

DATE: December 30, 2024
TO: City of Tucson
FROM: ECOnorthwest
SUBJECT: Tucson Housing Needs Final Results

The purpose of this memo is to support the City of Tucson in meeting the requirements of Arizona State Bill 1162, which requires municipalities to produce a comprehensive housing needs assessment by January 1, 2025, and every five years thereafter. The analysis completed by ECOnorthwest to assist Tucson in developing their housing needs assessment provides the total number of housing units needed to address demand from the current and future population through 2045, by income level.

PIMA COUNTY HOUSING STUDY

As part of a comprehensive effort to understand regional housing challenges, ECOnorthwest is currently conducting a countywide housing needs assessment for Pima County. The findings presented in this memo reflect Tucson's portion of the total countywide housing needs, which have been allocated based on the city's share of population and employment within Pima County. This approach ensures a consistent methodology in analyzing housing needs across all jurisdictions and places within the county. While this memo provides a high-level summary of the methodologies used for calculating the countywide total housing need and for the distribution of that need to local communities, a detailed technical memorandum on the methodologies will be released in January 2025 as part of the broader Pima County Housing Study.

How to Measure Countywide Housing Need

Housing needs assessments utilize data on key demographic factors, housing stock characteristics, market trends, and projected population and job growth to understand the number of housing units an area will need to produce to meet current and future housing needs over a specified planning period. Such assessments also offer insights into housing needs for households across the income spectrum, which allows for a strategic approach targeted at this range of diverse needs.

The needs assessment developed for Pima County estimates the number of households across the county that will need housing units affordable to them between 2024 and 2045. This estimate of needed housing is created using Census data on population and housing, county population projections, and other local data sources.

At a high level, the method used in the Pima County Housing Needs Assessment has three primary components:

- ◆ **Homelessness (current need):** This component is the calculation of units needed for the population currently experiencing homelessness, who are often not captured in foundational datasets derived from the Census. The analysis uses data from the Tucson-Pima Collaboration to End Homelessness to estimate the number of households experiencing homelessness in Pima County.
- ◆ **Future need:** This component accounts for future housing demand driven by population growth. The analysis uses population projections for 2045 and household data from the U.S. Census Bureau’s American Community Survey 2023 1-Year Public Use Microdata Sample. It converts population projections by age cohort to household projections by income and compares these estimates to the current housing supply by affordability level. For each income bracket (0–30 percent, 30–60 percent, etc.), the model estimates future housing demand, including a regional 7 percent vacancy goal, and adjusts supply based on expected unit losses and rent/value changes over 22 years.
- ◆ **Underproduction (current need):** This component accounts for the *housing shortage* in Pima County, or the number of housing units needed to meet the current demand from existing households in the county, as well as “missing households” – those that would exist under Pima County’s Pre-Recession headship rates. Housing units used 2nd/vacation homes and housing units with incomplete plumbing are removed from consideration. Like future need, a 7 percent target vacancy rate is used. Unlike future need, underproduction is calculated as a regional total and then allocated into income bins based on the Pima County distribution of cost-burdened renter household incomes.

HOUSING MARKETS ARE REGIONAL

» Housing markets operate regionally, as people choose where to live based on jobs, affordability, schools, amenities, and other factors that cross jurisdictional boundaries. Despite this shared market, housing policies are often localized, resulting in fragmented efforts that fail to address broader dynamics shaping housing supply, demand, and affordability. By calculating housing needs at the regional level and distributing those needs to local communities, we create a more accurate reflection of each community’s role in addressing shared regional challenges, rather than relying solely on local calculations that may overlook broader market dynamics. Tucson’s share of Pima County’s total housing need is approximately 54 percent, underscoring its significant role in meeting the region’s housing needs.



NOTE ON CALCULATING FUTURE NEED

- » The current housing supply is projected into 2045, accounting for unoccupiable units and those lost to demolitions. The projection assumes that 0.1 percent of Pima County’s 2023 stock will be lost per year (via demolition, consolidation, natural disaster, etc.), and the target housing supply is calculated by multiplying future households by a 1.072 (or roughly a 7 percent vacancy rate) household-to-housing unit ratio. The difference between the target supply and the projected future supply is the total future housing need. By enabling greater mobility within the market, this vacancy rate would expand the range of housing options available to households, allowing them to make decisions that align with their individual and changing needs, such as proximity to transit or job opportunity.

Local Housing Need Allocation

While the Pima County Housing Needs Assessment produces a comprehensive estimate of current and future housing needs for the entire county, it is also important to understand how that need is reflected across the county’s diverse local communities to inform policy decisions that support meeting the broader needs of the county.

ECONorthwest created a model for distributing the Pima County Housing Needs Assessment results among the local communities in Pima County, including Census Designated Places (CDPs), based on criteria that reflect both current and future local conditions and needs in Tucson. At a high level, the categories and rationale behind the criteria are as follows:

- ◆ **Current population:** Housing need corresponds directly to population size. This is calculated as Tucson’s share of Pima County’s total population.
- ◆ **Current jobs:** Employment is a driver of housing demand. Better matching of job and housing locations creates more options for housing, shortens commute times, and eases strain on transportation systems. This is calculated as Tucson’s share of Pima County’s total current jobs.
- ◆ **Added population:** Future housing need is more likely to increase in areas where population growth will occur. This is calculated as Tucson’s share of the total projected population to be added in Pima County between 2025 and 2030.
- ◆ **Added jobs:** Employment growth is a driver of future housing demand. This is calculated as Tucson’s share of the total jobs to be added in Pima County between 2021 and 2050.¹

¹ Current data limitations prevent the availability of small-area employment projections for 2025–2030.



UNDERSTANDING TUCSON'S LOCAL HOUSING NEEDS ALLOCATION

To allocate housing needs across Pima County's diverse communities, it is critical to ground the analysis in both current and future conditions. The following assumptions were used to develop Tucson's local housing need allocation from the countywide total regional need:

- » Current Population (2023 – Source: ACS): 561,548
- » Projected Population (2045 – Source: OEO): 603,724
- » Current Jobs (2022 – Source: LEHD): 246,643
- » Projected Jobs (2035 – Source: PAG): 292,467
- » Current Housing Units (2023 – Source: ACS): 250,561

The local allocation methodology incorporates workforce projections, which satisfy the requirements of Arizona State Bill 1162 by connecting employment growth to housing needs.

Tucson Results

The analysis shows that Tucson will need to produce just over 62,000 new housing units between 2024-2045 to address the current need driven by underproduction and people experiencing homelessness, and future need, driven by anticipated population growth. A breakdown by component of the total housing need through 2045 for Tucson is shown in Exhibit 1 below.

Exhibit 1: Summary of Housing Need by Component, 2024–2045

Component	Housing units	Share
Homelessness need	4,717	7%
Underproduction	8,061	13%
Future need	49,625	80%
Total units	62,403	100%

Source: ECONorthwest analysis; synthesis of Office of Economic Opportunity Pima County Population Projection and U.S. Census Bureau, American Community Survey 1-year 2023 Public Use Microdata Sample estimates; Tucson-Pima Collaboration to End Homelessness



Total Housing Need by Income 2045

The Pima County Housing Needs Assessment allocates total housing needs by 2045 based on different income levels, recognizing that households across the income spectrum need affordable housing options relative to their household income. Exhibit 2 shows the

TUCSON AND PIMA COUNTY'S RELATIVE AFFORDABILITY

The lower housing need in the 60–120 percent Area Median Income (AMI) range reflects Tucson and Pima County's relatively affordable housing market compared to other intermountain west communities. Therefore, moderate- and higher-income households in region have access to a broader range of housing options, which reduces the urgency of targeted interventions for this income group. However, this dynamic puts pressure on lower-income households, as moderate-income households may choose to "rent or buy down," occupying housing that would otherwise serve lower-income households, thereby exacerbating affordability pressures at the lower end of the income spectrum.

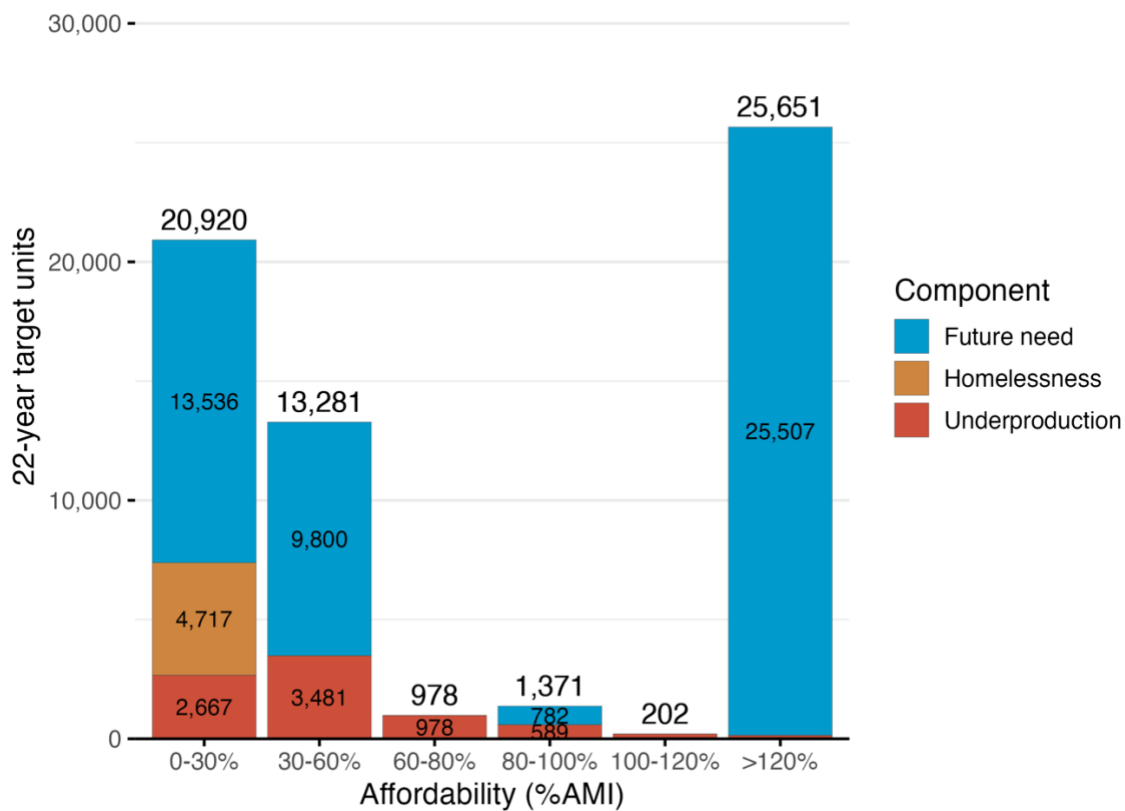
distribution of total needed units by income and housing need component. Housing needs for Tucson specifically are heavily skewed towards lower and higher income households. An estimated 34,000 housing units for households earning 0–60 percent of the Area Median Income are needed to meet current and future demand, including housing for the homeless. The private market typically fails to deliver housing affordable to these income levels, as they require a patchwork of financial subsidies to build and maintain. Housing needs are lower for households in the 60–120 percent Area Median Income range, partly due to an existing

supply of housing affordable to these income levels in Pima County. Just under 26,000 units serving higher earning households above 120 percent of Area Median Income are also needed, primarily driven by future population growth. It is worth noting that this is the last income bin and can contain households making any income at 120 percent of AMI (\$103,200 for a family of four, as of 2023) or higher, which can include a wider range of housing types. Adding new supply can create more options for higher income households which can help relieve pressure on the existing, more affordable housing stock. The market can potentially produce housing for these income levels on its own, assuming supportive local policies are in place.

Given the lack of detailed, local data on the incomes of homeless households, this model assumes that all units needed for addressing homelessness must be targeted at the 0-30 percent AMI level. While it is possible that some homeless households may earn above this income level, the most realistic and defensible assumption is that this specific component of housing need must be deeply affordable in order to provide the necessary long-lasting housing stability for Tucson's homeless residents.



Exhibit 2. Housing Need Components by Income, Tucson, 2024–2045



Source: ECONorthwest analysis; synthesis of Office of Economic Opportunity Population Projection and U.S. Census Bureau, American Community Survey 1-year 2023 Public Use Microdata Sample estimates; Tucson-Pima Collaboration to End Homelessness

Scaled Estimates for Tucson

Estimates for housing need are through 2045, but this estimate can be adjusted for a shorter planning horizon to better understand the number of units needed in the near term and to align policies and strategies with current market conditions and to support other ongoing planning efforts. Therefore, the analysis includes results adjusted for a 10-year and a 5-year horizon, out to 2028 and 2033, respectively. Because housing for the homeless reflects a clear and pressing housing need, all of those units are included in the 5- and 10-year scaled estimates. Similarly, underproduction is treated as a high-priority component of need, and the entirety of it is included in the 10-year scaled estimates, and half in the 5-year scaled estimates.



10-YEAR SCALED ESTIMATE

Over 35,000 housing units are needed in Tucson between 2024² and 2033 to address current need, driven by underproduction and people experiencing homelessness, and future need, driven by anticipated population growth through 2033. The 10-year estimate represents just under 57 percent of the total need through 2045. A breakdown by component of the housing need through 2033 for Tucson is shown in Exhibit 5 below.

Exhibit 3: 10-Year Scaled Estimate of Housing Need for Tucson, 2024-2033

Component	Housing units	Share
Homelessness need	4,717	13%
Underproduction	8,061	23%
Future need	22,557	64%
Total units	35,335	100%

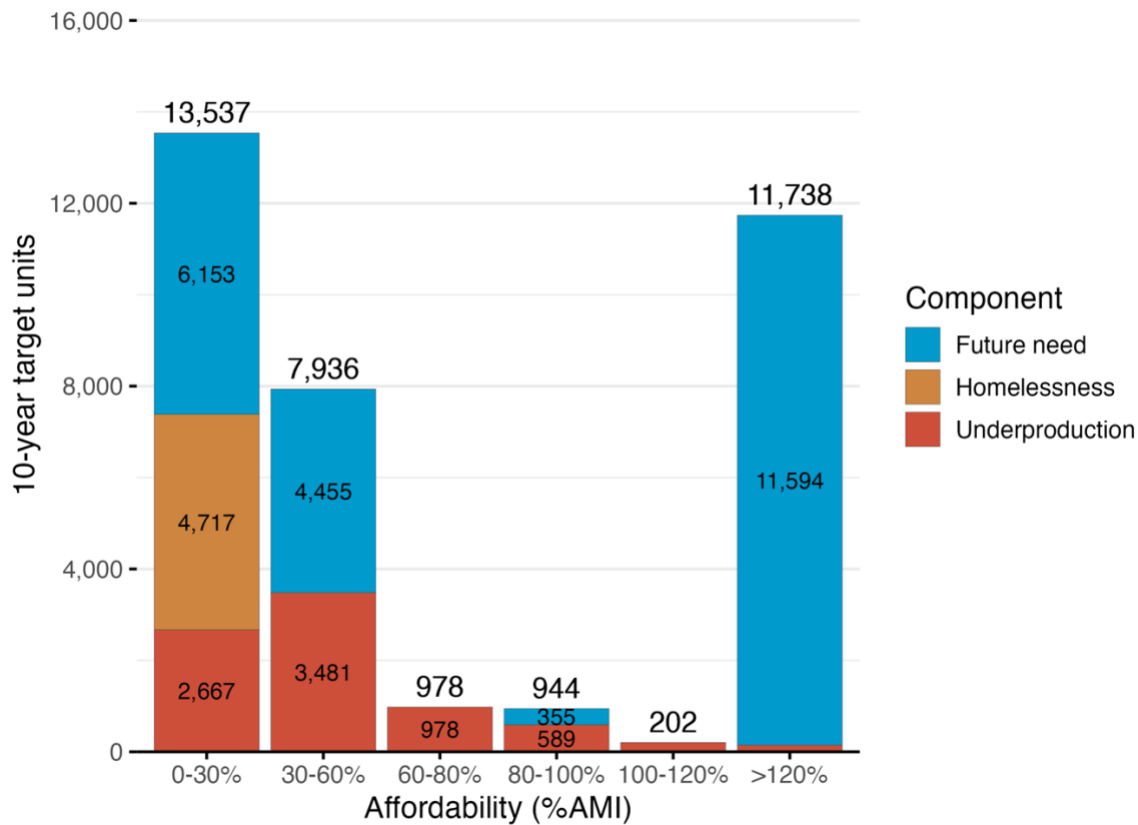
Source ECONorthwest analysis; synthesis of Office of Economic Opportunity Pima County Population Projection and U.S. Census Bureau, American Community Survey 1-year 2023 Public Use Microdata Sample estimates; Tucson-Pima Collaboration to End Homelessness

Exhibit 3 shows the 10-year distribution of total needed units by area median income. The distributions reflect the assumptions and methods, discussed above, that allocate all units to address homelessness and the majority of units to address underproduction to the lowest income categories. Therefore, the 10-year estimate shows the greatest need in the 0–60 percent Area Median Income categories.

² Given the lag in Census data requiring us to calculate current stock with 2023 PUMS data, the short-term need technically is calculated as between 2024-2033.



Exhibit 4: 10-Year Scaled Housing Need Components by Income, Tucson, 2024-2033



Source: ECONorthwest analysis; synthesis of Office of Economic Opportunity Pima County Population Projection and U.S. Census Bureau, American Community Survey 1-year 2023 Public Use Microdata Sample estimates; Tucson-Pima Collaboration to End Homelessness

5-YEAR SCALED ESTIMATE

Just over 20,000 housing units are needed in Tucson between 2024³ and 2028 to address current need, driven by underproduction and people experiencing homelessness, and future need, driven by anticipated population growth through 2028. The 5-year estimate represents just over 32 percent of the total need through 2045. A breakdown by component of the housing need through 2028 for Tucson is shown in Exhibit 5 below.

³ Given the lag in Census data requiring us to calculate current stock with 2023 PUMS data, the short-term need technically is calculated as between 2024-2028



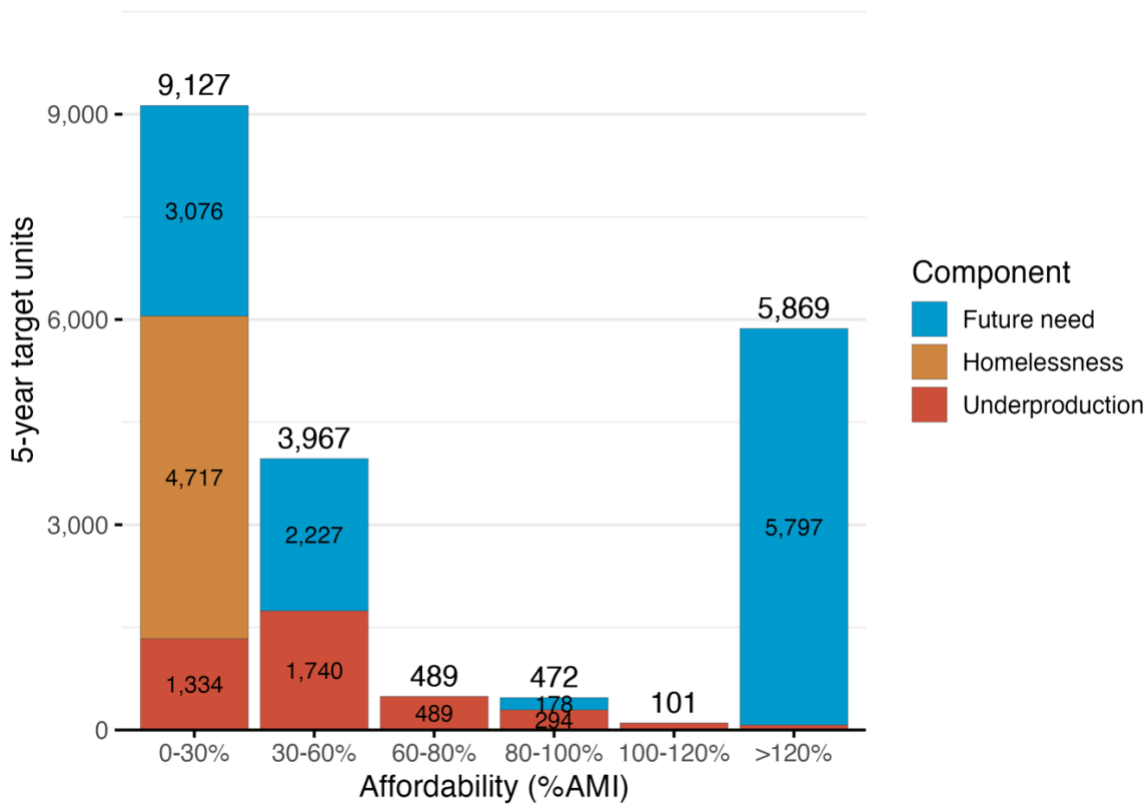
Exhibit 5: 5-Year Scaled Estimate of Housing Need for Tucson, 2024-2028

Component	Housing units	Share
Homelessness need	4,717	24%
Underproduction	4,030	20%
Future need	11,279	56%
Total units	20,026	100%

Source ECONorthwest analysis; synthesis of Office of Economic Opportunity Pima County Population Projection and U.S. Census Bureau, American Community Survey 1-year 2023 Public Use Microdata Sample estimates; Tucson-Pima Collaboration to End Homelessness

Exhibit 6 shows the 5-year distribution of total needed units by area median income. The distributions reflect the assumptions and methods, discussed above, that allocate all units to address homelessness and the majority of units to address underproduction to the lowest income categories. Therefore, the 5-year estimate shows the greatest need in the 0–60 percent Area Median Income categories.

Exhibit 6: 5-Year Scaled Housing Need Components by Income, Tucson, 2024-2028



Source: ECONorthwest analysis; synthesis of Office of Economic Opportunity Pima County Population Projection and U.S. Census Bureau, American Community Survey 1-year 2023 Public Use Microdata Sample estimates; Tucson-Pima Collaboration to End Homelessness



Next Steps

The city will integrate this data on local housing needs into its comprehensive housing needs assessment to meet the requirements of Arizona State Bill 1162. A key task for Tucson and the region will be to build upon and scale up past successes in identifying and securing funding sources and developing strategic partnerships to expand affordable housing options and enhance support services for low-income residents and individuals experiencing homelessness. In the past, the city and county have effectively leveraged federal and state resources to support housing initiatives; however, moving forward, new and innovative approaches to securing *local* funding sources may be required.

The city can also use these findings to guide policy development, update zoning and land-use regulations, and align housing strategies with projected housing need through 2045.

