

# Hybrid Working and the Long-Term Outlook for Home Construction

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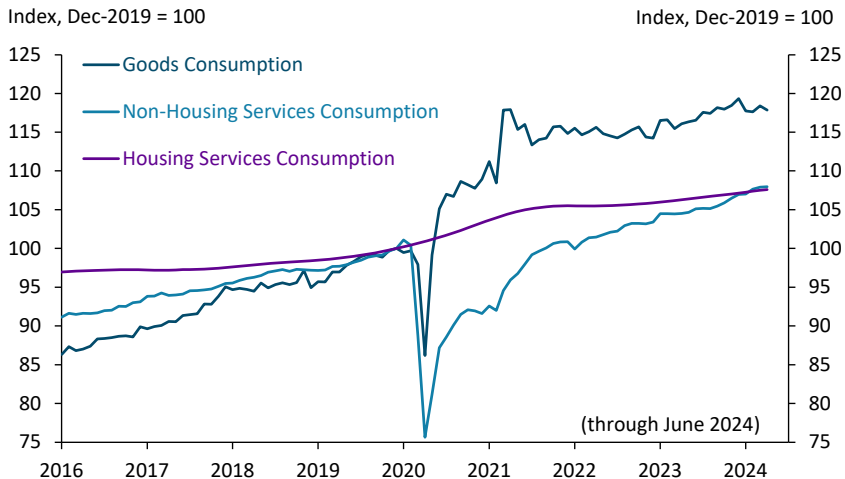
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\*The views herein are strictly mine and do not necessarily represent those of the Federal Reserve Bank of Kansas City or the Federal Reserve System.

# Overview

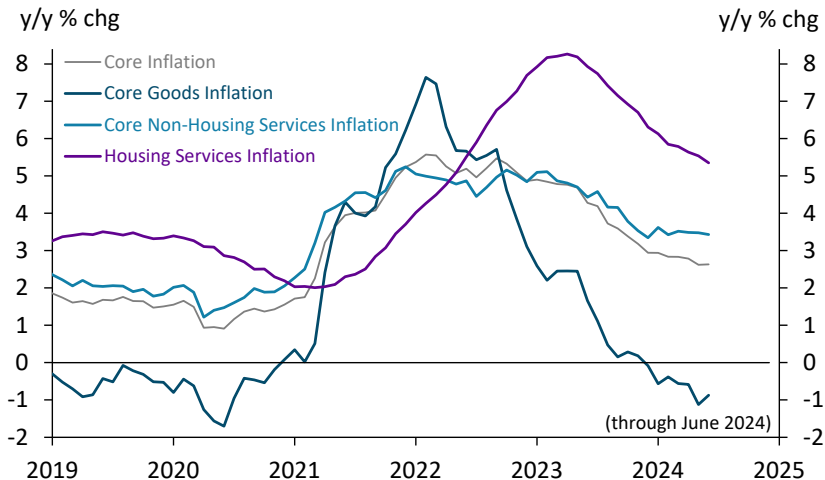
- An unprecedented surge in demand for goods consumption backed up the supply chain during the pandemic, driving up inflation.
- More recently, supply constraints and inflation have shifted to other sectors.
- Over the long term, supply constraints have been greatest for housing.
- Single-family home construction remained weak throughout the 2010s.
- Long commutes discourage living in outer suburbs, where land is plentiful.
- Less frequent commuting makes workers willing to live farther from their employer, allowing suburbs to expand outward.
- The shift in location preferences and associated boost in home construction will most affect the largest metropolitan areas
- The need for highways and other infrastructure will slow the move outward.

## Goods consumption surged following the onset of the pandemic, severely straining supply chains and transportation capacity



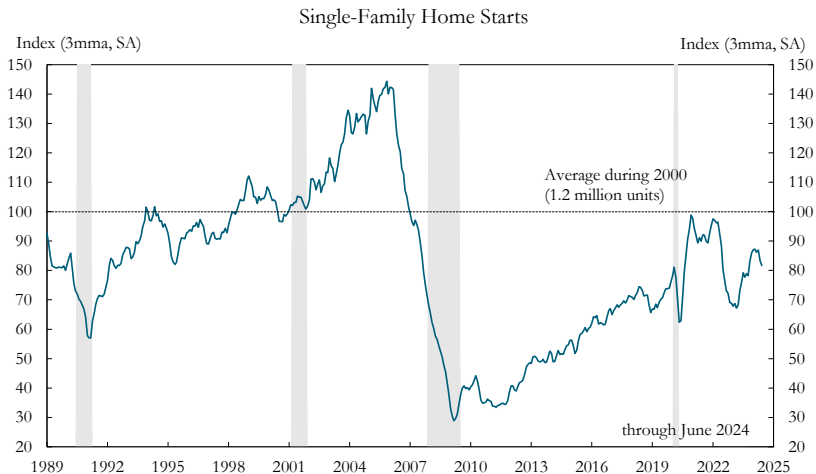
Source: Census Bureau (Haver Analytics)

## The changing composition of inflation partly reflects different supply considerations.



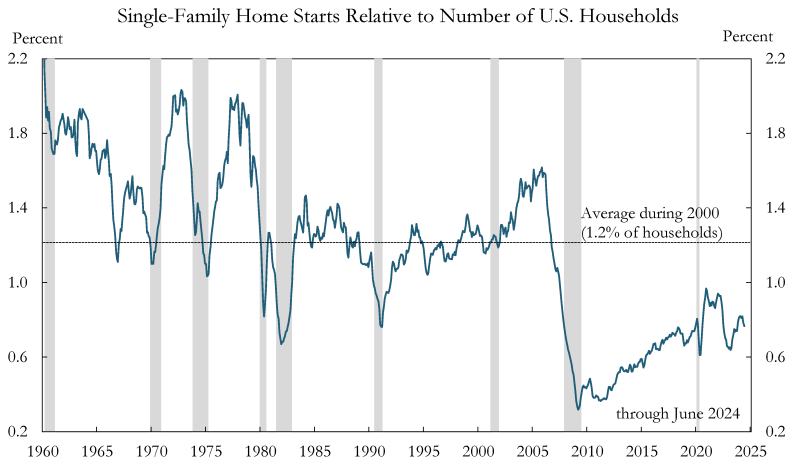
Source: Bureau of Economic Analysis (Haver Analytics)

## Prior to the pandemic, home construction hadn't fully recovered from its bubble and crash during the 2000s.



Sources: Census Bureau, NBER, Haver Analytics, author's calculations

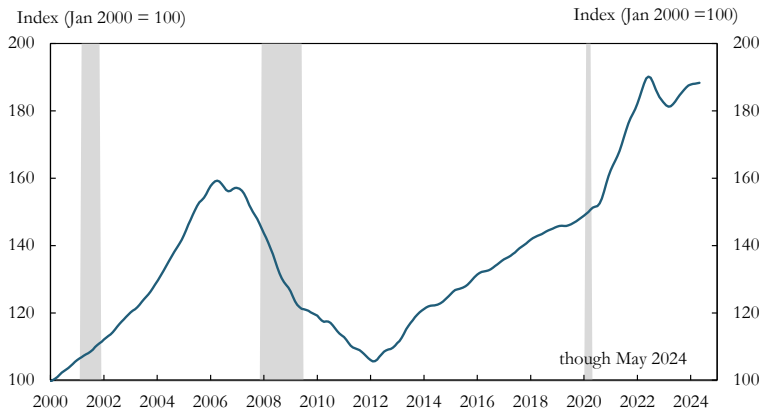
## Home construction per household during the 2010s was the lowest since at least the 1950s ...



Sources: Census Bureau, NBER, Haver Analytics, author's calculations

## ... despite soaring inflation-adjusted home prices ...

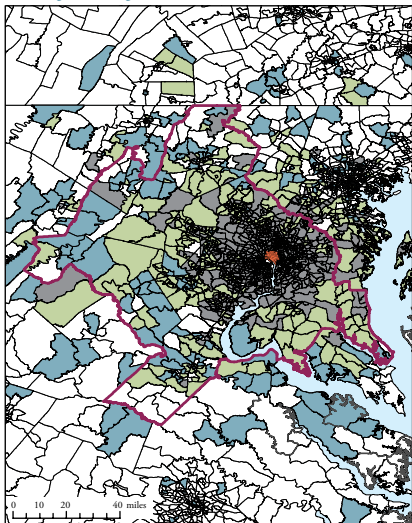
### Inflation-Adjusted Price of Single-Family Homes



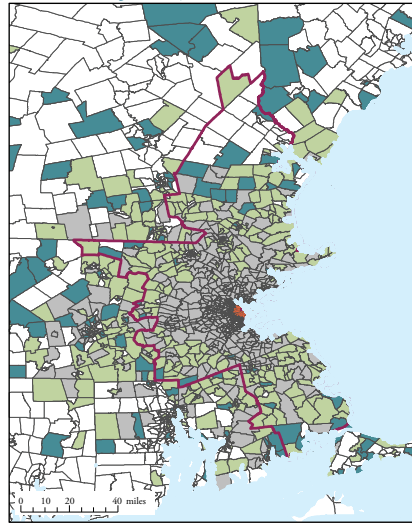
Sources: Standard & Poor's, BEA, NBER, Haver Analytics, author's calculations

# ... and plentiful undeveloped land at metropolitan peripheries.

Commuting Time to Central Business District:  
Washington-Arlington-Alexandria

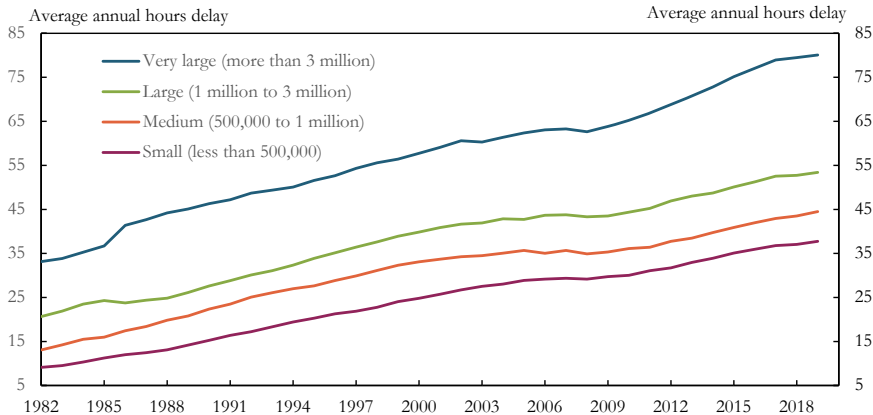


Commuting Time to Central Business District:  
Boston-Cambridge-Quincy





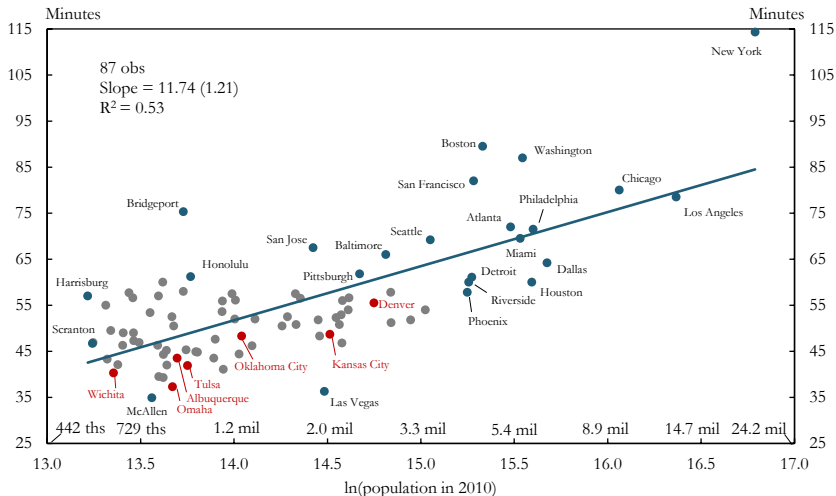
## Increasingly long and congested commutes partly account for the shortfall in home construction.



Sources: Schrank et al. (2021), author's calculations

# Pre-pandemic commutes in the largest metros were punitive.

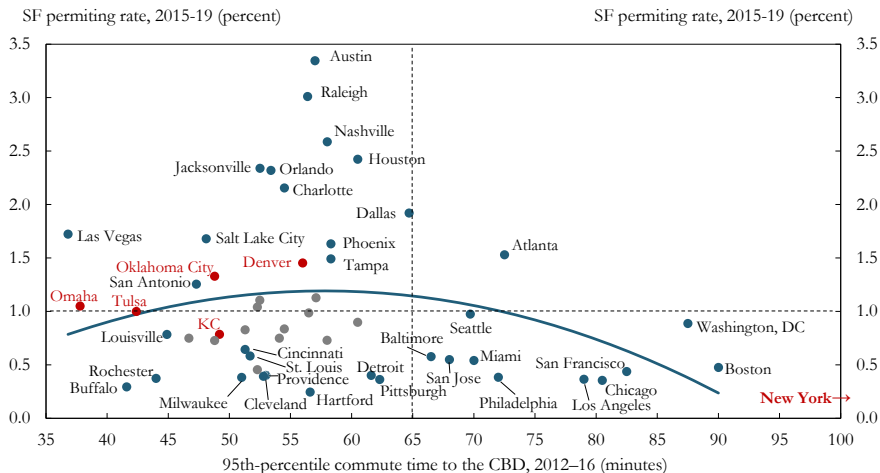
95<sup>th</sup> Percentile Driving Time to Downtown Business District (2012-16)



Sources: Census Bureau, author's calculations

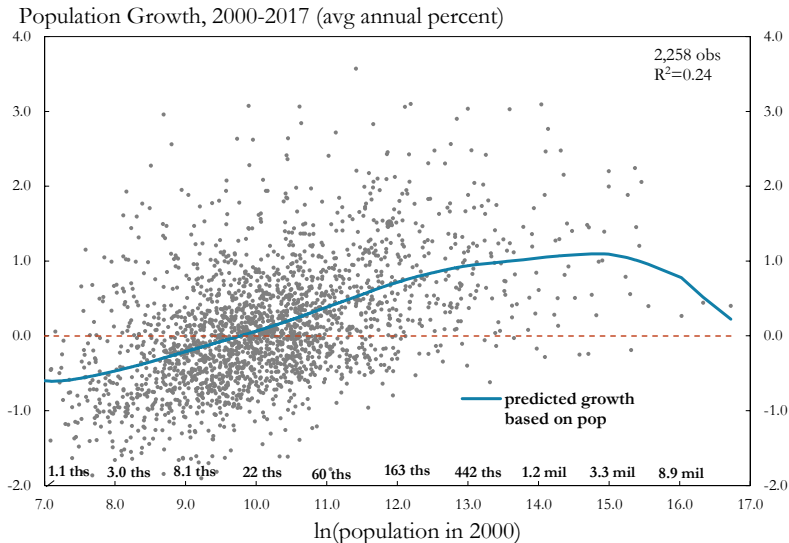


# Home construction was weaker where commutes were longer.



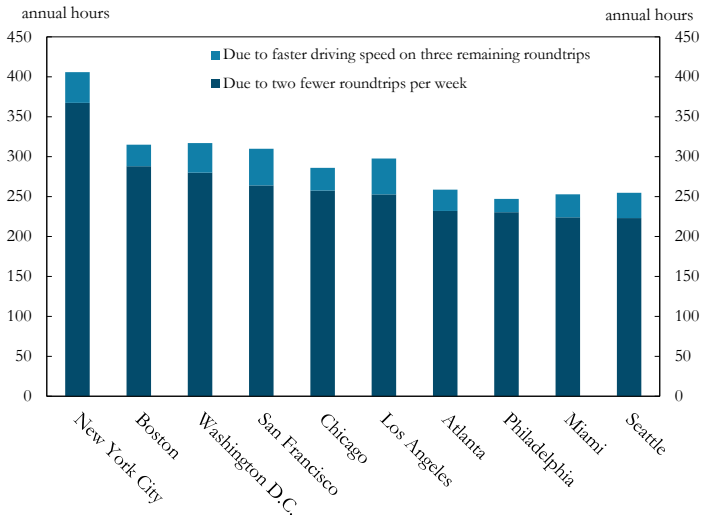
Sources: Census Bureau, author's calculations

## Population growth drives home construction. Prior to the pandemic, medium-sized metros were growing fastest.



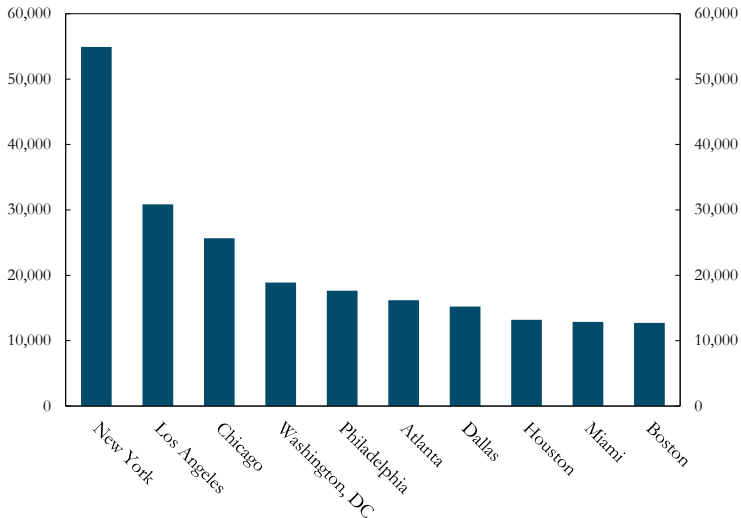
# Working from home two days per week will save commuters in the largest metro areas hundreds of hours per year.

Commuting Time Saved from Working Remotely

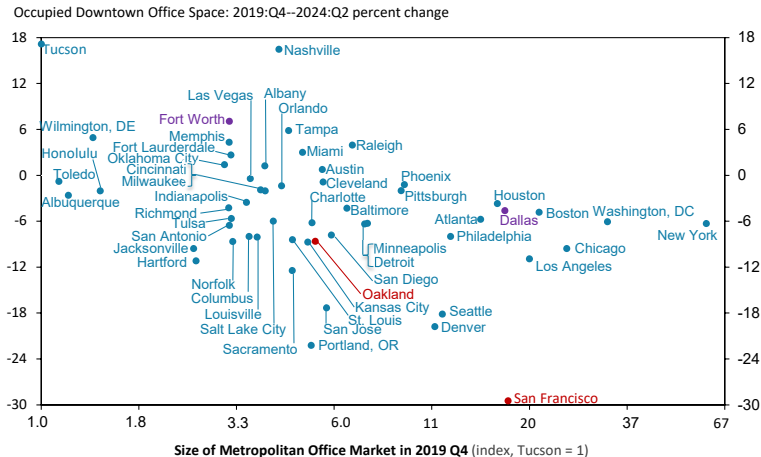


# Hybrid working is likely to boost home construction most in the largest metropolitan areas.

Largest Predicted Increases in Annual SF Permits



# The post-pandemic decline in office occupancy has varied considerably across metropolitan downtowns, suggesting that many can again thrive.



sources: CBRE Econometric Advisors and Author's calculations



- **Hybrid working versus full-time remote?**
  - ▶ Full-time remote breaks rather than loosens the tether to places of employment.
  - ▶ Lots of reasons why full-time remote will prove a bad match for most workers and businesses.
- **Downtown business districts?**
  - ▶ Downtown business districts can remain vibrant but only if people feel safe.
  - ▶ Hybrid working may increase the attractiveness of locating employment there.
  - ▶ Young adults may want to live nearby, especially if there are urban amenities such as pedestrian retail, cafes, restaurants, bars, and performance venues.
- **Timing?**
  - ▶ The business cycle and interest rates matter!
  - ▶ Will take many years of experimenting to make hybrid working successful.
  - ▶ Transitions to new patterns of living play out over decades.
- **Cost?** Single-family home construction is expensive!