Data Democratization and Spatial Heterogeneity in the Housing Market

Ralph B. McLaughlin, Chief Economist, @TruliaRalph
Cheryl K. Young, Senior Economist, @peekabooworld
How does data access affect spatial heterogeneity?

Overview of Paper

- How are consumers using real estate websites, and what types of data do these sites offer?
- Conceptual model of data democratization and spatial heterogeneity.
- Home value distribution and racial segregation.
- Summary and policy recommendations.
How do consumers use real estate websites?

• Most buyers combine online research with agent expertise
• Only 51% use an agent at the beginning of their home search
• 41% start on their own using real estate websites but eventually use an agent
• 7% wait until they’re ready to make an offer.
3 Types of Online Real Estate Data Available to Consumers

1. **Property-Specific Information:** listings, sales, and assessor data.

2. **Neighborhood Specific Information:** crime, schools, parks, commute, etc.

3. **User Specific Information:** custom content on affordability, mortgage quotes, rent vs. buy, etc.
Increased Spatial Heterogeneity Through Expansion of Choice Sets

Improved search efficiency leads to neighborhood discovery.

- Information on preferred amenities is extensive and easy to search.
- Increased information over traditional search methods (social networks, ads, agents alone).
- User specific information highlights ability to afford housing in neighborhoods that appear out-of-reach.
Increased Demand for Amenities Induces Housing Unaffordability

Improved search efficiency leads to an amenity effect that can price out residents.

- Inelastic housing supply exacerbates price increases in amenity-rich neighborhoods.
- Higher income households can outbid others.
- Spatial homogeneity likely as lower income residents are priced out.
Home Value Inequality and Racial Segregation

- Home value polarization across metros are a proxy for spatially segregated choice sets.
- Persistent racial segregation partially explained by how segregated home values are across metros.
- Decreasing racial and income segregation contingent on expanding affordable housing supply.

Source: U.S. Census 2015 5-Year ACS and Trulia data
Summary

- Consumers using real estate websites as complements to traditional search process. Many using them at start of home search.

- Data access affects two countervailing forces of spatial heterogeneity:
  - (1) increases heterogeneity by expanding choice sets of consumers into more diverse areas,
  - (2) decreases heterogeneity if demand to live near amenities prices out existing or future residents.

- Net effect is theoretically ambiguous, but we find distribution of homes values across metros highly correlated with racial segregation.
Policy Recommendations

- **(1) Restrictive Zoning Reform:** Develop incentives that guide existing federal funds to municipalities that increase housing choice.

- **(2) Housing Choice Voucher Reform:** make the housing choice voucher program a blind process to landlords.

- **(3) Low Income Housing Tax Credit Reform:** requiring a proportion of the existing two dollars per capita credit to be used in the most income segregated census tracts.