

## Housing Morsel

# On the Move: which cities have the biggest housing shortage?

07 August 2023

### Key takeaways

- We identify which cities in the US are more likely to have the biggest longer term housing shortages by analyzing near real-time migration flows based on the Bank of America internal data and total housing stock. Our analysis suggests that in 2Q, San Antonio, Dallas, and Orlando have the most constrained housing supply as buoyant labor markets continue to attract people.
- On the flip side, St.Louis, Detroit and Miami seem to have the highest housing stock relative to their population. The good news is that cities with lower housing supply are already seeing higher construction trends but if the current population dynamics are maintained there will continue to be a strong housing need in the growing parts of the country.
- Looking more broadly at population flow, Bank of America internal data suggests that in 2Q, 13 out of the 27 Metropolitan Statistical Areas (MSAs) we track continue to see positive year-over-year (YoY) growth in population with Jacksonville and Columbus leading the gain. Charlotte, Nashville, and Las Vegas saw accelerating pace of increase in residents than in 1Q.

### Too many or too few homes in your area?

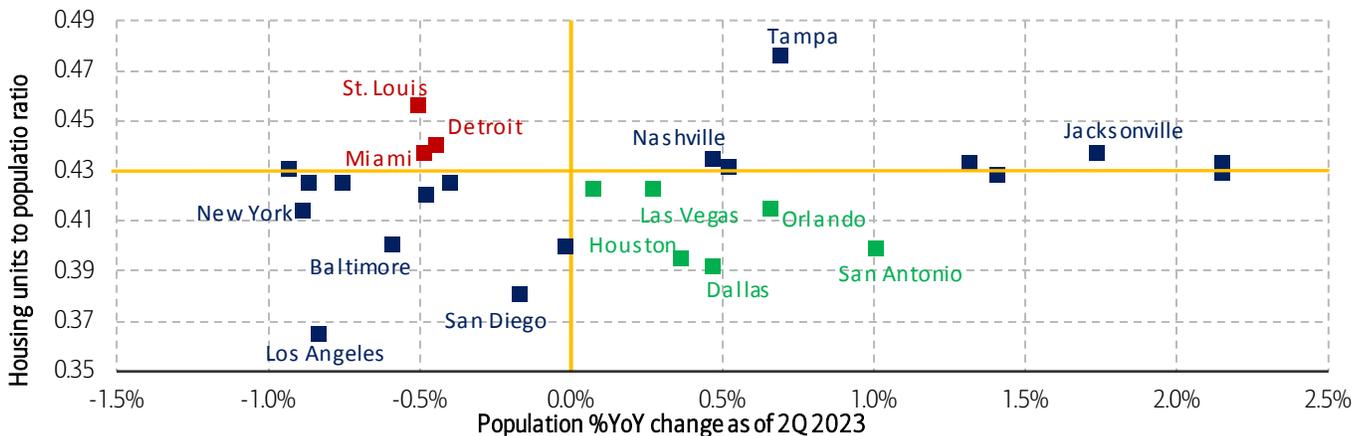
One distinct characteristic of the current housing market is tight inventory nationally. A common way to measure this is via “months’ supply”, which calculates the number of months it will take for the housing inventory to run out at the current pace of sales. According to the National Association of Realtors, the latest national reading was just 3.1 months in June – over 25% lower than the 2015-2019 average of 4.2.

However, the data is nuanced; after all, housing markets are ultimately highly localized. It’s even possible that two cities in the same region could be experiencing completely different housing supply/demand trends.

Furthermore, months’ supply which is a critical factor for near-term home prices only considers active listings and pending sales – different from the total housing stock. In today’s environment of high mortgage rates, many homeowners are choosing to stay put. As they chose to do so and do not list their homes for sale, inventory levels are falling even lower. However, should mortgage rates fall, these dynamics could change rapidly. As a result, using total housing stock instead (i.e. the total housing units that are either occupied or vacant) in a region may provide a longer-term view on housing supply.

**Exhibit 1: %YoY in number of customers with a home address in each MSA in 2Q 2023, based on Bank of America internal data, and housing unit to population ratio in 2022, based on Census Bureau data**

By comparing the total housing units-to-population ratio and population %YoY change, we divide major MSA into quadrant.



Source: Bank of America internal data. Census Bureau. Horizontal yellow line means the housing units to population ratio at the national level

We offer an alternative view to months' supply to assess the regional supply-demand balance by looking at population trends and total housing units in each metropolitan statistical area (MSA). Our analysis suggests that San Antonio, Dallas, and Orlando, as of 2Q 2023, have the most constrained housing supply as buoyant labor markets continue to attract people to these cities. On the flip side, St. Louis, Detroit and Miami seem to have the highest housing stock relative to their population. Such variation across cities can shed light on longer term supply-demand dynamics in local housing markets.

### Naming the quadrants: Hot, Warm, Cool, and Cold

To estimate the level of existing housing stock, we aggregate county-level data on total housing units in 2022 from the Census Bureau for each MSA and then calculate the ratio between housing units and the local population. We then compare this to the 2Q %YoY change in population in these cities, using internal Bank of America data. We recognize that total housing units might include a number of second homes or vacant units that do not technically classify as housing supply in our analysis. But this generally represents a small share of around 10% across regions, according to Census, with the South seeing a slightly higher proportion.

Using this methodology we divide MSAs into four categories (Exhibit 1):

- 1) *Low housing stock with population inflow.* This category include **San Antonio** and **Las Vegas** and we call this the "Hot" group.
- 2) *High housing stock with population inflow.* This category includes **Tampa** and **Jacksonville**. We call this the "Warm" group.
- 3) *Low housing stock with population outflow.* This category includes the biggest number of MSAs that we track and includes cities like **Los Angeles** and **Baltimore**. We also call this the "Cool" group.
- 4) *High housing stock with population outflow.* This category includes cities like **St. Louis**, **Detroit**, and **Miami**. We call this the "Cold" group.

In this report we will focus on the Hot and the Cold group because these cities have the biggest imbalance between population and housing supply in terms of housing stock, according to our analysis. Whereas in both the Warm and Cool groups, the direction of population flow more closely aligns with the relative position of housing inventory.

For example, although the housing units/population ratio was just 0.36 in Los Angeles, the lowest among all major MSAs, its population also dropped by 0.8% YoY in 2Q, which could alleviate the potential housing shortage problem. The opposite is true for cities like Tampa where higher level of housing stock is matched with population inflow. That said, the higher housing units/population ratio in Tampa might be slightly skewed by the higher number of second homes, given its position as a popular retirement and vacation town.

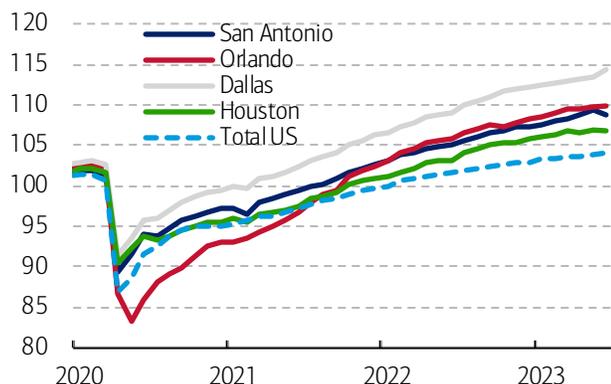
### It's getting hot in Texas

The Hot quadrant includes cities that continue to have fast inward population growth and already relatively stretched housing stocks. San Antonio, Dallas, Orlando and Houston all fall under this categorization.

Why are people moving to these cities? One reason is their booming labor markets which are performing even better than national statistics. For example, as of June 2023, the seasonally adjusted total nonfarm payroll was 14% higher than its January 2019 level in Dallas, and 10% higher in Orlando (Exhibit 2). This compares with the 4% increase in total nonfarm payrolls on a national level.

**Exhibit 2: Total nonfarm payroll by select MSAs (index, Jan 2019=100 for each MSA)**

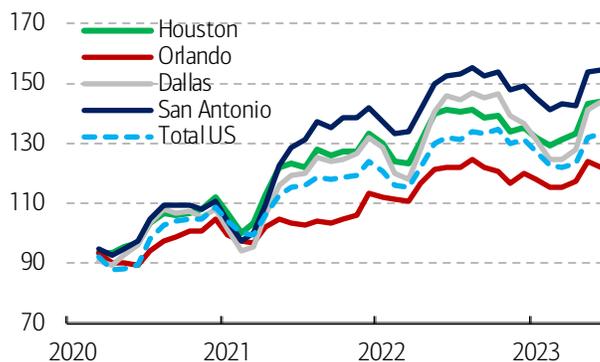
Dallas and Orlando saw stronger job growth over the last few years



Source: Bureau of Labor Statistics

**Exhibit 3: Construction small business spending per client by select MSAs (index, 2019 =100 for each MSA, 3-month moving average)**

Construction small businesses in San Antonio and Houston have seen much stronger spending than the national average



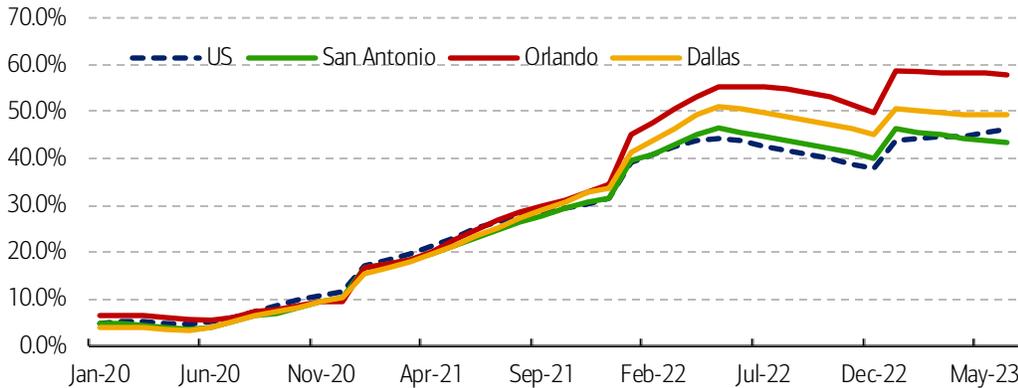
Source: Bank of America internal data

In part due to this large influx of residents, housing stock relative to population in these cities has fallen below the national average. The national average of housing unit/population ratio was 0.43 in 2022, compared with just 0.39 in Dallas and 0.4 in San Antonio.

As a result, home price appreciation in these cities has also been stronger than the US average over the last two years. When compared with the same month in 2019, home prices in Orlando were up a whopping 58% in June 2023, followed by 49% in Dallas (Exhibit 4). The only exception is San Antonio, where home prices grew faster than national average until very recently (April). That said, we think the relative softening in home price growth in San Antonio might be due to short term macro headwinds and that over the longer term still sees a relative housing shortage.

**Exhibit 4: Home price appreciation in select MSAs (%change from the same month in 2019)**

When compared with the same month in 2019, home prices in Orlando were up a whopping 58% in June 2023, followed by 49% in Dallas.



Source: Freddie Mac

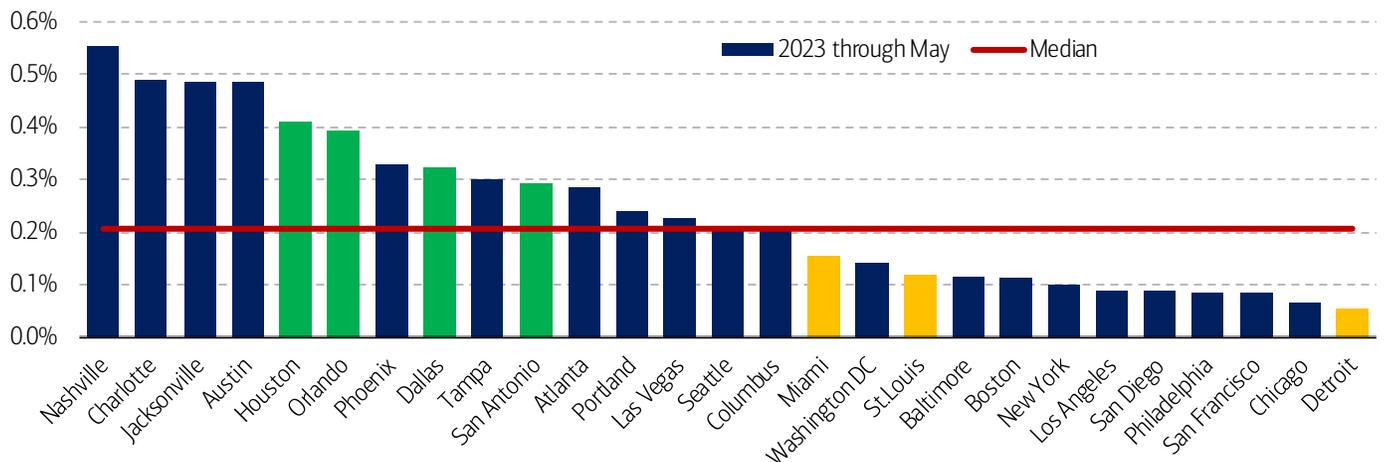
The most direct solution for the housing shortage problem is to build more homes. Looking at the potential number of units coming through the pipeline, all four cities saw higher-than-average permits issued per capita during the first five months of 2023, with Houston leading (Exhibit 5). According to BofA Global Research, new multifamily completions are set to hit a record high in 2Q24, as COVID related delays are finally resolved.

This is also reflected in Bank of America small business spending data. As Exhibit 3 shows, small businesses in the construction sector in San Antonio, Dallas and Houston have all seen much stronger spending than the national average. The only exception is Orlando, where spending growth of small construction businesses has lagged the national average. The caveat is that this data does not differentiate between residential and nonresidential construction, and only includes small businesses.

So while the good news is that cities with lower housing supply are already seeing higher construction trends, the question is whether supply will continue to keep up if the inward migration trends are sustained in these growing parts of the country. If not, there will continue to be a strong housing need.

**Exhibit 5: Building permits issued as a share of local population (Jan to May 2023)**

All four cities saw higher-than-average permits issued per capita issued during the first five months of 2023, with Houston leading



Source: Census Bureau, Haver Analytics

## A little chillier in St. Louis, Detroit and Miami

As a contrast, cities in the Cold quadrant including St. Louis, Detroit and Miami are seeing relatively higher housing supply, which could be either due to declining populations or excess residential construction. For St. Louis and Detroit, it seems to be the former: the populations of both declined steeply following the Great Recession in 2008, posting only tepid growth over the last decade.

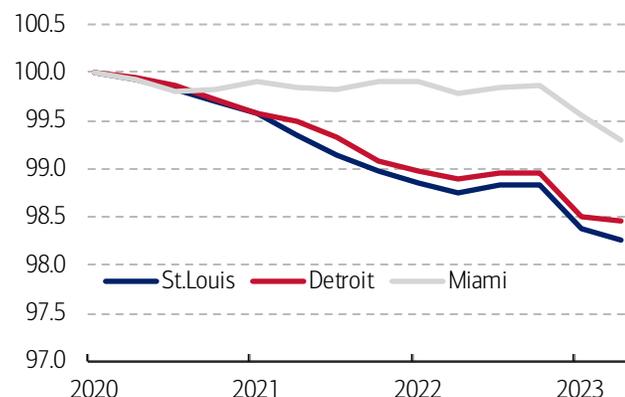
Miami tells a slightly different story. According to Bank of America internal data, its population was fairly stable between 2020 and 2022. However, in the most recent two quarters, there was a fairly large outflow of residents (Exhibit 6), consistent with some press reports suggesting that many people who moved to Miami in the beginning of the pandemic have since moved away, partly due to the rising cost of living in the city.

While home price appreciation remains elevated in Miami so far, longer term downside risks could be growing if such exodus trends are sustained. This is especially the case given that new construction has also increased at a much faster pace in Miami than in St. Louis and Detroit, leading to a rapid rise in housing stock (Exhibit 7).

So what does this mean for the local housing market? It could mean that house prices might cool faster over the long term when home selling traffic picks up again. Note, however, that our categorization of “high supply” is relative to other MSAs and we would caution against reading this as “excess supply”, especially as the US continues to face an overall housing shortage. Moreover, the number of units available for sale is low even though the overall number of housing units is relatively high these cities.

**Exhibit 6: Number of customers with a home address in cities under “high supply group” (index, 1Q 2020=100 for each MSA, non-seasonally adjusted)**

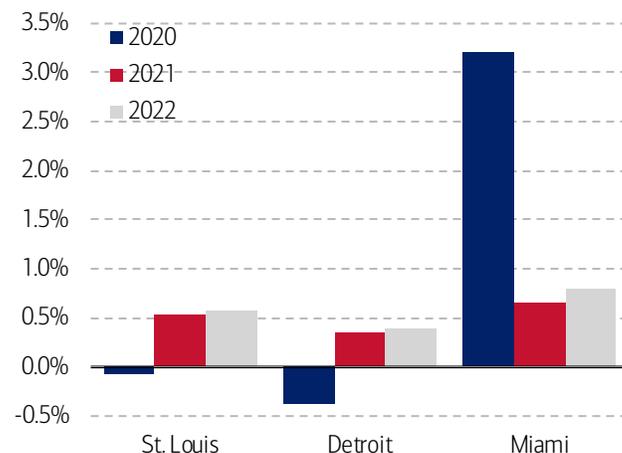
Miami saw a fairly large outflow of residents over the recent quarters



Source: Bank of America internal data

**Exhibit 7: Change in total housing units in select MSA (%YoY)**

New construction has also increased at a much faster pace in Miami than in St. Louis and Detroit, leading to a rapid rise in housing stock



Source: Census Bureau

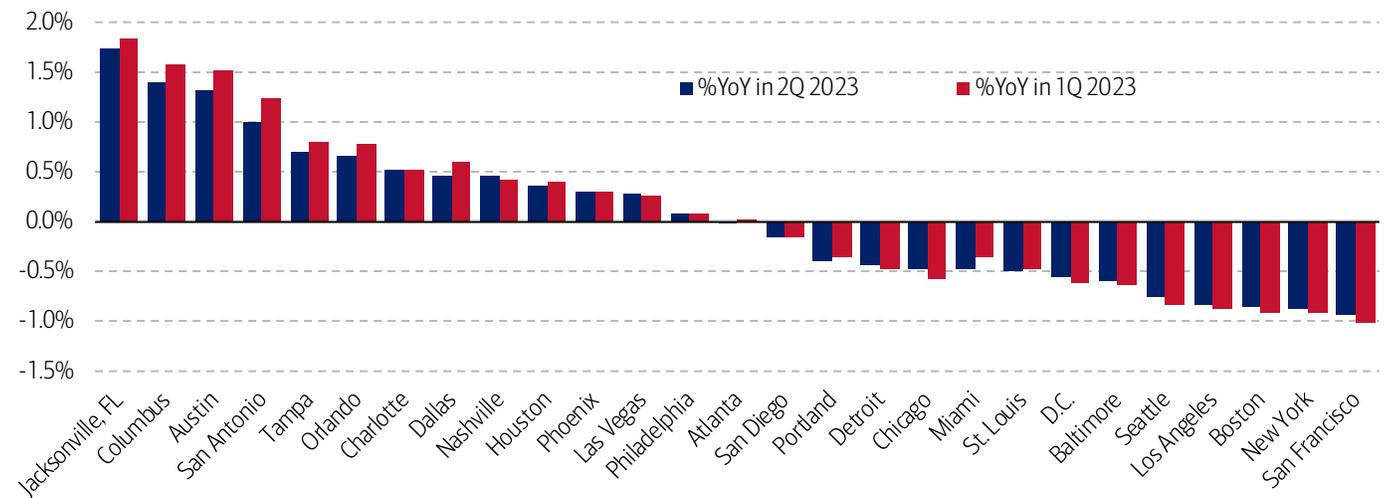
## Quarterly update on migration trends

Looking at broader population flows, in 2Q 2023, we find that of the 27 MSAs that we track, 13 continue to see positive YoY population growth (Exhibit 8). Jacksonville and Columbus lead the gain, with a net increase of 1.7% and 1.4% YoY, respectively. San Francisco, New York, Boston and Los Angeles continue to see the largest net population losses, down about 1% YoY. As a reminder, our analysis is based on a fixed sample of Bank of America customers who had an open consumer checking, savings, credit and/or other investment accounts for every quarter between 4Q 2018 and 2Q 2023.

While most cities with continued population inflows saw a slower %YoY increase in 2Q, there were three exceptions where the growth rate accelerated: Charlotte, Nashville, and Las Vegas. On the flip side, Portland and Miami saw a faster exodus of residents in 2Q then in 1Q.

**Exhibit 8: Net population change in major MSAs, according to Bank of America internal data (year-over-year percentage change in 1Q and 2Q 2023, positive means net inflow, negative means net outflow, ranked by 2Q%YoY change)**

Of the 27 cities that we track, 13 continue to see positive YoY growth in population in 2Q 2023 with Jacksonville leading the gain



Source: Bank of America internal data

## Methodology

Selected Bank of America transaction data is used to inform the macroeconomic views expressed in this report and should be considered in the context of other economic indicators and publicly available information. In certain instances, the data may provide directional and/or predictive value. The data used is not comprehensive; it is based on **aggregated and anonymized** selections of Bank of America data and may reflect a degree of selection bias and limitations on the data available.

Our analysis for migration pattern is based on the group of Bank of America customers who had an open consumer checking, savings, credit and/or other investment accounts for every quarter between 4Q 2018 and 2Q 2023. Migration pattern is then extracted based on customer home addresses. This methodology yields a fixed sample size of roughly 46 million customers.

Generations, if discussed, are defined as follows: 1. Gen Z, born after 1996; 2. Millennials: born between 1978-1995; 3. Gen Xers: born between 1965-1977; 4. Baby Boomer: 1946-1964

Additional information about the methodology used to aggregate the data is available upon request.

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### Sources

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