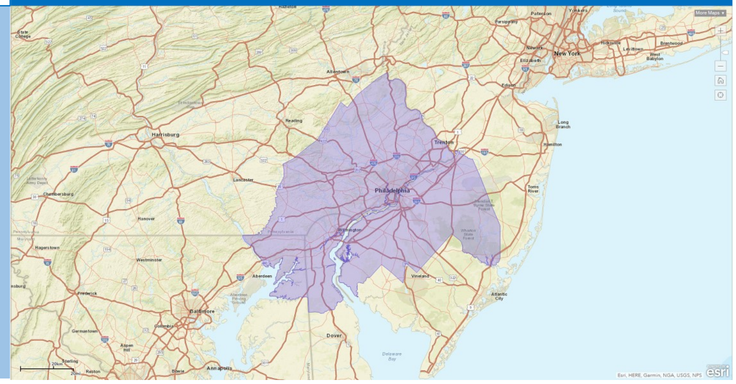
BARRIERS to APARTMENT CONSTRUCTION

PHILADELPHIA

BARRIERS RANKING[1]	NEW MF DEMAND[2]	HIGH RENT BURDEN[3]	STAR SHARE[4]
57	29.5k	49%	37%

MEDIAN RENTAL HOUSEHOLD INCOME	$36,480
INCOME REQUIRED FOR AVERAGE RENT[5]	$49,680

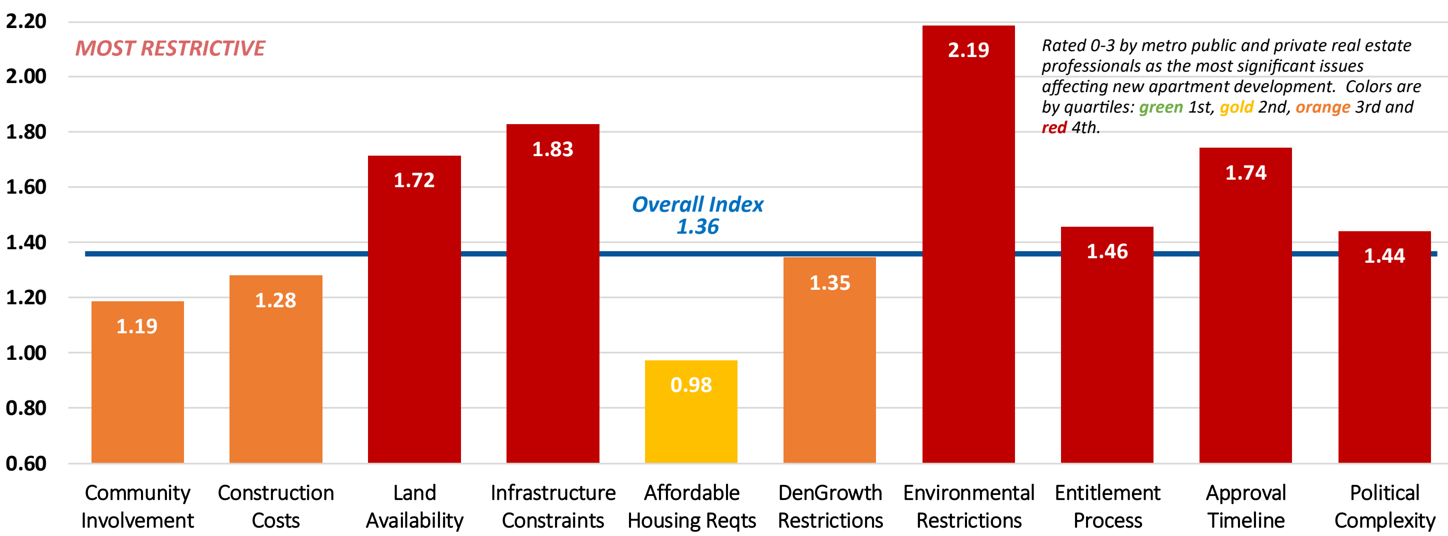


MOST RESTRICTIVE APARTMENT CATEGORIES:

- ENVIRONMENTAL RESTRICTIONS
- INFRASTRUCTURE CONSTRAINTS
- APPROVAL TIMELINE

Philadelphia metro ranks in the bottom third of national apartment demand and near bottom for barriers to development with a supply index of 1.36. Only San Jose ranks a more restrictive major market. Survey respondents cite environmental restrictions highest, driven by coastal and wetland issues, flood zone restrictions and their mitigation. Infrastructure constraints led by impact fees are also cited, along with general land availability and lengthy approval timelines. Political complexity is led by the heavy influence of both local councils and their public constituents. Legislation and tax increases need assessment of their housing impact ahead. Other research cites that housing affordability is less about rents and more tied to lower worker incomes; the median rental income ranked in the lower third of major markets and is a significant 27% below the requirement for the average market rents of $1,245. As with scaled metros like Philadelphia, these barriers become more pronounced in the urban core relative to outlying housing sectors.

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 ***S**econd-**T**ier **A**ffordable **R**entals 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.