

February 2026

Modeling Solutions to Homelessness in Oakland

Technical explainer for system modeling analysis in the Homelessness Strategic Action Plan

Overview

All Home's *Solutions Modeling* is a system modeling tool designed to estimate the additional investment and inventory requirements needed to achieve homelessness reduction goals. It produces a high-level roadmap for reducing unsheltered homelessness through a *strategy of concurrent investments* in targeted homelessness prevention, permanent housing solutions, and interim housing.

In 2024-2025, All Home's technical assistance team worked in close collaboration with Oakland's Housing and Community Development (HCD) department to gather a variety of Oakland-specific data inputs to incorporate into the analysis and to refine the system performance assumptions and strategic goals informing the modeling outputs. In 2025, Oakland's newly formed Office of Homelessness Solutions reviewed system analysis results and confirmed the City's interest in utilizing these results to inform the 5-year Homelessness Strategic Action Plan (HSAP).

This report describes the methods, key assumptions, and data sources used to produce the Solutions Modeling estimates produced for Oakland's Homelessness Strategic Action Plan. It also describes the motivation behind the distinguishing characteristics of the model, chief among these being the ability to link reduced new entries into homelessness to expanded investment in targeted homelessness prevention, a research-based best practice and cost-effective solution for reducing overall homelessness.

Understanding what it will take to rapidly and substantially reduce homelessness is a crucial step toward actually achieving this goal. In addition to informing local strategy and investment priorities, the estimates produced hopefully support

advocacy for increased new funding. Perhaps most importantly, the findings help demonstrate that when the scale of investment matches the scale of the crisis we face, real change is possible. Similarly, the estimates help us understand our limited recent progress despite increased (though still insufficient) new funding and policy change.

The report begins by briefly highlighting the major motivations that informed the design of the Solutions Modeling tool, calling attention to characteristics that distinguish the model from comparable systems modeling tools. It then describes the process, data, and assumptions used to estimate the need for additional homelessness prevention assistance, permanent housing solutions, and interim housing, along with the associated costs. After acknowledging several limitations of the model, the report concludes by noting that Oakland inventory and investment goals should be updated and informed by the system modeling informing the forthcoming *Home Together 2030* strategic plan to end homelessness in Alameda County.

Model Design Motivation

The projections generated by the *Solutions Modeling* tool are associated with the implementation of a particular homelessness reduction strategy. Specifically, the analysis is guided by the Regional Action Plan's strategic framework, characterized by *concurrent investments* in three core solutions: homelessness prevention, permanent housing solutions, and interim housing.¹ In system performance terms, the modeling is based on a strategy of reducing new incidence of homelessness while simultaneously expanding the available array of exits to permanent housing, and expanding interim housing inventory to facilitate exits to housing and mitigate the trauma of living unsheltered long-term. This strategy provides the most cost-effective path to achieving meaningful and lasting reductions in unsheltered homelessness. It does so by building a balanced response system able to more rapidly meet distinct needs of the unhoused population while promoting improved program outcomes and systemwide efficiencies.

Permanent housing, interim housing, and new homelessness prevention depend on one another to succeed, and the required investments in each category are interdependent. If we invest heavily in prevention, for example, less permanent housing and interim housing will likely be needed in the future because fewer people will lose housing in the first place. Similarly, creating more permanent

¹ Full Regional Action Plan available at www.allhomeca.org/regionalactionplan/

housing solutions reduces the number of new interim housing units required to reach unsheltered reduction goals, since people will be able to exit homelessness more rapidly (and thereby open up existing units of interim housing to accommodate others).

The Solutions Modeling tool was designed to draw attention to the interdependency of homelessness prevention, permanent housing solutions, and interim housing, and the unmet need for each program type. It makes this connection most apparent by linking projected new entries into homelessness to investments in expanded homelessness prevention assistance. This link in the analysis is perhaps the most important distinguishing design characteristic of the model, and is a step that has historically been overlooked in approaches to homelessness system modeling. Despite the formidable assumptions required, we think it is important to include this linkage in the modeling to demonstrate the potential impact of reducing new incidence of homelessness, and to ensure that homelessness prevention programming does not go unaddressed in policy debates and budgetary considerations.

Calculating New Interventions and Units Required

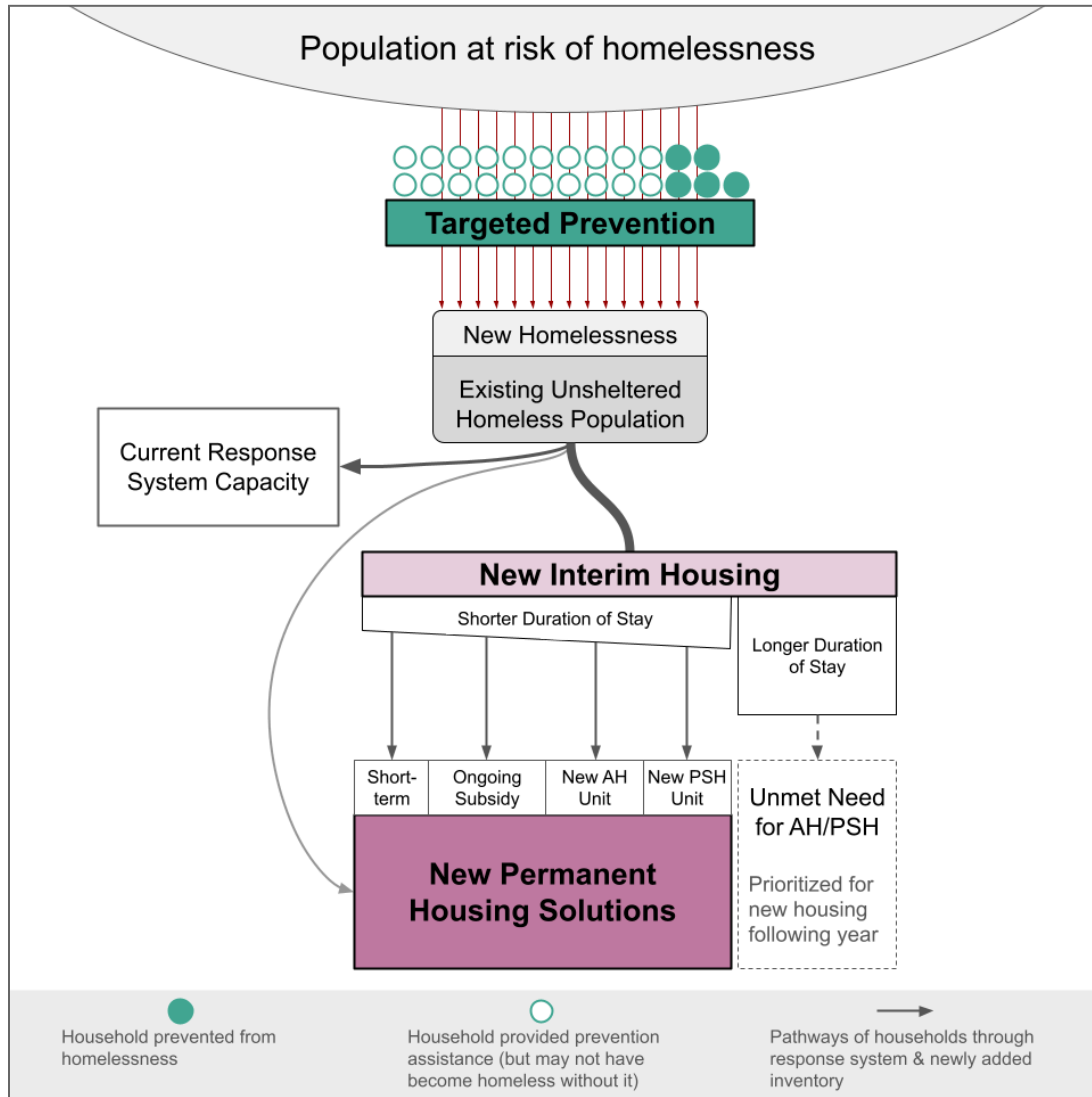
Solutions Modeling estimates the *additional* housing inventory and assistance required to reduce unsheltered homelessness by a designated goal, and assumes that currently operating programs in the city's homelessness response system remain in operation. Funding requirements are in addition to current baseline spending.

In consultation with HCD staff, we established a target of reducing unsheltered homelessness in Oakland by 50 percent over five years. Estimates for the inventory needed to reach this goal are calculated through three broad analytical steps which determine:

1. the total population needing housing assistance to achieve the unsheltered reduction goal, including expectations for how many people will become newly homeless each year *after accounting for the impact of increased investment in homelessness prevention*;
2. the number and types of new permanent housing solutions required to meet yearly goals; and,
3. the number of additional interim housing units required to facilitate exits to housing and provide short term/transitional options in the absence of sufficient affordable permanent housing.

This section describes how the modeling approaches each of these tasks, noting for each the key assumptions and data sources used. [Figure 1](#) visualizes these major components of the model and their relationship.

Figure 1. Modeled solutions and system flow



Dynamic Population Projections and Prevention Impact

The population of people experiencing homelessness is dynamic. Each year, roughly 1,500 people in Oakland move out of homelessness and into housing. At the same time, however, 2,500 people also become homeless for the first time

each year, while still others return to homelessness after resolving a previous experience. The Solutions Modeling analysis accounts for this dynamic nature of the homeless population by including both those currently homeless and those projected to become homeless in calculating the need for additional housing assistance.

The number of people currently experiencing homelessness is derived from the most recent Point-in-Time (PIT) count data available. Despite shortcomings resulting in what is widely acknowledged as an undercount,² PIT data serves as the most reliable, regularly reported proxy available for estimating the number of people currently living in unsheltered settings.

To project the number of people likely to become homeless in a given year, we accessed Homeless Management Information System (HMIS) data restricted to programs operating within Oakland.³ With assistance from the Alameda County Department of Housing and Homelessness Services Department, we used this Oakland-specific HMIS data to estimate annual “first-time homelessness” as defined by the U.S. Department of Housing and Urban Development (HUD).⁴ “First-time” is a somewhat misleading term, since in actuality it includes only people who enroll in a homelessness assistance program and who have no record of having enrolled in such a program in the previous two years. So, someone who stayed in a shelter three years earlier, for example, will be counted as homeless for the first time. It also counts as homeless for the first time anyone who experienced homelessness previously but did not engage the response system for some form of assistance.

The HUD SPM for first-time homelessness also only includes people enrolled in “residential” programs, including emergency shelters, transitional housing, rapid rehousing, and other permanent housing assistance. This means that this estimate does not include people experiencing homelessness but who engage with response systems only through street outreach, for example. While certainly an undercount, this measure provides the best apparent proxy for the number of people requiring housing assistance to exit homelessness.

² Kim Hopper et al., “Estimating Numbers of Unsheltered Homeless People Through Plant-Capture and Postcount Survey Methods,” *American Journal of Public Health* 98, no. 8 (August 2008): 1438–42, <https://doi.org/10.2105/AJPH.2005.083600>; Monika Schneider, Daniel Brisson, and Donald Burnes, “Do We Really Know How Many Are Homeless?: An Analysis of the Point-In-Time Homelessness Count,” *Families in Society* 97, no. 4 (October 1, 2016): 321–29, <https://doi.org/10.1606/1044-3894.2016.97.39>.

³ HMIS data is tracked county-wide, and while calculating city-specific measures was required for this analysis, doing so inherently introduces additional limitations and imprecision to the data.

⁴ System Performance Measure data and reference material are available at <https://www.hudexchange.info/programs/coc/system-performance-measures/>

Our baseline projection for “first-time homelessness” as defined by HUD averages three years of HMIS data (2021-2023). To this number, we add the anticipated number of people *returning* to homelessness each year after a recent exit to housing. Again, since we are utilizing data solely from programs operating in Oakland, estimated returns do not include individuals who enroll in a homeless assistance program outside of Oakland after a successful permanent housing “exit” from a program within the city.

The best way to reduce new entries and returns to homelessness is to maximize the use of targeted homelessness prevention. By focusing on the population at highest risk of homelessness and providing prevention services including rapid flexible financial assistance, housing stabilization services, and legal services as needed, we can prevent people from losing housing in the first place. This tactic prevents people from experiencing the trauma and destabilizing effects caused by homelessness. As research on the costs of homelessness have shown, it is also far more economically efficient to prevent entries into homelessness than to serve people once they are homeless.⁵

In a financially constrained environment, investing in targeted homelessness prevention is essential to meeting the 15 percent “new homelessness reduction goal” set in consultation with Oakland HCD. Reducing the new incidence of homelessness by this rate would require substantially scaling up Oakland’s existing targeted homelessness prevention assistance.⁶ The 15 percent reduction target—an undeniably aspirational goal—is in line with assumptions incorporated in system modeling conducted for the Los Angeles Homeless Services Authority, for example, which assumes expanded prevention assistance could reduce the need for interim housing by 20 percent.⁷

Successful homelessness prevention programs require efficiently identifying and serving people who would have become homeless without assistance. Many people who apply for services would benefit from financial support, but would not be pushed into homelessness if they are not served. Existing evidence-based risk assessments help target resources toward the highest need individuals, but it remains impossible to perfectly predict who will and will not be pushed into

⁵ See *Do Homelessness Prevention Programs Prevent Homelessness? Evidence from a Randomized Controlled Trial* (2025). <https://direct.mit.edu/rest/article-abstract/107/5/1187/116185/Do-Homelessness-Prevention-Programs-Prevent>

⁶ *Keep People Housed - Oakland* represents the most established targeted homelessness prevention program in Oakland at this time.

⁷ See *Homeless Services System Analysis: Envisioning an Optimal System in Los Angeles*, Los Angeles Homeless Services Authority, 2020. <https://www.lahsa.org/documents?id=4311-homeless-services-system-analysis-envisioning-an-optimal-system-in-los-angeles.pdf>.

homelessness. "Targeting efficiency" means the percent of households receiving prevention assistance who would have become homeless without it. In the modeling, we peg prevention targeting efficiency at 15 percent, meaning between six and seven households will need to be served to reduce projected new homelessness by one.

The current homeless population plus the number of individuals projected to become homeless each year (after the baseline is reduced to meet new homelessness reduction goals achieved through expanded prevention assistance) constitutes our estimate for the total population requiring housing assistance.⁸ The five-year, 50 percent reduction target is broken into annual progress benchmarks, which determine the number of individuals matched with housing assistance in each year of the modeled strategy.

Table 1a. Key Population and Prevention Assumptions

Name	Description	Model Inputs
Unsheltered Homelessness Reduction Goal	Target for the percent by which unsheltered homelessness will be reduced by year five. (Maintained for years 6-10.)	50%
Inflow Reduction Goal	Target for the percent of projected new homelessness (both "1st-time and returns) prevented from becoming homeless	15%
Annual change in Inflow	Projected annual change in "1st-time" homelessness	0%
Prevention Targeting Efficiency	Percent of households receiving prevention assistance projected to have become homeless without the assistance. (Used to calculate the number of interventions required to reduce new homelessness by one.)	15%

⁸ The modeling uses PIT data to approximate the number of "single adult households" and "family households" requiring assistance to reach designated reduction goals, which informs both total interventions required and the per-unit program costs associated with each household type.

Table 1b. Key Population and Prevention Data Sources

Measure	Description	Source
Baseline unsheltered homelessness	Total number of people currently experiencing unsheltered homelessness	Point-in-Time (PIT) Count data
Baseline new homelessness	Estimate for the number of people each year becoming homeless for the "first time," as defined by HUD	HUD System Performance Measure 5.2, calculated using HMIS data from programs operating within Oakland.
Returns to homelessness	Estimate for the percent of people projected to return to homelessness within two years of exiting to permanent housing.	HUD System Performance Measure 2, calculated using HMIS data from programs operating within Oakland.

Permanent Housing Solutions

After determining the number of households requiring housing assistance to reach annual homelessness reduction benchmarks, we reduce this amount by what we term "current system capacity" which we define as the number of households for whom the current response system can already reliably resolve homelessness with housing assistance in a given year. To set this baseline, we again draw on Oakland-specific HMIS data, this time indicating total individuals exiting to positive housing destinations from city programs. The modeled current system capacity for Oakland was calculated by averaging annual total exits to positive destinations (sometimes referred to as "permanent housing exits") for three years, 2021-2023.

After subtracting the current system capacity from the total housing assistance required for a given year, the model calculates the number and type of additional interventions or units required to meet that year's remaining unmet needs. Four broad categories of permanent housing solutions are included in the model:

- **Short-term assistance** - a general category including one-time or time-limited financial or rental assistance and problem-solving support.
- **Ongoing Rental Subsidy** - comparable to housing choice vouchers, which provide subsidies to households renting housing on the private market.

- **New Dedicated Affordable Housing Units** - newly developed, deeply affordable housing units with dedicated, ongoing funding for operations, and targeted to people exiting homelessness.
- **New Permanent Supportive Housing (PSH) Units** - newly developed, deeply affordable housing units requiring additional funding to provide ongoing mental health and other supportive services for residents requiring more support to maintain housing stability.

The added ongoing rental subsidies and new affordable units are serving essentially the same needs and purpose: expanding the amount of housing affordable to households with extremely-low-incomes. The model includes both categories to acknowledge that, while we won't need to build a new unit for all households served by these programs, we also can't achieve our goal solely by expanding rental subsidies. A full spectrum of housing assistance— including both expanded rental assistance and expanding upon the existing stock of deeply affordable rental housing—is required to achieve an effective and enduring reduction of homelessness in Oakland.

Our approach to determining how we distribute the total need for new housing support across these four categories strives to match approximate levels of need among the population with appropriate housing solutions while simultaneously acknowledging constraints in developing new units. Beginning with the *currently homeless* population, the number of new permanent supportive housing (PSH) units needed is estimated based on the proportion of people experiencing chronic homelessness (as determined by most recent PIT data).⁹ Thus, rates of chronic homelessness are used as a proxy for the need for supportive housing.¹⁰ After accounting for the number of new PSH units needed, the remaining permanent housing solutions required are distributed among the other three categories. Population shares matched with each housing solutions were determined in consultation with HCD staff, and are reported in [table 2a](#) below. For the *newly homeless* population, we generally assume a lower level of need for PSH, as the significant expansion of new housing resources should reduce the length of time most individuals experience homelessness.¹¹

⁹ For their [California Homeless Housing Needs Assessment](#), the Corporation for Supportive Housing assumed that 90 percent of those experiencing chronic homelessness, and 10 percent of all other individuals experiencing homelessness, would be best served with permanent supportive housing.

¹⁰ For HUD's official definition of chronic homelessness, see: <https://www.hudexchange.info/homelessness-assistance/coc-esg-virtual-binders/coc-esg-homeless-eligibility/definition-of-chronic-homelessness/>

¹¹ The proportions of *newly homeless* households matched with these four, broad categories of housing support will not—and probably *should* not—match the interventions deemed most appropriate for households currently served by homelessness response systems. Given the current scarcity of resources to provide housing solutions, those who are currently prioritized to receive assistance represent

In light of severe racial disparities among Oakland's unhoused population, and as required by the City of Oakland's Racial Equity Impact Analysis (REIA) process, All Home and the City of Oakland researched the characteristics of the city's Black unhoused population to ensure that modeled inventory goals aligned with housing needs. Reducing unsheltered homelessness in Oakland requires deliberately addressing racial disparities in who becomes homeless in Oakland. City investments must account for racially-correlated differences indicating program models and per-unit costs associated with meeting various needs of different racial or ethnic groups. Local data and external academic research were used to estimate the proportion of Black unhoused Oaklanders best matched with each permanent housing model (i.e., time-limited subsidies, permanent rental vouchers, dedicated affordable housing, and permanent supportive housing) and to calibrate modeled inventory needs.¹²

Assigning the approximate level of need for each of the four housing solutions is a distinct process from that of determining how many units can feasibly be produced in a given year. To determine this "baseline production limit," we draw on data from the California Department of Housing and Community Development on the number of deeply affordable units completed in recent years. Oakland's baseline production limit is calculated by averaging the number of new housing units affordable to households with very-low incomes (or VLI units) completed over the last five years.¹³ This baseline—which includes both new construction and acquisition/rehab and reuse projects—determines the number of new units that can be completed in year one of the modeled strategy. Based on production pipeline data provided by HCD (while acknowledging a significant influx in required new funding), we assume production capacity will increase incrementally, reaching 150% of baseline levels by year five. This represents an aspirational level of new state, local and federal funding. However, with this added funding, Oakland's housing pipeline and the existing infrastructure of nonprofit developers and City oversight could feasibly deliver the units. Production limits are divided evenly between the new affordable housing and new PSH categories.

the most vulnerable subset of the broader homeless population, and require a higher level of support (on average) than would be required by those served by an optimal, better balanced response system.

¹² Racially disaggregated data and associated implications for policy and program design are discussed in greater detail in the Homelessness Strategic Action Plan Racial Equity Impact Analysis, with recommendations incorporated into the Homeless Strategic Action Plan.

¹³ While the bulk of the units required would qualify as units affordable to households with extremely-low incomes (or ELI units, dedicated to households earning below 30 percent area median income), data for this category of housing has until recently been subsumed under the very-low income (VLI) category, representing housing affordable to households earning under 50 percent area median income.

When the projected need for new permanent housing options surpasses a given year's production limit, the resulting gap informs decisions about the number of new interim housing units required, as discussed below.

Table 2a. Permanent Housing Solutions Assumptions

Name	Description	Model Input
New Unit Production Capacity Change	Number of new housing units (as a percentage of the baseline production limit) that can be produced in a given year. Used to inform incremental increases in production capacity.	150% by year 5.
Percent assigned PSH	Percent of population matched with PSH as their permanent housing solution (for both currently homeless population and those projected to become homeless in future years.)	Current: 30% New: 20%
Percent assigned newly constructed affordable units	Percent of population matched with newly constructed affordable units as their permanent housing solution.	Current: 21% New: 24%
Percent assigned ongoing rental subsidy	Percent of population matched with full rental subsidy as their permanent housing solution.	Current: 28% New: 32%
Percent assigned short-term assistance	Percent of population matched with short-term assistance as their permanent housing solution.	Current: 21% New: 24%

Table 2b. Permanent Housing Solutions Data sources

Measure	Description	Source
Current System Capacity	Projected number of people to be housed via current system (i.e., not requiring additional investment). Total exits to positive destinations from programs within Oakland.	HMIS data for programs operating within Oakland
Chronic homelessness rate	Percent of the currently homeless population experiencing chronic homelessness, as defined by HUD. Used to determine PSH needs.	PIT count data.
New Production Baseline limit	Average number of VLI units completed over the last five years. Used to establish annual production thresholds for new units produced in year one.	HCD Housing Element Implementation and APR Data Dashboard

Interim Housing

Calculating the number of new interim housing units needed is an undeniably contentious and deceptively complicated task.¹⁴ In response, we have developed a relatively conservative yet grounded approach to the challenge. Our estimates for interim housing are based on the program serving two strategic purposes:

- Short stays for stabilizing and facilitating exits to housing** - We assume that a majority of households exiting into permanent housing in a given year will stay in interim housing prior to that exit. For them, we set an aspirational duration of stay in interim housing of several months. These short stays create opportunities for connecting to supportive services, facilitate the process of collecting documentation required to access most

¹⁴ Recent efforts to estimate regional or statewide need for added interim housing are often static and do not incorporate dynamic variables that demonstrate the interconnection between prevention, interim housing, and permanent housing. Other approaches underestimate the true need for interim housing by basing estimates on survey data indicating low portions of people experiencing homelessness expressing interest in available shelter options. When the interim housing aligns with All Home's [Interim Housing Principles](#), we believe a larger share of individuals are likely to embrace the opportunity for dignified, supported interim options, a perspective supported by [recent research](#) comparing interim housing models in Portland.

subsidized housing options, and reduce the added traumas and adverse health impacts associated with living in unsheltered settings.

- Longer stays when new housing needed exceeds production limits** - Especially in the early years of implementing the strategy, we assume there will be a gap between the permanent housing needed and what can be completed and made available. In such cases, we add additional interim units equivalent to this gap. This decision follows a philosophical view that the street should not serve as the waiting room for the housing we cannot yet build fast enough.

The total new interim housing units added for a given year adds the number of units required to accommodate the short stays (in which each unit will accommodate multiple households over a year) and longer stays (in which each unit is dedicated to one household to be prioritized for new housing the following year). Short stay durations of just several months are aspirational, and achieving them will likely require both expanding permanent housing availability as well as pursuing a number of other strategies to improve program performance. Given the speed with which many modular or acquisition and rehab projects have come online, we do not include production limits for interim housing in the model.¹⁵

Table 3a. Interim Housing Assumptions

Name	Description	Model Input
Percent w/ short stay in Interim Housing	Percent of households staying in new interim housing units prior to exiting to permanent housing (by permanent housing assigned).	-50% (short-term assistance) -70% (ongoing subsidy) -70% (new affordable unit) -80% (new PSH unit)
Average short stay duration in new interim housing	Anticipated average duration of stay in interim housing for households exiting to housing in a given year (by permanent housing assigned).	-2 months (short-term assistance & ongoing subsidy) -3 months (new affordable & PSH units)
Exit to Housing Rate	Projected percentage of households with longer stay in interim housing projected to exit to permanent housing. (Remaining percent included in next year's projections for returns to homelessness.)	75%

¹⁵ Given the significant expansion of permanent housing solutions included in the modeling, we allow a portion (10%) of a system's current interim housing to accommodate a small share of the modeled additional need for interim housing, thereby reducing the estimate for total new interim housing units required.

Table 3b. Interim Housing Data Sources

Measure	Description	Source
Existing shelter beds and Interim Housing Units	Total number of emergency shelter beds, transitional housing, safe haven beds currently in operation. Informs determination for the number of additional interim housing units required.	HUD Housing Inventory Count (HIC) for relevant projects operating within Oakland

Calculating Required Funding

The modeling analysis provides estimates of the costs associated with providing the assistance and adding/operating the new housing described above. However, the model gives no indication regarding the source of funds or which level of government (e.g., city, county, state) bears primary responsibility for funding any particular program area. Cost estimates thus convey *total investment needs*. In practice, city budget allocations along with funds originating from state, federal, and county sources collectively contribute toward achieving target investment levels.

Per-unit costs for each of the inventories added in the modeling are included in [Table 4a](#). All cost points were determined in consultation with HCD staff and through review of recently-funded projects in Oakland.

Capital costs (associated with the development of new affordable and supportive housing units and new interim housing) are one-time costs and included in the costs for the year in which the new units come online. Capital costs for new dedicated affordable and PSH units were informed by a review of recently-funded development projects. Only a portion of total per-unit development costs—about 40 percent—is included in the estimates of funding required. This amount (\$300k in the model) was intended to reflect the high-end of city share of costs required to make projects competitive for tax credits. For interim housing, the full per-unit costs are included in the modeling, and are based on recently-funded, well-performing programs in the city.

Operations and services costs represent the full funding requirements for prevention programming, short-term assistance, and full rental subsidy permanent housing solutions, as well as the annual ongoing costs associated with each newly constructed dedicated affordable, PSH, and interim unit. The costs for prevention and short-term assistance are one-time costs for providing assistance to distinct households. Costs for ongoing rental subsidies along with the operations and services costs for new dedicated affordable housing, PSH and interim units are ongoing and persist over time. For these programs, yearly costs include all new interventions or units added that year plus all those added in previous years. For newly added interim housing units, operations and services costs are only calculated for units remaining in operation, excluding new units created but decommissioned in later years.

All baseline per-unit costs increase in the modeling by annual inflation rate of 3 percent.

Table 4a. Per-unit Cost Inputs

Solution	Program/Cost Type	Cost Input
Targeted Prevention	Financial assistance and support (services/ops)	\$8,000-\$9,000/household
Permanent Housing	Short-term assistance and support (services/ops)	\$15,000-\$18,000/household
	Ongoing Rental Subsidy (services/ops)	\$21,000/household
	New Affordable/PSH Units (capital)	\$300,000/unit **Represents only city share/gap funding required. Total per-unit costs (incl. tax credits and mortgage) expected to be closer to \$850k/unit.
	New Affordable Housing Units (services/ops)	\$16,500/unit
	New PSH Units (services/ops)	\$20,000/unit
Interim Housing	New Interim Units (capital)	\$180,000/unit
	New Interim Units (services/ops)	\$40,000/unit

Table 4b. Per-unit Cost Data Sources and Informative References

Solution	Program/Cost Type	Source/Reference Material
Targeted Prevention	Financial assistance	Based on records from Keep People Housing-Oakland. Total cost includes financial assistance (~75%), services (~15%) and administration (~10%).
Permanent Housing	Short-term assistance (services/ops)	Assumes half of households served receive rapid rehousing and half shallow subsidies. Based on currently operating city programs and on cost points included in Centering Racial Equity in Homeless System Design .
	Ongoing Subsidy (services/ops)	Based on average Housing Choice Voucher amount for Oakland Housing Authority (\$1732). Source: HUD HCV Data Dashboard
	New Affordable/PSH Units (capital)	HCD estimate based on review of recently funded projects, aiming for an estimate on the high end of city share of per-unit costs to project local investment required to successfully compete for state funds and federal tax credits.
	New Affordable/PSH Units (services/ops)	Based on model R2H2 proposals, with costs including property management and supportive services. Services costs in PSH units are twice those assumed for dedicated affordable units, while property management costs held standard across the models. See the Turner Center's Permanent Supportive Housing as a Solution to Homelessness for comparison of PSH and general LIHTC costs.
Interim Housing	New Interim Units (capital)	Based on review of model R2H2, round 4 proposals. Assumes mix of acquisition & rehab and modular, but excludes less-optimal models like tough sheds.
	New Interim Units (services/ops)	Based on review of model R2H2, round 4 proposals, current well-performing programs in the City, and interviews with providers on actual costs.

Limitations

Like any attempt to model complex human systems, the Solutions Modeling tool is not a perfect representation of reality. Many broad social forces—fluctuations in the economy or policy decisions made at the state or federal level—cannot be accounted for even though their impact on homelessness and response systems is undeniable. The high-level estimates the model produces cannot address all the nuanced details required in the process of implementing such a strategy. This blueprint provides a picture of what we will need to build, but an extraordinary amount of decisions, collaboration, and problem-solving will be needed to make it a reality.

There are several more specific limitations of the tool and estimates worth acknowledging, several with important implications for implementation. First, while we believe that we are drawing on the best available data to serve the purposes of the Solution Modeling tool, data sources on homelessness are notoriously imprecise. For example, available data for the number of households both experiencing and resolving episodes of homelessness in a given year are indicative, but likely both undercounts.

Next, given the difficulty of accurately calculating *current* city and county spending on homelessness programs, it can be difficult to contextualize the estimates for *additional funding* produced by the model. And given the significant fluctuation of homelessness funding from state and federal sources, the assumption that current spending will remain steady is anything but assured.

Our high-level modeling estimates—which lump solutions into broad categories—are not intended to imply that the needs of people experiencing homelessness are homogenous. The programs and practices required to best assist those vulnerable to or currently experiencing homelessness are more nuanced and detailed than our estimates can convey. The system modeling also doesn't include the full constellation of programs or supportive services that play an important role in getting or keeping someone stably housed. The model's focus on housing assistance—the most important and resource-intensive form of assistance for preventing and resolving homelessness—should not distract from the important role played by other efforts like job training, benefits advocacy, and support for behavioral health needs.

A final limitation to note involves implementation considerations related to the model's estimates for newly developed housing stock. While the modeled estimates focus solely on the number of new affordable and supportive units

needed for formerly homeless households, units serving this population are frequently a minority of the total units in a new development. The structure of state and federal financing means buildings serving 100% people exiting homelessness with extremely low incomes are often financially and operationally unsustainable. Implementing the strategy, then, would likely require developing additional units dedicated to a larger spectrum of low-income households, housing for which there is also an urgent need.

Looking Ahead

Estimates produced through the *Solutions Modeling* analysis provide useful direction-setting for Oakland's Homelessness Strategic Action Plan. Moving forward, these targets should be regularly reassessed to reflect the changing context in which the city pursues its goals. The release of Alameda County's *Home Together 2030* homelessness strategic plan—set for completion later in 2026—provides perhaps the most proximate opportunity to update investment and inventory targets so they better align with the more recent, countywide system modeling. Doing so provides the city and county the opportunity to further align strategic priorities and delineate roles and responsibilities in pursuing shared goals of preventing and reducing homelessness and closing the 5-year funding gap to successfully reduce unsheltered homelessness in Oakland by 50 percent.