



# S.B. 1162 Housing Needs Assessment 2024-2029

Arizona Counties and  
Selected Municipalities with 30,000 or More Population



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# 1. Introduction

In April 2024, Senate Bill 1162 was signed into law, which, among other things, required that all municipalities of 30,000 or more population (beginning January 1, 2025, and every five years thereafter) publish a Municipal Housing Needs Assessment. The Bill specifies that the Assessment includes reporting on local population and employment growth projections, the current amount of residentially zoned land in the municipality, and determining the existing and future housing needs over the next five-year period.

The Arizona League of Cities and Towns, in partnership with Arth Analytics, LLC, developed a standardized data collection framework and housing needs determination methodology and performed the analysis for 17 cities and towns opting to use the League's approach: Apache Junction, Avondale, Buckeye, Bullhead City, El Mirage, Gilbert, Glendale, Kingman, Lake Havasu City, Oro Valley, Phoenix, Prescott, Prescott Valley, San Luis, Sierra Vista, Surprise, and Tucson.

It is important to acknowledge that housing development is primarily dictated by market conditions and forces and driven by the real estate development community. Cities and towns have limited control on housing production and their planning and zoning functions are primarily to ensure a higher quality of life and that proposed development projects are in conformance with adopted general plans. Housing construction completion timeframes and pricing are highly dependent upon construction trade labor force and material costs and supply availability.

This report discusses the collaborative process by which the methodology was developed and the outreach to cities, towns, and other parties (Section 2), the factors influencing the determination of housing needs (Section 3 and Appendix A), followed by the results and analysis of the Housing Needs Assessment (Section 4 and Appendix B). Appendix C contains the detailed methodology, assumptions, and data sources used. Finally, Section 5 provides recommendations for policymakers and impacted cities and towns, in an effort to strengthen and improve the Municipal Housing Needs Assessment process in subsequent iterations.

# 2. Objectives

In developing the Housing Needs Assessment, the League and Arth Analytics established several key objectives at the outset. First and foremost, the Assessment effort strived to fully respond to the language of the Bill. A proposed draft methodology was developed and shared with the Bill's largest proponents, the Arizona Multifamily Housing Association (MFHA). In discussions with them, they provided clarification and guidance on the Bill's language and intent. The MFHA assured the research team that the methodology was aligned with their goals and desired outcomes. Additionally, the Arizona Department of Housing was briefed on the methodology.

Methodologically, the motivation was to establish a standardized, repeatable process and leverage consistent, publicly available data sets across all municipalities subject to the Bill. The team performed substantial literature review and evaluated the relative strengths and weaknesses of different housing needs assessment methodologies performed elsewhere.

The team also solicited input and review from several top practitioners and researchers, including Jim Chang, Arizona State Demographer; Dr. Arthur Nelson, Professor Emeritus of Urban Planning and Real Estate Development, University of Arizona; and Dr. Jeff Tayman, retired Technical Services Director and retired Lecturer at UC San Diego. The methodology was developed in an iterative, collaborative, and open process with League members, and the team held multiple outreach meetings and technical briefings with municipalities and their consultants.

The Housing Needs Assessment aims to incorporate leading principles and best practices within the urban planning and housing policy research domains. It is intended to be continually subjected to input and peer review by municipalities, planners, policy analysts, and researchers.

### 3. Factors Influencing Housing Needs

To provide a context for the existing housing and future housing needs, this section of the report describes current trends for the factors used to calculate the housing information and to support monitoring trends in employment dynamics for all counties in Arizona and the 17 municipalities with 30,000 or more population that used this methodology. The housing needs determination factors include housing vacancy rates, headship rates, overcrowding rates, HUD family income categories, housing construction, and employed residents in the labor force (workforce). The monitoring factors include place-of-work employment, in- and out-commuters, and average commute time. Appendix A contains the data tables for the counties and municipalities discussed in this section.

#### A. Workforce, Employment, and Commuting Characteristics

The workforce is the number of employed people in the labor force residing in a particular geographic area, and employment represents the number of jobs in the same location. Comparing the two indicates the balance or lack thereof between workers and jobs. Three commuting characteristics for municipalities are shown in this report: 1) the percentage of the resident workforce who hold jobs outside of the municipality (out-commuters); 2) the percentage of the workforce living outside of the municipality who hold jobs in the municipality (in-commuters); and the average commute time for the workforce in the municipality.

Statewide, the jobs and workforce are roughly balanced. In 2022, the state's workforce was 3,058,370, and its jobs were 3,018,413 (Appendix Table A1). Rounded to one decimal place, the ratio of workforce to employment is 1.0. Coconino, Greenlee, and Maricopa have more jobs than the resident workforce, with ratios of 0.9, 0.7, and 0.9, respectively. For counties with a larger workforce than jobs, the ratios range from 1.1 in Pima and Yuma Counties to 2.8 in Pinal County. Pinal County has roughly three times greater workforce than jobs. In Apache County, the workforce and jobs are roughly in balance.

Similarly, across all municipalities, the jobs (1,586,998) and workforce (1,509,981) have a 1.0 ratio of workforce to employment (Appendix Table A2). Three municipalities have more jobs than workforce; their ratios range from 0.7 in Phoenix to 0.9 in Tucson. Most municipalities have a larger workforce than jobs; their ratios range from 1.1 in Sierra Vista to 6.7 in El Mirage. Kingman has approximately the same size of its workforce and jobs.

Across municipalities, just over two-thirds of the residents work outside their municipality. The percentages of these out-commuters range from 43.6% in Tucson to 98.7% in El Mirage. In over

one-third of the municipalities, 90% or more of their workforce work outside the municipality. In three municipalities, less than half of the workforce work outside the municipality.

Across the municipalities, 69% of the jobs are held by workforce living outside of the municipality (in-commuters). The percentages of these in-commuters range from 31.2% in Lake Havasu City to 91.2% in El Mirage. In five of the 17 municipalities, in-commuters comprise 80% or more of the jobs. In only one municipality (Lake Havasu City) do in-commuters hold less than half of the jobs.

Across municipalities, the average commute time is 25 minutes and ranges from 16.3 minutes in Prescott to 33.3 minutes in Buckeye. Four municipalities have average commute times under 20 minutes, and three have average commute times of 30 minutes or more.

## B. Housing Construction

Between Census 2020 (April 1, 2020) and end of fiscal year 2024 (June 30, 2024), Arizona adds over 217,000 housing units, a change of 7.1% (Appendix Table A3). Apache County has the lowest percentage change (1.3%), and Pinal County has the highest (12.2%), with an average percentage change across counties of 5.2%. Pinal is the only county with a double-digit percentage change. Over 90% of the net housing change occurs in Maricopa, Pima, Pinal, Yavapai, and Yuma counties.

Since 2020, the municipalities in this analysis have added just over 99,000 housing units, a change of 7.2% (Appendix Table A4). Housing change in all municipalities captures 46% of the housing change statewide. Tucson and Sierra Vista have the lowest percentage change (2.9%), and Buckeye has the highest (30.1%), with an average change across municipalities of 9.1%. There is substantial variability in housing change across the municipalities. Three municipalities have a change of 15% or more, nine between 5% and 15%, and five municipalities less than 5%. Among the municipalities in this analysis, four municipalities add more than 9,000 housing units each from 2020 to 2024 (Buckeye, Gilbert, Phoenix, and Surprise).

## C. Vacancy Rate

Two different vacancy rate measures are presented. The total housing vacancy rate (THVR) divides the total number of vacant units by the housing inventory (vacant units + occupied units). The available housing vacancy rate (AHVR) divides the sum of vacant units "for sale only" and vacant units "for rent" by the sum of occupied units, vacant units that are "for sale only", vacant units that have been "sold but not yet occupied", vacant units that are "for rent", and vacant units that have been "rented but not yet occupied." The THVR is larger than the AHVR because seasonal units affect the latter.

Between 2018 and 2023, the THVR and AHVR decline substantially in all counties and statewide, with the AHVR uniformly showing the largest percent changes (Appendix Table A5). The percentage decline in the THVR ranges from -45.9% in Graham County to -13.8% in Yuma County, and the percentage decline for the AHVR ranges from -86.5% in La Paz County to -27.7% in Coconino County.

A similar pattern is seen in the municipality vacancy rates (Appendix Table A6). The THVR shows a double-digit percentage decline in all municipalities. The percentage declines for the THVR range

from -62.5% in San Luis to -13.9% in Prescott. The AHVR increases in only one municipality (Surprise, 3.0% to 3.5%). The percentage declines in the AHVR range from -84.6% in San Luis to -8.0% in Avondale. Ten municipalities have a percentage decline of 40% or more.

#### D. Headship Rate

The headship rate is the share of the total population that heads a household (householders). The Census Bureau considers age 15 the youngest householder, and the total headship rate is the number of households divided by the population aged 15 years and older.

Between 2018 and 2023, the headship rate increased in all counties and statewide (Appendix Table A7), indicating that households increased faster than the population 15 years and older. A faster increase in households implies a decline in the average size of a household. The percentage increase ranges from 1.7% in Cochise County to 23.0% in La Paz County. Graham, La Paz, and Navajo Counties, which show double-digit percentage increases in headship rates.

A similar pattern is seen in the headship rate for municipalities; 14 of the 17 municipalities show an increase in headship rates (Appendix Table A8). The headship rate declines in El Mirage, Prescott Valley, and San Luis, ranging from -3.6% to -0.5%. The percentage change for municipalities with increased headship rates ranges from 0.4% in Surprise to 11.8% in Kingman. Only Buckeye and Kingman show a headship rate increase of greater than 10%.

#### E. Overcrowding Rate

The overcrowding rate is defined as the share of households with more than one occupant per room, while the severely overcrowded rate is greater than 1.5 occupants per room. Rooms include living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches suitable for year-round use, and lodger's rooms. Bathrooms, open porches, balconies, halls or foyers, half-rooms, utility rooms, unfinished attics or basements, or other unfinished space used for storage are not considered as rooms.

Arizona had an overcrowding rate of 4.4% and a severe overcrowding rate of 1.5% in 2023 (Appendix Table A9). The overcrowding rate in 2023 ranges from 2.3% in Yavapai County to 12.9% in Apache County, and the severe overcrowding rate is the lowest (0.6%) and highest (6.4%) in these two counties. The percent change in overcrowding rate declined in five counties between 2018 and 2023, ranging from -1.5% in Apache County to -15.8% in Mohave County. The overcrowding rate increases (as a percent change) in ten counties, ranging from a 2.5% increase in Gila County to 84.6% in La Paz County. The severe overcrowding rate declined in five counties between 2018 and 2023, ranging from a -38.9% decline in Gila County to -1.5% in Apache County. The severe overcrowding rate increased in eight counties, ranging from an 11.1% increase in Pinal County to 65.5% in La Paz County. Maricopa and Yavapai show no change in the severe overcrowding rate.

The overcrowding rate in 2023 ranges from 0.5% in Oro Valley to 24.2% in San Luis, and the severe overcrowding rate is the lowest in three municipalities, Oro Valley, Prescott, and Sierra Vista (0.3%) and highest (10.9%) in San Luis (Appendix Table A10). The overcrowding rate declined in eight municipalities between 2018 and 2023, ranging from a -44.4% decline in Oro Valley to -10.6% in

Tucson. The overcrowding rate increased in four counties (as a percent change), ranging from a 2.9% increase in Avondale to 77.8% in Sierra Vista. Apache Junction had no change in its overcrowding rate. The severe overcrowding rate declined in five counties, ranging from -25.0% in Flagstaff and Sierra Vista to -9.5% in Phoenix. The severe overcrowding rate increases in ten counties, ranging from 20.0% in Prescott Valley to 144.4% in El Mirage. Bullhead City and Kingman show no change in the severe overcrowding rate.

#### F. HUD Income Groupings

The municipalities' total existing and future housing needs (in Section 4) are distributed to income groups using the latest (2021) Housing and Urban Development Area Median Family Income (HAMFI) data. The upper threshold of 80-100% and 100% or more of HAMFI has been disaggregated to 80-120% of HAMFI and 120% or more.

Based on the average across municipalities, 9.8% of the households make less than 30% of the median family income (MFI), 10.5% of the households make between 30% and 50% of the MFI, 17.7% of the households make between 50% and 80% of the MFI, 21.5% of the households make between 80% and 120% of the MFI and 40.5% make more than 120% of the MFI (Appendix Table A11). The variability within income groups across jurisdictions generally narrows as the family income increases. The variability is smallest for households making more than 80% of the MFI and greater for households making less than 50% of the MFI. The percentage across municipalities ranges from 5.0% to 16.0% for the lowest income group, 5.1% to 18.6% for the 30%-50% income group, 10.9% to 22.8% for the 50%-80% income group, 17.7% to 28.4% for the 80%-120% income group, and 26.7% to 55.1% for the highest income group.

## 4. Deliverables

This section presents the deliverables called for by Arizona Senate Bill 1162: 1) Existing (2024) housing needs for the 17 municipalities with 30,000 or more population that used the Arth Analytics methodology. The existing municipality housing needs are also disaggregated by HUD family income categories; 2) Future housing needs (2024-2029) for municipalities disaggregated in HUD family income categories; 3) 2024-2029 population and place-of-work employment projections for the counties and municipalities; and 4) the amount of land zoned for single and multiple family use in the municipalities. Appendix B contains the data tables for the counties and municipalities discussed in this section.

#### A. Existing Housing Needs 2024

Across the participating municipalities, the existing housing needs were 56,560, representing 3.8% of the current housing units (Appendix Table B1). San Luis has the largest needs as a percent of the current housing units (14.8%). The other municipalities' percentage ranges from 2.2% in Apache Junction to 6.7% in Buckeye. The existing housing needs in the HUD Area median family income categories (Appendix Table B2) are based on the percentage distributions shown in Table A11 applied to the total existing housing needs.

## B. Future Housing Needs, 2024-2029

Across the municipalities, the future housing needs from 2024-2029 are 105,100 additional units, 85.8% larger than the existing housing needs (Appendix Table B1). The future housing needs in twelve municipalities are larger than the existing ones. Five jurisdictions have smaller future housing needs than existing housing needs. The differences between future housing needs and existing housing needs are largely due to the expected population growth between 2024 and 2029. Faster-growing municipalities tend to have greater future housing needs than their existing housing needs. Future housing needs in the HUD Area median family income categories (Appendix Table B2) are based on the percentage distributions shown in Table A11 applied to the total future housing needs.

## C. Population and Employment Forecasts, 2024-2029

Across the municipalities, the population is expected to reach 3,902,052 in 2029, a gain of 267,100 population (7.3%) (Appendix Table B3). Employment changes faster than the population (8.5%), reaching 1,811,521 in 2029, a gain of 141,441 jobs. The percentage changes range from 1.9% in Sierra Vista and Tucson to 32.8% in Buckeye. All but three municipalities have gained jobs between 2024 and 2029. The percentage changes range from 3.2% in Kingman to 43.8% in El Mirage. Employment in Prescott, San Luis, and Sierra Vista declined by -2.2%, -28.9%, and -3.2%, respectively.

## D. Residential Land Use, 2024

Across the municipalities, most residential land is zoned for single-family use (84.7%) (Appendix Table B4). Prescott has the smallest single-family share (65.0%), and Buckeye has the largest (99.7%). In seven municipalities, single-family land accounts for more than 90% of the land zoned for residential activities.

# 5. Recommendations

The SB 1162 Housing Needs Assessment Bill marks an important milestone in state housing policy and should provide a consistent framework for housing needs indicators across municipalities. A set of recommendations for future amendments to the law has been considered to improve the process and achieve the intended outcomes of the Bill.

## A. Submission Date

The Bill specifies Housing Needs Assessment submission date of January 1 every five years. Due to critical data availability and release schedules from the Arizona Office of Economic Opportunity, the U.S. Census Bureau, and others occurring late in the calendar year (each with generally a 1-year lag), it would be beneficial to establish a submission date later in the calendar year. A later date would ensure that the most current data can be incorporated into the analysis and provide sufficient time for local outreach, quality assurance, and review. A mid-year (fiscal year end) submission date would accommodate that.

## B. Jobs-Housing Nexus

SB 1162 requires that the Housing Needs Assessment consider the need for additional housing based on the current workforce and job growth projections (Part A, 4(b) and 4(d)). There is some

ambiguity in the language regarding whether determinations of housing needs are required separately to house the current workforce (i.e., employed residents) and future job growth (place of work employment).

To strengthen the Bill, future amendments may seek to better specify the desired outcomes as they relate to the nexus between jobs and housing and determining housing needs. For example, regional disparities in the jobs-housing balance have long existed. If the intent is to promote greater housing in municipalities with a poor jobs-housing balance (high number of jobs relative to housing), it could specifically be addressed through the Housing Needs Assessment. Also, considering the rates of in-commuters and out-commuters and the composition of the local workforce (including age and labor force participation) could help better address desired housing outcomes.

### C. Regional (Mesoscopic) Level of Analysis and Needs Determination

The current Bill can result in a bottom-up (municipality-focused) approach to determining regional and state-level housing needs, potentially creating a myopic and siloed scope of housing needs determination. Specifying a regional or mesoscopic (top-down but locally balanced) approach to housing needs determination could better address whether a region's overall housing needs are being met.

The methodology developed by the research team first determines the regional (county) level of housing needs. Then, it allocates it sub-regionally in a manner that is intended to be balanced and equitable. This top-down approach ensures that the regional needs are met by the region's municipalities subject to the Bill, and it also helps create balance by considering local growth dynamics and disparities across the region.

### D. Housing Affordability

Future amendments to the Bill should consider specifying housing affordability as a factor in determining a municipality's housing needs. For planners, developers, and the public alike, the level of housing needs is important, and so is housing affordability. Addressing rent-burdened and owner-cost-burdened households (in which housing costs exceed 30% of gross household income) as part of determining the overall regional or municipality housing needs warrants consideration. Sufficient localized publicly available data sources exist, and a modification to the current methodology could be easily incorporated.

## Appendix A - Factors Affecting Housing Needs Tables

Table A1 Workforce and Employment, Counties

Table A2 Workforce, Employment Commuting Characteristics, Municipalities

Table A3 Housing Change, Counties

Table A4 Housing Change, Municipalities

Table A5 Vacancy Rate, Counties

Table A6 Vacancy Rate, Municipalities

Table A7 Headship Rate, Counties

Table A8 Headship Rate, Municipalities

Table A9 Overcrowding Rate, Counties

Table A10 Overcrowding Rate, Municipalities

Table A11 HUD Income Categories, Municipalities

Table A1 – Workforce and Employment, Counties

<b>Workforce and Employment, Counties</b>			
<b>County</b>	<b>2022 Workforce</b>	<b>2022 Employment</b>	<b>Workforce / Employment</b>
Apache	14,260	13,914	1.0
Cochise	39,385	29,120	1.4
Coconino	54,469	58,119	0.9
Gila	18,594	13,284	1.4
Graham	13,425	9,317	1.4
Greenlee	3,222	4,815	0.7
La Paz	6,633	5,702	1.2
Maricopa	2,029,013	2,224,364	0.9
Mohave	77,524	53,278	1.5
Navajo	29,634	25,408	1.2
Pima	398,227	369,943	1.1
Pinal	190,588	67,676	2.8
Santa Cruz	17,682	12,185	1.5
Yavapai	91,564	63,363	1.4
Yuma	74,150	67,925	1.1
<b>Arizona</b>	<b>3,058,370</b>	<b>3,018,413</b>	<b>1.0</b>

Sources: Longitudinal Employment Housing Dynamics (LEHD)  
 Origin-Destination Employment Statistics  
<https://lehd.ces.census.gov/data/#lodes>

Table A2 - Workforce, Employment, and Commuting Characteristics, Municipalities

**Workforce, Employment, and Commuting Characteristics, Municipalities**

<b>Municipality</b>	<b>2022 Workforce</b>	<b>2022 Employment</b>	<b>Workforce / Employment</b>	<b>Out- Commuters</b>	<b>In- Commuters</b>	<b>Average Commute Time (Minutes)</b>
Apache Junction	18,793	6,911	2.7	94.1%	83.9%	28.5
Avondale	45,055	22,981	2.0	95.1%	90.5%	28.0
Buckeye	42,823	13,734	3.1	92.1%	75.3%	33.3
Bullhead City	15,517	9,527	1.6	74.5%	58.5%	21.3
El Mirage	16,702	2,491	6.7	98.7%	91.2%	30.0
Gilbert	127,741	87,801	1.5	85.5%	79.0%	26.1
Glendale	109,685	86,507	1.3	89.0%	86.0%	28.0
Kingman	13,277	12,860	1.0	61.5%	60.2%	19.2
Lake Havasu City	21,392	16,088	1.3	48.3%	31.2%	16.4
Oro Valley	15,739	12,131	1.3	88.0%	84.4%	27.0
Phoenix	741,893	989,949	0.7	45.6%	59.2%	25.7
Prescott	17,630	22,634	0.8	64.9%	72.6%	16.3
Prescott Valley	19,217	11,593	1.7	78.1%	63.6%	21.5
San Luis	10,784	4,799	2.2	82.3%	60.3%	27.1
Sierra Vista	13,982	13,199	1.1	59.0%	56.5%	17.5
Surprise	65,268	27,086	2.4	89.8%	75.4%	30.3
Tucson	214,483	246,707	0.9	43.6%	51.0%	22.2
<b>Municipalities</b>	<b>1,509,981</b>	<b>1,586,998</b>	<b>1.0</b>	<b>66.5%</b>	<b>68.6%</b>	<b>24.6</b>

Sources: Longitudinal Employment Housing Dynamics (LEHD) Origin-Destination Employment Statistics

<https://lehd.ces.census.gov/data/#lodes>

2019-2023 5-Year American Community Survey, U.S. Census Bureau

Table A3 - Housing Change, Counties

Housing Change, Counties							
County	2020 Units	Net Change in Housing				2020-2024	
		2020 <sup>a</sup> - 2021	FY 2022	FY 2023	FY 2024	Number	Percent
Apache	28,723	88	158	113	21	380	1.3%
Cochise	58,648	517	586	504	526	2,133	3.6%
Coconino	69,108	915	481	480	1,077	2,953	4.3%
Gila	32,373	217	175	169	121	682	2.1%
Graham	13,704	239	197	175	158	769	5.6%
Greenlee	4,389	22	30	24	16	92	2.1%
La Paz	13,457	228	34	10	19	291	2.2%
Maricopa	1,812,827	37,464	30,156	36,410	38,310	142,340	7.9%
Mohave	117,650	1,940	2,334	1,952	2,049	8,275	7.0%
Navajo	56,180	354	567	572	536	2,029	3.6%
Pima	470,132	4,675	4,842	4,749	5,805	20,071	4.3%
Pinal	172,878	6,426	6,346	4,177	4,141	21,090	12.2%
Santa Cruz	18,729	222	223	293	277	1,015	5.4%
Yavapai	121,154	2,618	2,216	2,423	2,103	9,360	7.7%
Yuma	92,048	1,720	1,540	1,186	1,459	5,905	6.4%
<b>Arizona</b>	<b>3,082,000</b>	<b>57,645</b>	<b>49,885</b>	<b>53,237</b>	<b>56,618</b>	<b>217,385</b>	<b>7.1%</b>

Sources: 2020 Decennial Census (April 1, 2020), U.S. Census Bureau  
 Arizona Office of Economic Opportunity. Office of the State Demographer  
 Quarterly Building Permits and Completions Data, 2009Q1 to 2024Q2  
 Quarterly Demolition Table, 2020Q2 to 2024Q2

<sup>a</sup> CY2020 Q2 + FY 2021

Table A4 - Housing Change, Municipalities

Housing Change, Municipalities							
Municipality	2020 Units	Net Change in Housing				2020-2024	
		2020 <sup>a</sup> - 2021	FY 2022	FY 2023	FY 2024	Number	Percent
Apache Junction	22,149	213	204	86	752	1,255	5.7%
Avondale	29,084	453	504	1,058	1,117	3,132	10.8%
Buckeye	30,860	3,736	1,450	2,247	1,854	9,287	30.1%
Bullhead City	24,503	365	342	375	301	1,383	5.6%
El Mirage	11,481	91	55	106	246	498	4.3%
Gilbert	93,230	2,554	3,070	2,511	1,605	9,740	10.4%
Glendale	91,912	788	1,211	1,888	1,980	5,867	6.4%
Kingman	14,135	430	360	271	226	1,287	9.1%
Lake Havasu City	35,410	487	332	413	371	1,603	4.5%
Oro Valley	23,303	388	339	158	197	1,082	4.6%
Phoenix	630,752	8,844	8,775	9,677	12,170	39,466	6.3%
Prescott	25,367	583	364	256	372	1,575	6.2%
Prescott Valley	21,276	554	489	601	751	2,395	11.3%
San Luis	7,966	433	244	235	340	1,252	15.7%
Sierra Vista	20,051	146	188	130	115	579	2.9%
Surprise	58,831	2,686	2,304	2,593	4,165	11,748	20.0%
Tucson	242,798	1,333	2,101	1,495	2,010	6,939	2.9%
<b>Municipalities</b>	<b>1,383,108</b>	<b>24,084</b>	<b>22,332</b>	<b>24,100</b>	<b>28,572</b>	<b>99,088</b>	<b>7.2%</b>

Sources: 2020 Decennial Census, U.S. Census Bureau  
 Arizona Office of Economic Opportunity. Office of the State Demographer  
 Quarterly Building Permits and Completions Data, 2009Q1 to 2024Q2  
 Quarterly Demolition Table, 2020Q2 to 2024Q2

<sup>a</sup> CY2020 Q2 + FY 2021

Table A5 - Vacancy Rate, Counties

<b>Vacancy Rate, Counties</b>						
<b>County</b>	<b>Total<sup>a</sup></b>			<b>Available<sup>b</sup></b>		
	<b>2018</b>	<b>2023</b>	<b>% Change</b>	<b>2018</b>	<b>2023</b>	<b>% Change</b>
Apache	37.8	29.5	-22.0%	4.0	2.6	-35.0%
Cochise	19.1	14.9	-22.0%	7.1	2.8	-60.6%
Coconino	27.8	23.3	-16.2%	4.7	3.4	-27.7%
Gila	35.0	28.7	-18.0%	3.8	2.1	-44.7%
Graham	19.6	10.6	-45.9%	6.1	2.5	-59.0%
Greenlee	27.3	22.1	-19.0%	8.7	4.9	-43.7%
La Paz	45.2	34.9	-22.8%	9.6	1.3	-86.5%
Maricopa	11.5	8.3	-27.8%	3.7	2.6	-29.7%
Mohave	24.9	19.0	-23.7%	3.9	1.7	-56.4%
Navajo	40.4	31.2	-22.8%	4.8	2.0	-58.3%
Pima	12.3	9.3	-24.4%	4.0	2.7	-32.5%
Pinal	19.9	12.6	-36.7%	3.5	2.1	-40.0%
Santa Cruz	15.5	11.5	-25.8%	5.5	3.9	-29.1%
Yavapai	16.7	12.2	-26.9%	3.2	1.7	-46.9%
Yuma	21.0	18.1	-13.8%	4.1	2.3	-43.9%
<b>Arizona</b>	<b>15.0</b>	<b>11.0</b>	<b>-26.7%</b>	<b>3.9</b>	<b>2.5</b>	<b>-35.9%</b>

Source: 2014-2018 and 2019-2023 5-Year American Community Survey, U.S. Census Bureau

<sup>a</sup> Vacant units / housing inventory.

<sup>b</sup> Vacant units for sale and rent / (Occupied Units + (Vacant units for sale and rent + Vacant units sold or rented and not occupied)).

Table A6 - Vacancy Rate, Municipalities

<b>Vacancy Rate, Municipalities</b>						
<b>Municipality</b>	<b>Total<sup>a</sup></b>			<b>Available<sup>b</sup></b>		
	<b>2018</b>	<b>2023</b>	<b>% Change</b>	<b>2018</b>	<b>2023</b>	<b>% Change</b>
Apache Junction	24.0	18.3	-23.8%	3.5	1.9	-45.7%
Avondale	6.6	4.7	-28.8%	2.5	2.3	-8.0%
Buckeye	13.1	8.0	-38.9%	4.2	2.2	-47.6%
Bullhead City	29.1	19.9	-31.6%	5.3	2.0	-62.3%
El Mirage	8.9	6.4	-28.1%	3.0	1.6	-46.7%
Gilbert	6.3	3.4	-46.0%	2.3	1.7	-26.1%
Glendale	9.0	5.6	-37.8%	4.2	3.0	-28.6%
Kingman	11.1	5.4	-51.4%	3.3	1.3	-60.6%
Lake Havasu City	26.0	21.9	-15.8%	3.7	2.0	-45.9%
Oro Valley	12.4	10.6	-14.5%	2.8	2.3	-17.9%
Phoenix	9.7	6.5	-33.0%	3.8	2.3	-39.5%
Prescott	13.7	11.8	-13.9%	2.4	1.2	-50.0%
Prescott Valley	9.3	6.9	-25.8%	3.4	1.5	-55.9%
San Luis	6.4	2.4	-62.5%	1.3	0.2	-84.6%
Sierra Vista	14.5	8.6	-40.7%	8.7	3.1	-64.4%
Surprise	14.1	9.8	-30.5%	3.0	3.5	16.7%
Tucson	11.5	8.4	-27.0%	4.7	3.2	-31.9%

Source: 2014-2018 and 2019-2023 5-Year American Community Survey, U.S. Census Bureau

<sup>a</sup> Vacant units / housing inventory.

<sup>b</sup> Vacant units for sale and rent / (Occupied Units + (Vacant units for sale and rent + Vacant units sold or rented and not occupied)).

Table A7 - Headship Rate, Counties

<b>Headship Rate<sup>a</sup>, Counties</b>			
<b>County</b>	<b>2018</b>	<b>2023</b>	<b>% Change</b>
Apache	0.369	0.396	7.3%
Cochise	0.478	0.486	1.7%
Coconino	0.408	0.443	8.6%
Gila	0.490	0.514	4.9%
Graham	0.368	0.410	11.4%
Greenlee	0.441	0.473	7.3%
La Paz	0.500	0.615	23.0%
Maricopa	0.449	0.465	3.6%
Mohave	0.487	0.514	5.5%
Navajo	0.409	0.460	12.5%
Pima	0.478	0.490	2.5%
Pinal	0.406	0.426	4.9%
Santa Cruz	0.428	0.444	3.7%
Yavapai	0.496	0.516	4.0%
Yuma	0.444	0.466	5.0%
<b>Arizona</b>	<b>0.452</b>	<b>0.469</b>	<b>3.8%</b>

Sources: 2014-2018 and 2019-2023 5-Year American Community Survey, U.S. Census Bureau

<sup>a</sup> Households / Population ages 15 and older.

Table A8 - Headship Rate, Municipalities

**Table A8 Headship Rate<sup>a</sup>, Municipalities**

<b>Municipality</b>	<b>2018</b>	<b>2023</b>	<b>% Change</b>
Apache Junction	0.501	0.521	4.0%
Avondale	0.407	0.419	2.9%
Buckeye	0.356	0.392	10.1%
Bullhead City	0.496	0.530	6.9%
El Mirage	0.408	0.406	-0.5%
Gilbert	0.426	0.442	3.8%
Glendale	0.426	0.437	2.6%
Kingman	0.474	0.530	11.8%
Lake Havasu City	0.505	0.540	6.9%
Oro Valley	0.509	0.521	2.4%
Phoenix	0.443	0.461	4.1%
Prescott	0.497	0.534	7.4%
Prescott Valley	0.502	0.499	-0.6%
San Luis	0.336	0.325	-3.3%
Sierra Vista	0.493	0.509	3.2%
Surprise	0.451	0.453	0.4%
Tucson	0.476	0.495	4.0%

Sources: 2014-2018 and 2019-2023 5-Year American Community Survey, U.S. Census Bureau

<sup>a</sup> Households / Population ages 15 and older.

Table A9 - Overcrowding Rate, Counties

<b>Overcrowding Rate, Counties</b>						
<b>County</b>	<b>Overcrowding <sup>a</sup></b>			<b>Severe Overcrowding <sup>b</sup></b>		
	<b>2018</b>	<b>2023</b>	<b>% Change</b>	<b>2018</b>	<b>2023</b>	<b>% Change</b>
Apache	13.1	12.9	-1.5%	6.5	6.4	-1.5%
Cochise	2.1	2.4	14.3%	0.6	0.8	33.3%
Coconino	6.8	7.2	5.9%	3.5	2.6	-25.7%
Gila	4.0	4.1	2.5%	1.8	1.1	-38.9%
Graham	6.1	6.1	0.0%	1.4	2.5	78.6%
Greenlee	3.7	4.0	8.1%	1.8	1.7	-5.6%
La Paz	5.2	9.6	84.6%	2.9	4.8	65.5%
Maricopa	4.6	4.3	-6.5%	1.4	1.4	0.0%
Mohave	3.8	3.2	-15.8%	0.9	0.7	-22.2%
Navajo	8.8	9.4	6.8%	3.4	4.0	17.6%
Pima	3.8	3.4	-10.5%	1.1	1.4	27.3%
Pinal	3.7	4.0	8.1%	0.9	1.0	11.1%
Santa Cruz	5.0	6.3	26.0%	1.2	1.9	58.3%
Yavapai	2.4	2.3	-4.2%	0.6	0.6	0.0%
Yuma	7.0	10.3	47.1%	2.4	5.7	137.5%
<b>Arizona</b>	<b>4.5</b>	<b>4.4</b>	<b>-2.2%</b>	<b>1.4</b>	<b>1.5</b>	<b>7.1%</b>

Sources: 2014-2018 and 2019-2023 5-Year American Community Survey, U.S. Census Bureau

<sup>a</sup> Share of households with more than one person per room.

<sup>b</sup> share of households with more than 1.5 persons per room.

Table A10 - Overcrowding Rate, Municipalities

<b>Overcrowding Rate, Municipalities</b>						
<b>Municipality</b>	<b>Overcrowding<sup>a</sup></b>			<b>Severe Overcrowding<sup>b</sup></b>		
	<b>2018</b>	<b>2023</b>	<b>% Change</b>	<b>2018</b>	<b>2023</b>	<b>% Change</b>
Apache Junction	4.0	4.0	0.0%	1.3	1.0	-23.1%
Avondale	6.8	7.0	2.9%	1.8	2.5	38.9%
Buckeye	4.2	3.4	-19.0%	0.9	0.8	-11.1%
Bullhead City	3.7	2.7	-27.0%	0.8	0.8	0.0%
El Mirage	4.9	8.4	71.4%	0.9	2.2	144.4%
Gilbert	1.4	1.9	35.7%	0.4	0.6	50.0%
Glendale	6.4	6.6	3.1%	1.7	2.2	29.4%
Kingman	4.1	3.8	-7.3%	0.7	0.7	0.0%
Lake Havasu City	2.0	2.8	40.0%	0.5	1.0	100.0%
Oro Valley	0.9	0.5	-44.4%	0.4	0.3	-25.0%
Phoenix	6.6	6.1	-7.6%	2.1	1.9	-9.5%
Prescott	1.3	1.2	-7.7%	0.2	0.3	50.0%
Prescott Valley	2.8	2.2	-21.4%	0.5	0.6	20.0%
San Luis	15.6	24.4	56.4%	5.0	10.9	118.0%
Sierra Vista	0.9	1.6	77.8%	0.4	0.3	-25.0%
Surprise	1.5	2.4	60.0%	0.3	0.5	66.7%
Tucson	4.7	4.2	-10.6%	1.4	1.7	21.4%

Sources: 2014-2018 and 2019-2023 5-Year American Community Survey, U.S. Census Bureau

<sup>a</sup> Share of households with more than one person per room.

<sup>b</sup> share of households with more than 1.5 persons per room.

Table A11 - HUD Income Categories, Municipalities

<b>HUD Income Categories, Municipalities</b>					
<b>HUD Area Median Family Income (% of Households), 2021</b>					
<b>Municipality</b>	<b>&lt; 30%</b>	<b>30% - 50%</b>	<b>50% - 80%</b>	<b>80% - 120%</b>	<b>&gt; 120%</b>
Apache Junction	15.1	18.6	20.9	18.7	26.7
Avondale	10.1	12.3	19.2	21.1	37.2
Buckeye	6.1	7.5	17.2	28.4	40.8
Bullhead City	12.6	10.4	22.1	19.2	35.7
El Mirage	12.3	10.0	21.6	25.4	30.8
Gilbert	5.0	5.1	11.3	24.6	54.0
Glendale	15.4	11.8	20.8	17.7	34.2
Kingman	7.0	11.6	17.4	20.2	43.9
Lake Havasu City	6.6	7.5	15.4	23.3	47.3
Oro Valley	5.9	5.7	10.9	22.5	55.1
Phoenix	12.4	12.0	19.5	19.1	37.1
Prescott	8.1	9.9	15.1	21.2	45.7
Prescott Valley	7.0	12.3	17.3	22.1	41.5
San Luis	12.2	13.2	22.8	19.0	33.0
Sierra Vista	8.2	8.5	12.7	19.6	51.0
Surprise	7.0	8.2	17.0	25.6	42.2
Tucson	16.0	13.9	19.3	18.3	32.6
<b>Average</b>	<b>9.8</b>	<b>10.5</b>	<b>17.7</b>	<b>21.5</b>	<b>40.5</b>

Source: Office of Policy Development and Research, U.S. Department of Housing and Urban Development. CHAS Background. Retrieved November 14, 2024, [https://www.huduser.gov/portal/datasets/cp/CHAS/bg\\_chas.html](https://www.huduser.gov/portal/datasets/cp/CHAS/bg_chas.html).

## Appendix B - Senate Bill 1162 Deliverables Tables

Table B1 Existing and Future Housing Needs, Municipalities

Table B2 Existing and Future Housing Needs by HUD Area Median Family Income, Municipalities

Table B3 Total Population and Employment Projections, Municipalities

Table B4 Residential Land Use, Municipalities

Table B1 – Existing and Future Housing Needs, Municipalities

<b>Existing and Future Housing Needs, Municipalities</b>				
<b>Municipality</b>	<b>2024 Existing Needs</b>			<b>2024-2029 Future Needs</b>
	<b>2024 Units</b>	<b>Number</b>	<b>Percent<sup>a</sup></b>	<b>Number</b>
Apache Junction	23,400	510	2.2%	4,030
Avondale	32,220	1,420	4.4%	4,790
Buckeye	40,150	2,670	6.7%	12,100
Bullhead City	25,890	900	3.5%	1,410
El Mirage	11,980	430	3.6%	250
Gilbert	102,970	5,080	4.9%	3,320
Glendale	97,780	3,150	3.2%	4,570
Kingman	15,420	820	5.3%	1,490
Lake Havasu City	37,010	1,390	3.8%	1,810
Oro Valley	24,390	970	4.0%	1,360
Phoenix	670,220	23,220	3.5%	39,080
Prescott	26,940	1,020	3.8%	1,500
Prescott Valley	23,670	1,210	5.1%	2,220
San Luis	9,220	1,360	14.8%	930
Sierra Vista	20,630	1,020	4.9%	380
Surprise	70,580	2,940	4.2%	21,170
Tucson	249,740	8,450	3.4%	4,690
<b>Municipalities</b>	<b>1,482,210</b>	<b>56,560</b>	<b>3.8%</b>	<b>105,100</b>

<sup>a</sup> Existing housing needs / 2024 housing units × 100.

Table B2 – Existing and Future Housing Needs by HUD Area Median Family Income, Municipalities

Existing and Future Housing Needs by HUD Area Median Family Income <sup>a</sup>

Municipality	Current Housing Need	< 30%	30% - 50%	50% - 80%	80% - 120%	> 120%	Projected Housing Need	< 30%	30% - 50%	50% - 80%	80% - 120%	> 120%
Apache Junction	510	80	100	110	100	120	4,030	610	750	840	750	1,080
Avondale	1,420	140	170	270	300	540	4,790	490	590	920	1,010	1,780
Buckeye	2,670	160	200	460	760	1,090	12,100	740	910	2,080	3,440	4,930
Bullhead City	900	110	90	200	170	330	1,410	180	150	310	270	500
El Mirage	430	50	40	90	110	140	250	30	30	50	60	80
Gilbert	5,080	250	260	580	1,250	2,740	3,320	160	170	380	810	1,800
Glendale	3,150	490	370	660	560	1,070	4,570	710	540	950	810	1,560
Kingman	820	60	100	140	170	350	1,490	100	170	260	300	660
Lake Havasu City	1,390	90	100	210	320	670	1,810	120	140	280	420	850
Oro Valley	970	60	60	110	220	520	1,360	80	80	150	310	740
Phoenix	23,220	2,870	2,780	4,530	4,440	8,600	39,080	4,830	4,680	7,620	7,460	14,490
Prescott	1,020	80	100	150	220	470	1,500	120	150	230	320	680
Prescott Valley	1,210	80	150	210	270	500	2,220	160	270	380	490	920
San Luis	1,360	170	180	310	260	440	930	110	120	210	180	310
Sierra Vista	1,020	80	90	130	200	520	380	30	30	50	70	200
Surprise	2,940	210	240	500	750	1,240	21,170	1,480	1,740	3,590	5,420	8,940
Tucson	8,450	1,350	1,170	1,630	1,550	2,750	4,690	750	650	900	860	1,530
<b>Municipalities</b>	<b>56,560</b>	<b>6,330</b>	<b>6,200</b>	<b>10,290</b>	<b>11,650</b>	<b>22,090</b>	<b>105,100</b>	<b>10,700</b>	<b>11,170</b>	<b>19,200</b>	<b>22,980</b>	<b>41,050</b>

<sup>a</sup> Percent of Area Median Family Income

Table B3 - Total Population and Employment Projections, Municipalities

<b>Total Population and Employment Projections, Municipalities</b>						
<b>Municipality</b>	<b>Population</b>			<b>Employment<sup>a</sup></b>		
	<b>2024</b>	<b>2029</b>	<b>% Change</b>	<b>2024</b>	<b>2029</b>	<b>% Change</b>
Apache Junction	41,643	49,781	19.5%	6,652	6,966	4.7%
Avondale	96,803	110,418	14.1%	30,140	32,845	9.0%
Buckeye	113,349	150,577	32.8%	28,989	39,901	37.6%
Bullhead City	43,578	46,460	6.6%	10,034	10,920	8.8%
El Mirage	36,958	37,702	2.0%	6,616	9,515	43.8%
Gilbert	292,116	301,111	3.1%	111,337	120,756	8.5%
Glendale	260,878	273,106	4.7%	110,008	125,320	13.9%
Kingman	35,657	38,964	9.3%	15,642	16,149	3.2%
Lake Havasu City	59,484	63,088	6.1%	17,502	18,544	6.0%
Oro Valley	49,159	51,976	5.7%	13,157	14,283	8.6%
Phoenix	1,697,696	1,795,071	5.7%	950,946	1,025,949	7.9%
Prescott	48,082	51,035	6.1%	24,387	23,848	-2.2%
Prescott Valley	51,532	56,493	9.6%	14,151	16,179	14.3%
San Luis	39,383	42,790	8.7%	3,901	2,774	-28.9%
Sierra Vista	45,492	46,364	1.9%	14,413	13,953	-3.2%
Surprise	165,916	219,197	32.1%	47,349	60,135	27.0%
Tucson	557,226	567,919	1.9%	264,856	273,484	3.3%
<b>Municipalities</b>	<b>3,634,952</b>	<b>3,902,052</b>	<b>7.3%</b>	<b>1,670,080</b>	<b>1,811,521</b>	<b>8.5%</b>

Sources: Maricopa Association of Government estimates and projections  
 Arizona Office of Economic Opportunity estimates and projections

<sup>a</sup> Place-of-work employment

Table B4 - Residential Land, Municipalities

<b>Residential Land, Municipalities</b>				
<b>Municipality</b>	<b>Acres, 2024</b>			<b>% Single Family</b>
	<b>Single-Family</b>	<b>Multiple Family</b>	<b>Total</b>	
Apache Junction	23,912	1,853	25,765	92.8%
Avondale	5,255	2,059	7,314	71.8%
Buckeye	101,731	311	102,042	99.7%
Bullhead City	18,491	1,951	20,442	90.5%
El Mirage	1,591	241	1,832	86.8%
Gilbert	24,593	1,133	25,726	95.6%
Glendale	16,881	2,982	19,863	85.0%
Kingman	14,060	515	14,575	96.5%
Lake Havasu City	9,314	1,432	10,746	86.7%
Oro Valley	10,229	842	11,071	92.4%
Phoenix	227,907	49,711	277,618	82.1%
Prescott	17,438	9,389	26,827	65.0%
Prescott Valley	20,853	938	21,791	95.7%
San Luis	2,082	387	2,469	84.3%
Sierra Vista	11,097	1,409	12,506	88.7%
Surprise	33,285	4,404	37,689	88.3%
Tucson	82,486	32,716	115,202	71.6%
<b>Municipalities</b>	<b>621,205</b>	<b>112,273</b>	<b>733,478</b>	<b>84.7%</b>

Source: City/Town Zoning, 2024

## Appendix C – Methodology

### Summary

The Bill requires calculating existing (2024) and future (2024-2029) housing needs. Existing housing needs are determined for all counties in Arizona and selected municipalities with 30,000 or more population.

A county's existing housing needs were based on the vacancy rate and level of overcrowding. The vacancy rate housing needs represented the difference in housing units between the net vacancy rate (accounting for seasonal units) and a "healthy" vacancy rate between 4.5% and 5.0%. The overcrowding housing needs added housing units to lower the number of severely overcrowded households (> 1.5 persons per room) to a moderately overcrowded status (average of overcrowded households (1 – 1.5 persons per room) and severely overcrowded households) to defray overcrowding. The existing housing needs for counties were the sum of the housing needs due to low vacancy rates and high levels of overcrowding. A range of housing needs was determined for each county. The low end was based on a vacancy rate of 4.5%, and the high end was based on a vacancy rate of 5.0%. The county's existing housing needs were allocated to the municipalities based on three equally weighted factors (shares of the county): 1) 2024 household population, 2) housing unit growth since 2010, and 3) total workforce (residents in the labor force). Municipalities' overall existing housing needs were distributed according to income level using municipality-specific HUD Area Median Income (HAMFI) shares.

Future housing needs were determined only for the municipalities. First, a projection of future (2029) households was determined by multiplying the change from 2024-2029 in population ages 15 and older by an overall headship rate (households / population ages 15 and older). A vacancy rate target of 5% was assumed and applied to the household projection, which represents the minimum number of new housing units required. Municipalities' overall future housing needs were distributed according to income level using municipality-specific HUD Area Median Income (HAMFI) shares.

### Population Growth Projection for the Subsequent Five Years

For all municipalities subject to the Bill, base year population was established and reported from the most current (July 1, 2024) Current Estimates of Population<sup>1</sup> from the Arizona Office of Economic Opportunity (OEO), which provided estimates of the total population and served as the control total for further segmentation. Using the Census Bureau's 5-Year American Community Survey (ACS) Summary File's sex by age<sup>2</sup> and group quarters population<sup>3</sup> data, shares of the population in households and group quarters were applied to the municipality's base year population estimate to provide estimates of household population and group quarters.

Population growth projections for each municipality for July 1, 2029, were reported from the OEO's 2023 to 2060 Sub-County Population Projections<sup>4</sup> using the medium projection series. OEO provided revised projections for each municipality and county to reconcile with its base year population estimates for July 1, 2024. For those municipalities within the Maricopa Association of Governments (MAG) or Pima Association of Governments (PAG) Metropolitan Planning Organization (MPO) planning areas, the household and group quarters populations conform to their

MPO's most recently adopted socioeconomic projection series, adjusted to the estimates base year. As with the base year population estimates from OEO, the population projections do not distinguish between population in households and group quarters. Accordingly, the total population is segmented using the same household and group quarters population constant shares from the 2022 5-year ACS.

## Projected Job Growth for the Subsequent Five Years

Base year estimates and 2029 projections of total employment are reported for each municipality subject to the Bill. The OEO traditionally produces estimates and projections of covered (QCEW) employment by County and Metropolitan Statistical Area and has also developed a new custom analysis for all municipalities<sup>5</sup> that are subject to the legislation. OEO's estimated base year employment and 2029 projections report the newly developed OEO series. OEO has committed to producing this new series annually for ongoing monitoring purposes.

## Residentially Zoned Land by Municipality

Data on the acres of residentially zoned single-family and multifamily land were collected from each municipality. The determination of housing needs is not based on quantities of residentially zoned land, but it will prove helpful in developing each jurisdiction's annual report (see Appendix B).

## Additional Residential Housing Needs

Additional residential housing needs were analyzed across several key dimensions per the Bill. While the Bill calls for specific determination of municipality-level housing needs based on current and future workforce, it is important to recognize the regional nature of employment and corresponding residential location choice. Therefore, employment and resident workforce were important factors in determining existing and future housing needs (see Appendix A). Still, a standalone determination based on the workforce alone was not created.

This methodology also incorporates each municipality's housing needs across all income levels for its current and future population. It recognizes the critical importance of considering each municipality's special circumstances related to its income profile. Income thresholds determined at region and municipality-specific levels by the U.S. Department of Housing and Urban Development (HUD) were used, consistent with those used by municipalities in housing block grant and voucher programs.

It is important to note that this analysis focused on housing the permanent, year-round resident population. As such, each municipality's current housing supply was adjusted to account for seasonal, recreational, or occasional use, using Census ACS estimates.

### *Needs in Housing Current Population*

To determine a municipality's housing needs, base year estimates of the current population, total housing units, and households were required. The data source that provides the most consistent, accurate, and broad geographic coverage of housing unit counts is the 2020 Decennial Census Demographic and Housing Characteristics (DHC) housing tenure<sup>6</sup> and vacancy status<sup>7</sup> tabulations. The housing tenure and vacancy status counts were then carried forward from the 2020 Census point to the base year using OEO's Quarterly Building Permits and Completions<sup>8</sup> data set at the

county and Census place level. Demolitions by place and county<sup>9</sup> were also tabulated to create a quarterly net additional unit count by municipality and county from April 1, 2020 (Census timepoint) to July 1, 2024. Estimates of base year households were generated by applying the occupancy rate from the 5-year ACS Summary File's occupancy status<sup>10</sup> detail table to the estimated housing unit count.

Existing housing needs were developed using a two-step process that first determined the county-level housing needs and then allocated it to sub-county incorporated places and unincorporated areas. The county-level needs were calculated using the base year vacancy and overcrowding rates as the key factors. Both are theoretically robust and reliable indicators of the balance of housing supply and demand. Data coverage and availability are additional strengths, providing long, consistent time series from the Decennial Census and ACS. County-level rates also tend to be more stable and reliable than municipality-level rates, broadly due to a larger sample size.

The county-level housing needs based on vacancy rate were calculated as a reported range of additional units required to meet a "healthy" vacancy rate, ranging from 4.5% to 5.0%. Throughout real estate literature, a 5% vacancy rate (across all housing units, irrespective of tenure or structure type) strongly indicates a healthy, well-functioning housing market. Vacancy rates below 5% are often associated with a supply-constrained market that provides limited housing opportunities for new and current residents and one in which new household formation is suppressed.

The vacancy rate used for the analysis is the Census definition of *Available Housing Vacancy*, which is the proportion of the total housing inventory that is either vacant-for-sale only or vacant-for-rent. It excludes seasonal, recreational, or occasional use housing units and housing that is vacant due to other reasons, such as personal or family reasons, units under repair or renovation, estate settlement, and foreclosures, among other reasons. According to the Census Bureau<sup>11</sup>, the *Available Housing Vacancy Rate* is

*the proportion of the housing inventory that is vacant "for-sale only" and vacant "for-rent." It is computed by dividing the sum of vacant units "for sale only" and vacant units "for-rent" by the sum of occupied units, vacant units that are "for sale only", vacant units that have been "sold but not yet occupied", vacant units that are "for rent", and vacant units that have been "rented but not yet occupied," and then multiplying by 100. This measure is rounded to the nearest tenth.*

The overcrowding rate, defined as the share of households with more than one occupant per room ("severely overcrowded" greater than 1.5 occupants per room), is then determined using the ACS Tenure by Occupants per Room<sup>12</sup> detail table. The ACS defines rooms as follows<sup>13</sup>:

*...rooms include living rooms, dining rooms, kitchens, bedrooms, finished recreation rooms, enclosed porches suitable for year-round use, and lodger's rooms. Excluded are strip or pullman kitchens, bathrooms, open porches, balconies, halls or foyers, half-rooms, utility rooms, unfinished attics or basements, or other unfinished space used for storage. A partially divided room is a separate room only if there is a partition from floor to ceiling, but not if the partition*

*consists solely of shelves or cabinets.*

Overcrowded households are strongly associated with poorer physical and mental health and many other negative socioeconomic indicators. These effects are particularly acute for children in overcrowded households, resulting in much poorer educational and child development outcomes<sup>14</sup>.

For this analysis, an adjustment to the base year housing total, representing additional needs due to severe overcrowding, was calculated countywide. The rationale is that adjusting housing units to at least equal the number of severely overcrowded households would help defray current overcrowded housing conditions. The severe overcrowding level was chosen for this analysis because some levels of overcrowding have always been present in each county, and the trends have generally been improving. However, the severe overcrowding has stabilized and remains a problem for many counties statewide.

Base year county totals of severely overcrowded households were tabulated and added to the additional housing units needed for the vacancy rate adjustment to result in a countywide total estimated housing need. Next, the county level's high need range was distributed to sub-county incorporated places and unincorporated areas based on three equally weighted factors: 1) the municipality's share of total base-year household population, 2) the municipality's share of total housing unit growth countywide since 2010, and 3) the municipality's share of the county's total base year workforce. The workforce is tabulated from the most-current 2022 Census Longitudinal Housing and Employment Dynamics Origin-Destination Employment Statistics (LODES). The 2010 to 2023 period for housing unit growth is chosen to account for the COVID-related impacts on housing supply and consider the longer overall business cycle and regional construction trends.

Finally, the base year municipality-level housing needs were distributed across income levels using the HUD Area Median Family Income<sup>15</sup> (HAMFI, often reported as AMI). Shares of households earning the following levels of the AMI are reported for each municipality. Household shares above 100% of HAMFI were distributed to an 80-120% category and >120% using family income shares from the ACS to result in the following groups.

- ≤ 30% HAMFI
- > 30% to ≤ 50% HAMFI
- > 50% to ≤ 80% HAMFI
- > 80% to ≤ 120% HAMFI (workforce housing)
- > 120% HAMFI

### *Needs in Housing Current Workforce*

Employment levels are a more regional, dynamic, and volatile economic condition, so needs directly associated with housing each municipality's current workforce were not analyzed or reported. Instead, municipality-level workforce share was considered when allocating a county's total housing needs based on the current population. Nevertheless, the employment-housing nexus is a core urban planning issue, with regional imbalances contributing to many housing, environmental, and social impacts. Long commute times, insufficient transportation access, housing and transportation

cost burdens, and equity issues result from moderate to large regional housing and employment balance discrepancies.

Several key metrics were reported to support monitoring trends in employment dynamics and analyzing the jobs-housing balance, utilizing LEHD LODES worker flows and ACS Journey to Work data for each municipality and their respective counties. These include the average commute distance for each municipality's workforce<sup>16</sup>, the share of in-commuters vs. out-commuters<sup>17</sup>, and average travel time<sup>18,19</sup>.

### *Housing Projected Population Growth*

The analysis focuses on the minimum housing needs required to accommodate each municipality's permanent resident population and does not account for changes in the seasonal population (and corresponding housing units). A projection of future households was determined to calculate the housing units needed for each municipality's future resident population growth. Households were projected using the base year gross headship rate, calculated from the ACS Tenure by Age<sup>20</sup> of Householder and Sex by Age<sup>21</sup> Detailed Tables.

The headship rate is defined as the share of the population that heads a household. ACS tabulates households by the age of the householder and considers people aged 15 or older. Headship rates can be determined for specific age, sex, income, and race/ethnicity cohorts, and the trend in headship rates is a clear indicator of the overall number of households and the number of adults per household. Over the past decade, recent trends have shown a substantial decline in headship rates among the younger population cohorts, while older-aged cohorts have shown marked stability. The shares of householders among the oldest cohort, people aged 85 years and older, have grown considerably, consistent with the aging population and longer life expectancies.

The projections of future resident households were first calculated to calculate the projected housing needs. Overall base year headship rates (i.e., households divided by the total population aged 15 plus) were calculated for each municipality and applied to the projected net change in population aged 15 plus. Because age structure details are not provided at a sub-county level by OEO, base year ACS shares of each municipality's population 15 plus were calculated and trended based on the county-level change in the projected share of the population age 15 plus.

To support healthy future housing conditions, a vacancy rate target of 5% was assumed and applied to the household projection, which represents the minimum number of new housing units required. A 5% future target was chosen to ensure that sufficient housing is produced to accommodate the growth of the new household population.

Lastly, the housing unit needs over the next 5-year period were distributed across each of the municipality-specific HAMFI income category shares as in the existing housing needs determination step.

### *Housing Projected Employment Growth*

As with determining needs in housing related to housing the current workforce, a standalone projection of housing needs based on future employment growth was not performed based on the same rationale. Projections of total employment by municipality were reported, however, using OEO's new municipality employment projections series (See Appendix B).

### *Housing Needs Across Various Income Levels*

The existing and projected housing needs are reported across municipality-specific income levels. As discussed in each previous section, the most current shares of households within each interval of income based on the region-specific HAMFI level were used. For consistency across all municipalities, and because no income projection series exists, base year shares of households by income level were held constant for the 5-year projection period.

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