Employment and Earnings Among LA County Residents Experiencing Homelessness

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As nearly 60,000 thousand people are homeless each night in Los Angeles, the public grapples with basic questions about who they are and what factors or events might have led many of them to become homeless. Many perceive the homeless as afflicted by serious mental illness, substance abuse, or physical illness, and in fact many people experiencing homelessness are particularly vulnerable. Yet less is known about the basic economic conditions and the role of unemployment in homelessness. Many assume by default that homeless individuals are not working or haven't worked recently, but these assumptions have not been tested through a systematic study of employment patterns among people receiving homeless services in Los Angeles. Through the first-ever linkage between California state wage records and homeless services data, this study seeks to answer several basic questions: How many homeless people in Los Angeles have a work history in California? How many worked shortly before, during, or after enollment for homeless services? If they are working, how much are they earning and in what industries are they employed?

The study finds that the vast majority of homeless individuals served in Los Angeles County had some record of employment in California prior to becoming homeless (74% with earnings records between 1995 and 2018). While 47% were employed within four years before their first homeless spell, only 19% were employed in the quarter in which they became homeless. While these results suggest a substantial fraction of homeless may be able to work, especially among certain demographic groups, they should not disguise the very low annual earnings for people experiencing homelessness. For all employed homeless, average annual earnings were only $9,970 in the year prior to experiencing homelessness. The discussion below includes more detailed analyses, including employment rates for people receiving different types of homeless services, employment dynamics before, during, and after enrolling into homeless services, and the industries employing the majority of people experiencing homelessness. While this study establishes a baseline level of understanding of the employment histories of homeless individuals, future research should tackle more complex questions, including: to what extent is job loss a direct cause of homelessness? And, how can workforce and training programs successfully prevent homelessness or help people experiencing homelessness to secure gainful employment?

BACKGROUND

On any given night in Los Angeles, nearly 60,000 people are homeless.[1] Each year, tens of thousands of Los Angeles County residents receive help from programs coordinated by the Los Angeles Homeless Services Authority (LAHSA) to prevent or end homelessness, with services ranging from one-time cash assistance to emergency shelter stays to permanent supportive housing. While job loss or low wages are often reported as sources of homelessness risk, little is known about actual employment and earnings histories among people experiencing homelessness in Los Angeles.[2]

Studying employment among people experiencing homelessness is particularly difficult due to lack of access to data that independently measures employment for individuals. Typically, data collected from LAHSA's client management system, the Homeless Management Information System (HMIS), will have clients' self-reported income, but that information may not be reported accurately or captured consistently. State records on earnings provide an independent source of information on employment but must be accessed separately and linked to the HMIS. For this project, CPL linked California state records on earnings to LA County HMIS data. By doing so, CPL is able to analyze an independent, objective record of employment trends to better understand the employment histories and earnings of homeless individuals.

RESEARCH QUESTIONS

CPL's research seeks to answer the following questions:

- What proportion of homeless service clients in Los Angeles are employed?
- Who among the homeless is employed and in what industries are they employed?
- What are the employment dynamics before, during, and after homeless service enrollment?
- What are homeless clients' earnings?
- Who is most likely to be employed after homeless service enrollment?

ACKNOWLEDGEMENTS

DATA AND METHODOLOGY

In October 2018, CPL worked collaboratively with the California Employment Development Department (EDD) to facilitate a linkage of HMIS client data with the Unemployment Insurance Base Wage data. The linkage was made using identifiers collected by both agencies and completed in a secure computing environment at EDD and then de-identified.[3] All subsequent analyses were completed on de-identified data at EDD. More details are available in the accompanying technical appendix.

HMIS Data: The homeless services data include client demographic, program intake, and services receipt information for LAHSA clients enrolled between 2010 and 2018. For the purposes of understanding employment and earnings prior to, during, and after enrolling into homeless services, only individuals' first recorded enrollment in HMIS is used. Because some homeless individuals never access services or interact with service providers, it is possible that the first record of homeless services is not in fact that person's first homeless spell. Nonetheless, the first record of service enrollment is the most accurate proxy we can use for the client's first homeless spell within the administrative data. We used data on new enrollees' last living situation to assess to what extent individuals coming from stable housing have different employment patterns than those that had been homeless for some time.

We limit our sample to single adults and family heads of household age 18 to 70 at the time of enrollment, as our primary outcome of interest is employment. Since they do not fit the U.S. Department of Housing and Urban Development's definition of homelessness at the time of service enrollment, CPL removed 5,433 homeless prevention clients and 11,914 coordinated assessment entries from most of our analyses. Where appropriate and indicated, prevention clients were analyzed separately.

EDD Data: The Unemployment Insurance (UI) Base Wage files contain all Unemployment Insurance-covered employees' wages by quarter for all 92 quarters between 1995 and 2018. The UI Base Wage files do not capture employment or earnings from self-employment, independent contractors, or informal employment. Similarly, the files do not include any employment or earnings information for work outside of the state of California. While workers who are not UI-covered are excluded from EDD records, since the expansion of UI coverage in 1964, most formal employment is "covered" for the purposes of UI.

DEFINED TERMS

"Full sample:" Any single adult or family head of household aged 18 to 70 who was enrolled in homeless services in Los Angeles between 2010–2018 and who supplied a valid social security number to his or her service provider. Clients enrolled in prevention services are not included as they do not meet the HUD definition of homeless.

"Recent workers:" When analyzing employment and earnings changes for the full sample around the time of HMIS entry, we separately analyze those homeless individuals that had some recent employment prior to becoming homeless. These are individuals who worked in any quarter during the third and fourth years prior to their first homeless spell (i.e., quarters -16 to -9).[4]

"Employment:" Having a positive earnings record in EDD UI Base Wage files. EDD records contain all earnings from UI-covered employment in California. They do not cover earnings from self-employment/contract work, informal work, or work done outside of California.

RESULTS

What proportion of homeless service clients are employed?

There are 136,726 homeless clients in the full sample used for this study. Of these, 80% have at least one record of positive earnings in a calendar quarter in California between 1995 and 2018 — either before, during, or after they enrolled in homeless services. Figure 1 shows that 74% were employed prior to their first enrollment, 47% were employed within four years of enrollment, and 37% were employed within two years of enrollment. The fraction of clients that were employed in the same quarter that they enrolled in homeless services drops to 19%.

Those homeless clients that were employed at some point had an average of six years of earnings records (24 quarters with positive earnings). Yet, the median duration since their last employment at the time of service enrollment was over two years (nine quarters).

Table 1 shows demographic characteristics among homeless service clients with any employment. Nearly half of the clients (45%) linked to EDD data were in interim housing and three quarters were single adults without accompanying minor children. The median age at enrollment was 40. Overall, those with any employment were similar to all HMIS clients with a valid SSN in the full sample. Compared to the full sample, those with at least one valid earnings record are somewhat less likely to be single adults, somewhat less likely to be older, and slightly less likely to have a physical disability.[5]

TABLE 1: Sample Demographics by Homeless Service Type

	FULL SAMPLE (PERCENT)	PERMANENT SUPPORTIVE HOUSING (PERCENT)	RAPID REHOUSING (PERCENT)	TRANSITIONAL HOUSING (PERCENT)	INTERIM HOUSING (PERCENT)	STREET OUTREACH (PERCENT)
Gender						
Female	38.5	45.3	55.9	35.7	33.4	44.3
Male	61	54.2	43.8	63.6	66	54.9
Non-Conforming	0.6	0.5	0.3	0.7	0.6	0.8
Age Group						
TAY (18–24)	15.1	9.1	16	27.1	14.4	12.1
25–34	21.6	17.3	30.6	19.1	20.6	20.6
35-49	31.6	32.3	28.5	24.9	32.8	31.3
50-59	22.8	29.5	16.7	21	23.4	24.8
60+	8.9	11.7	8.2	7.9	8.8	11.2
Family Type						
Single Adult	76.4	78.4	51.7	67.3	80.7	81.2
Single TAY	13	6	10.7	23.3	13.1	10.2
Family	9.1	13.8	32.9	8.4	5.5	6
Other	1.4	1.9	4.7	1	0.7	2.5
Race						
Black	46.4	56	52.2	41.4	46.7	38.1
White	24	19.3	14.4	26.5	26	27
Latinx	25.6	20.9	30	27.9	23.1	31.2
Other	3.9	3.9	3.4	4.2	4.2	3.8
Physical Disability	21.1	27.7	21.4	17.4	22.8	20.2
Mental Health Issues	20.2	32.8	14.9	35.3	22	7.4
Substance Use Disorder	14.1	17.3	4.2	42	12.4	3.9

Source: HMIS, 2010-2018. N = 136,726 homeless service clients.

Recent workers have a higher employment rate at the time of their first homeless spell. Among those with any employment in the third or fourth years prior to their first homeless spell, the employment rate in the quarter of entry is 35%, compared to 19% for the full sample.
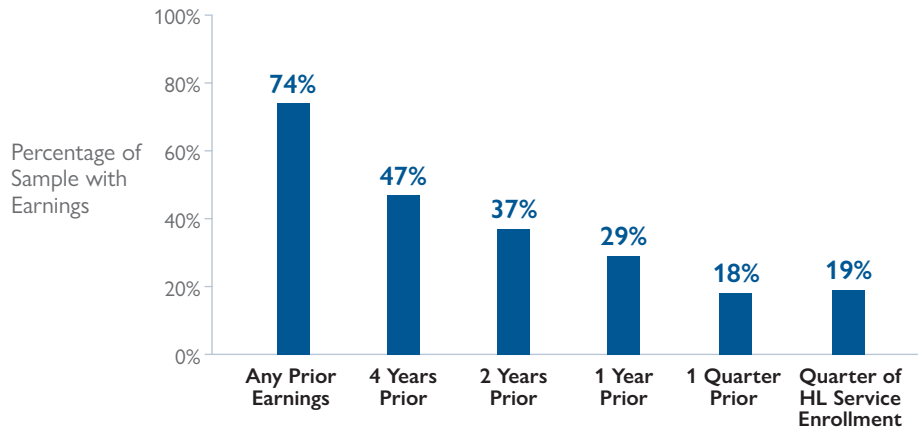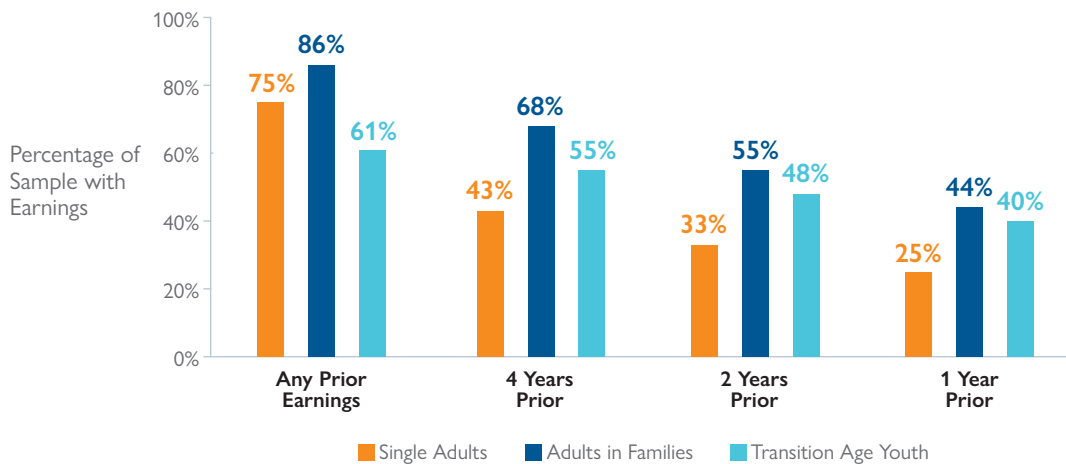
Source: HMIS, 2010-2018. Figure shows the percentage of the sample successfully matched to at least one quarter of covered employment prior to homeless service enrollment. N = 136,726.

Who among the homeless is employed and where are they working?

We first looked at whether employment trends differed by family type. Adults in families have the highest rates of employment; 86% have some recorded earnings prior to service enrollment, compared to 75% among single adults and 61% among transition age youth aged 18–24 (TAY).

While employment drops to 44% in the year prior to service enrollment for adults in families, it is still higher than single adults and TAY individuals, who are employed at 25% and 40% in the year prior to service enrollment, respectively.

FIGURE 2. Adults in families have the highest rates of employment prior to homeless services enrollment
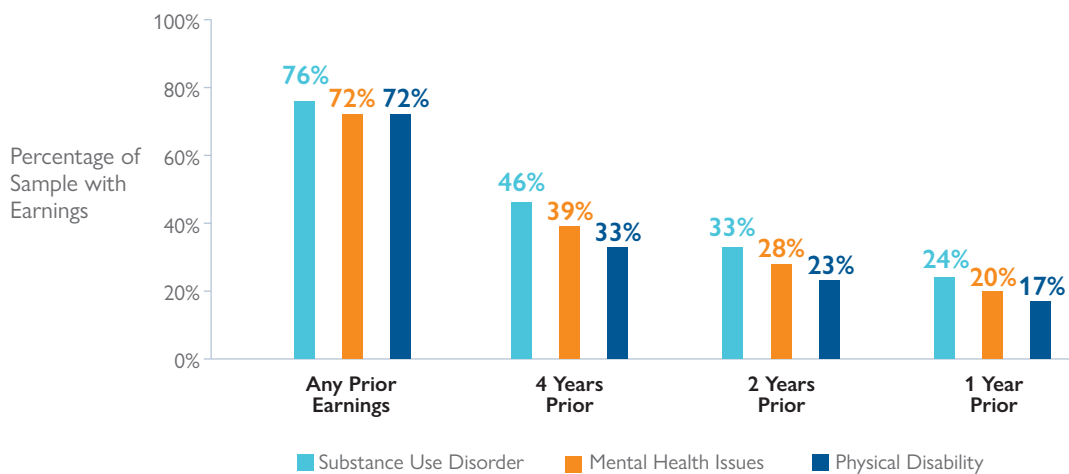

Source: HMIS, 2010-2018. Figure shows the percentage of the sample successfully matched to at least one quarter of covered employment prior to homeless service enrollment. In keeping with LAHSA's definition of family, 1,970 families without minor children are excluded. N = 134,756.

Individuals with self-reported physical health, mental health or substance abuse concerns have lower rates of employment prior to homelessness, particularly so for individuals reporting physical health concerns at entry.[6] Compared to an overall sample average of 29% employment in the year prior to service enrollment, 24% percent of individuals reporting substance abuse disorders, 20% of individuals reporting mental health issues, and 17% of individuals reporting physical disabilities were employed. While individuals with these health issues have non-negligible employment, employment is highest among individuals without these issues. For prime-age workers (aged 25–54) who do not report substance abuse, mental health, or physical health issues, the overall employment rate one year prior to enrollment is 37%, compared to 29% for the full sample. Similarly, 51% of healthy prime-age adults in families work one year prior to enrollment, compared to the full sample that has a 44% employment rate.

FIGURE 3. A significant proportion of the full sample who reported a mental health issue, substance use disorder, or physical disability when they enrolled in services also worked in the years before service enrollment
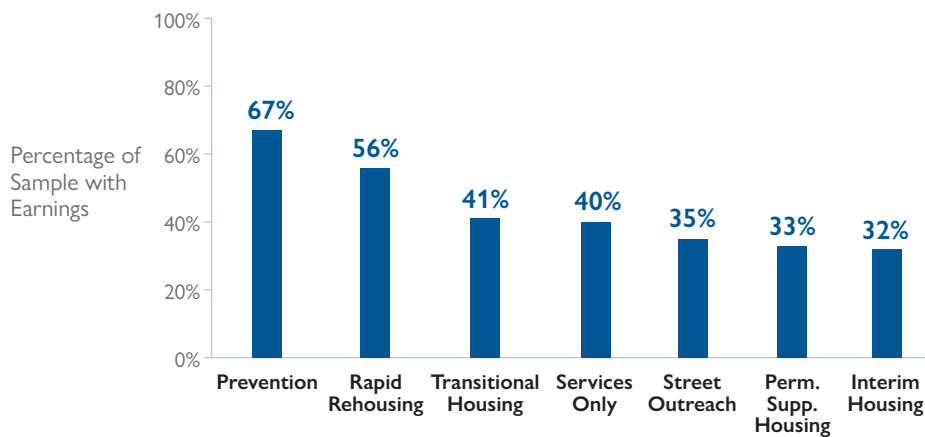

Source: HMIS, 2010–2018. Figure shows the percentage of the sample who report any of the three conditions shown and were successfully matched to at least one quarter of covered employment prior to homeless service enrollment. N = 53,929.

Finally, we looked at employment trends among homeless service clients enrolled in different types of services. There are twelve homeless services program categories, which are organized by the programs' target populations, housing resources, and the nature of services provided. Some programs, such as street outreach, do not provide housing but are designed to connect their target population (i.e., those experiencing street homelessness) to emergency shelters and health services. Other programs provide housing and services at increasing levels of intensity. Those include emergency shelter (also called "interim housing"); rapid rehousing (short term rental subsidies); and permanent supportive housing, which may include both a permanent housing placement as well as support services to help individuals with a history of chronic homelessness and disabling conditions live independently.[7] Prevention is intended to help individuals and families at high risk of homelessness stay in their current housing.[8]

Relative to other program types, clients enrolled in homelessness prevention and rapid rehousing projects had the highest rates of employment in the two years prior to service enrollment, at 67% and 56%, respectively. Clients enrolled in interim housing and permanent supportive housing had the lowest rates of employment in the two years prior to service enrollment, at 32% and 33% respectively.

FIGURE 4.
Homeless prevention and rapid rehousing clients have the highest employment rates in the two years prior to service enrollment

Source: HMIS, 2010-2018. Figure shows the percentage of clients in each service type who were successfully matched to at least one quarter of covered employment in the two years prior to homeless service enrollment. For this analysis 5,433 individuals receiving prevention services were included. N = 142,159.

The EDD data also reports the most recent industry in which homeless clients were employed. Over 60% of those employed prior to service enrollment worked in just four industries: (1) 28% in administrative support, waste management, and remediation services; (2) 14% in health care and social assistance; (3) 12% in accommodation and food services; (4) 11% in retail trade.[9] This information may be useful for identifying opportunities to develop or assess employment assistance programs for individuals who have lost jobs in one of those industries.

What are the employment dynamics around homelessness?

In order to focus on employment and earnings around the time when individuals became homeless, we analyze quarterly employment and earnings records within a two-year window of entry into the HMIS system. In the following analyses, "quarters -8 to -1" refer to the two years prior to homelessness, "quarter zero" refers to the quarter of service enrollment, and "quarters +1 to +8" refer to the two years after entry into the HMIS.

To better understand employment dynamics for individuals who are likely capable of participating in the labor market, we separately analyze individuals with recent employment. For the purposes of this study, we refer to these clients as "recent workers" and they are defined as having positive earnings three or four years (or in "quarters -16 to -9") prior to entry. Their employment trends are then compared to the full sample, whose employment history may lie outside the two-year window around homelessness we focus on in this brief. Studying individuals with recent employment is important, since these are individuals that may be more likely to respond to efforts to reintegrate the homeless into the labor market.

The fraction of individuals employed among the two groups is shown in Figure 5. On average, recent workers had substantially higher quarterly employment rates than the individuals in the full sample.

Turning to dynamics, the employment rate in the eight quarters prior to service enrollment is relatively flat for the full sample during this period, hovering between 18–19%.

In contrast, the employment rate declines for recent workers from 46% at quarter -8 to 33% at quarter -1. Yet in the two years after service enrollment, employment for recent workers never recovers to the rates seen between quarters -8 and -3.

Another way to state this result is in terms of the annual employment rate, i.e., the fraction of workers with some employment in a given year. Recent workers experience a

significant decrease in the annual employment rate of 15 percentage points prior to homelessness. The full sample experiences a smaller reduction of six percentage points. Yet, recent workers still have higher employment than the full sample. Two years after service enrollment the annual employment rate is 38% for recent workers, compared to 23% for the full sample.

FIGURE 5. Employment among recent workers declines prior to service enrollment and does not recover to pre-enrollment levels
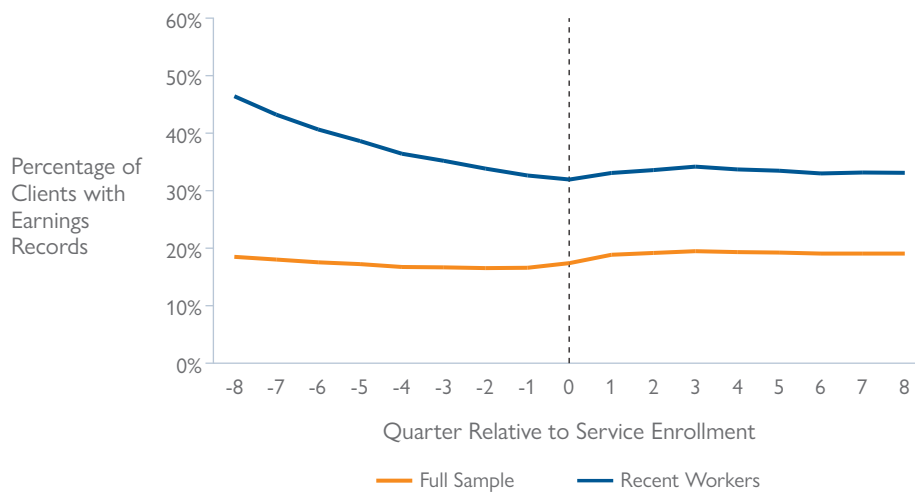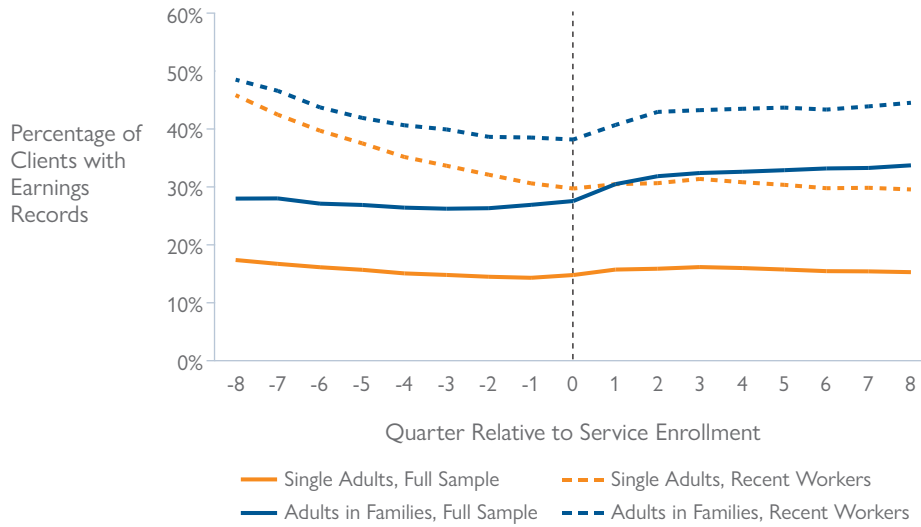

Source: HMIS, 2010–2016. Figure shows the percentage of the sample successfully matched to covered employment in a given quarter relative to enrollment in HMIS. Recent workers are those with any recorded earnings in quarters -16 to -9, relative to service enrollment. N = 100,693 (including 37,151 recent workers).

The difference in employment dynamics between the full sample and recent workers is especially evident when we break out the clients by household structure. Recently working single adults see sharper declines in employment prior to service enrollment than adults in families, from 46% in quarter -8 to 31% in quarter -1. Employment among recently working adults in families declines as well prior to service enrollment, from 49% to 39% between quarters -8 to -1.

Employment among adults in families rises noticeably starting with enrollment, with a sharp rise from 39% to 44% for recent workers and a more gradual increase from 28% to 34% among the full sample.[10] For these workers access to homelessness services appeared to have coincided with a partial recovery in employment rates. In contrast, across the seventeen quarters of our observation period, the full sample group of single adults' employment is relatively flat, hovering between 14–17%.

FIGURE 6. **Recently working single adults see sharper declines in employment prior to service enrollment**
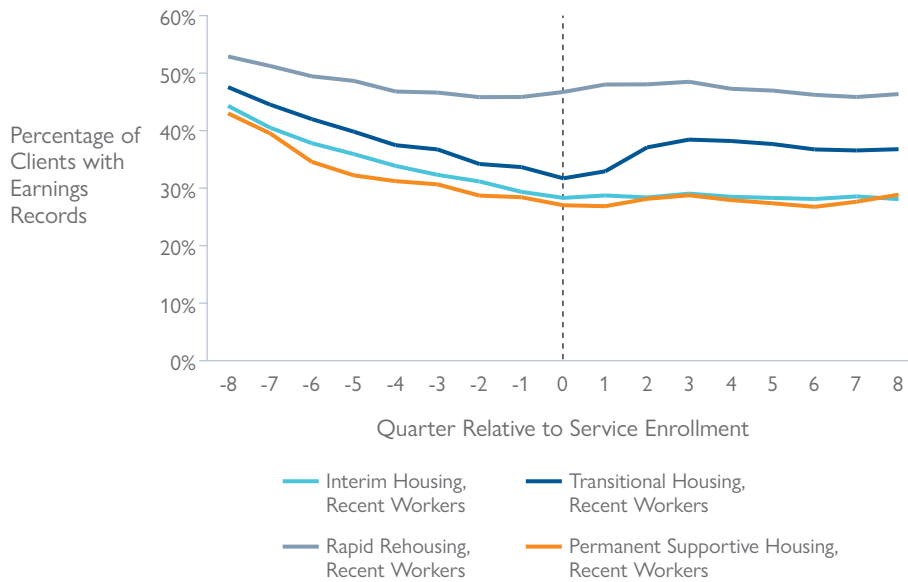

Source: HMIS, 2010–2016. Figure shows the percentage of the sample successfully matched to covered employment in a given quarter relative to enrollment in HMIS. Recent workers are those with any recorded earnings in quarters -16 to -9, relative service enrollment. Full sample N = 86,880 (including 32,443 recent workers)

We also analyzed employment dynamics around HMIS enrollment for individuals receiving different homelessness services. Focusing on recent workers that have more salient employment dynamics around homelessness, rapid rehousing clients have the highest employment rates and suffer the smallest employment losses. Transitional housing clients see the largest increase in employment after service enrollment, from 32% employment at quarter 0 to 38% at quarter +3.

This seven percentage point increase in employment may be a result of service providers' eligibility requirements that can include gaining and securing employment. For comparison, clients entering interim housing (emergency shelters) and permanent supportive housing see a large permanent reduction in employment without any meaningful recovery at entry.

FIGURE 7. Transitional housing clients see a boost in employment after service enrollment among recent workers
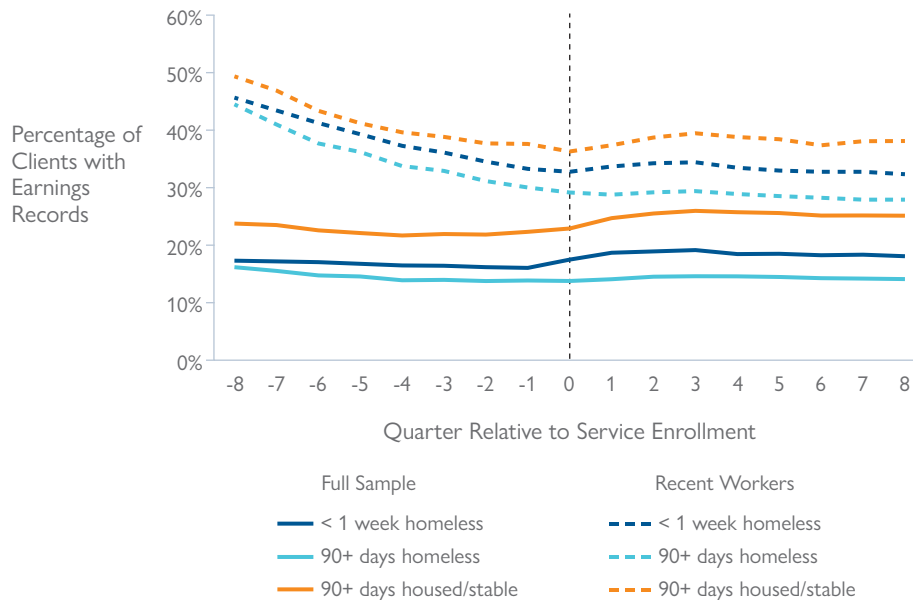

Source: HMIS, 2010–2016. Figure shows the percentage of recent workers successfully matched to covered employment in a given quarter relative to enrollment in HMIS. Recent workers are those with any recorded earnings in quarters -16 to -9, relative to service enrollment. N = 27,842.

We also analyzed potential changes in the types of jobs that homeless individuals held before and after HMIS enrollment. While industries of employment change somewhat around service enrollment, homeless service clients continue having most of their employment in the following four industries. For example, at the time of HMIS entry, more than half (65%) of those working during the quarter of homeless service enrollment were employed in administrative support, waste management, and remediation services (28%), health care and social assistance (14%), accommodation and food services (12%), or retail trade (11%).

An important question is whether the pattern we see around enrollment into services is due to entry into homelessness from stable housing, or whether it is due to service receipt among individuals that have already been homeless for some time.[11]

The results indicate that individuals coming from stable housing have higher quarterly employment rates and experience more of an employment recovery after service enrollment than those who experienced a longer period of homelessness. Our results imply that prolonged homelessness is detrimental to employment, and that those recently in stable housing do better even after becoming homeless. The average differences in employment rate by prior living situation are sizeable. Among the full sample, those coming from a stable housing situation have about a ten percentage point higher quarterly employment rate among the full sample, and five point higher employment rate among recent workers. Interestingly, Figure 8 shows that the evolution before and after enrollment in services follows similar patterns. In particular, whether recently stably housed or not, recent workers saw a decline in employment prior to homelessness that occurred over two years prior to service enrollment, whereas the full sample had flat employment prior to entry. We see some lasting increases in employment after service entry for all groups except those that had been homeless for over 90 days.

Percentage of Clients with Earnings Records (y-axis)

Quarter Relative to Service Enrollment (x-axis)

Full Sample
— < 1 week homeless
— 90+ days homeless
— 90+ days housed/stable

Recent Workers
-- < 1 week homeless
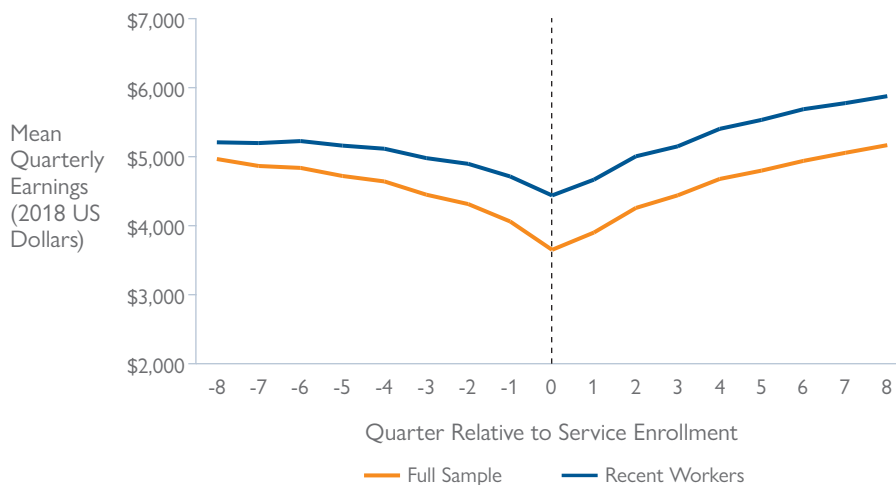-- 90+ days homeless
-- 90+ days housed/stable

Source: HMIS, 2010–2016. Figure shows the percentage of the sample successfully matched to covered employment in a given quarter relative to enrollment in HMIS. Recent workers are those with any recorded earnings in quarters -16 to -9, relative to service enrollment. Type and duration of living situation prior to first service enrollment is taken from HMIS, see text. N = 47,147 for full sample (including 17,323 recent workers).

What are homeless clients' earnings?

Even if a homeless individual is employed, they may be earning low wages. An advantage of our data is that it also allows us to analyze total wages earned in a calendar quarter. When analyzing earnings, we only include the workers with earnings records in the specified quarter of interest. Average earnings for all individuals experiencing homelessness while working are low. We converted earnings to 2018 US Dollars and Winsorize the data to reduce the possible effects of extreme outliers.[12] We found that average quarterly earnings

among the full sample were approximately $4,966 two years before HMIS entry, and dipped to $3,650 in the quarter of service enrollment.[13] As a point of comparison, a full-time worker would earn $6,240 at the minimum wage prevailing in 2018 for firms with less than 26 workers. At that wage level, $5,000 would correspond roughly to two and a half months worked full time. While this seems non-negligible, the annual earnings estimates imply that even working individuals have unstable employment, and hence many quarters with zero earnings.

Source: HMIS, 2010–2016. Figure shows the mean quarterly earnings in 2018 dollars among employed individuals relative to enrollment in HMIS. Recent workers are those with any recorded earnings in quarters -16 to -9, relative service enrollment. Full sample N = 48,476 (including 29,547 recent workers). To reduce any possible effects of extreme outliers, earnings are Winsorized (see text).

In the year prior to service enrollment, employed clients earned an average of $9,970. While this is 82% of the Federal Poverty Level (FPL) for a single person household in 2018, it is only 16% of the Average Median Income (AMI) for Los Angeles County, which is a substantially more expensive place to live than many other areas of the United States.[14]

Recent workers have higher quarterly earnings than all workers. Recent workers employed in the quarter of service enrollment earned 22% more than the full sample, with average quarterly earnings totaling $4,438. As we saw in the previous section, they also have more stable employment than the full sample. As a result, in the full year before service enrollment, recent workers earned $12,121, just under the 2018 FPL for a single person household ($12,140), but still substantially below the AMI of LA County.

Although we observe little recovery in quarterly employment rates for the full sample (e.g., Figure 6), people experiencing homelessness that are employed after service enrollment experience a recovery in earnings. The recovery may be due to an increase in the number of days or the number of hours worked, or because individuals found higher paying jobs. In the second year prior to service enrollment, workers in the full sample made $11,502 while recent workers made $13,163. In the second year after service enrollment, the average working client made $13,311, while recent workers who were working during the observation earned 19% more, or $15,880 on average.

Despite these modest increases, all of the individuals in these groups still have extremely low earnings that are less than 30% of the area median income (AMI) for a single-person household.

FIGURE 10. Recent workers had consistently higher annual earnings than the average client in the full sample
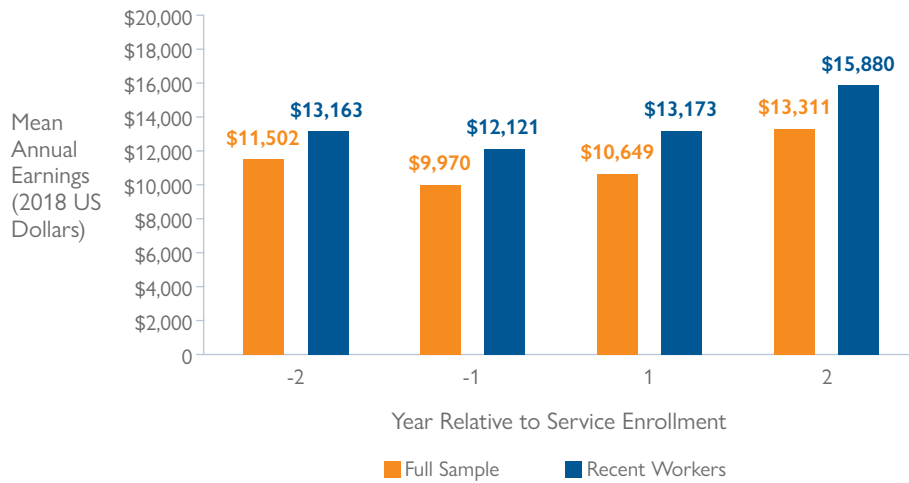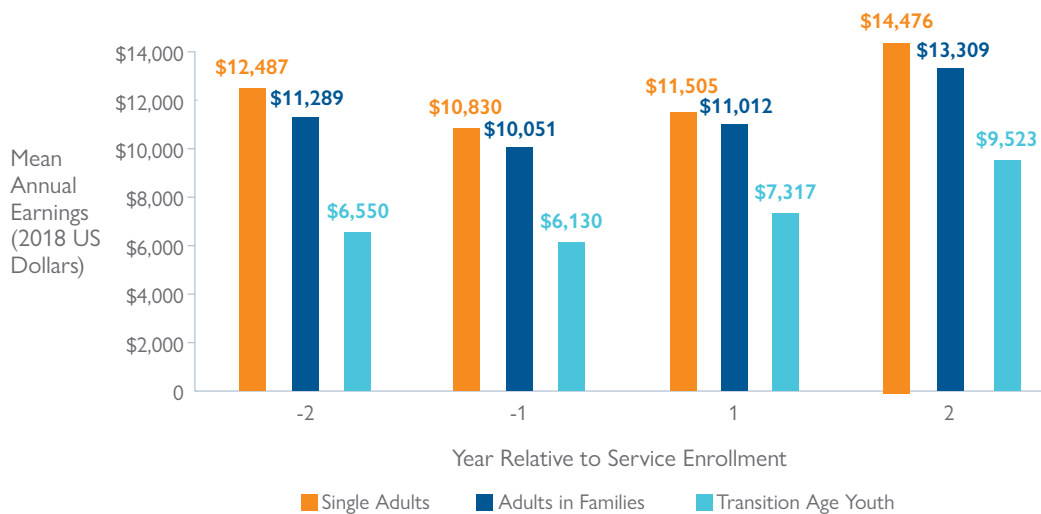

Source: HMIS, 2010–2016. Figure shows the mean annual earnings in 2018 dollars among employed individuals relative to enrollment in HMIS. Recent workers are those with any recorded earnings in quarters -16 to -9, relative service enrollment. Full sample N = 47,879 (including 29,376 recent workers). To reduce any possible effects of extreme outliers, earnings are Winsorized (see text).

The EDD data further allows us to assess who among individuals in the full sample had the highest earnings. Single adults had earnings 11% higher than adults in families in the second year prior to homelessness, averaging $12,487 and $11,289, respectively. While the difference in mean earnings decreases around entry into the homelessness system, by the second year after service enrollment, employed single adults are again earning 9% more than adults in families on an annual basis.

FIGURE 11. Single Adults have the highest average annual earnings before and after service enrollment

Source: HMIS, 2010–2016. Figure shows the mean annual earnings in 2018 dollars among employed individuals by family type relative to enrollment in HMIS. Transition Age Youth (TAY) are individuals between 18 and 24. Total N=47,059. To reduce any possible effects of extreme outliers, earnings are Winsorized (see text).

Who is most likely to be employed after homelessness?

Our data allows us to study which types of homeless individuals are more likely to be employed after entering homelessness, and may therefore benefit the most from supportive services. To predict the likelihood of employment and the amount of earnings after program enrollment, we estimate a series of linear regression models looking at post-entry outcomes.

Our outcomes of interest are as follows:

1. Employment within the first four quarters of a homelessness spell

2. Employment with earnings above the Federal Poverty Line within the first four quarters of homelessness spell

3. Log-transformed total earnings within the first four quarters of homelessness spell, conditional on any earnings

4. Log-transformed total quarters worked after the start of a homelessness spell beginning in 2010–2017, conditional on any employment.

A key advantage of regression models is that the results allow us to assess the contribution of each attribute to the likelihood of employment, holding constant all other individual characteristics. This allows verifying which characteristics we have analyzed so far independently contribute to differences in employment and earnings. All models control for demographic characteristics at entry, homeless services program type, and pre-entry employment and earnings characteristics. Our main analysis focuses on the influence of prior employment history, demographic characteristics, disability status, and HMIS service received on post-entry employment and earnings.

Overall, the strongest determinant of post-entry employment we find is whether a client worked in the past two years before homelessness. If an individual had any employment during that period, it raises the probability of employment within the first four quarters of homelessness by 24 percentage points, an 80% increase compared to the full sample mean of quarterly employment of 30%. If the person had prior earnings above the Federal Poverty Line (FPL), it further raises the probability of employment by an additional 29 percentage points. This result confirms findings of the previous sections that showed that recently employed homeless fared substantially better in the labor

market. While we showed these individuals experienced larger employment losses, workers with prior employment are also substantially more likely to return to work.

Holding other factors constant, our results suggest that the likelihood to be employed within a year of entry into the homelessness system is highest among Transition Age Youth and declines steadily with age. Individuals in families are more likely to be employed than single adults, as are black and Latinx individuals compared to white individuals. Finally, physical health, mental health, and substance use conditions reduce the likelihood of post-entry employment, but conditional on other individual characteristics perhaps less than expected.

The likelihood of having earnings over the Federal Poverty Line after entry into the homelessness system is 6.4% for the full sample.[15] Again holding other factors constant, individuals age 25 to 49 are the most likely to have earnings over the FPL, as are black and Latinx individuals compared to white individuals. As we saw before, adults in families, however, are less likely than single individuals to have earnings over the FPL.

Finally, we find that individuals receiving permanent supportive housing, which is the most intensive homelessness service, individuals in interim housing, and unsheltered individuals reached by street outreach services are less likely to be employed or have earnings over the FPL than individuals in transitional housing, rapid rehousing, or those receiving services unrelated to housing. This is not an unexpected finding because unsheltered individuals or individuals prioritized into permanent supportive housing typically have higher acuity.

When analyzing quarterly earnings of homeless individuals after service enrollment (shown in column 3 of Table 2) we again find that those with prior employment have a substantial advantage, especially if their earnings were above the FPL. While we see a typical hump-shaped earnings pattern in age, unlike in the wider labor market, we find that women and men have roughly similar earnings, there is no penalty for being black, and Latinx individuals even have an earnings premium over white workers. It is also apparent that self-reported health limitations of any kind or substance abuse carry substantial economic penalties. This includes a reduction in earnings of 19.4% for mental health issues; 7.8% for substance abuse conditions; 15.5% for development disability, and 13.8% for physical disability.

Table 2. Determinants of Probability of Working After Entry into HMIS

	PERCENT OF SAMPLE	(1) ANY EMPLOYMENT	(2) EARN > FPL	(3) LN (TOTAL EARN) (IF EARN > 0)	(4) LN (QTRS WORKED) (IF > 0)
Age Group (Ref: 60+)					
TAY (18–24)	14.8	0.160*** (0.011)	0.006 (0.006)	-0.089 (0.061)	0.215*** (0.046)
25–34	21.1	0.114*** (0.006)	0.020*** (0.003)	0.046 (0.054)	0.154*** (0.041)
35–49	32.1	0.086*** (0.004)	0.023*** (0.002)	0.192*** (0.051)	0.158*** (0.038)
50–59	23.4	0.046*** (0.003)	0.012*** (0.002)	0.137* (0.057)	0.084* (0.033)
Male	61.8	-0.004 (0.003)	-0.001 (0.002)	-0.019 (0.023)	-0.087*** (0.011)
Family Type (Ref: Single Adult)	76.9				
Family	9.0	0.071*** (0.006)	-0.048*** (0.004)	0.281*** (0.030)	0.140*** (0.016)
Race (Ref: White)	24.2				
Black	47.1	0.050*** (0.005)	0.015*** (0.002)	0.016 (0.033)	0.093*** (0.013)
Latinx	24.8%	0.036*** (0.004)	0.012*** (0.002)	0.082* (0.033)	0.114*** (0.018)
Physical Disability	21.2%	-0.070*** (0.004)	-0.016*** (0.002)	-0.138** (0.040)	-0.137*** (0.016)
Developmental Disability	5.3	-0.012* (0.006)	-0.006* (0.002)	-0.155** (0.049)	-0.037 (0.025)
Chronic Health Condition	15.3	-0.014*** (0.003)	-0.004* (0.002)	-0.042 (0.035)	-0.038+ (0.019)
Mental Health Issues	23.5	-0.063*** (0.004)	-0.017*** (0.002)	-0.194*** (0.037)	-0.170*** (0.019)
Substance Use Disorder	16.4	-0.005 (0.004)	-0.009*** (0.002)	-0.078* (0.033)	-0.086*** (0.012)

continued

Table 2. Determinants of Probability of Working After Entry into HMIS (continued)

	PERCENT OF SAMPLE	(1) ANY EMPLOYMENT	(2) EARN > FPL	(3) LN (TOTAL EARN) (IF EARN > 0)	(4) LN (QTRS WORKED) (IF > 0)
Program Type (Ref: Services Only)	15.8				
Permanent Supportive Housing	4.5	-0.084*** (0.009)	-0.012* (0.004)	-0.082 (0.074)	-0.035 (0.025)
Rapid Rehousing	8.6	0.050*** (0.010)	0.036*** (0.007)	0.141** (0.044)	0.040* (0.017)
Transitional Housing	10.5	0.048*** (0.008)	0.002 (0.004)	-0.007 (0.039)	0.051*** (0.014)
Interim Housing	50.3	-0.042*** (0.009)	-0.017*** (0.003)	-0.236*** (0.034)	-0.121*** (0.019)
Street Outreach	10.4	-0.073*** (0.012)	-0.012** (0.004)	-0.125* (0.055)	-0.094** (0.028)
Any Employment w/in 4 Years Prior	46.8	0.076*** (0.005)	0.014*** (0.002)	0.066 (0.057)	0.088** (0.022)
Any Employment w/in 2 Years Prior	36.0	0.249*** (0.008)	0.063*** (0.004)	0.455*** (0.046)	0.346*** (0.021)
Earn > FPL Either 2 Years Pre-Entry	6.4	0.304*** (0.010)	0.459*** (0.007)	1.491*** (0.042)	0.489*** (0.028)
Mean Outcome		0.303	0.079	8.203	1.722
Observations		113,813	113,813	34,511	50,122
R-Squared		0.293	0.258	0.167	0.1379

Notes: HMIS, 2010-2017 . Outcomes in Models 1-3 are within 4 calendar quarters after the quarter of HMIS entry. Only select coefficients presented; various demographic, economic, geographic, and industry related coefficients shown in Appendix. Standard errors in parentheses.
Stars reflect underlying p-values: + = p-value < 0.10; * = p-value < 0.05; ** = p-value < 0.01; *** = p-value < 0.001.

KEY INSIGHTS

- 74% of the homeless population has recorded earnings in CA prior to homeless service enrollment, but for most homeless, those records are two or more years prior to receiving services.

- 47% of clients have earnings records within four years prior to their homeless spell, and nearly 40% are employed within two years of their homeless spell. On average, they worked two of the four quarters in the year before service enrollment.

- Adults in families have the highest rates of recent employment.

- Prevention and rapid re-housing clients are more recently employed and employed at higher rates than clients in other types of services.

- 65% of clients' most recent employment is in just four industries.

- For workers with recent labor market attachment, employment decreases in the two years before service enrollment. The reduction halts and sometimes reverses after enrollment in homeless services. For the average individual experiencing homelessness, employment remains relatively flat before, during, and after enrollment in homeless services.

- Mean earnings are low for new homeless service clients. Earnings among those employed is 16% of the Average Median Income (AMI) in Los Angeles. Recent workers have higher earnings, but their earnings are still only 20% of AMI.

- Mean earnings among the employed drop in the quarter of HMIS entry before rising again.

FUTURE RESEARCH

While this study establishes a baseline understanding of employment rates among people receiving homeless services in Los Angeles, additional research is needed to translate these findings into policy recommendations. Specifically, future research should further explore to what extent job loss is the direct cause of homelessness and for whom. Research should also explore how workforce and training programs could prevent homelessness or speed up exits from homelessness. Finally, while this study utilizes the first-ever linkage between state wage records and homeless services data, it does not contain critical information on income from social safety net programs, like Supplemental Security Income, General Relief, CalWORKs, or CalFRESH. Linking these data would provide policy makers a more complete view of income for homeless individuals.

Endnotes

1   2019 Greater Los Angeles Homeless Count- Los Angeles County: https://www.lahsa.org/documents?id=3423-2019-greater-los-angeles-homeless-count-los-angeles-county.pdf

2   Predicting and Preventing Homelessness in Los Angeles (December 2019): https://www.capolicylab.org/predicting-preventing-homelessness-la/

3   Over 70% of all HMIS clients had the identifiers necessary to complete a linkage with EDD data. Using Probit regression, we created a dataset with sampling weights based on likelihood of having those identifiers in the HMIS data. We found no significant differences in our results and those produced using a sample that was reweighted to match the characteristics of all clients, whether they have identifiers or not. Thus, we assume there are no significant differences between our sample and all individuals ages 18–70 in the HMIS.

4   This period is deliberately chosen to avoid attributing an employment reduction arising from mean reversion to the enrollment in homeless services.

5   A direct comparison of those with any employment and the full sample is shown in the technical appendix.

6   Disability, health, and substance use disorder information is recorded during the Coordinated Entry System intake process. Examples of assessment questions include, "Do you have any mental health or brain issues that would make it hard for you to live independently because you need help?" and "Do you have any chronic health issues with your liver, kidneys, stomach, lungs or heart?" These questions address serious health concerns and conditions and how they may relate to a person's ability to maintain housing and live independently.

7   Placement into these programs is based upon service provider assessment at intake. Scores on the assessment tool known as the Vulnerability Index — Service Prioritization Decision Assistance Tool help with this assessment.

8   To observe employment rates for all homeless services program categories, we added the 5,433 prevention clients back into the sample (N=142,159).

9   We identify most recent industry of employment using the North American Industry Classification System (NAICS) sector code for the employer linked to individuals' most recent earnings records before homeless service enrollment. See appendix for full set of recent industries. Missing observations excluded from denominator when calculating percentages. For more information on NAICS and details regarding each sector, visit https://www.census.gov/eos/www/naics/.

10   Employment among transition age youth increases for both the full sample and recent workers. This is likely due to individuals joining the labor market as they age.

11   Using self-reported information from the HMIS on a client's living arrangement and its duration prior to service enrollment, we compare employment patterns for three groups of individuals: 1) clients that at the time of enrollment had been homelessness for three months or more 2) clients that enrollment had been homelessness for less than a week 3) clients that prior to enrollment had been stably housed for three months or more.

12   In Winsorizing, outliers are replaced with values corresponding to a specified percentile of the data. In this analysis, we set all income values higher than the 99.95th percentile to the income at the 99.95th percentile. We also set income values lower than the 0.1th percentile to the 0.1th percentile.

13   For average earnings calculations, we only included individuals who were working during the specified period. For instance, the average earnings of $3,650 at the quarter of service enrollment was calculated using only the earnings of those who were working in that quarter.

14   In 2018, the Federal Poverty Level for a single person household was set at $12,140. https://aspe.hhs.gov/2018-poverty-guidelines. The FPL is used to determine financial eligibility for government programs and is set annually by the Department of Health and Human Services. The Area Median Income in 2018 for Los Angeles County was $61,015. The AMI is calculated by county or metropolitan area by the Department of Housing and Urban Development using estimates from the American Community Survey. Since it is calculated for individual regions rather than nationally it thus more sensitive to local economic factors than the Federal Poverty Level. The AMI is the midpoint of a region's income, meaning half of the region's earners earn more than AMI and half earn less. The Department of Housing and Urban Development sets income thresholds based on the AMI. Like the FPL, these thresholds are used to determine eligibility for HUD funded housing programs. https://www.census.gov/quickfacts/fact/table/losangelescountycalifornia/INC110217#INC110217.

15   Our analysis divides the FPL into four equal parts and then compares quarterly earnings to the quarterly FPL. A single adult with earnings over $12,140/4 = $3,035 or a head of household with earnings over $25,100/4 = $5,025 in any quarter within a year of entry into homelessness is considered to have earnings over the FPL.