# Results of the 2021 Greater Hollywood Volunteer Homeless Count

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# **Abstract**

Data from February 25, 2021 censuses of Hollywood and East Hollywood show that unsheltered homelessness has fallen by  $10\% \pm 9\%$  and  $15\% \pm 12\%$ , respectively, in those communities compared to the 2020 LAHSA Count (90% CI). A 30% drop in individuals seen on the street drives this change, reducing the number of identified persons and dwellings in about a third of census tracts. The unsheltered population is thus likely to have declined even if average dwelling occupancies are updated. Nevertheless, 28% of tracts saw at least a doubling of tents and makeshift structures. This enhanced visual salience—combined with COVIDrelated sanitation and social service disruptions—would support perceptions that conditions worsened over the past year despite the potential success of initiatives to bring and keep Angelenos indoors. Coordinated Entry System data will reveal whether homelessness has declined in general, or merely Greater Hollywood's unsheltered portion.

# 1 Context

The Los Angeles Homelessness Services Authority (LAHSA) conducts an annual Point In Time (PIT)

census of Los Angeles County's unhoused population. These data inform programmatic funding levels, educate residents, undergird legislation, and shape the practices of professional and volunteer service providers.

As the official assessment of the scope of one of our most pressing humanitarian issues, the LAHSA Count is invaluable. Due to disruptions from COVID-19, however, the unsheltered portion of the 2021 count was cancelled. Since 70% of unhoused residents of the City of LA ("LA") were unsheltered in 2020, without additional efforts, this cancellation will substantially erode our understanding of homelessness following an unprecedented year of economic disruption and government intervention—both of which may have significantly affected the number of unhoused Angelenos.

Greater Hollywood is an epicenter of the homelessness crisis. According to the 2020 Count, the Hollywood and East Hollywood Communities were home to 2203 unhoused residents, 1714 of whom (78%) were unsheltered. This figure corresponds to roughly 5% of LA's homeless population in an area with 3.5% of its total population. In some places, 1-in-25 Hollywood residents are unhoused compared to 1-in-100 citywide.

While the above statistics are tragic, Hollywood is

<sup>&</sup>lt;sup>1</sup> https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx; assumes 4M total Angelenos.

also home to large and increasingly robust coalitions of service providers, business leaders, residents, and governmental entities dedicated to humanely housing everyone in their community. Given the capacity of the above organizations and the importance of the annual PIT count in educating residents, funders, and legislators, Hollywood proceeded as a collective to conduct a grassroots PIT count on Thursday, February 25, 2021.

This document details the methodology and findings of that count. Section 2 describes the volunteer training, data acquisition, and analysis protocols. Section 3 presents estimates of the unsheltered populations in Hollywood and East Hollywood, contextualizes them in terms of the 2020 LAHSA PIT results and those communities' total populations, and presents cross-checks. Section 4 provides interpretation and highlights areas where quantitive findings may drive qualitative impressions as to the "felt" state of the crisis. Section 5 summarizes. The Appendix provides additional information, including tract-level tallies and population inferences. All data are available at https://hollywood4wrd.live/2021-homeless-count.

# 2 Methods

### 2.1 Data Acquisition

The count was based out of *The Center in Hollywood* ("The Center"), a major service provider in Hollywood. All volunteers reported and returned to this location as they would a LAHSA community hub in the past.<sup>2</sup> Unlike previous PIT counts, however, training was performed offsite, volunteers never left their vehicles, and all surveying occurred before 10:00 PM.

The count covered the 40 US Census tracts constituting the LAHSA-defined Hollywood and East Hollywood Communities (22 and 18 tracts, respectively). It did not recognize census tract "splits"—e.g., "1905.10a"—which modified of the definition of Hollywood to include all of tract 1905.10 and East Hollywood to include all of tract 1913.01. Since 2016, split 1905.10b has never hosted more than 7 unsheltered people; 1913.01a never more than 15. As such, these modifications do not significantly affect community-level results. Figure 1 shows the count footprint.

All tracts were vetted by outreach professionals from The Center prior to assignment. Tracts deemed especially challenging—e.g., due to their proximity to freeway onramps/peripheries—were reserved for professional counting teams. Vetting produced 9 such tracts, which were surveyed by personnel from The Center and Covenant House circa 3:00 PM on 25 Feb. All but one of the remaining tracts were surveyed by volunteer vehicle-based teams and beginning at 7:00 PM. The final volunteer tract was surveyed on 16 March (Section 2.1.1).

With the exception of one tract in East Hollywood, teams were restricted to one or the other community, making the community-level results nearly independent. Cross-comparisons therefore serve as data quality indicators (Section 3.5). Table 1 records which tracts were surveyed by which kind of team.

Thirty-two volunteer teams participated in the count, which was limited to existing "pods" of two to three people to minimize the possibility of COVID transmission. All participants wore personal protective equipment and maintained social distancing when appropriate.

Counting followed 2020 LAHSA PIT protocols to the greatest extent possible. Each volunteer team comprised at least a driver and a counter and was assigned two tracts. Three-person teams included a navigator, as well. If present, the navigator directed the driver while the counter tallied individuals/dwellings. In two-person teams, the counter doubled as the navigator. Training emphasized techniques aimed at reducing counters' cognitive loads to minimize errors (e.g., covering interior streets in a serpentine pattern before circling the tract border). Teams were instructed to count both sides of interior streets but only interior sides of border streets as described in the official 2020 PIT training materials.

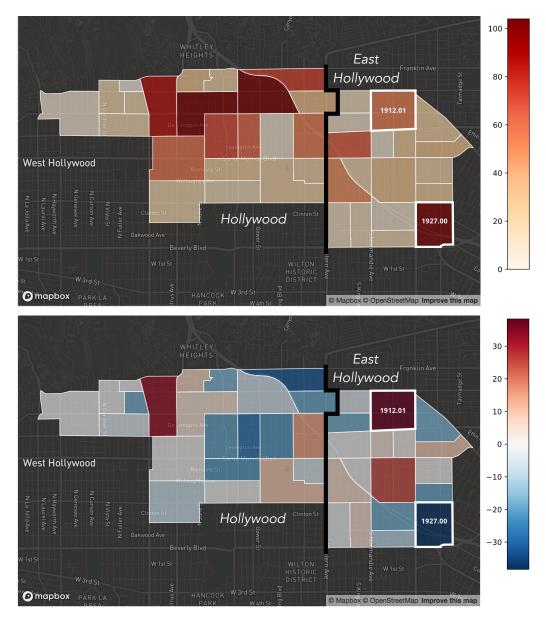
All teams were deployed by roughly 7:30 PM and returned by 9:55 PM.

Upon arriving at The Center, organizers gave each team a clipboard containing two tract maps, two tally sheets, and a 1-page training summary with a contact number for field issues.

The tally sheets were the data acquisition tool. These contained separate columns for each of the nine categories of unsheltered individuals/dwellings recognized in the 2020 LAHSA PIT count:

- 1. adults (ages  $\geq 25$ );
- 2. transition age youths ("TAY," 18–24);
- 3. unaccompanied minors;
- 4. families (at least one adult with at least one minor);
- 5. cars;
- 6. vans;
- 7. RVs;
- 8. tents;

<sup>&</sup>lt;sup>2</sup>Except for those counting tract 1919.02; see Section 2.1.1.



**Figure 1:** The 2021 volunteer count covered the LAHSA-recognized Hollywood and East Hollywood Communities. The former spans Laurel Canyon at Franklin to Western at Melrose. The latter spans Western at Hollywood to Hoover at Temple. *Top:* inferred 2021 unsheltered population (darker is higher). *Bottom:* inferred change from 2020 (red+, blue-). The tracts with the largest gain (1912.01) and loss (1927.00) from 2020 are highlighted in both panels.

#### 9. makeshift structures.

Dwellings—items (5) to (9)—are treated specially in the analysis and hereafter may be referred to as "CVRTM." Adults+TAY may also be combined into "Persons" (P). No families or unaccompanied minors were identified.<sup>3</sup>

See Appendix for examples of the above documents.

Upon returning, counters verbally read their results to organizers who entered them into a Google Form. Organizers verbally confirmed the counts before submitting the form and recovering the paper tally sheets.

Once all materials were collected, organizers crosschecked the electronic records—a Google Sheet generated by the form responses—with the paper tallies and identified any uncounted areas. None requiring followup were found. Disagreements between electronic and paper references were corrected to the paper tally.

<sup>&</sup>lt;sup>3</sup> One potential unaccompanied minor was reported in tract 1912.01 but could not be confirmed by outreach personnel dispatched to that location. One potential family was also reported dwelling in a van in tract 1899.05 but could also not be confirmed. These categories' upper limits capture this uncertainty (3 each at 95% confidence), but their raw counts are set to zero.

Given turnout, every volunteer tract was assigned to at least two teams. Four tracts were counted in triplicate. Beyond increasing the count's accuracy, repeat measurements enhance our understanding of errors (Sections 2.3) and provide robustness: one tally was uninterpretable, leaving only the result from the second team.

All told, the data comprise 38 pair-wise volunteer measurements, one unique volunteer measurement, and nine unique professional assessments. The latter account for  $\sim 20\%$  of tracts in both communities and roughly 40% of identified individuals and dwellings. Year-on-year trends are consistent between volunteer-and professional-counted tracts (Section 3.5).

#### 2.1.1 Tract 1919.02

Tract 1919.02 escaped assignment on the night of the count. This omission was recognized 15 March and the area independently surveyed by experienced volunteers at 6:00 AM (Abramson) and 8:15 PM (Eigenberg) the next day. Despite the 19-day delay, we include these data to conform the 2021 PIT results to LAHSA-defined geographies. While SELAH tract monitoring suggests counts are stable on ~month timescales, no conclusions change if this tract is excluded.

### 2.1.2 Volunteer Training

Teams underwent mandatory,  $\sim 30$  minute Zoom-based training sessions before arriving for the count. Each participant was also required to watch the official 2020 LAHSA PIT training video.

The training covered the motivation for the count, an overview of the survey geography, team roles, and examples of unhoused dwellings. Except for people standing next to tents—as described in the 2020 LAHSA video—volunteers were instructed to count CVRTM and individuals separately and not to estimate how many people might live in or be associated with a specific dwelling. This ensured that results could be analyzed as a function of the CVRTM weights, which may change with future information.

The training primed volunteers only with min/max estimates of tract-level individual+dwelling counts ("0–120") and the likelihood of encountering unaccompanied minors or families ("very unlikely") or TAY ("some tracts, especially in Hollywood"). These statements were informed by the 2020 LAHSA PIT results. No other prior was established. The training presentation is available here.

**Table 1:** 2021 Greater Hollywood PIT Count Summary

Tract	Community	Countera	Passes <sup>b</sup>	Median Est. [people]	90% CI [people]
1898.00	Hollywood	Vol	3	6	0–15
1899.02	Hollywood	Vol	3	18	12-24
1899.03	Hollywood	Vol	2	0	0-12
1899.04	Hollywood	Vol	2	18	11–25
1899.05	Hollywood	Vol	2	19	9-30
1901.00	Hollywood	Vol	2	88	75-102
1902.01	Hollywood	Vol	2	21	13-29
1902.02	Hollywood	Vol	2	30	20-40
1903.01	Hollywood	Pro	1	74	54-96
1905.10	Hollywood	Pro	1	34	22-46
1905.20	E. Hollywood	Vol	2	12	6-18
1907.00	Hollywood	Vol	2	110	93-127
1908.01	Hollywood	Vol	2	63	50-76
1908.02	Hollywood	Pro	1	71	54-90
1909.01	Hollywood	Pro	1	55	39-71
1909.02	Hollywood	Vol	3	6	0-17
1910.00	Hollywood	Pro	1	169	140-201
1911.10	E. Hollywood	Vol	2	9	2-15
1911.20	E. Hollywood	Pro	1	66	48-85
1912.01	E. Hollywood	Vol	2	55	44–68
1912.03	E. Hollywood	Vol	2	26	14-38
1912.04	E. Hollywood	Vol	2	6	0-16
1913.01	E. Hollywood	Vol	2	31	22-42
1913.02	E. Hollywood	Vol	2	23	15-30
1914.10	E. Hollywood	Vol	2	20	13-28
1914.20	E. Hollywood	Vol	2	24	16-32
1915.00	E. Hollywood	Vol	2	29	21-38
1916.10	E. Hollywood	Pro	1	48	31-68
1916.20	E. Hollywood	Pro	1	17	6–30
1917.10	Hollywood	Vol	2	21	14-29
1917.20	Hollywood	Vol	3	21	12-31
1918.10	Hollywood	Vol	2	24	14–34
1918.20	Hollywood	Vol	2	16	10-23
1919.01	Hollywood	Vol	2	60	49–72
1919.02 <sup>c</sup>	Hollywood	Vol	2	19	13–27
1925.10	E. Hollywood	Vol	2	12	4–21
1925.20	E. Hollywood	Vol	$1^{d}$	14	1–28
1926.10	E. Hollywood	Vol	2	7	1–14
1926.20	E. Hollywood	Vol	2	18	9–26
1927.00	E. Hollywood	Pro	1	129	96–167
All			74	1510	1361-1679

<sup>a</sup>Volunteer vs. professional surveyor; <sup>b</sup>no. counting teams; <sup>c</sup> surveyed 16 March; <sup>d</sup>one tally rejected during quality control.

### 2.2 Data Analysis

The data form a  $9 \times 75$  array containing each team's tract-level tallies for each unhoused individual/dwelling class. The population inference entails averaging duplicate tract counts and weighting CVRTM by their mean occupancies. We produce 10,000 realizations of this inference incorporating random perturbations of the counts and weights based on their errors (see below). The final product is a  $9 \times 10000 \times 40$  array that may be split and summed to provide aggregate, tract, or category-level population estimates and uncertainties.

Our baseline result assumes the 2020 SPA4/CD13 CVRTM weights underpinning the 2020 LAHSA Com-

munity Summaries. We recognize that these weights may have changed since they were last defined and encourage robust efforts to reassess them. However, at least one survey of tent-dwellers in Hollywood suggests that the tent weight has remained stable. Section 3.3 reviews the impact of adopting the other CVRTM choices in Table 2; none significantly affects our findings.

## 2.2.1 Monte Carlo Population Inferences

We wish to infer the true unsheltered population in Hollywood and East Hollywood as of 25 February. We do so by constructing probability density functions (PDFs) describing the likelihood of encountering a given number of unsheltered people in those communities as constrained by our PIT data. To accomplish this, we model three known uncertainties: (1) errors in the visual tallies, (2) deviations of the CVRTM weights from their quoted means, and (3) the intrinsic background rate of persons/dwellings in areas where none were actually sighted. Items (1) and (3) reflect how our PIT tally might change if performed at a different time or by different teams. Item (2) reflects how the mean occupancy of CVRTM in our survey area might differ from that in the geography in which the weights were defined.

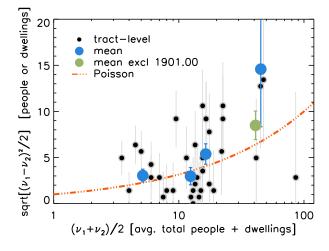
We model count and weight errors as independent random draws from Gaussian distributions with standard deviations of  $\sqrt{n}$  and  $\sigma$ , respectively, where n is the raw PIT tally and  $\sigma$  is the standard error on the respective CVRTM weight, w. The i-th estimate of the true number, N, of people in the j-th unsheltered class in any tract is then:

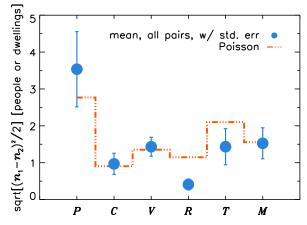
$$N_{i,j} = \left[ n_i + \mathcal{G}_i(0, \sqrt{n_i}) \right] \times \max[\mathcal{G}_i(w_i, \sigma_i), 1], \quad (1)$$

where  $\mathscr{G}(\mu, \Sigma)$  is a Gaussian random number with mean  $\mu$  and standard deviation  $\Sigma$ . If more than one team counted a tract, n is replaced by the average of their tallies and the attendant counting error is divided by the square root of the number of teams. If no members of the j-th unsheltered category were observed,  $\sqrt{n_j}$  is replaced in the first term by that category's estimated background rate,  $\sigma_j^{\rm bkg}$ , discussed in the next section.

The final output PDFs reflect 10,000 realizations of Equation 1. Weights for adults and TAY are fixed to unity— $(w, \sigma) \equiv (1,0)$ —such that uncertainties reflect only counting errors.

We place a floor on the CVRTM mean occupancies at 1 person per dwelling; i.e., we assume that the *mean* person does not own more than one dwelling. This is not to say no one may own more than one, just that such





**Figure 2:** Intercounter result comparisons. *Top:* mean tractlevel differences (large blue points; 10-pair bins) are  $1.4 \times$  the Poisson expectation (dot-dashes;  $\sqrt{\langle v \rangle}$ );  $1.3 \times$  excluding outlier tract 1901.00 (large green point). Small points show pairwise differences. *Bottom:* mean category-level dispersions are consistent with random errors except for RVs, which are identified significantly more consistently. Only means are shown at bottom to reduce clutter.

a statement is never representative. This choice induces a mild asymmetry in our global PDFs but does not significantly affect inferences.

# 2.2.2 Null Entries and Background Rates

Often, no persons or dwellings of a specific category are observed in a given tract. Probabilistically, these data are consistent with non-zero values for the true population. The Monte Carlo PDF reconstruction allows all such entries to fluctuate based on an assumed background rate,  $\sigma_j^{\rm bkg}$ .

Ideally,  $\sigma_j^{\text{bkg}}$  would derive from category variations in similar tracts defined by independent criteria. Sufficient

**Table 2:** 2021 CVRTM Mean Occupancy Assumptions

	$w_C$	$w_V$	$w_R$	$w_T$	$w_M$
2020 SPA4/CD13	$1.51\pm0.25$	$1.77 \pm 0.42$	$1.42 \pm 0.28$	$1.48 \pm 0.11$	$1.68 \pm 0.31$
$2021 \ w_T^{\ a}$	_	_	_	$1.39 \pm 0.14$	_
$2021 w_T$ non-resp model <sup>b</sup>	_	_	_	$1.51\pm0.24$	_
2020 SPA4	$1.38 \pm 0.11$	$1.68\pm0.22$	$1.32 \pm 0.15$	$1.45\pm0.06$	$1.64 \pm 0.16$

The baseline scenario incorporating the is bolded. Dashes denote values identical to entries above them. <sup>a</sup>Reflects occupancy data for 38 out of 47 tents surveyed in Hollywood. <sup>b</sup>Assumes 9 "non-responding" tents sheltered 0–4 occupants each.

data may exist to support that exercise, but it is beyond the scope of this analysis. Instead, we adopt a noise floor based on the counts expected if all members of a given category were distributed evenly across tracts:

$$\sigma_j^{\text{bkg}} \equiv \sqrt{\frac{1}{40} \sum_{\text{tracts}} n_j}.$$
 (2)

While oversimplistic (Section 3.4), this method works for any category for which at least one individual/dwelling was observed in any tract. However, for categories for which this is not the case—unaccompanied minors and families, here—we set  $\sigma_j^{\rm bkg}$  to the lowest non-zero value of the other categories (corresponding to TAY). The adopted backgrounds are thus:

$$\sigma_i^{\text{bkg}} = \{3.1, 0.4, 0.4, 0.9, 1.3, 1.2, 2.8, 2.5, 0.4\}$$
 (3)

adults, TAY, unaccompanied minors, cars, vans, RVs, tents, makeshifts, and families per tract.

Note that the above numbers are not added to null entries, but random draws from normal distributions of that width. This treatment is somewhat arbitrary, but we employ it symmetrically—per-tract category inferences can be negative—so it does not bias the final estimate. Instead, it sets the upper limits of intrinsically rare categories and inflates aggregate uncertainties.

### 2.3 Duplicate Counts

Each volunteer tract in both communities (31) were assigned to at least two independent counting teams. Four tracts additionally received a third pass. Pass 1 paired tracts by tract number. Pass 2 paired projected high-population tracts with ones geographically nearby. Pass 3 was the same as Pass 1 with pairings presented in reverse order, such that teams deployed simultaneously would likely start in different tracts.

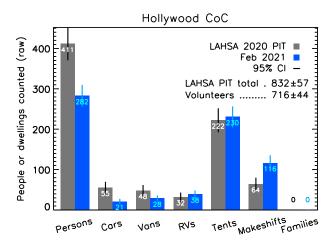
Results for one of the two teams assigned to tract 1925.20 could not be interpreted, making it the only volunteer tract with one population estimate.

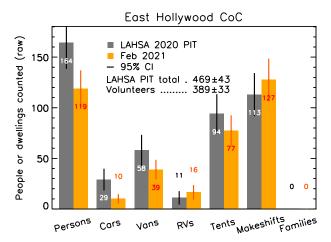
Figure 2 shows intercounter comparisons of raw counts (people+dwellings) at the tract and category levels. Average offsets are close to Poisson expectations in all cases except for the highest occupancy tracts, where they are inflated by an outlier (see below). Explicitly,  $\langle \sqrt{(v_1-v_2)^2/(v_1+v_2)}\rangle = 1.4$ , where v is the total number of dwellings and people in a given tract returned by one of the teams. In the one instance where no persons or dwellings of any kind were identified (tract 1899.03), both teams agreed exactly.

The outlier is tract 1901.00, whose repeat measurements differ by  $6.6\,\sigma$ . There, one team counted  $\{P,C,V,R,T,M\}=\{23,1,1,1,6,2\}$  while the other counted  $\{77,15,10,1,6,6\}$ . Abramson re-counted this tract on-foot 14 hours after the PIT tally, obtaining  $\{36,4,6,0,8,2\}$ . In total, this tally  $(v_{\text{Abr}}=56\pm7)$  is within  $1.9\,\sigma$  of the volunteers' mean  $(\langle v_{\text{PIT}}\rangle = 75\pm6)$ . As such, we retain the volunteer PIT estimate as-is. As illustrated in Figure 2, top, the mean intercounter dispersion drops to  $1.3\,\sigma$  if this tract is excluded.

In terms of categories, all dispersions are consistent with Poisson expectations except for RVs, where agreement is significantly better. Given their salience, this finding is reassuring if unsurprising.

No team counted tracts in both Hollywood and East Hollywood. As such, the volunteer counts in those communities represent independent datasets. Including the professional-counted tracts, cross-talk comes from one tract in East Hollywood counted by a team that surveyed five tracts in Hollywood. We discuss intercommunity comparisons between volunteer and professionally counted tracts in Section 3.5.





**Figure 3:** Raw tallies of unsheltered persons and dwellings in Hollywood and East Hollywood (left/right) from the 2020 and 2021 PIT counts (grey/colors). Persons, cars, and vans fell in both communities; RVs and tents stayed statistically flat. Makeshift structures are the only category to show a potential common increase. Overall, we identified 208 fewer people and dwellings compared to 2020, with similar 16% decreases assessed by almost entirely independent teams in both communities. "Persons" are TAY+Adults.

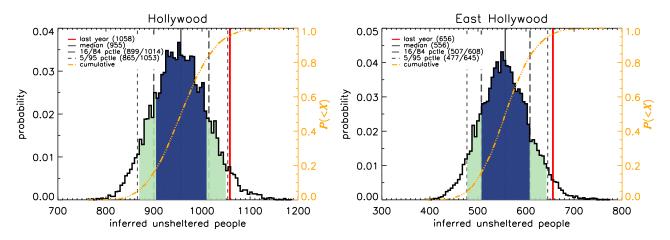


Figure 4: 2021 unsheltered population inferences compared to 2020 PIT results (red vertical lines) using identical CVRTM weights (Table 2). Orange dot-dashes show cumulative probabilities, suggesting a  $\geq$ 95% chance of a year-on-year decline.

# 3 Results

This section presents community- and aggregate-level estimates for the number of unsheltered people living in Hollywood and East Hollywood as of 25 February 2021. Sections 3.1 and 3.2 summarize our results, 3.3 compares them to the 2020 LAHSA PIT estimates, 3.4 quantifies the population's geographic distribution, and 3.5 presents cross-checks.

# 3.1 Hollywood

Counters identified  $715 \pm 45$  (95% CI) persons and dwellings in the 22 census tracts comprising the Holly-

wood Community. Modulated by the baseline CVRTM weights, these estimates imply a total unsheltered population of  $956 \pm 94$  people (90% CI; Figure 4, left), with the plurality (35%) living in tents (Table 3; Figure 3, left). The five tracts counted by professional teams—largely along the US 101 corridor—comprised 41% of raw counts and 42% of inferred unsheltered people. Tract 1910.00 (pro-counted) had the most people and dwellings (123; 170 total population); 1899.03 had the fewest (0; <12 total population).

Modifying the CVRTM weights from the baseline SPA4/CD13 values to their SPA4-wide values lowers Hollywood's inferred total unsheltered population to  $933 \pm 68$  people; applying an updated tent weight based

	Adult	TAY	Car	Van	RV	Tent	Makeshift	2021 Total	2020 Total	Difference
Hollywood										
Counts	280	2	21	28	38	230	116	715	831	-14%
Inhabitants	280 (28)	2(3)	32 (11)	51 (14)	56 (14)	339 (29)	196 (24)	956 (94)	1058	-10% (9%)
Category share	29% (3%)	0% (0%)	3% (1%)	5% (1%)	6% (1%)	35% (3%)	20% (3%)	-	-	
East Hollywood										
Counts	114	4	10	39	16	77	127	389	469	-17%
Inhabitants	114 (19)	4 (4)	15 (8)	70 (15)	24 (9)	115 (19)	216 (23)	557 (83)	656	-15% (12%)
Category share	20% (3%)	1% (1%)	3% (1%)	13% (3%)	4% (2%)	20% (3%)	39% (4%)	-	_	

Parentheses denote 90% uncertainties (binomial for categories). Uncertainties larger than estimates imply only upper limits are available. Marginalized upper limits imply <3 unaccompanied minors and families in either community.

on a survey in Hollywood raises it to  $964 \pm 118$  people (Section 3.3). Neither shift is significant.

### 3.2 East Hollywood

Counters identified  $389 \pm 33$  (95% CI) persons and dwellings in the 18 census tracts comprising East Hollywood. Modulated by the baseline CVRTM weights, these estimates imply a total unsheltered population of  $556 \pm 83$  people (Figure 4, right), with the plurality (39%) living in makeshift structures (Table 3, Figure 3, right). The four tracts counted by professional teams comprised 46% of those counts and 47% of inferred unsheltered people. Tract 1927.00 (pro-counted) had the most people and dwellings (87; 129 total population); 1912.04 had the fewest (5; <16 total population).

Modifying the CVRTM weights from the baseline SPA4/CD13 values to the SPA4-wide values lowers East Hollywood's inferred total unsheltered population to  $539 \pm 59$  people; applying the updated tent weight raises it to  $559 \pm 87$  people. Neither shift is significant.

### 3.3 Comparison to 2020

The official LAHSA estimates from the 2020 PIT count are overplotted in Figure 4 as red vertical lines in each panel: 1058 unsheltered people in Hollywood, 656 in East Hollywood. Our baseline inferences suggest a >95% probability that the current population has fallen from those levels. Using the PDFs' medians and 90% CIs, we infer declines of  $10\% \pm 9\%$  and  $15\% \pm 12\%$ , respectively.

Figure 5 shows the tract-level changes in counts and inferred populations as geographically illustrated in Figure 1. We find significant gains in 7 tracts and significant declines in 14, resulting in net changes of  $-199 \pm 45$ 

and  $-218 \pm 71$  counts or people, respectively.<sup>4</sup> Tract 1912.01 saw the largest year-on-year gain (Barnsdall Park; +40 people), tract 1927.00 the largest loss (US 101; -125 people). Both are located in East Hollywood.

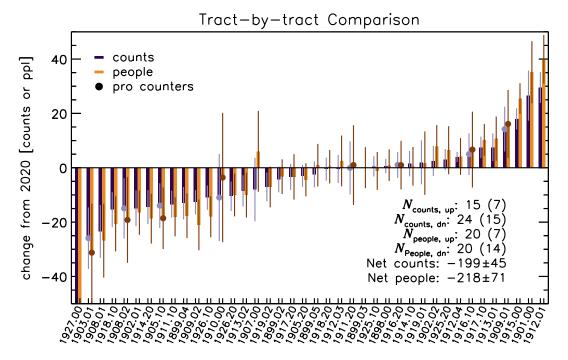
Tract 1927.00 is unique (Section 4). Its precipitous decline since 2020 can account for all of East Hollywood's total unsheltered population change. It is also the only tract assessed by a team that worked in both communities. If it is excluded, we infer  $427 \pm 61$  unsheltered people in E. Hollywood vs. 407 in 2020. Person/dwelling trends remain similar to those in Hollywood regardless of whether 1927.00 is examined, however (Figure 6).

Given the deficit in raw counts, it seems unlikely that reasonable modifications to the CVRTM weights will qualitatively affect our inferences. Nevertheless, due to the high proportion of people living in tents and makeshift structures,  $w_T$  and  $w_M$  are the largest potential error sources.

To constrain their evolution from last year, SELAH outreach teams surveyed 47 tents (38 responses) in Hollywood on 28 Feb. This exercise yielded a mean occupancy of  $w_T = 1.39 \pm 0.14$  people per tent, or  $w_T = 1.50 \pm 0.22$  if non-responses are assumed to have anywhere from 0 to 4 occupants, each. While neither the full 2021 PIT area nor  $w_M$  has been assessed, the above values are consistent with the 2020 estimate of  $w_T = 1.48 \pm 0.11$ . Neither adopting the updated  $w_T$  value nor replacing all weights with the last SPA4-wide values leads to less than a 89% chance of a decline in unsheltered populations compared to 2020.

We encourage robust efforts to update the CVRTM weights, but the changes required to null the decline we find are substantial. Only  $w_T$  and  $w_M$  can reason-

<sup>&</sup>lt;sup>4</sup>Tract-level CVRTM counts inferred from LAHSA's data portal. We verified that they sum to the correct community totals.



**Figure 5:** Compared to 2020, the 2021 PIT count identified 7 tracts with significantly more persons/dwellings, 14 with fewer (purple). The same holds for total unsheltered population (orange; parentheses denote 1  $\sigma$ -significant changes). Circles denote professional-counted tracts (1 increase; 3 declines). Net, we identified about 200 fewer persons+structures or unsheltered people. Tract 1927.00 saw the biggest decline (over 120 people; Section 4), and may drive all of East Hollywood's inferred change from 2020.

ably achieve it. These must rise to 2.1 and 2.5 people from 1.5 and 1.7 people, respectively, in 2020. Not withstanding the above survey, such  $\sim$ 45% increases in *mean* occupancies seem unlikely. While 2021 is unprecedented in many ways, no SPA4/CD13 CVRTM weight has changed by more than  $\sim$ 30% year-on-year since 2018.

Largely, our results reflect the fact that persons seen on the street fell by  $\sim 30\%$  (Figure 3). Cars and vans are also down from last year by more than the number of safe parking spaces (Section 3.5). Only makeshift structures show a potential common gain. All told, however, the total number of dwellings remained roughly flat. Although uncertainties in East Hollywood and effects from tract 1927.00 are large, Figure 6 reveals this trend to be common across communities and areas counted by volunteers or professionals. Such consistencies in nearly independent datasets suggest the results are robust.

### 3.4 Geographic Concentration

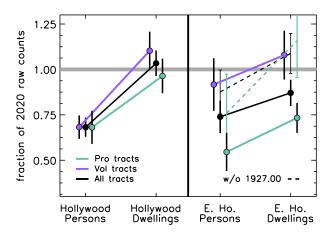
Everyday experience (and Figure 1) confirms that unsheltered homelessness is unevenly distributed. This

statement is worth quantifying so that arguments over, e.g., the placement of new housing facilities may be grounded in data. Figure 7 is one attempt to do so.

Combining our PIT count with 2020 US Census data, we compare the distribution of unsheltered Angelenos vs. all Angelenos in Greater Hollywood. The top panel shows the proportion of people in a given tract that are unsheltered. This fraction spans 0% to over 4%, with a mean near 1%— $1.4\times$  higher than LA's global unsheltered fraction in Jan. 2020 (assuming 4M Angelenos).

The bottom panel shows the cumulative contribution of each tract to Greater Hollywood's total and unsheltered populations. If people were equitably distributed, the curves would form a diagonal line of unit slope, yielding a Gini coefficient  $c_{\rm Gini}=0$ . The total population in Greater Hollywood has  $c_{\rm Gini}\simeq 0.1$ —50% of people living 40% of tracts—close to evenly distributed. The unsheltered population, on the other hand, has  $c_{\rm Gini}=0.44\pm0.02$ —50% of people living in 20% of tracts—analogous to those describing income inequality in Rwanda, Philippines, or Malawi. Such a concentration of lived trauma, real poverty, and the attendant externalities of unsheltered homelessness should condition equity-driven policymaking.

 $<sup>^5</sup>w_R$  fell from  $\sim$ 2 to  $\sim$ 1.4 between 2019 and 2020.



**Figure 6:** Year-on-year trends in pro- and vol-counted tracts are consistent in both communities, though uncertainties in East Hollywood are large and effects from tract 1927.00 are strong. While dwellings stayed roughly flat, persons were down significantly. The volunteer (purple) and pro results with tract 1927.00 removed (turquoise, dashed at right) represent completely independent datasets. Errors are  $1\,\sigma$ .

#### 3.5 Cross-checks

Multiple validations involving independent counters and external datasets suggest that the raw counts from our 2021 PIT count are accurate.

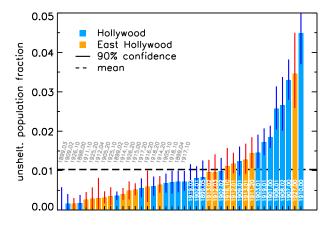
#### 3.5.1 Internal checks

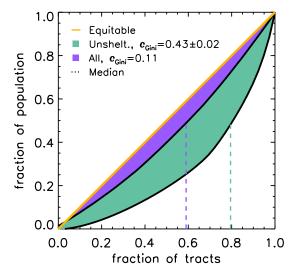
Figure 2's comparisons of the count's 37 duplicate tract measurements suggest per-tract and -category counting uncertainties are consistent with the random errors built into the analysis. There is thus no strong evidence that counters were biased in identifying unsheltered persons or dwellings. Of course, the data do not preclude systematic errors in identifying, e.g., cars and vans—which can be difficult at night—but Figure 6 illustrates that, at least across all dwellings, volunteers and professionals saw consistent trends. As the professional tracts were surveyed on foot and in daylight, such consistency suggests that biases are not large. Post-facto independent measurements of key geographies suggest this, too.

#### 3.5.2 External checks

Three census tracts were re-surveyed in detail, none of which yield evidence of a PIT undercount:

• 1901.00 – intercounter variability outlier. Abramson assessed this tract 14 hours after the PIT count (circa 9:00 AM) on foot with results  $1.9 \sigma$ 





**Figure 7:** *Top:* 0% to over 4% of each tract's total population is experiencing unsheltered homelessness in Greater Hollywood. The mean of  $\sim 1\%$  is about  $1.4\times$  above the citywide average. *Bottom:* unsheltered homelessness is much more concentrated than the general population, with 50% of unsheltered persons+dwellings confined to  $\sim 20\%$  of census tracts (vs. 40% for all residents). The implied Gini coefficient is about that describing income inequality in The Philippines.

lower than the volunteers' average (Section 2.3):  $\{P,C,V,R,T,M\}_{PIT} = \{50.0,8.0,5.5,1.0,6.0,4.0\}$  vs.  $\{36,4,6,0,8,2\}$ .

- 1912.01 *largest increase*. Abramson assessed this tract on 27 Feb. circa 12:00 PM as part of SELAH monitoring. Results were consistent with the PIT count to within 1  $\sigma$ .  $\{P, C, V, R, T, M\}_{PIT} = \{18.5, 0.5, 3.5, 1.5, 5.5, 12.0\}$  vs.  $\{21, 0, 4, 1, 8, 6\}$ .
- 1927.00 *largest decrease*. Abramson assessed this tract on 4 March circa 8:30 AM by vehicle. Results were 35 inferred people lower than than the PIT estimate, though with 9 additional

vans sighted. Given this tract's configuration—intersecting many freeway ramps and shoulders—the PIT survey was conducted on foot by outreach professionals. As such, we take the recount only to suggest that the PIT data were likely not biased to induce an artificial deficit of more than about  $9w_V \simeq 16$  people.

Two larger-geography surveys concur:

- Biweekly data from *The Hollywood Partnership* from 19 Feb. are consistent with PIT counts in a common tract (1902.02) and with an independent recount of the entire Business Improvement District performed 28 Feb. by Abramson and Kohan. These data also imply a decline from past values.
- Three additional tracts in Echo Park and Silver Lake monitored biweekly by SELAH since May 2020 show declines similar to that inferred for Greater Hollywood.

Finally, if the 49 safe parking spaces in or near the survey area<sup>6</sup> were occupied on 25 Feb., these locations probably went uncounted. Adding the implied  $80\pm16$  total car and van dwellers to our results (equal mix) reduces the baseline chance of a decline in unsheltered people from 98% to 89%.

All of the above suggests that our results are reliable.

# 4 Discussion

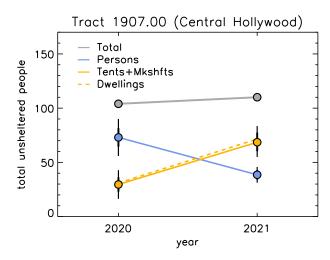
As far as we can assess, the number of people experiencing unsheltered homelessness in Greater Hollywood has fallen by roughly 10% from its Jan. 2020 level. A number of factors may contribute to this decline, some COVID-related and some not.

### 4.1 Government Initiatives

Foremost among these are government programs aimed at moving people indoors and stanching inflow into homelessness. The two most salient are COVID-related: Project Roomkey and eviction moratoria.

#### 4.1.1 Eviction Moratoria

We do not know how many people the moratoria have prevented from becoming homeless. However, per the



**Figure 8:** An example of one of 11 tracts where tent+makeshift frequencies at least doubled. 1907.00 lies in the heart of Central Hollywood, increasing the visual impact of this rise in dwellings, which was almost offset by a decline in identified persons on the street.

LAHSA Count report, nearly 83,000 people became unhoused in 2020 from LA County's pool of over 500,000 rent-burdened residents. Of these,  $\sim 7500$  could not be rehoused. Thus, if the eviction moratoria reduced even 10% of last year's inflow, extant mechanisms may have been able to place everyone who lost their housing under a new roof.

However, while our PIT data show a decline in unsheltered living, at  $\sim$ 10%, the implications for the period after the eviction moratoria lapse are not necessarily rosy.

## 4.1.2 Project Roomkey

More information is accessible regarding Project Roomkey. Also according to the 2020 Count report, over 6000 unsheltered LA County residents became sheltered at some point between March and May of that year. Examining only CD13's share of LA County's unsheltered senior population (6.5%), perhaps 100 of Roomkey's 1608 occupied rooms were filled with Greater Hollywood residents on the night of 25 Feb. If so, this would account for about half the inferred global reduction.

Data from the Coordinated Entry System (CES) will constrain this scenario.

#### 4.1.3 A Bridge Home

Unrelated to COVID, at least one *A Bridge Home* (ABH) opened between this year's and last year's PIT estimate

<sup>&</sup>lt;sup>6</sup>Per CD13 field deputy. Includes Echo Park. Safe parking providers did not respond to an email query.

whose catchment area spans nearly all of Greater Hollywood. Assuming 50% capacity due to COVID precautions, the Riverside site can account for a further 50 people exiting the unsheltered population.

However, COVID-related "decompression" of congregate living sites simultaneously reduced available beds in pre-existing shelters. Assuming 50% reductions, we estimate that the five ABHs whose catchments touch Greater Hollywood—Schrader, YWCA/Lodi (recently expanded), Gardner, Riverside, and Lafayette—constitute a net addition of just 33 beds (398 total, 116 gained, 83 lost to decompression).

Local contributions can be larger, however. Tract 1927.00—which saw the largest year-on-year decline—overlaps with three ABH catchments, two of them new. As many as 89 beds may thus have become available to that tract's unsheltered residents, corresponding to  $\sim 70\%$  of that tract's inferred population change.

CES data will constrain this scenario.

## 4.1.4 Permanent Supportive Housing

Finally, the leasing of 120 new PATH permanent supportive housing units may also have contributed. That site happens also to be located in tract 1927.00. We do not know how many of its rooms went to Greater Hollywood residents or those of its home tract, but any that did would help drive the declines we infer in both.

CES data will constrain this scenario.

## 4.2 Other Losses

### 4.2.1 Geographic Leakage/Edge Effects

Our PIT count covered a limited geography. As such, people exiting Greater Hollywood to nearby communities is an obvious potential loss having nothing to do with housing initiatives.

Tract 1927.00 is, again, special in this regard. Two of its edges are borders, and there is additionally a substantial community of unsheltered Angelenos opposite its eastern flank. Indeed, since 2016, this tract's unsheltered population has *only* seen 50%–100% annual swings. Whether this variability reflects residents simply crossing the street this year, we do not know. Upcoming grassroots PIT counts in Mid City and Silver Lake—bounding Greater Hollywood to the southwest and east, respectively—may provide insights.

#### **4.2.2** Deaths

An unfortunate but inevitable source of population loss is death. While COVID mortality rates are far higher among people experiencing homelessness relative to the general population, Dept. of Public Health statistics suggest that  $\sim\!200$  unhoused LA County residents had succumbed to the disease by the time of the PIT count, subordinating its impact to other causes.

Instead, drug overdoses, particularly from methamphetamine, likely dominate. Based on data spanning only the first seven months of 2020, overdoses had killed 929 people experiencing homelessness—a rate  $7.6 \times$  higher than COVID to that point.

All told, deaths of people experiencing homelessness increased by 26% from Jan. through July 2020 compared to the same interval in 2019. A more rigorous analysis is needed to determine the extent to which those deaths contributed qualitatively to the decline we infer, but, quantitatively, they must have.

## 4.3 Objective Support for Subjective Trends

The authors of this report did not anticipate a decline in Greater Hollywood's unsheltered population. The feeling accumulated over the course of 2020 was one of a meaningful, if not dramatic worsening in the state of homelessness. The PIT data provide hints as to how these subjective and objective conclusions may be reconciled.

Principally, smaller scales tell different stories than the community level results. Eleven tracts—28%—saw at least a doubling in their number of tents and makeshift structures, with a mean increase of ~10 such dwellings per tract. As such, the *visual salience* of unsheltered living increased markedly in many places. Moreover, this quantitative growth was qualitatively amplified by LAPD's suspension of LAMC 56.11 enforcement during COVID. Ordinarily, this law requires tents to be collapsed during the day. Without it, the impression of homelessness might increase even in areas where the number of tents *declined* as those that remained would be newly salient. The effect in places where tents doubled is obvious. Tracts 1907.00 and 1912.01 are two such places.

Tract 1907.00 is located in the heart of Central Hollywood's commercial district.<sup>8</sup> Not only did dwellings

<sup>&</sup>lt;sup>7</sup>Tracts 1899.04, 1902.02, 1907.00, 1911.20, 1912.01, 1913.01, 1913.02, 1914.10, 1915.00, 1916.10, 1917.20.

<sup>&</sup>lt;sup>8</sup>Fountain to Sunset to Franklin, Vine to Seward to Highland.

double here, but it is one of four tracts wherein dwellings and persons swapped shares of the unsheltered population compared to 2020. The swap was so precise in 1907.00 as to nearly conserve the total number of identified people+dwellings (Figure 8). This phenomenon would enhance the impression of unsheltered living even as the population as a whole remained unchanged.

Meanwhile, tract 1912.01's population did not remain the same, but more than *tripled*, leading to the largest absolute gain vs. 2020. Containing Vermont Ave between Fountain and Hollywood Blvd, and Hollywood Blvd between Vermont and Normandie (Barnsdall Park), this tract, like 1907.00, is a high-traffic area, and so one of enhanced visibility.

Even as overall numbers declined, the above local trends show how facts in key areas would support impressions that the opposite occurred. This is to say nothing of deteriorations in the conditions of street living for those unable to get indoors (see next section).

Finally, the above trends also provide some evidence of the impact of COVID-related tent distribution efforts by professional and volunteer service providers. Anecdotally, these are reported as robust despite the global number of tents remaining similar to 2020 levels. A concentration of tents in the above tracts combined with a substantial fraction going to replacing damaged or destroyed tents may have soaked up this source.

# 4.4 Quality of Life Degradation

If there are fewer people on the street today, their quality of life has doubtless degraded. COVID has restricted or eliminated access to restaurant and park bathrooms, libraries (so *The Source* service days), Dept. of Public Social Services (EBT, Medi-Cal), Dept. of Motor Vehicles (ID replacement), and Dept. of Mental Health facilities. Physical limitations on client access at hospitals has also hindered caseworkers from managing successful discharges. These harms are reflected by said 25% increase in overdose deaths, and amplified by the simultaneous suspension or de-scoping of city and state sanitation programs (which further increase the visual impact of aforementioned tent doublings).

As such, while 2021 PIT data may support the efficacy of programs designed to reduce street homelessness, they do *not* suggest that the state of homelessness in Greater Hollywood has improved. In the fight to rebuild lives—as well as build homes—that fact must remain paramount.

# 5 Summary

Data from February 25, 2021 show that unsheltered homelessness has fallen in Hollywood and East Hollywood by  $10\% \pm 9\%$  and  $15\% \pm 12\%$ , respectively, compared to the 2020 LAHSA PIT Count (90% CI). Multiple internal and external cross-checks support the quality of the data—30/40 tracts counted by multiple teams; consistency between volunteer- and professional-counted tract trends; consistency with external data—which point to a 30% drop in individuals seen on the street driving the year-on-year change. The size of this shift makes it difficult for updates to dwelling occupancies to erase the community-scale declines we infer.

We attribute the declines mainly to government initiatives—e.g., eviction moratoria, Project Roomkey—aimed at bringing or keeping people indoors. The opening of at least one *A Bridge Home* facility and new permanent supportive housing units likely also contributed. Data from the Coordinated Entry System will test these statements.

While community-level counts declined, 28% of tracts saw at least a doubling in tents and makeshift structures. This phenomenon—amplified by suspension of LAMC 56.11 enforcement and compounded by city and state sanitation de-scopings—may have contributed to qualitative perceptions that the state of homelessness worsened even as the numbers went down. Given COVID-related disruptions to health, hygiene, and social support services—these sentiments are also likely to be accurate. Especially in light of the lifting of eviction moratoria, much work remains to ensure everyone has a home in Hollywood.

LA thanks Dan Kelson for his analysis insights, and Courtney Kanagi, Guido Merkens, and The Hollywood Partnership for sharing validation data. The organizers additionally thank everyone who volunteered for the 2021 grassroots PIT count: Kate Adams; Albert Andrade; Rachel Andres; Eleanor Atlee; Thomas Atlee; Kate Aviv; Elvina Beck; Clarissa Boyajian; Peggi Carbonel; Erin Casey; Chip Clements; William Clements; Shreyansh Daftry; Darius Derakshan; Anthony Demarbiex; Polly Estabrook; Nicole Farley; Mark Fishlowitz; Rana Ghadban; Margaret Gillespie; Kali Ghazali; Jane Gibson; Charlotte Gordon; Daniel Gracey; Thomas Grogan; Kate Hammond; Lauren Hernandez; Carter

Tract 1899.02 (Sierra Bonita-La Brea/Fountain-Sunset)



Figure 9: Example Hollywood tract map.

Tract:											
ate:											
ime:											
Team members:											
Adults	18-24 yr olds	Unacc Minors	Cars	Vans/SUVs	RVs	Tents	Makeshift	Families			
Addits	10-24 yr 0103	Oridee miliors	Curs	VUIIS/30 VS	NV3	Tents	wakesiiit	i diffiles			
Comments:				l		l					

**Figure 10:** Counter tally sheet/data collection tool.

Hewgley; Spencer Hillman; Joan Howard; Veronica Huerta; Bill Kaplan; Seth Kaplan; Moira Kelly; Maryam Khoshreza; Elizabeth Larson; Kris Larson; Jennifer Levin; Marissa Levin; Erica Levine; Rhea K. Mac; Aditi Mahajan; Thomas Mapp; Erica Martin; Kristian Melby; Renée Mockhatel; Mackenzie Morrison; Robert Morrison; Chelsea Mottern; Rebecca Nashleanas; Andoni Nava; Barbara Ngai; Henry Perez; Margarett Qaqish; Kelly Reilly; Elizabeth Roland; Julia Roland; Rich Sarian; Allison Schallert; Jillian Schultz; Robert Scott; Priyanka Srivastava; Carmen Stewart; Devin Strecker; Ninoska Suarez; Giuseppe Tantino; Sierra Thomas; Leah Thompson; Dylan Tucker; Ben Tysch; Matt Wait; Brenna Wall; Nadia Wehbe; Delaney Wells; Marilyn Wells.

# A Example Documents

Figure 9 shows an example tract map. Figure 10 shows the PIT tally sheet. Figure 11 shows the training summary provided to volunteer teams on deployment.

# 2021 Greater Hollywood Volunteer Homeless Count Tract maps (up to 2, see below). Tally sheets (up to 2, one per tract, see below). Clipboard + pens. Ensure Counter has tally sheets + tract maps. Ensure Navigator has tract maps if prese Drive to a tract. Enter an intersection in google maps for directions (e.g., "Fountain/Normandie"). Record tract number on tally sheet. Drive every street in the tract. Drive slowly so Counter can survey each street. Use hazard lights. If present, Navigator should direct Driver and mark streets that have been counted. Else, Counter should do the Count only the interio side streets on tract If you do not count a street ark on man and note in "Comments" section of the tally sheet (see below) Tally example: Record the tract number, printed in Tract: 1899,02 Date: 2/25/21 Time: 7:15 PM bold at top of each tract map (see example above). Read your results to the volunteer **Dwelling examples** 2021 Greater Hollywood Volunteer Homeless Count or safety and that of the people we count is a priority. Should you feel unsafe at e, please stop counting and return to *The Center in Hollywood* at 6636 Selma at ere you can check-in with volunteer leads. Irrespective of whether you are counting in a COVID pod, please use a mask at all times, including when interacting with volunteer leads at The Center in Hollywood. graphs: Please be mindful that our neighbors experiencing homelessness have no private residence and so are always on display. For their privacy and your safety, please do not photograph anyone or any dwelling during the count (especially no flash photography). However, please take photos of your team at work inside your car-we would love to THANK YOU for being a part of the 2021 Hollywood Homeless Count!

**Figure 11:** Count primer. The telephone number for the onsite emergency contact has been omitted for privacy reasons.

# **B** Full Tract-level Results

Tables 4 and 5 present counts and population inferences, respectively, for all 40 Greater Hollywood census tracts. Professional surveying took place circa 3:00 PM on 25 Feb. Volunteers counted from 7 PM to 10 PM except in tract 1919.02, assessed the morning and evening of 16 March.

**Table 4:** Census Tract-level Unsheltered Counts

Tract	Community	Counter	Adults	TAY	Car	Van	RV	Tent	Makeshift	Total
1898.00	Hollywood	Vol	3.3	0.3	0.0	0.7	0.0	1.3	0.0	5.7
1899.02	Hollywood	Vol	4.3	0.0	0.0	1.3	2.7	4.0	1.3	13.7
1899.03	Hollywood	Vol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1899.04	Hollywood	Vol	9.5	0.0	0.0	1.0	0.0	2.5	2.0	15.0
1899.05	Hollywood	Vol	3.0	0.0	3.0	4.5	1.0	2.0	0.0	13.5
1901.00	Hollywood	Vol	49.5	0.5	8.0	5.5	1.0	6.0	4.0	74.5
1902.01	Hollywood	Vol	14.5	0.0	0.5	0.0	0.0	2.5	1.5	19.0
1902.02	Hollywood	Vol	9.0	0.0	0.0	0.0	0.0	8.0	5.5	22.5
1903.01	Hollywood	Pro	10.0	0.0	0.0	0.0	0.0	19.0	22.0	51.0
1905.10	Hollywood	Pro	13.0	0.0	0.0	0.0	4.0	6.0	4.0	27.0
1905.20	E. Hollywood	Vol	2.0	0.5	0.5	1.0	0.0	4.0	1.0	9.0
1907.00	Hollywood	Vol	38.5	0.0	2.0	0.0	0.0	38.5	7.0	86.0
1908.01	Hollywood	Vol	18.5	0.0	0.5	0.0	0.0	19.5	9.0	47.5
1908.02	Hollywood	Pro	22.0	0.0	0.0	1.0	5.0	13.0	13.0	54.0
1909.01	Hollywood	Pro	15.0	0.0	0.0	0.0	0.0	17.0	9.0	41.0
1909.02	Hollywood	Vol	2.7	0.3	0.7	1.7	0.0	0.0	0.0	5.3
1910.00	Hollywood	Pro	34.0	0.0	1.0	0.0	5.0	60.0	23.0	123.0
1911.10	E. Hollywood	Vol	4.0	0.5	0.0	0.0	0.0	2.5	0.5	7.5
1911.20	E. Hollywood	Pro	14.0	0.0	0.0	0.0	0.0	24.0	10.0	48.0
1912.01	E. Hollywood	Vol	17.5	1.0	0.5	3.5	1.5	5.5	12.0	41.5
1912.03	E. Hollywood	Vol	5.0	0.0	2.0	8.0	0.0	0.0	2.5	17.5
1912.04	E. Hollywood	Vol	3.0	0.5	0.5	1.0	0.0	0.0	0.0	5.0
1913.01	E. Hollywood	Vol	8.0	0.0	0.5	7.5	0.5	5.0	1.0	22.5
1913.02	E. Hollywood	Vol	5.5	0.0	0.5	0.5	0.5	3.5	6.0	16.5
1914.10	E. Hollywood	Vol	7.5	0.0	1.0	0.5	0.0	1.0	5.5	15.5
1914.20	E. Hollywood	Vol	4.0	0.0	2.0	4.5	1.0	3.0	2.0	16.5
1915.00	E. Hollywood	Vol	10.0	0.0	0.0	4.5	2.5	2.5	2.5	22.0
1916.10	E. Hollywood	Pro	6.0	0.0	0.0	1.0	1.0	2.0	22.0	32.0
1916.20	E. Hollywood	Pro	0.0	2.0	0.0	0.0	0.0	4.0	6.0	12.0
1917.10	Hollywood	Vol	6.5	0.0	2.0	4.5	1.0	1.0	0.5	15.5
1917.20	Hollywood	Vol	2.3	0.0	0.3	1.3	6.3	0.0	4.3	14.7
1918.10	Hollywood	Vol	3.5	0.0	1.0	1.5	1.5	10.0	0.0	17.5
1918.20	Hollywood	Vol	2.5	1.0	0.0	2.5	2.0	1.5	2.0	11.5
1919.01	Hollywood	Vol	16.0	0.0	2.0	1.5	5.0	13.0	7.5	45.0
1919.02*	Hollywood	Vol	2.5*	$0.0^{*}$	$0.0^{*}$	1.5*	$4.0^{*}$	5.5*	0.5*	$14.0^{*}$
1925.10	E. Hollywood	Vol	4.0	0.0	1.5	1.0	1.5	0.0	1.5	9.5
1925.20	E. Hollywood	Vol	1.0	0.0	1.0	6.0	1.0	0.0	0.0	9.0
1926.10	E. Hollywood	Vol	2.0	0.0	0.0	0.0	0.0	3.5	0.5	6.0
1926.20	E. Hollywood	Vol	1.0	0.0	0.0	0.0	0.0	11.0	0.5	12.5
1927.00	E. Hollywood	Pro	20.0	0.0	0.0	0.0	7.0	6.0	54.0	87.0

<sup>\*</sup>Assessed 16 March. Raw counts from each tract coded as in Table 1. Fractions reflect averages over multiple counters.

 Table 5: Census Tract-level Unsheltered Population Inferences

Tract	Community	Counter	Adults	TAY	Car	Van	RV	Tent	Makeshift	Total
1898.00	Hollywood	Vol	3.3 (1.7)	0.0(0.6)	0.0(2.2)	0.0(1.5)	0.0(2.8)	1.9 (1.6)	0.0 (7.0)	6.9 (8.4)
1899.02	Hollywood	Vol	4.3 (2.0)	0.0(0.7)	0.0(2.3)	2.3 (2.2)	3.8 (2.5)	5.9 (2.9)	2.2 (2.0)	18.7 (5.8)
1899.03	Hollywood	Vol	0.0(5.2)	0.0(0.7)	0.0(2.2)	0.0 (3.9)	0.0(2.8)	0.0 (6.8)	0.0 (7.1)	0.0 (12.3)
1899.04	Hollywood	Vol	9.5 (3.6)	0.0(0.7)	0.0(2.3)	0.0(2.2)	0.0(2.7)	3.7 (2.7)	3.3 (3.0)	18.3 (7.0)
1899.05	Hollywood	Vol	3.0 (2.0)	0.0(0.7)	4.4 (3.3)	7.7 (5.4)	0.0(1.7)	2.9 (2.5)	0.0 (7.1)	19.9 (10.3)
1901.00	Hollywood	Vol	49.5 (8.2)	0.0(0.8)	11.8 (5.9)	9.5 (6.1)	0.0 (1.8)	8.9 (4.3)	6.6 (4.5)	88.8 (13.5)
1902.01	Hollywood	Vol	14.5 (4.4)	0.0(0.7)	0.0 (1.3)	0.0(3.9)	0.0(2.8)	3.7 (2.8)	0.0(2.5)	21.5 (7.7)
1902.02	Hollywood	Vol	9.0 (3.5)	0.0(0.7)	0.0(2.2)	0.0(4.0)	0.0(2.8)	11.8 (5.0)	9.1 (5.3)	30.2 (9.9)
1903.01	Hollywood	Pro	10.0 (5.2)	0.0(0.7)	0.0(2.2)	0.0(3.9)	0.0(2.7)	27.8 (11.0)	36.5 (16.8)	74.8 (21.3)
1905.10	Hollywood	Pro	12.9 (5.9)	0.0(0.7)	0.0(2.2)	0.0(4.0)	5.7 (5.1)	8.8 (6.0)	6.5 (5.9)	34.2 (12.4)
1905.20	E. Hollywood	Vol	2.0 (1.6)	0.0(0.8)	0.0 (1.3)	0.0(2.2)	0.0(2.8)	5.9 (3.6)	0.0(2.1)	12.7 (6.0)
1907.00	Hollywood	Vol	38.5 (7.2)	0.0(0.7)	3.0 (2.6)	0.0(3.9)	0.0(2.8)	56.7 (12.8)	11.6 (6.3)	110.1 (16.9)
1908.01	Hollywood	Vol	18.5 (4.9)	0.0(0.7)	0.0(1.3)	0.0(3.9)	0.0(2.8)	28.6 (8.4)	14.9 (7.4)	63.2 (13.2)
1908.02	Hollywood	Pro	21.9 (7.7)	0.0(0.7)	0.0(2.2)	0.0(3.1)	7.1 (5.8)	19.0 (9.1)	21.3 (11.8)	71.7 (18.1)
1909.01	Hollywood	Pro	15.0 (6.3)	0.0(0.7)	0.0(2.3)	0.0(4.0)	0.0(2.8)	24.9 (10.6)	14.8 (9.4)	55.3 (16.4)
1909.02	Hollywood	Vol	2.7 (1.5)	0.0(0.6)	0.0 (1.2)	2.9 (2.5)	0.0(2.7)	0.0 (6.8)	0.0 (7.2)	6.9 (10.7)
1910.00	Hollywood	Pro	34.0 (9.6)	0.0(0.7)	0.0(2.6)	0.0(3.9)	7.0 (5.7)	88.1 (21.7)	38.1 (17.4)	169.7 (30.4)
1911.10	E. Hollywood	Vol	4.0 (2.3)	0.0(0.8)	0.0(2.2)	0.0 (3.9)	0.0(2.7)	3.6 (2.8)	0.0 (1.4)	9.0 (6.7)
1911.20	E. Hollywood	Pro	13.9 (6.1)	0.0(0.7)	0.0(2.2)	0.0 (3.9)	0.0(2.7)	35.3 (12.8)	16.4 (10.1)	66.2 (18.2)
1912.01	E. Hollywood	Vol	17.5 (4.9)	0.0(1.1)	0.0 (1.3)	6.0 (4.6)	0.0(2.2)	8.1 (4.2)	19.9 (9.0)	55.8 (12.4)
1912.03	E. Hollywood	Vol	5.0 (2.6)	0.0(0.7)	3.0 (2.6)	13.9 (7.8)	0.0(2.8)	0.0 (6.8)	4.2 (3.3)	26.4 (11.9)
1912.04	E. Hollywood	Vol	3.0 (2.0)	0.0(0.8)	0.0 (1.3)	0.0(2.2)	0.0(2.8)	0.0 (6.8)	0.0 (7.0)	6.2 (10.7)
1913.01	E. Hollywood	Vol	8.0 (3.3)	0.0(0.7)	0.0(1.3)	13.0 (7.5)	0.0 (1.2)	7.3 (3.9)	0.0(2.0)	31.8 (9.5)
1913.02	E. Hollywood	Vol	5.5 (2.7)	0.0(0.7)	0.0(1.3)	0.0(1.5)	0.0 (1.2)	5.1 (3.2)	9.9 (5.6)	23.1 (7.5)
1914.10	E. Hollywood	Vol	7.5 (3.2)	0.0(0.7)	0.0 (1.8)	0.0(1.6)	0.0(2.8)	0.0(1.7)	9.0 (5.3)	20.6 (7.4)
1914.20	E. Hollywood	Vol	4.0 (2.3)	0.0(0.7)	3.0 (2.7)	7.7 (5.3)	0.0 (1.8)	4.4 (3.0)	3.3 (3.0)	24.1 (8.0)
1915.00	E. Hollywood	Vol	10.0 (3.6)	0.0(0.7)	0.0(2.2)	7.8 (5.3)	3.5 (2.9)	3.7 (2.7)	4.1 (3.4)	29.6 (8.6)
1916.10	E. Hollywood	Pro	6.0 (4.0)	0.0(0.7)	0.0(2.3)	0.0(3.1)	0.0(2.4)	0.0 (3.4)	36.4 (16.9)	48.7 (18.3)
1916.20	E. Hollywood	Pro	0.0 (5.2)	0.0(2.3)	0.0(2.3)	0.0(3.9)	0.0(2.8)	5.8 (4.9)	10.0 (7.5)	17.9 (11.9)
1917.10	Hollywood	Vol	6.5 (3.0)	0.0(0.7)	3.0 (2.6)	7.8 (5.4)	0.0 (1.7)	0.0(1.8)	0.0 (1.4)	21.3 (7.4)
1917.20	Hollywood	Vol	2.3 (1.5)	0.0(0.7)	0.0(0.9)	2.3 (2.1)	9.0 (4.3)	0.0 (6.8)	7.1 (3.9)	21.7 (9.6)
1918.10	Hollywood	Vol	3.5 (2.2)	0.0(0.7)	0.0 (1.8)	0.0(2.7)	0.0(2.2)	14.6 (5.7)	0.0 (6.9)	24.6 (10.2)
1918.20	Hollywood	Vol	2.5 (1.8)	0.0 (1.2)	0.0(2.3)	4.3 (3.8)	2.9 (2.6)	2.2(2.1)	3.3 (3.0)	16.4 (6.7)
1919.01	Hollywood	Vol	16.0 (4.7)	0.0(0.7)	2.9 (2.6)	0.0(2.7)	7.1 (4.3)	19.1 (6.6)	12.4 (6.5)	60.6 (11.9)
1919.02*	Hollywood	Vol	2.5 (1.8)*	$0.0(0.7)^*$	$0.0(2.2)^*$	$0.0(2.8)^*$	5.7 (3.7)*	8.1 (4.2)*	$0.0 (1.4)^*$	19.9 (7.1)*
1925.10	E. Hollywood	Vol	4.0 (2.3)	0.0(0.7)	0.0 (2.2)	0.0(2.2)	0.0 (2.2)	0.0 (6.7)	0.0 (2.6)	12.8 (8.5)
1925.20	E. Hollywood	Vol	0.0 (1.6)	0.0(0.7)	0.0(2.5)	10.5 (8.3)	0.0 (2.4)	0.0 (6.8)	0.0 (7.1)	14.8 (13.6)
1926.10	E. Hollywood	Vol	2.0 (1.6)	0.0(0.7)	0.0(2.3)	0.0(4.0)	0.0(2.8)	5.1 (3.3)	0.0 (1.4)	8.0 (6.7)
1926.20	E. Hollywood	Vol	0.0(1.2)	0.0(0.7)	0.0(2.2)	0.0(4.0)	0.0(2.8)	16.1 (6.1)	0.0 (1.4)	18.0 (8.4)
1927.00	E. Hollywood	Pro	19.9 (7.4)	0.0(0.7)	0.0(2.3)	0.0(3.9)	10.0 (7.0)	8.8 (6.0)	90.4 (33.2)	129.4 (35.4)

<sup>\*</sup>Assessed 16 March. Estimates reflect PDF medians with 90% CIs shown in parentheses.