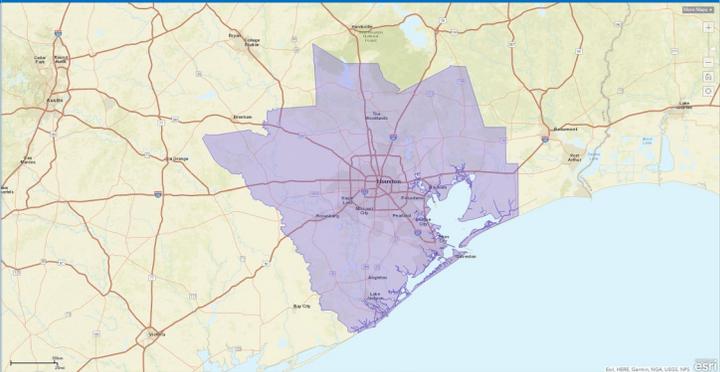


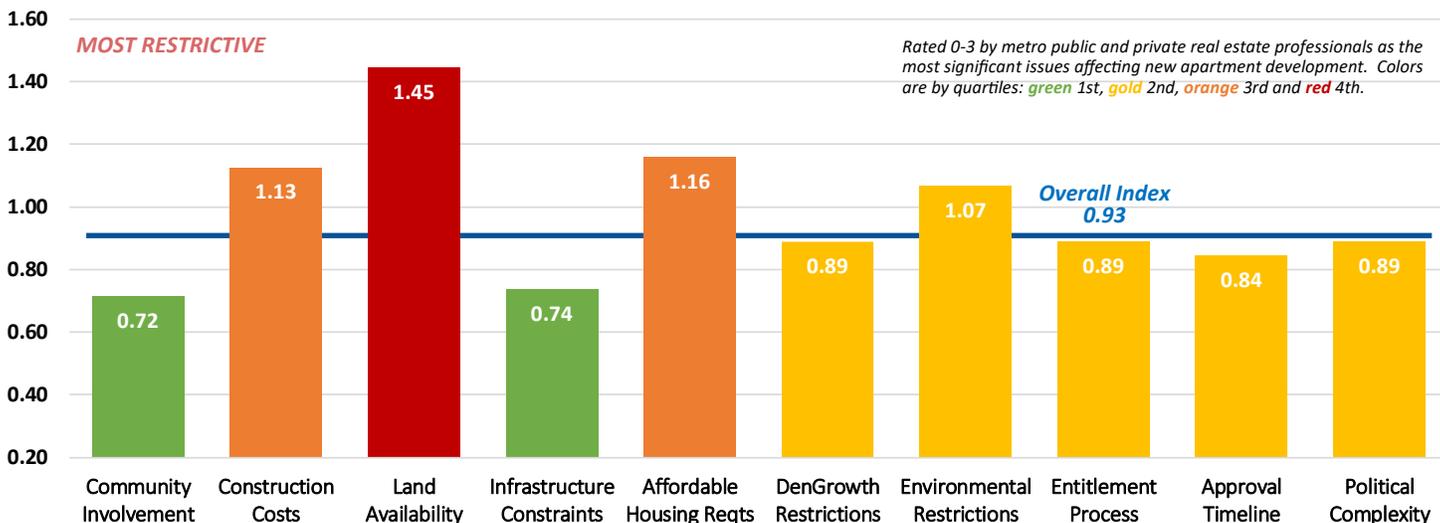
| BARRIERS to APARTMENT CONSTRUCTION | | | | HOUSTON |
|---|----------------------------|-------------------------------|-------------------------|--|
| BARRIERS RANKING ¹ | NEW MF DEMAND ² | HIGH RENT BURDEN ³ | STAR SHARE ⁴ |  |
| 14 | 182k | 43% | 22% | |
| MEDIAN RENTAL HOUSEHOLD INCOME | | | \$41,740 | |
| INCOME REQUIRED FOR AVERAGE RENT ⁵ | | | \$43,480 | |

MOST RESTRICTIVE APARTMENT CATEGORIES:

- LAND AVAILABILITY
- AFFORDABLE HOUSING REQUIREMENTS
- CONSTRUCTION COSTS

Houston metro ranks in the top fourth least restricted among major markets with a supply index of 0.93. Sustained apartment demand also ranks in the top 10% of national markets. Survey respondents cite general land availability as the greatest barrier to supply, followed by affordable housing requirements, specifically the lack of density bonuses, and rising construction costs, specifically land costs. Environmental issues are tied to flood zone restrictions. Political complexity is driven by lack of general plan updates. Other typical metro barriers categorized as community involvement, infrastructure and entitlement processes are below index and comparatively low for all major markets. Some 43% of renters spend at least 35% on rent and their median rental incomes are 4.0% below the requirements for average market rents of \$1,090.

Barriers to Apartment Construction Subindices



BARRIERS INDEX METHODOLOGY:

These NAA HAS Barriers to Apartment Construction indices were created from over 90 apartment development, process and timing questions in ten categories and sourced digitally from real estate professionals in both the public and private realms. An initial overall metro **Barriers to Apartment Construction Index** is also plotted above.

DEFINITIONS and NOTES:

- ¹**BARRIERS RANKING** is the relative ranking among 58 major metro apartment markets based upon the average index of each metro from the least restricted to the most; ranges from 1 (Albuquerque) to 58 (San Jose). Rankings consider expert responses from throughout the extended metro that includes but not isolates the urban core.
- ²**NEW MF DEMAND** is the updated total demand for new multifamily units (in thousands) through 2030 based upon the forecasted total rental housing demand 2017-2030 from the NAA-NMHC demand study by HAS: *U.S. Apartment Demand—A Forward Look (2017)*; ranges from 3,890 (Sioux Falls) to 222,589 (New York).
- ³**HIGH RENT BURDEN** refers to that share of 2017 households spending over 35% of combined household income on rent; major metro ranges from 56% and rents of \$1,370 (Miami) to 38% and rents of \$865 (Sioux Falls) with a major metro average of 43%.
- ⁴**STAR SHARE** is that share of metro rental housing stock with five or more units HAS qualified as **Second-Tier Affordable Rentals* or those non-institutional sites of typically lower unit count, lower quality and greater age, often overlooked as crucial affordable housing already in place. Using CoStar® ratings of 1-5 for sites of five units or more, STAR is the lower ratings of 1-2. This share ranges from 61% (Los Angeles) to 17% (Austin) with a major metro average of 36%.
- ⁵**INCOME REQUIRED FOR AVERAGE RENT** assumes a more conservative 30% of rental household income needed for the average metro contract rent.

