N=367)	Cohort 2 (N=480)
POPULATION CHARACTERISTICS[2]								
Population size	--	--	433,418	459,495	254,633	260,131	473,761	490,945
% over 65	--	--	12%	14%	13%	17%	13%	15%
% 19 and under	--	--	28%	27%	25%	24%	26%	25%
% white	--	--	86%	85%	81%	81%	89%	89%
% non-white including more than one race	--	--	14%	15%	19%	19%	11%	11%
ECONOMIC CONDITIONS[2]								
Area median household income	--	--	$56,656	$64,275	$60,314	$66,090	$49,078	$48,525
% below 100 percent of the federal poverty line	--	--	12%	11%	10%	11%	14%	16%
% Employed	--	--	51%	60%	50%	52%	53%	58%
Vacancy rate (rental)	--	--	3%	2%	7%	5%	8%	4%
Fair market rent (2bd)	--	--	$905	$944	$921	$1,020	$731	$773
DEMOGRAPHIC CHARACTERISTICS								
Female	90%	86%**	91%	90%	91%	83%*	89%	80%***
Age (Years)	31	33***	33	34	32	35***	30	34***
Hispanic	18%	19%	13%	12%	8%	10%	8%	10%
Race								
White only	61%	65%*	62%	59%	53%	62%	65%	66%
Black only	4%	5%	6%	5%	5%	9%	3%	5%

[2] All population characteristics and economic conditions data are from the 2011 and 2015 ACS 1-year estimates, with the exceptions of % below 100 percent of the federal poverty line (from the 2011 and 2015 ACS 5-year estimates) and the fair market rent estimates (from HUD).

	Across Six Counties		Clark		Kitsap		Spokane	
	Cohort 1 (N=1592)	Cohort 2 (N=1584)	Cohort 1 (N=335)	Cohort 2 (N=259)	Cohort 1 (N=262)	Cohort 2 (N=191)	Cohort 1 (N=367)	Cohort 2 (N=480)
Asian only	<1%	<1%	1%	<1%	0%	0%	<1%	0%
American Indian only	5%	3%**	1%	0%	2%	1%	3%	2%
Native Hawaii/ Pacific Islander only	2%	2%	3%	6%	2%	2%	2%	1%
Other only	<1%	<1%	1%	2%	<1%	1%	<1%	0%
Multi-racial	28%	26%	25%	28%	37%	26%*	26%	26%
FAMILY COMPOSITION								
% Children under 19	100%	100%	100%	100%	100%	100%	100%	100%
Avg.	2	2.1	2	2.3*	1.9	2.2*	2	2
Among those with children								
Child under 6	71%	65%***	69%	63%	66%	60%	75%	62%***
Child under 2	50%	39%***	43%	40%	43%	31%**	55%	36%***
HISTORY OF SERVICE RECEIPT								
Emergency shelter in past 12m	2%	4%**	0%	7%***	3%	5%	3%	3%
Transitional housing in past 12m	<1%	1%	<1%	0%	<1%	1%	0%	1%
Rapid re-housing in past 12m	1%	2%	0%	1%	2%	1%	0%	3%**
Permanent housing in past 12m	0%	0	0%	0%	0%	0%	0%	0%
STRENGTHS AND VULNERABILITIES								
TANF in 3m before entry	48%	27%***	47%	29%***	37%	27%*	58%	26%***
SNAP in 3m before entry	92%	88%***	90%	86%	90%	83%*	95%	90%*
Child Care Assistance in 3m before entry	13%	11%	12%	13%	12%	11%	16%	10%*

	Across Six Counties		Clark		Kitsap		Spokane	
	Cohort 1 (N=1592)	Cohort 2 (N=1584)	Cohort 1 (N=335)	Cohort 2 (N=259)	Cohort 1 (N=262)	Cohort 2 (N=191)	Cohort 1 (N=367)	Cohort 2 (N=480)
Child Support Services in 3m before entry	75%	70%***	72%	64%*	68%	70%	79%	72%*
Need for MH treatment at entry	24%	30%***	26%	29%	26%	29%	26%	31%
MH Inpatient services in past 12m	1%	1%	0%	1%	<1%	2%	1%	1%
MH Outpatient services in past 12m	32%	36%	31%	30%	32%	38%	34%	39%
SA Inpatient services in past 12m	8%	9%	4%	4%	8%	5%	8%	7%
SA Outpatient services in past 12m	14%	12%	9%	8%	11%	12%	15%	9%**
SERVICE RECEIPT OVER TIME								
Emergency shelter Received 0-6m Avg. length of stay	57% 2.4	46%*** 2.7 ***	56% 2.7	62% 3.0*	68% 2.3	66% 2.7*	58% 2.6	32%*** 2.4
Transitional housing Received 0-6m Avg. length of stay	28% 10.3	12%*** 12.8***	34% 8.9	11%*** 11.1	13% 13.3	12% 18.5	38% 9.2	5%*** 7.7
Rapid re-housing Received 0-18m Avg. length of stay	40% 5.4	60%*** 6.0*	38% 8.7	47%* 12.3***	34% 2.7	34% 5.3***	35% 5.1	80%*** 4.8
Permanent housing Received 0-18m Avg. length of stay	6% 18.3	3%*** 18.5	8% 12.3	2%*** 6.5	4% 9.1	6% 16.9	8% 16.2	2%*** 15.4
SUBSIDY RECEIPT OVER TIME								

	Across Six Counties		Clark		Kitsap		Spokane	
	Cohort 1 (N=1592)	Cohort 2 (N=1584)	Cohort 1 (N=335)	Cohort 2 (N=259)	Cohort 1 (N=262)	Cohort 2 (N=191)	Cohort 1 (N=367)	Cohort 2 (N=480)
PHA subsidy at entry	6%	6%	7%	2%	7%	9%	5%	6%
PHA subsidy 0-6m	13%	13%	11%	8%	12%	18%	11%	10%
PHA subsidy 6-12m	16%	16%	12%	11%	14%	19%	16%	14%
PHA subsidy 12-18m	19%	18%	13%	14%	18%	19%	24%	16%**
EMPLOYMENT								
Employed in								
Entry quarter	22%	35%***	20%	31%***	31%	37%	20%	34%***
1st quarter	24%	33%***	22%	29%	31%	37%	20%	34%***
2nd quarter	26%	33%***	24%	27%	31%	34%	22%	35%***
3rd quarter	26%	34%***	25%	28%	31%	36%	24%	34%**
4th quarter	26%	35%***	24%	30%	32%	32%	25%	34%**
5th quarter	27%	34%***	26%	30%	29%	34%	28%	33%
6th quarter	28%	33%***	28%	35%	31%	36%	24%	32%*
HOURS WORKED								
Hours worked								
Entry quarter	51	76***	49	66	71	85	40	71**
1st quarter	59	86***	53	76	83	96	52	89***
2nd quarter	70	91***	61	82	93	95	60	91**
3rd quarter	74	95***	68	89	92	106	70	89
4th quarter	78	102***	64	99*	104	98	76	96
5th quarter	80	103***	80	93	97	104	79	108*
6th quarter	83	99*	87	104	94	96	80	99
WAGES EARNED								
Wages earned								
Entry quarter	$525	$907***	$499	$795*	$760	$1,109	$403	$817***
1st quarter	$620	$1,050***	$559	$926*	$849	$1,330*	$548	$1,080***

	Across Six Counties		Clark		Kitsap		Spokane	
	Cohort 1 (N=1592)	Cohort 2 (N=1584)	Cohort 1 (N=335)	Cohort 2 (N=259)	Cohort 1 (N=262)	Cohort 2 (N=191)	Cohort 1 (N=367)	Cohort 2 (N=480)
2nd quarter	$729	$1,116***	$694	$1,023*	$965	$1,293	$600	$1,104***
3rd quarter	$798	$1,232***	$805	$1,147	$998	$1,471*	$702	$1,148***
4th quarter	$830	$1,342***	$745	$1,282**	$1,117	$1,481	$805	$1,262**
5th quarter	$881	$1,382***	$919	$1,327*	$1,111	$1,533	$807	$1,412***
6th quarter	$954	$1,335***	$1,018	$1,517*	$1,090	$1,333	$866	$1,300**
CRIMINAL JUSTICE INVOLVEMENT								
Experienced a conviction								
by 6m	8%	7%	4%	7%	7%	8%	8%	5%
by 12m	15%	13%*	10%	13%	14%	10%	13%	10%
By 18m	19%	17%	14%	19%	18%	12%	17%	17%
CHILD OUT OF HOME PLACEMENTS								
Out of home placement								
At entry	7%	7%	5%	5%	9%	9%	9%	8%
6m after entry	5%	8%**	4%	6%	8%	7%	4%	10%**
12m after entry	6%	8%	5%	7%	8%	7%	6%	11%*
18m after entry	7%	7%	7%	7%	8%	5%	7%	10%
RETURNS TO HOMELESSNESS								
Returns to homelessness								
Within 6m	9%	6%***	11%	9%	9%	5%	9%	4%*
Within 12m	14%	9%***	18%	13%	13%	12%	13%	7%**
Within 18m	17%	11%***	21%	15%	18%	15%	15%	8%**
Within 24 months	19%	13%***	23%	17%	22%	17%	16%	9%**

*** $p < .001$, ** $p < .01$, * $p < .05$.

Exhibit D-2. (Continued) Characteristics, Service Receipt, and Outcomes for Families in Non-Demonstration Counties, by Cohort

	Thurston		Whatcom		Yakima	
	Cohort 1 (N=122)	Cohort 2 (N=167)	Cohort 1 (N=171)	Cohort 2 (N=122)	Cohort 1 (N=167)	Cohort 2 (N=171)
POPULATION CHARACTERISTICS[3]						
Population size	256,591	269,536	203,663	212,284	247,141	248,830
% over 65	13%	16%	14%	16%	12%	13%
% 19 and under	25%	24%	24%	24%	34%	33%
% white	84%	82%	87%	84%	77%	81%
% non-white including more than one race	16%	18%	13%	16%	23%	19%
ECONOMIC CONDITIONS[3]						
Area median household income	$60,061	$62,137	$51,500	$55,016	$42,173	$47,223
% below 100 percent of the federal poverty line	11%	12%	15%	16%	21%	21%
Employed	56%	56%	53%	58%	51%	58%
Vacancy rate (rental)	6%	4%	5%	3%	4%	4%
Fair market rent (2bd)	$901	$1,026	$848	$948	$782	$769
DEMOGRAPHIC CHARACTERISTICS						
Female	84%	87%	88%	88%	91%	91%
Age (Years)	31	32	30	32	31	32
Hispanic	7%	13%	20%	23%	42%	45%
Race						
White only	63%	70%	71%	69%	55%	64%*
Black only	5%	7%	2%	2%	2%	1%
Asian only	0%	0%	0%	1%	0%	0%

[3] All population characteristics and economic conditions data are from the 2011 and 2015 ACS 1-year estimates, with the exceptions of % below 100 percent of the federal poverty line (from the 2011 and 2015 ACS 5-year estimates) and the fair market rent estimates (from HUD).

	Thurston		Whatcom		Yakima	
	Cohort 1 (N=122)	Cohort 2 (N=167)	Cohort 1 (N=171)	Cohort 2 (N=122)	Cohort 1 (N=167)	Cohort 2 (N=171)
American Indian only	2%	1%	6%	5%	15%	7%**
Native Hawaii/ Pacific Islander only	1%	1%	0%	1%	0%	0%
Other only	2%	1%	0%	0%	0%	0%
Multi-racial	27%	20%	22%	22%	29%	28%
FAMILY COMPOSITION						
% Children under 19	100%	100%	100%	100%	100%	100%
Avg.	1.9	1.9	1.9	2	2.3	2.2
Among those with children						
Child under 6	70%	60%	71%	71%	72%	72%
Child under 2	52%	37%*	57%	41%**	53%	48%
HISTORY OF SERVICE RECEIPT						
Emergency shelter in past 12m	1%	5%	3%	1%	2%	3%
Transitional housing in past 12m	0%	1%	0%	1%	<1%	1%
Rapid re-housing in past 12m	2%	2%	2%	1%	2%	1%
Permanent housing in past 12m	0%	0%	0%	0%	0%	0%
STRENGTHS AND VULNERABILITIES						
TANF in 3m before entry	49%	26%***	51%	29%***	42%	26%***
SNAP in 3m before entry	93%	89%	94%	91%	90%	88%
Child Care Assistance in 3m before entry	13%	10%	13%	11%	10%	9%
Child Support Services in 3m before entry	69%	65%	76%	64%*	81%	77%

	Thurston		Whatcom		Yakima	
	Cohort 1 (N=122)	Cohort 2 (N=167)	Cohort 1 (N=171)	Cohort 2 (N=122)	Cohort 1 (N=167)	Cohort 2 (N=171)
Need for MH treatment at entry	31%	32%	22%	34%*	17%	27%**
MH Inpatient services in past 12m	1%	1%	1%	1%	<1%	1%
MH Outpatient services in past 12m	38%	38%	39%	39%	27%	31%
SA Inpatient services in past 12m	2%	8%*	11%	7%	12%	19%**
SA Outpatient services in past 12m	7%	13%	19%	18%	19%	17%
SERVICE RECEIPT OVER TIME						
Emergency shelter Received 0-6m Avg. length of stay	49% 2.9	37%* 3.4	46% 2.6	42% 3.1	58% 1.7	47%** 2.3***
Transitional housing Received 0-6m Avg. length of stay	40% 14.3	14%*** 15.3	33% 10.3	20%** 13.0	18% 10.6	17% 12.2
Rapid re-housing Received 0-18m Avg. length of stay	45% 5.1	69%*** 4.6	51% 4.9	62%* 7.9***	43% 4.7	51%* 4.4
Permanent housing Received 0-18m Avg. length of stay	2% 53.3	0% 0	11% 30.9	10% 22.9	<1% 10	1% 16
SUBSIDY RECEIPT OVER TIME						

	Thurston		Whatcom		Yakima	
	Cohort 1 (N=122)	Cohort 2 (N=167)	Cohort 1 (N=171)	Cohort 2 (N=122)	Cohort 1 (N=167)	Cohort 2 (N=171)
PHA subsidy at entry	12%	10%	10%	11%	3%	3%
PHA subsidy 0-6m	35%	20%**	16%	18%	7%	11%
PHA subsidy 6-12m	38%	22%**	19%	25%	12%	14%
PHA subsidy 12-18m	37%	24%*	21%	30%*	12%	14%
EMPLOYMENT						
Employed in						
Entry quarter	22%	32%	15%	36%***	23%	37%***
1st quarter	26%	28%	21%	36%**	25%	35%**
2nd quarter	26%	32%	22%	35%**	31%	35%
3rd quarter	23%	32%	20%	39%***	31%	34%
4th quarter	23%	29%	22%	41%***	27%	41%***
5th quarter	23%	29%	24%	38%**	27%	37%**
6th quarter	25%	26%	27%	36%	30%	35%
HOURS WORKED						
Hours worked						
Entry quarter	48	62	32	81***	60	94**
1st quarter	52	67	43	81**	66	95*
2nd quarter	67	68	54	101**	80	103
3rd quarter	68	80	56	118**	81	99
4th quarter	64	77	57	121***	88	119
5th quarter	55	70	62	111**	85	117*
6th quarter	62	79	77	101	86	105
WAGES EARNED						
Wages earned						
Entry quarter	$454	$739	$323	$1,061***	$628	$1,020**
1st quarter	$520	$811	$459	$1,018**	$698	$1,082**

	Thurston		Whatcom		Yakima	
	Cohort 1 (N=122)	Cohort 2 (N=167)	Cohort 1 (N=171)	Cohort 2 (N=122)	Cohort 1 (N=167)	Cohort 2 (N=171)
2nd quarter	$641	$859	$581	$1,242**	$826	$1,171*
3rd quarter	$670	$1,050	$623	$1,600***	$874	$1,175
4th quarter	$645	$1,029	$659	$1,696***	$873	$1,402**
5th quarter	$619	$1,029	$727	$1,499**	$918	$1,415**
6th quarter	$683	$1,181*	$899	$1,341	$1,006	$1,315
CRIMINAL JUSTICE INVOLVEMENT						
Experienced a conviction						
by 6m	8%	5%	13%	10%	12%	8%
by 12m	14%	15%	20%	14%	21%	14%*
By 18m	19%	19%	23%	19%	27%	19%*
CHILD OUT OF HOME PLACEMENTS						
Out of home placement						
At entry	6%	4%	3%	9%*	7%	8%
6m after entry	7%	6%	5%	9%	5%	7%
12m after entry	7%	6%	7%	6%	6%	5%
18m after entry	11%	4%	7%	5%	7%	6%
RETURNS TO HOMELESSNESS						
Returns to homelessness						
Within 6m	6%	7%	5%	4%	11%	6%*
Within 12m	11%	10%	8%	6%	17%	9%**
Within 18m	15%	13%	9%	8%	20%	11%**
Within 24 months	16%	15%	11%	8%	23%	14%**

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

Appendix E. Families' Characteristics, Experiences, and Outcomes by County

The following tables present descriptive analyses by county.

Study Design and Methodology

Exhibit E-1. Family Impact Study Sample Size, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1	Cohort 2	Cohort 1	Cohort 2	Cohort 1	Cohort 2	Cohort 1	Cohort 2
Baseline sample	467	504	156	182	157	157	154	165
6-month sample	392	369	133	117	127	117	132	135
% of baseline	*(84%)*	*(73%)*	*(85%)*	*(64%)*	*(81%)*	*(75%)*	*(86%)*	*(82%)*
12-month sample	389	365	135	123	125	114	129	128
% of baseline	*(83%)*	*(72%)*	(87%)	(68%)	(80%)	(73%)	(84%)	(78%)
18-month sample	395	417	135	149	127	125	133	143
% of baseline	*(85%)*	*(83%)*	(87%)	(82%)	(81%)	(80%)	(86%)	(87%)
Complete housing data	391	408	134	145	126	122	131	141
% of sample	*(84%)*	*(81%)*	(86%)	(80%)	(80%)	(78%)	(85%)	(85%)

Characteristics of Families Served Before and After Systems Reform

Exhibit E-2. Demographic Characteristics of the HOHs of Families, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=467)	Cohort 2 (N=504)	Cohort 1 (N=156)	Cohort 2 (N=182)	Cohort 1 (N=157)	Cohort 2 (N=157)	Cohort 1 (N=154)	Cohort 2 (N=165)
Female	89%	92%	89%	86%	84%	94%*	95%	95%
Age	32	34***	32	35*	33	32	31	35***
Hispanic	16%	11%*	22%	13%	12%	10%	15%	11%
Race								
White	42%	43%	25%	24%	47%	40%	56%	65%
Black/African American	33%	37%	46%	56%	31%	39%	22%	16%
Asian	2%	1%	5%	2%	1%	1%	0%	1%
American Indian	3%	4%	2%	6%	3%	3%	3%	4%
Pacific Islander	3%	3%	2%	2%	6%	3%	2%	2%
Other race	6%	4%	12%	4%*	2%	3%	6%	5%
Multiracial	10%	8%	10%	6%	8%	11%	11%	7%
Born in USA	87%	91%	77%	88%*	93%	95%	93%	90%
Lived in WA 5+ years	44%	83%***	41%	83%**	50%	78%**	42%	88%***
Lived in county 5+ years	--	70%	--	76%	--	64%	--	68%

Served in Armed Forces	3%	3%	3%	2%	4%	4%	3%	2%

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

Exhibit E-3. Composition of Families, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=467)	Cohort 2 (N=504)	Cohort 1 (N=156)	Cohort 2 (N=182)	Cohort 1 (N=157)	Cohort 2 (N=157)	Cohort 1 (N=154)	Cohort 2 (N=165)
# children under 19	1.8	1.8	1.9	1.9	1.7	1.8	1.6	1.7
Spouse/partner	25%	27%	24%	23%	34%	32%	17%	27%
Children under 2	43%	37%	44%	34%	32%	42%	53%	35%**
Currently pregnant	11%	9%	10%	7%	17%	12%	8%	7%
Child away	23%	25%	15%	20%	26%	22%	29%	32%

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

Exhibit E-4. Strengths and Vulnerabilities of HOHs of Families, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=467)	Cohort 2 (N=504)	Cohort 1 (N=156)	Cohort 2 (N=182)	Cohort 1 (N=157)	Cohort 2 (N=157)	Cohort 1 (N=154)	Cohort 2 (N=165)
< HS education	29%	20%**	24%	19%	24%	17%	38%	24%*
HS education/GED	33%	32%	27%	31%	39%	32%	31%	32%
Some College	39%	49%**	49%	51%	36%	51%*	31%	45%*
Ever employed	96%	98%	95%	100%*	96%	97%	97%	96%
Employed at entry	16%	32%***	26%	41%*	10%	27%***	12%	27%**
Median monthly income	$478	$745***	$602	$922**	$453	$700***	$408	$657***
Receives SSI/SSDI (family)	10%	19%***	10%	17%	10%	22%*	10%	18%
Median total debt	$3,471	$6,760	$3,790	$6,660	$3,175	$5,860	$3,200	$8,245**
Has medical insurance	82%	96%***	69%	95%	85%	97%***	91%	97%
Poor physical health scale	10%	11%	11%	8%	14%	11%	4%	14%**
Any mental health indicator	47%	55%*	47%	59%	46%	48%	48%	58%
Mental health hospitalization	15%	17%	10%	17%	17%	14%	18%	18%
Substance abuse screen	25%	20%	17%	14%	27%	20%	31%	27%
Hospitalized for SA	21%	19%	7%	12%	21%	18%	34%	28%
Recent DV	9%	8%	8%	9%	10%	7%	10%	9%
History of DV	60%	60%	55%	59%	57%	54%	68%	69%
Convicted of a felony	17%	18%	11%	21%	25%	12%*	16%	19%
On probation or parole	7%	5%	6%	3%	5%	2%	8%	11%
Open CPS plan	9%	9%	4%	2%	12%	10%	11%	15%

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

Exhibit E-5. Employment Characteristics for HOHs' Jobs at Receipt of Initial Assistance, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=71)	Cohort 2 (N=132)	Cohort 1 (N=40)	Cohort 2 (N=73)	Cohort 1 (N=15)	Cohort 2 (N=42)	Cohort 1 (N=18)	Cohort 2 (N=44)
Hours per week	26	31**	27	33*	29	31	19	29*
Hourly wage	$10.51	$13.03**	$10.82	$13.14**	$10.62	$12.21	$9.71	$13.47***
Working multiple jobs	(N=60) 8%	(N=116) 9%	(N=34) 9%	(N=56) 11%	(N=12) 0%	(N=32) 9%	(N=14) 14%	(N=27) 7%
Job offers benefits	(N=71) 14%	(N=129) 47%***	(N=39) 15%	(N=59) 54%***	(N=15) 7%	(N=32) 47%*	(N=17) 18%	(N=38) 36%
Job type Permanent Temporary Seasonal/Day labor	(N=72) 65% 24% 11%	(N=132) 74% 17% 8%	(N=40) 75% 13% 13%	(N=60) 78% 17% 5%	(N=15) 40% 60% 0%	(N=34) 68% 24% 9%	(N=17) 65% 18% 18%	(N=39) 71% 15% 13%
Job offers opportunity for advancement	(N=57) 56%	(N=130) 68%	(N=32) 53%	(N=59) 69%	(N=12) 75%	(N=33) 70%	(N=13) 46%	(N=37) 65%

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

Exhibit E-6. Homeless and Housing History of Families, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=467)	Cohort 2 (N=504)	Cohort 1 (N=156)	Cohort 2 (N=182)	Cohort 1 (N=157)	Cohort 2 (N=157)	Cohort 1 (N=154)	Cohort 2 (N=165)
Homeless Ever	44%	47%	36%	43%	44%	45%	53%	53%
Homeless as a Child	17%	14%	12%	11%	15%	15%	25%	18%
Homeless past 2 years	21%	25%	15%	23%	20%	20%	28%	31%
On lease in last 6m	42%	48%	47%	42%	43%	46%	37%	43%
Homeless last 6m	28%	64%***	23%	71%***	34%	57%***	28%	62%***
Homeless night before entry	13%	50%***	9%	59%***	18%	41%***	11%	48%***
Doubled up last 6m	74%	61%***	76%	57%***	71%	69%	75%	57%**
Own place last 6m	48%	41%*	51%	39%	53%	43%	40%	40%
Prior eviction	14%	13%	13%	12%	17%	14%	17%	14%
Subsidy	20%	18%	23%	17%	14%	15%	14%	15%

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

Exhibit E-7. Percentages of Families with a School-Aged or Younger Target Child, by County

King County

	Baseline		6 months		12 months		18 months	
	C1 N=156	C2 N=182	C1 N=133	C2 N=117	C1 N=135	C2 N=123	C1 N=135	C2 N=149
School-aged target child	58%	63%	59%	71%	59%	74%	60%	77%
Younger target child	22%	20%	25%	21%	28%	21%	28%	17%
No target child	20%	17%	16%	8%	13%	5%	12%	6%

[+]Percentages calculated to reflect presence of a target child eligible for inclusion in outcome analysis.

Pierce County

	Baseline		6 months		12 months		18 months	
	C1 N=157	C2 N=157	C1 N=127	C2 N=117	C1 N=127	C2 N=125	C1 N=127	C2 N=125
School-aged target child	52%	52%	54%	59%	57%	53%	60%	59%
Younger target child	27%	25%	26%	31%	27%	27%	28%	28%
No target child	21%	23%	20%	10%	16%	80%	12%	13%

[+]Percentages calculated to reflect presence of a target child eligible for inclusion in outcome analysis.

Snohomish County

	Baseline		6 months		12 months		18 months	
	C1 N=154	C2 N=165	C1 N=132	C2 N=135	C1 N=129	C2 N=128	C1 N=133	C2 N=143
School-aged target child	38%	50%	43%	57%	46%	61%	47%	63%
Younger target child	27%	23%	27%	24%	32%	23%	38%	27%
No target child	35%	27%	30%	19%	22%	16%	15%	10%

[+]Percentages calculated to reflect presence of a target child eligible for inclusion in outcome analysis.

Exhibit E-8. Characteristics of Target Children, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1	Cohort 2	Cohort 1	Cohort 2	Cohort 1	Cohort 2	Cohort 1	Cohort 2
Older children	N=232	N=279	N=91	N=115	N=82	N=82	N=59	N=82
Female	55%	48%	52%	46%	60%	46%	53%	54%
Age	10.7	10.9	10.7	11.3	10.9	10.0	10.6	11.2
School type								
Elementary	56%	54%	56%	50%	57%	64%	58%	49%
Middle	24%	24%	26%	25%	23%	21%	20%	26%
High	20%	23%	18%	25%	20%	15%	22%	26%
Changed schools	26%	33%	24%	36%	27%	35%	26%	29%
Chronically absent	30%	22%	31%	28%	28%	21%	32%	16%
Excellent/very good health	74%	76%	67%	78%	79%	78%	78%	70%
Any special needs	50%	50%	47%	51%	50%	46%	56%	52%
Younger children	N=125	N=119	N=34	N=37	N=39	N=43	N=41	N=39
Female	48%	52%	43%	38%	57%	67%	43%	49%
Age	3.3	3.4	3.3	3.4	3.4	3.3	3.2	3.6
Enrolled in Preschool/ Pre-K	30%	45%	37%	53%	31%	42%	24%	41%
Changed schools	28%	25%	25%	40%	36%	6%	23%	31%
Early intervention assessment	21%	32%	12%	27%	19%	26%	30%	45%
Early intervention services	10%	19%	9%	14%	11%	17%	9%	26%
Excellent/very good health	81%	80%	85%	73%	78%	86%	81%	80%
Any special needs	27%	32%	15%	24%	24%	26%	41%	46%

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

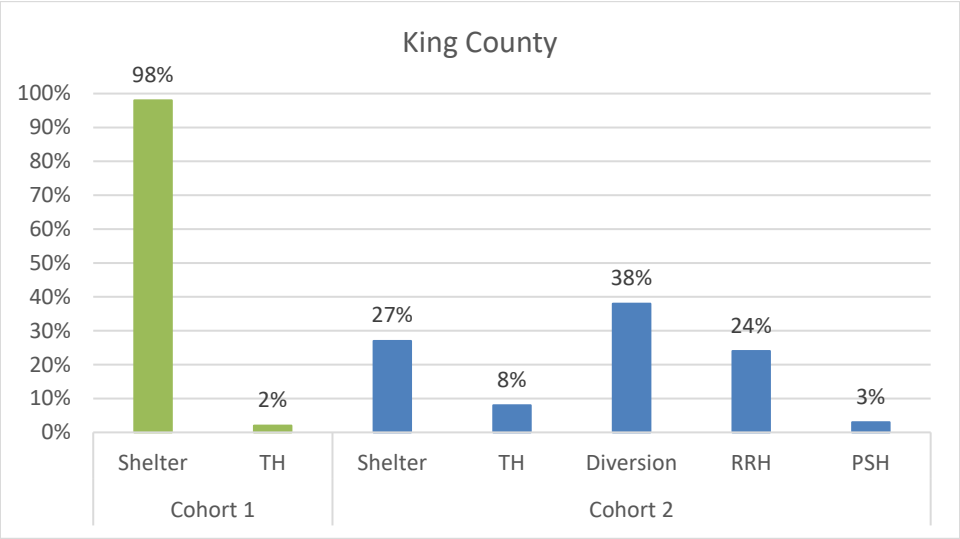
The Family Impact Study: Seeking and Receiving Assistance Before and After Systems Reform

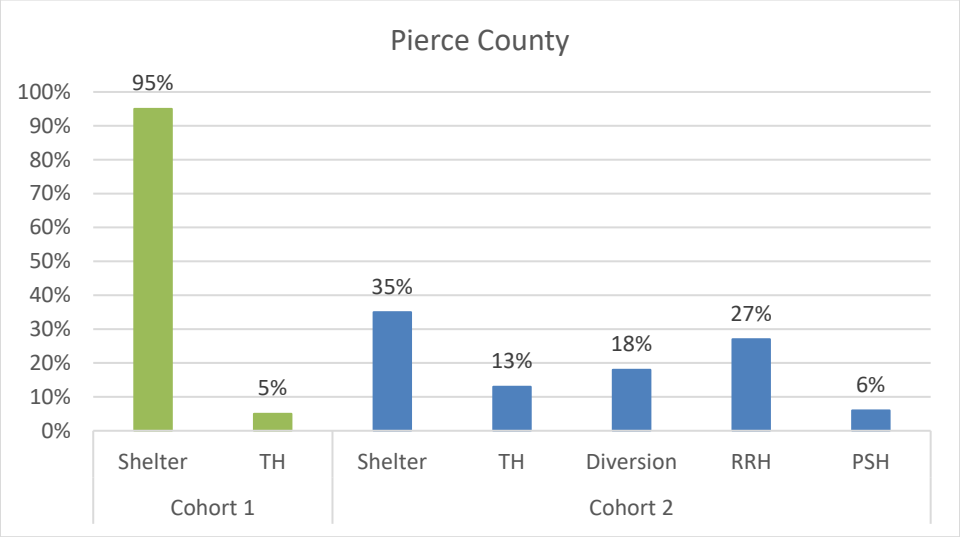
Exhibit E-9. Formal Help Seeking, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=467)	Cohort 2 (N=504)	Cohort 1 (N=156)	Cohort 2 (N=182)	Cohort 1 (N=157)	Cohort 2 (N=157)	Cohort 1 (N=154)	Cohort 2 (N=165)
% contacted homeless system first	72%	76%	72%	84%*	75%	76%	69%	65%
% ever on waitlist	62%	75%**	65%	72%	62%	77%*	59%	77%**
% ever contacted 211	78%	85%*	84%	97%***	70%	68%	81%	90%
# calls seeking assistance								
Mean	98	73**	116	81*	92	58*	86	79
Median	40	30*	50	30**	40	25	30	40
Range	0-500+	0-500+	0-500	0-500	0-500	0-500	0-500	0-500
# organizations contacted								
Mean	11	9	14	10*	10	8	8	9
Median	6	5**	10	5***	6	4*	4	5
Range	0-99	0-100	0-99	1-100	0-80	0-80	0-50	0-100
# different assessments								
Mean	5	5	7	5	5	4	3	5
Median	2	3**	3	3	2	2	0	3**
Range	0-99	0-99	0-99	0-45	0-80	0-50	0-45	0-99
Time to entry (weeks) - Homeless System	(n=330)	(n=342)	(n=113)	(n=142)	(n=115)	(n=116)	(n=105)	(n=94)
Mean	25	38**	25	47**	17	20	35	45
Median	10	14*	9	20**	8	9	15	14
Range	0-500+	0-493	0-196	0-493	0-150	0-270	0-519	0-382

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

Exhibit E-10. Initial Type of Assistance Received, by County





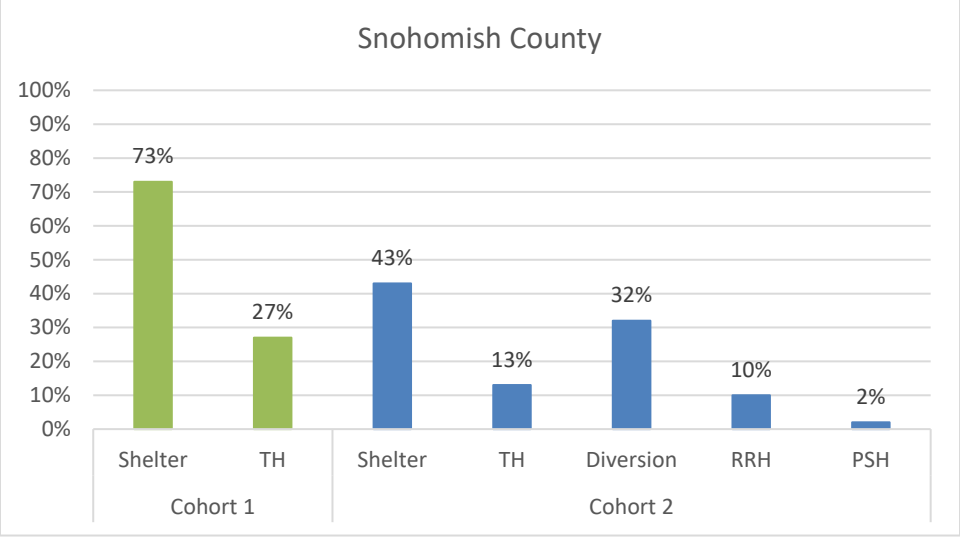


Exhibit E-11. Time to First Enter One's Own Housing, by County

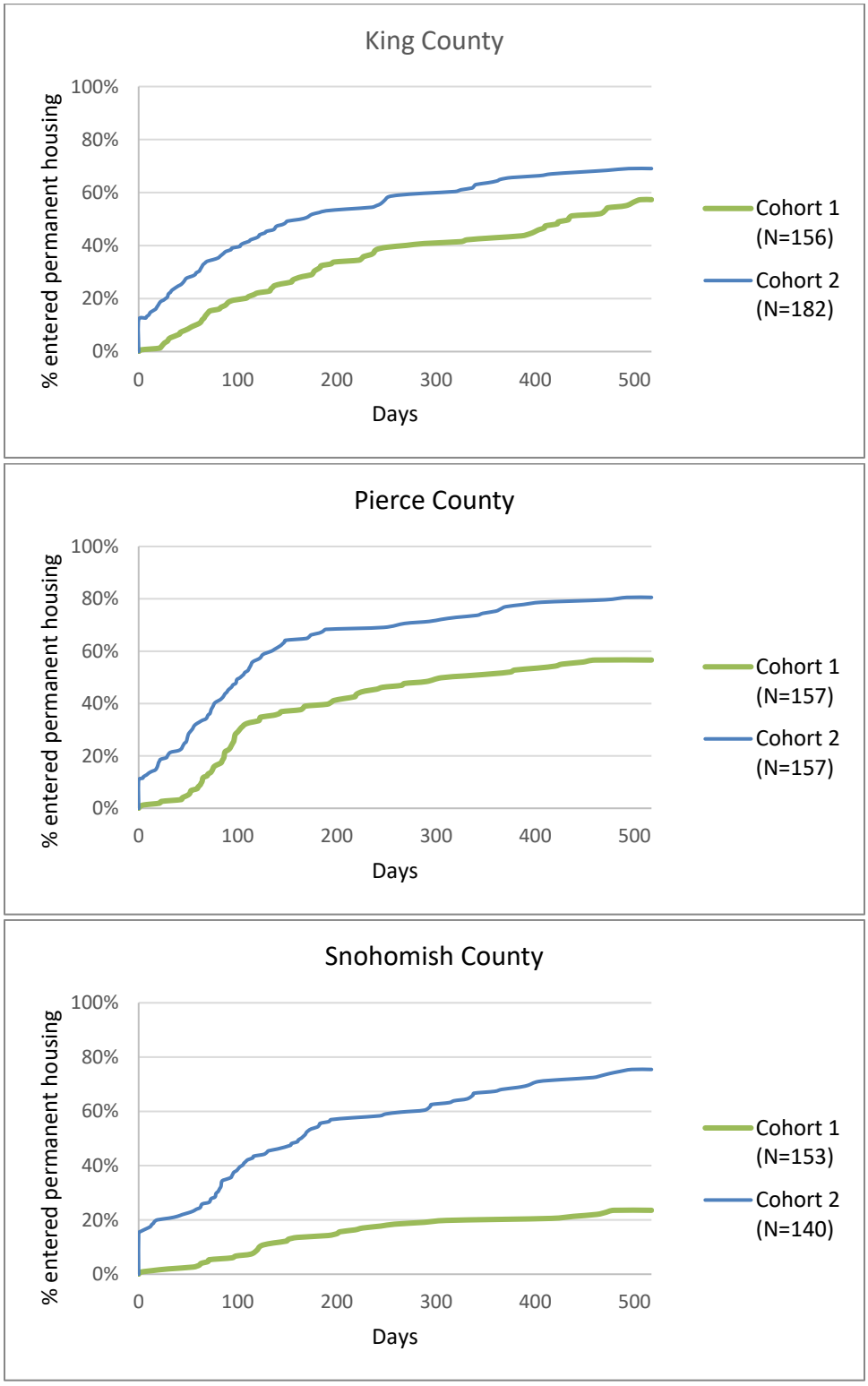


Exhibit E-12. Nights in One's Own Housing in Each 6-month Period, by County

King County

	Cohort 1 (N=134)		Cohort 2 (N=145)	
	% with 1+ nights in own place	# of nights in own place	% with 1+ nights in own place	# of nights in own place
Days 0-180	31%	29	51%***	61***
Days 180-365	45%	70	63%**	98**
Days 365-517	54%	68	64%	83

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

Pierce County

	Cohort 1 (N=126)		Cohort 2 (N=122)	
	% with 1+ nights in own place	# of nights in own place	% with 1+ nights in own place	# of nights in own place
Days 0-180	38%	35	70%***	78***
Days 180-365	48%	72	76%***	122***
Days 365-517	51%	69	71%***	100***

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

Snohomish County

	Cohort 1 (N=131)		Cohort 2 (N=141)	
	% with 1+ nights in own place	# of nights in own place	% with 1+ nights in own place	# of nights in own place
Days 0-180	14%	11	55%***	62***
Days 180-365	19%	30	65%***	102***
Days 365-517	22%	29	72%***	96***

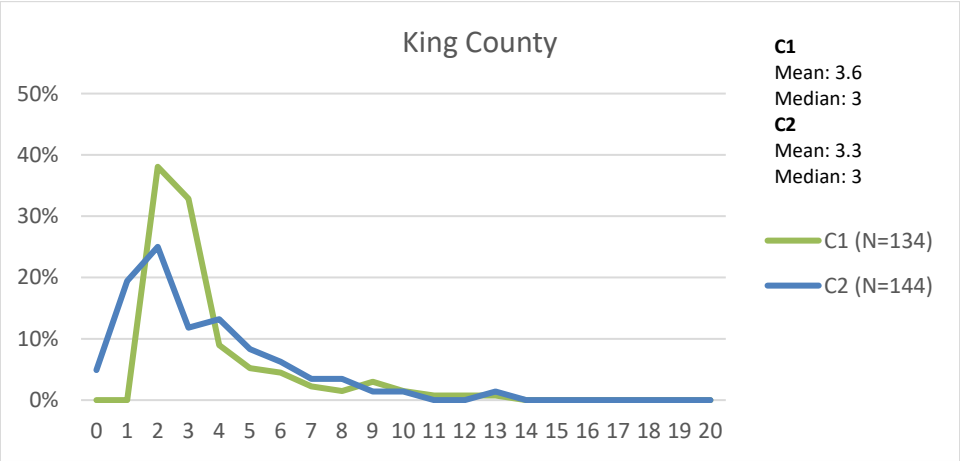
*$p < 0.05$ **$p < 0.01$ ***$p < 0.001$

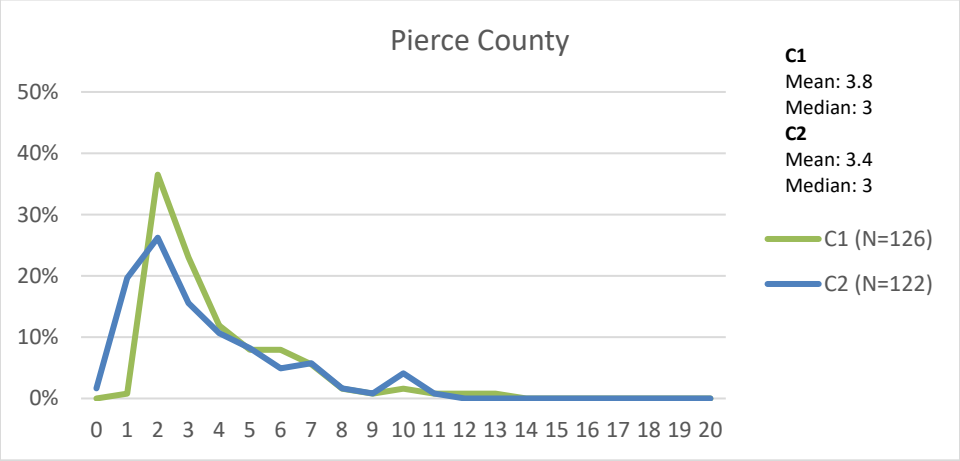
Exhibit E-13. Returns to Homelessness within 12 months among those Entering Own Housing, by County[+]

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=99)	Cohort 2 (N=221)	Cohort 1 (N=36)	Cohort 2 (N=70)	Cohort 1 (N=46)	Cohort 2 (N=83)	Cohort 1 (N=17)	Cohort 2 (N=68)
% Returned to Homelessness								
Overall	9%	11%	3%	13%	11%	10%	18%	10%
Sheltered	7%	6%	0%	4%	2%	5%	6%	6%
Unsheltered	2%	5%	3%	9%	9%	5%	12%	4%
Days to Return								
Mean	216	220	251	261	204	185	223	207
Median	217	237	251	261	182	184	217	207
Range	101-332	39-362	251	84-362	101-332	39-322	141-311	126-307

**p < 0.05 **p < 0.01 ***p < 0.001.* [+] Among those with at least 365 days following entry into housing.

Exhibit E-14. Number of Moves in the 18 Months Following Initial Assistance, by County





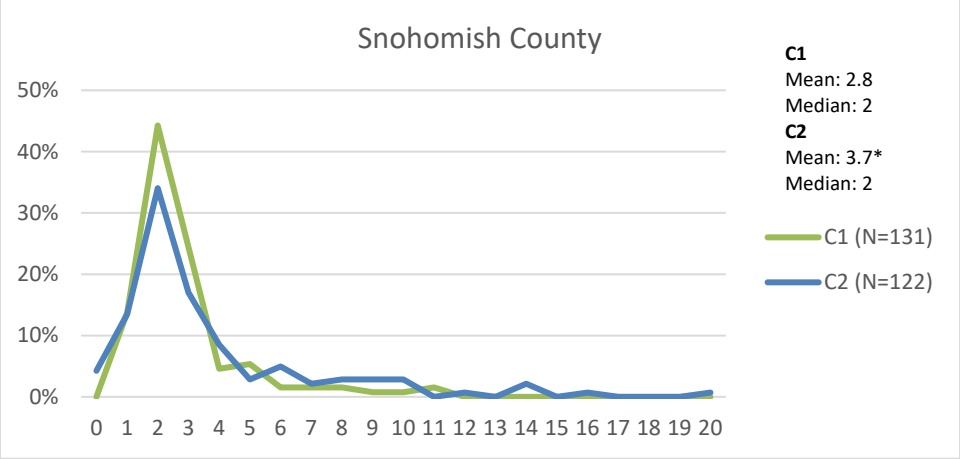


Exhibit E-15. Percent of Families with One or More Nights in Each Location in the 18 Months Following Initial Assistance, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=391)	Cohort 2 (N=408)	Cohort 1 (N=134)	Cohort 2 (N=145)	Cohort 1 (N=126)	Cohort 2 (N=122)	Cohort 1 (N=131)	Cohort 2 (N=141)
Own place	46%	75%***	58%	68%	56%	83%***	24%	77%***
Doubled up	29%	49%***	31%	48%**	38%	57%**	19%	42%***
Homeless, in shelter	90%	55%***	99%	54%***	95%	50%***	76%	61%**
Homeless, unsheltered	5%	34%***	3%	37%***	8%	26%***	5%	37%***
Transitional housing	61%	15%***	57%	21%***	43%	17%***	83%	7%***
Other locations (e.g., motels, hospitals, jail)	12%	28%***	12%	31%***	14%	27%*	9%	26%***

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

Exhibit E-16. Average Number of Nights in Each Location in the 18 Months Following Initial Assistance, by County[+]

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=391)	Cohort 2 (N=408)	Cohort 1 (N=134)	Cohort 2 (N=145)	Cohort 1 (N=126)	Cohort 2 (N=122)	Cohort 1 (N=131)	Cohort 2 (N=141)
Own place	138.0	266.0***	168.3	242.5**	175.6	300.2***	70.8	260.5***
Doubled up	48.4	84.9***	43.3	80.4**	74.5	93.5	28.6	82.1***
Homeless, in shelter	102.7	63.5***	105.8	58.7***	102.3	44.0***	100.0	85.1
Homeless, unsheltered	2.9	38.7***	0.8	48.2***	6.4	15.5*	1.9	49.2***
Transitional housing	215.5	49.4***	189.7	73.6***	148.2	52.8***	306.5	21.6***
Other locations (e.g., motels, hospitals, jail)	8.5	14.5	9.1	13.6	10.1	11.0	6.3	18.4*

*$p < 0.05$ **$p < 0.01$ ***$p < 0.001$. [+]Average is calculated for the full cohort of families with 18 months of follow-up data.

Exhibit E-17. Average Number of Nights in Location Type in the 18 Months Following Initial Assistance, by County[+]

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=391)	Cohort 2 (N=408)	Cohort 1 (N=134)	Cohort 2 (N=145)	Cohort 1 (N=126)	Cohort 2 (N=122)	Cohort 1 (N=131)	Cohort 2 (N=141)
0 – 180 Nights								
Own place	25.0	66.5	29.4	61.2	34.6	77.9	11.3	62.3
Doubled up	12.6	29.0	10.1	30.8	21.7	32.5	6.4	24.1
Homeless, in shelter	84.8	44.2	93.3	37.1	80.2	34.9	80.5	59.5

Homeless, unsheltered	0.8	16.5	<0.1	20.1	2.3	7.8	0.1	20.4
Transitional housing	54.4	17.3	44.7	24.5	38.6	22.0	79.5	5.7
Other locations (e.g., motels, hospitals, jail)	1.9	6.5	2.4	6.3	2.6	4.9	0.5	8.0
181 – 365 Nights								
Own place	57.5	106.6	70.4	98.0	72.2	122.1	30.1	101.9
Doubled up	18.6	29.2	14.9	25.6	28.9	30.9	12.5	31.4
Homeless, in shelter	12.8	12.4	10.6	12.6	12.9	5.0	14.9	18.7
Homeless, unsheltered	1.3	13.0	0.6	17.1	3.0	2.2	0.2	18.0
Transitional housing	90.4	18.9	84.2	27.7	62.6	19.8	123.6	9.2
Other locations (e.g., motels, hospitals, jail)	4.0	4.9	4.3	4.0	5.4	5.1	2.4	5.7
366 – 517 Nights								
Own place	55.4	92.9	68.4	83.3	68.8	100.2	29.3	96.3
Doubled up	17.2	26.7	18.2	24.0	23.8	30.1	9.7	26.6
Homeless, in shelter	5.2	6.9	1.9	9.1	9.3	4.2	4.7	6.9
Homeless, unsheltered	0.9	9.3	0.1	11.0	1.0	5.5	1.5	10.8
Transitional housing	70.6	13.2	60.9	21.4	47.0	11.0	103.4	6.7
Other locations (e.g., motels, hospitals, jail)	2.7	3.1	2.4	3.2	2.2	1.0	3.4	4.8

**p < 0.05 **p < 0.01 ***p < 0.001.* [+]Average is calculated for the full cohort of families with 18 months of follow-up data.

Exhibit E-18. Where Families Were Living 18 Months Following Initial Assistance, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=391)	Cohort 2 (N=408)	Cohort 1 (N=134)	Cohort 2 (N=145)	Cohort 1 (N=391)	Cohort 2 (N=408)	Cohort 1 (N=134)	Cohort 2 (N=145)
Own housing	39%	62% ***	50%	55%	47%	64%**	21%	66%***
Doubled Up	10%	18% **	12%	16%	13%	21%	6%	16%**
Shelter	3%	4%	<1%	7%**	4%	2%	3%	2%
Transitional Housing	45%	8%***	71%	29%***	33%	7%***	67%	5%**
Unsheltered homeless	<1%	6%***	<1%	6%*	<1%	4%	<1%	9%**
Other (e.g., motels, institutions)	2%	3%	4%	3%	2%	2%	2%	2%

**p < 0.05 **p < 0.01 ***p < 0.001*

Exhibit E-19. Employment in the 18 Months Following Initial Assistance, by County

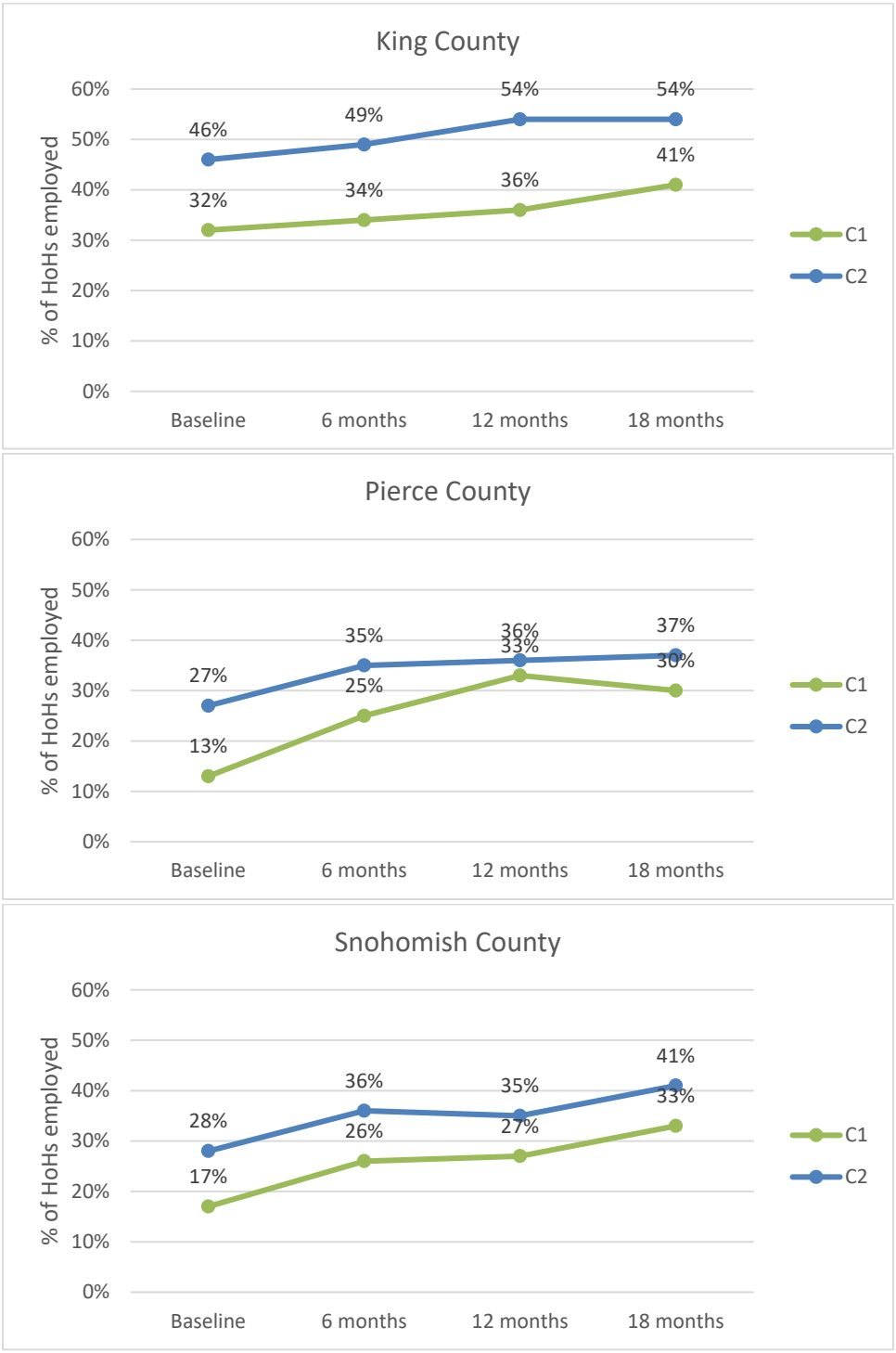


Exhibit E-20. Months Employed in the 18 Months Following Initial Assistance, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=391)	Cohort 2 (N=408)	Cohort 1 (N=134)	Cohort 2 (N=145)	Cohort 1 (N=126)	Cohort 2 (N=122)	Cohort 1 (N=131)	Cohort 2 (N=141)
Total Months Employed Over 18 Months	5.2	7.1 ***	6.3	9.1***	4.7	5.9	4.5	6.2*
By time period:								
Entry – 6 Months	1.5	2.1***	1.9	2.8**	1.2	1.7*	1.3	1.9*
6 – 12 Months	1.8	2.4***	2.1	3.0**	1.7	2.0	1.5	2.1*
12 – 18 Months	1.9	2.6***	2.3	3.3**	1.8	2.2	1.7	2.3

**p < 0.05 **p < 0.01 ***p < 0.001*

Exhibit E-21. Employment Characteristics for HOHs' Jobs at Time of Initial Assistance, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=391)	Cohort 2 (N=408)	Cohort 1 (N=134)	Cohort 2 (N=145)	Cohort 1 (N=126)	Cohort 2 (N=122)	Cohort 1 (N=131)	Cohort 2 (N=141)
% Employed	21%	34%***	32%	46%*	13%	27%**	17%	28%*
N=	81	139	43	67	16	33	22	39
Hours per week	26	32**	26	32**	32	31	22	31*
Median hourly wage	$9.80	$11.40***	$9.90	$11.70**	$9.90	$11.40*	$9.00	$11.00**
Working multiple jobs	1%	1%	0%	3%	6%	0%	0%	0%
Job offers benefits	15%	42% ***	14%	45% **	19%	45% **	14%	33%
Job types Permanent Temporary Seasonal/Day labor	 63% 25% 9%	 73% 18% 7%	 77% 12% 9%	 76% 16% 4%	 38% 63% 0%	 64%* 27%* 9%	 55% 23% 14%	 74% 13% 10%
Job offers opportunities for advancement	35%	48%	37%	45%	50%	48%	18%	54%**

**p < 0.05 **p < 0.01 ***p < 0.001*

Exhibit E-22. Employment Characteristics for HOHs' Jobs Following Initial Assistance, by County

	Tri-county		King County		Pierce County		Snohomish County	
	Cohort 1 (N=391)	Cohort 2 (N=408)	Cohort 1 (N=134)	Cohort 2 (N=145)	Cohort 1 (N=391)	Cohort 2 (N=408)	Cohort 1 (N=134)	Cohort 2 (N=145)
6 Months								
% Employed	29%	40%***	34%	49%*	29%	40%***	34%	49%*
N=	112	165	46	71	112	165	46	71
Hours per week	30	36**	30	37*	30	36**	30	37*
Median hourly wage	$10.00	$12.00***	$10.00	$13.15**	$10.00	$12.00***	$10.00	$13.15**
12 Months								
% Employed	32%	42%**	36%	54%**	33%	36%	27%	35%
N=	124	172	48	79	41	44	35	49
Hours per week	31	35*	31	36	33	36	30	34
Median hourly wage	$10.00	$12.50***	$10.00	$14.00*	$10.00	$11.60*	$9.70	$12.00***
18 Months								
% Employed	35%	44%**	41%	54%*	30%	37%	33%	41%
N=	136	181	55	78	38	45	43	58
Hours per week	32	36*	32	37*	32	34	31	35
Median hourly wage	$10.20	$12.50***	$10.60	$14.00***	$10.00	$12.00	$10.00	12.00**

**p < 0.05 **p < 0.01 ***p < 0.001*

Exhibit E-23. Monthly Median Income in the 18 Months Following Initial Assistance, by County

Exhibit E-24. Family Intactness in the 18 Months Following Initial Assistance, by County

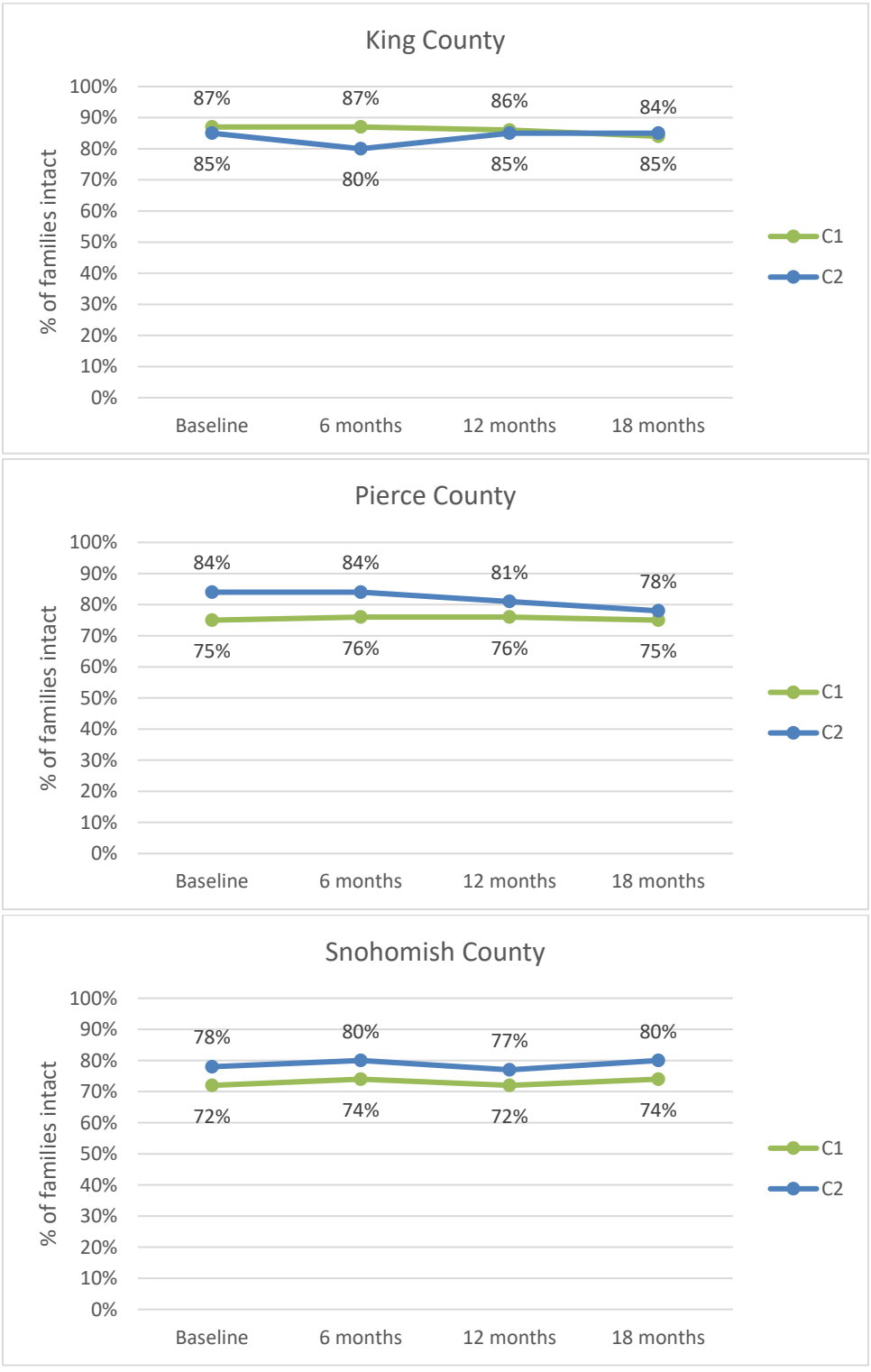


Exhibit E-25. Percentage of Target Children Experiencing Chronic Absenteeism in the 18 Months Following Initial Assistance, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=224)	Cohort 2 (N=265)	Cohort 1 (N=87)	Cohort 2 (N=110)	Cohort 1 (N=78)	Cohort 2 (N=79)	Cohort 1 (N=59)	Cohort 2 (N=76)
Baseline	30%	22%	31%	26%	28%	22%	33%	17%
6 months	28%	23%	21%	21%	29%	18%	35%	29%
12 months	22%	22%	17%	24%	26%	14%	24%	28%
18 months	21%	21%	26%	26%	16%	9%	21%	25%

Exhibit E-26. Cumulative Count of School Transitions due to Housing Among School Aged Target Children in the 18 Months Following Initial Assistance, by County

	Tri-County		King County		Pierce County		Snohomish County	
	Cohort 1 (N=147)	Cohort 2 (N=169)	Cohort 1 (N=62)	Cohort 2 (N=63)	Cohort 1 (N=51)	Cohort 2 (N=48)	Cohort 1 (N=34)	Cohort 2 (N=58)
Baseline								
0	76%	68%	82%	70%	69%	60%	76%	72%
1	24%	32%	18%	30%	31%	40%	24%	38%
6 months								
0	58%	53%	69%	52%	35%	44%	71%	60%
1	36%	42%	27%	43%	57%	46%	21%	38%
2	6%	5%	3%	5%	8%	11%	9%	2%
12 months								
0	37%	37%	39%	40%	27%	23%	47%	45%
1	45%	43%	52%	41%	37%	48%	44%	41%
2	16%	18%	10%	16%	31%	25%	6%	14%
3	2%	2%	0%	3%	4%	4%	3%	0%
18 months								
0	27%	28%	27%	33%	22%	15%	35%	34%
1	37%	37%	39%	35%	31%	35%	41%	40%
2	29%	27%	32%	22%	33%	33%	18%	26%
3	5%	7%	2%	8%	10%	15%	3%	0%
4	2%	1%	0%	2%	4%	2%	3%	0%

Appendix F.
Hierarchical Linear Models Predicting Employment and Housing Stability

We employed hierarchical linear modeling (HLM) to better understand the effect of cohort on the outcome measures, allowing for hierarchical or nested observations. In these models the hierarchical structure is with respect to time, such that time-varying covariates are nested within the covariates that are unchanging over time. This approach allows for an examination of time-varying covariates, such as income or employment, on the dependent variable, controlling for the influence of other key variables included in the model.

Examining the Effects of Cohort on Nights in One's Own Place

Exhibit F-1 presents a model of the effect of cohort and other potential baseline and time-varying covariates on housing stability (number of nights in own place) in each six-month increment. Consistent with our ordinary least squares regression findings, Cohort 2 families were significantly more likely than Cohort 1 families to experience increased number of nights in own place over the follow-up, a finding that remained consistent over time.

Examination of time-varying covariates in the models indicates that, within each cohort, increases in employment over time predict greater increases in time in one's own place. Additionally, experiencing probation or parole over time is associated with fewer nights in one's own place. Changes in income over time and exposure to domestic violence were not related to time spent in housing.

There were a number of significant time-by-covariate interactions, indicating variations in the relationship between the baseline covariates and the outcome over time. In general, these showed greater effects in the first six months of the follow-up than in later months.

Exhibit F-1. Hierarchical Linear Model Predicting Time in Own Place

Covariates[+]	Parameter
Main Effects	
Cohort 2 (compared to Cohort 1)	0.1833***
Age	0.0029*
Race (compared to White)	
Black/African American	-0.0060[1]
Multiracial/other	-0.0111[1]
Hispanic	-0.0696
Spouse/partner	-0.0334[1]
Number of kids (compared to 0 or 1)	
2-3	0.0055[1]
4+	-0.0281
Education (compared to HS)	
Less than HS	0.0197
More than HS	0.0701**
Income at entry	0.0238***
Employed at entry	-0.0318
Ever convicted of a felony	-0.0145
History of domestic violence	-0.0222
Substance abuse screen	0.0286
Mental health indicator	0.0182
Number of nights homeless in the year before entry	0.0000
History of eviction	-0.0694*[1]
Subsidy	0.1027**[1]
Time Varying Covariates	
Employment	3.9868***
Income	-0.9297
Domestic violence	0.0044
Probation or parole	-29.5665***

[1]Significant interaction with time. **p < 0.05 **p < 0.01 ***p < 0.001.* [+]County is included in the model as a covariate but results are not presented in the table; findings indicate that families in Pierce County had more nights in their own place than families in King County over the 18-month follow-up, showing greater increases in the first six months of the follow-up period than in the final six months.

Examining the Effects of Cohort on Employment

Exhibit F-2 presents a model of the effect of cohort and other potential baseline and time-varying covariates on incidence of employment (i.e., being employed one or more months) in each six-month increment (between baseline to six months, between 6- to 12 months, and 12- to 18 months). Consistent with the regression findings, Cohort 2 families were significantly more likely than Cohort 1 families to experience increases in employment over the 18-month follow-up. However, this main effect was qualified by a significant cohort-by-time interaction suggesting a nonlinear relationship between Cohort and employment over time.

Examination of time-varying covariates indicates that a greater number of nights in one's own place was associated with increased likelihood of employment over time. Experiencing probation or parole over time also was associated with a decreased likelihood of employment over time, with HOHs on probation or parole having short-term declines in employment in the first 6 months that subsequently increased. Income was not significantly associated with employment, but interacted with time, such that in Cohort 2 those with greater income experienced greater increases in employment in the last 12 months of the follow-up.

There were several additional significant time-by-covariate interactions, indicating that the relationship between the baseline covariates and the outcome differed at different time periods in the 18-month follow-up.

Exhibit F-2. Hierarchical Linear Model Predicting Employment

Covariates[+]	Parameter
Cohort 2 (compared to Cohort 1)	0.2862*[1]
Age	-0.0396***
Race (compared to White)	
Black/African American	0.4579**
Multiracial/other	0.3154
Hispanic	-0.2504[1]
Spouse/partner	-0.0332[1]
Number of kids (compared to 0-1)	
2-3	0.2729*
4+	0.1813
Education (compared to HS)	
Less than HS	-0.2659
More than HS	0.2970*
Income at entry	0.1249***
Ever convicted of a felony	0.1928
History of domestic violence	0.1302
Substance abuse screen	0.1168
Mental health indicator	-0.1177
Number of nights homeless in the year before entry	-0.0014*
History of eviction	0.7382***[1]
Subsidy	0.1904
Time Varying Covariates	
Nights in own housing	0.6231***
Income	12.8931[1]
Domestic violence	-0.0146
Probation or parole	110.1753*[1]

[1]Significant interaction with time. **p < 0.05 **p < 0.01 ***p < 0.001*. [+]County is included in the model as a covariate but results are not presented in the table; findings indicate that families in Pierce and Snohomish Counties were less likely to experience increases in employment than families in King County over the 18-month follow-up.

Appendix G. Trajectory Analysis

The following exhibits present findings from the trajectory analysis discussed in Section 6.

Exhibit G-1. HOH Demographic and Background Characteristics, by Trajectories in One's Own Housing

	Housing Trajectory Groups					Total for 1-4 (N=311)	Sign. across All	Sign. Traj 1-4 vs 5
	1 Access Early (n=156)	2 Access Later (n=55)	3 Access, Leave, Return (n=42)	4 Access, Leave (n=58)	5 Never Access (n=97)			
DEMOGRAPHICS								
Female respondent	91%	98%	90%	86%	95%	91%	.12	
Age	35	34	33	33	35%	34		
White only	46%	53%	31%	36%	48%	43%	.14	
Black only	22%	22%	33%	34%	23%	26%		
Asian only	1%	2%	2%	0%	1%	1%		
American Indian only	4%	4%	5%	2%	6%	4%		
Pacific Islander only	5%	2%	0%	0%	3%	3%		
Other only	7%	2%	5%	3%	3%	5%		
Multiple races	16%	16%	24%	24%	15%	18%		
Hispanic	12%	11%	7%	7%	19%	10%		*
FAMILY COMPOSITION								
Spouse/partners	31%	24%	29%	28%	25%	29%		
Pregnant	5%	9%	14%	12%	4%	8%	.09	.19
# children <19 yrs	1.96	1.82	1.76	1.48	1.95	1.82	.12	
Intact	82%	82%	90%	75%	80%	82%		
HOMELESS/HOUSING HISTORY								
Ever homeless	40%	51%	45%	60%	41%	46%	.11	
Homeless as a child	15%	15%	12%	26%	8%	17%	.06	*
Homeless in past 2 yrs	18%	26%	28%	38%	17%	25%	*	.12
Homeless night before assistance	47%	42%	50%	54%	52%	48%		
In own housing 1+ nights in past 180	45%	45%	52%	43%	34%	46%		*
In own housing 1+ nights in past 365	62%	47%	64%	52%	42%	58%	*	*
Eviction prior to entry	10%	17%	5%	16%	15%	12%		

	Housing Trajectory Groups					Total for 1-4 (N=311)	Sign. across All	Sign. Traj 1-4 vs 5
	1 Access Early (n=156)	2 Access Later (n=55)	3 Access, Leave, Return (n=42)	4 Access, Leave (n=58)	5 Never Access (n=97)			
EDUCATION AND EMPLOYMENT								
< HS	15%	20%	17%	17%	26%	16%		.05
HS	29%	33%	33%	31%	36%	31%		
Some College	56%	46%	50%	52%	38%	53%	.10	*
Ever employed	99%	94%	100%	97%	98%	98%	.12	
Employed at entry	38%	29%	40%	28%	32%	35%		
RESOURCES								
Median income	$1,099	$608	$1000	$935	$638	$1,000	***	***
Mean income	$1,363	$903	$1983	$1012	$839	$1,177	***	***
Own	47%	29%	52%	34%	42%	42%	.07	
TANF	28%	45%	26%	50%	33%	35%	*	
SSI/DI	22%	20%	12%	29%	13%	22%	.10	.08
Health insurance	97%	98%	98%	98%	94%	98%		.09
Medicaid	36%	35%	38%	39%	31%	37%		
VULNERABILITIES								
History of DV	59%	67%	60%	53%	63%	60%		
Current DV (at baseline)	9%	0%	2%	9%	13%	7%	*	.08
Low health functioning	12%	9%	17%	14%	8%	13%		
MH indicator	51%	58%	55%	60%	62%	55%		
SA screen	15%	23%	22%	21%	19%	18%		
Median debt	$7,675	$6,300	$11,500	$5,350	$4,500	$7,200	.12	**
Mean debt	$22,150	$13,319	$18,429	$12,515	$12,094	$18,289		.07
Felony	14%	17%	21%	26%	16%	18%		
Probation/parole	4%	17%	2%	4%	4%	6%	*	

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

Exhibit G-2. Type of Assistance Received, by Trajectories in One's Own Housing

	Housing Trajectory Groups					Total for 1-4 (N=311)	Sign. across All	Sign. Traj 1-4 vs 5
	1 Access Early (n=156)	2 Access Later (n=55)	3 Access, Leave, Return (n=42)	4 Access, Leave (n=58)	5 Never Access (n=97)			
FIRST ASSISTANCE								
Shelter	33%	40%	21%	34%	31%	33%		
Diversion	26%	38%	36%	26%	37%	29%		
Transitional housing	6%	13%	2%	16%	20%	8%	**	**
Rapid Re-housing	27%	7%	38%	22%	11%	24%	***	**
Permanent Supportive Housing	8%	2%	2%	2%	1%	5%	*	.09
SUBSIDY OVER TIME								
Subsidy at 6m	28%	12%	22%	12%	7%	21%	**	**
Subsidy at 12m	26%	30%	18%	13%	6%	23%	**	***
Subsidy at 18m	29%	35%	21%	10%	7%	25%	***	***

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

Exhibit G-3. Type of Help Finding Housing, by Trajectories in One's Own Housing

	Baseline	6 Months	12 Months	18 Months
Received list of addresses and/or landlords				
Accessed housing	38%	29%	10%	14%
Never accessed	31%	28%	22%*	20%
Received referral to online database of private landlords				
Accessed housing	--	21%	10%	9%
Never accessed	--	15%	22%*	13%
Received help finding an apartment				
Accessed housing	20%	18%	7%	7%
Never accessed	23%	11%	17%*	12%
Received help applying for housing subsidy				
Accessed housing	11%	15%	4%	4%
Never accessed	9%	9%	9%	13%**
Received help dealing with public housing authority				
Accessed housing	17%	13%	7%	6%
Never accessed	9%	11%	9%	14%*
Received help with getting ID or birth certificate				
Accessed housing	19%	17%	10%	6%
Never accessed	18%	12%	12%	17%**

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

Exhibit G-4. Assessment of Housing and Situation, by Trajectories in One's Own Housing

	Baseline	6 Months	12 Months	18 Months
FIT OF HOUSING				
Very Good Fit				
Accessed housing	36%	40%	33%	25%
Never accessed	33%	18%***	18%*	20%
Good Fit				
Accessed housing	24%	25%	24%	25%
Never accessed	29%	16%	16%	21%
Okay Fit				
Accessed housing	28%	22%	26%	33%
Never accessed	28%	33%	25%	31%
Bad Fit				
Accessed housing	5%	6%	7%	7%
Never accessed	3%	11%	16%*	8%
Very Bad Fit				
Accessed housing	6%	7%	10%	9%
Never accessed	8%	22%**	26%***	20%*
LIFE BETTER THAN 18 MONTHS AGO				
A lot better				
Accessed housing	--	--	--	54%
Never accessed	--	--	--	39%**
Somewhat better				
Accessed housing	--	--	--	22%
Never accessed	--	--	--	30%
About the same				
Accessed housing	--	--	--	14%
Never accessed	--	--	--	20%
Somewhat worse				
Accessed housing	--	--	--	6%
Never accessed	--	--	--	1%
A lot worse				
Accessed housing	--	--	--	4%
Never accessed	--	--	--	10%

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

Appendix H. Members of the Evaluation Advisory Committee

The following individuals served as members of the Evaluation Advisory Committee for one or more years of the evaluation from 2010-2020.

Amanda Andere, CEO, Funders Together to End Homelessness

Stephanie Chan, Director of Membership and Programs, Funders Together to End Homelessness

Dr. Gregg Colburn, Assistant Professor Runstad Department of Real Estate, University of Washington

Mary Cunningham, Vice President for Metropolitan Housing and Communities Policy, Urban Institute

Ben de Haan, Executive Director, Partners for Our Children

Anne Fletcher, Social Science Analyst, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Housing and Urban Development

Katharine Gale, Principal Associate, Focus Strategies

Dr. Martha Galvez, Principal Research Associate, Urban Institute

Dr. Jody Becker Green, Deputy Secretary, Washington Department of Children, Youth, and Families

Debbie Greiff, Debbie Greiff Consulting

Katie Hong, Director of Youth Homelessness, Raikes Foundation

Dale Jarvis, Dale Jarvis and Associates, LLC

Ted Kelleher, Manager, Washington State Department of Commerce

Julie Kestle, Snohomish County Family Representative

Sharon McDonald, Senior Fellow for Families and Children, National Alliance to End Homelessness

Jim Mayfield, Senior Research Scientist, Research and Data Analysis Division, Washington State Department of Social and Health Services

Gordon McHenry, President & CEO, The United Way of King County

Katy Miller, Regional Coordinator, U.S. Interagency Council on Homelessness

Ann Elizabeth Montgomery, National Center on Homelessness among Veterans

Dr. Peter Pecora, Managing Director of Research Services for Casey Family Programs, and Professor, School of Social Work, University of Washington

Dr. Robert Plotnick, Professor, Center for Studies in Demography and Ecology, University of Washington

Dr. Beth Shinn, Professor, Department of Human and Organizational Development, Vanderbilt University

Dr. David Takeuchi, Professor, School of Social Work, University of Washington

Cathy ten Broeke, Coordinator, Office to End Homelessness in Minneapolis/Hennepin County

Debbie Thiele, Managing Director, Corporation for Supportive Housing

Lisa Thornquist, Office to End Homelessness in Minneapolis/Hennepin County

Christine VanderWerf, King County Family Representative

Dr. Beth Weitzman, Professor, Steinhardt School of Culture, Education, and Human Development, New York University

From Building Changes:

- Mei Ling Ellis
- Betsy Liebermann
- Emily Nolan
- Annie Pennucci
- Mark Putnam
- Alice Shobe

From the Bill and Melinda Gates Foundation:

- Kollin Min
- Juan Sanchez
- Fannie Tseng
- David Wertheimer