Where the Landlords Are: Identification of Regions and Megaregions through Networks of Rental Ownership

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Abstract

The US is home to more than 100 million renters, and approximately 11 million landlords, yet these two sides to the rental market are rarely studied in tandem. This study uses a multiscalar network-based approach to identify regions and interconnections between regions of rental markets. Many US cities require landlords to acquire a license for each rental property they own. Building on this administrative data of rental property and landlord location, I define rental property networks as a spatial bipartite network, where landlords are connected to their properties, both of which exist in physical space. First, I simplify this network by extracting its backbone, defining a rental market area. This rent-based definition of a region provides for a clear boundary of rental markets based on renter and landlord concentration and location, which is a substantial improvement on commuting-flow approaches. I then compare these regions to existing a null model, commuting zones, and against administrative boundaries, and evaluate how they capture actual rents and urban boundaries. Second, I define rental housing megaregions based on common institutional ownership across regions, where distinct regional rental housing markets may have large concentrations of the same landowner. These megaregions are then evaluated based on their physical distance and other connections, such as through migration. Researchers and policymakers have historically viewed rentals in markets as unconnected nodes. By identifying appropriate definitions of regions and megaregions through the creation and analysis of a rental ownership network, this research contributes to the literature on delineation and extent of rental market areas. It therefore provides a more robust foundation to understand rental market dynamics and the relationship between owner, renter, and property.

Keywords: urban networks, housing markets, spatial analysis, urban flows

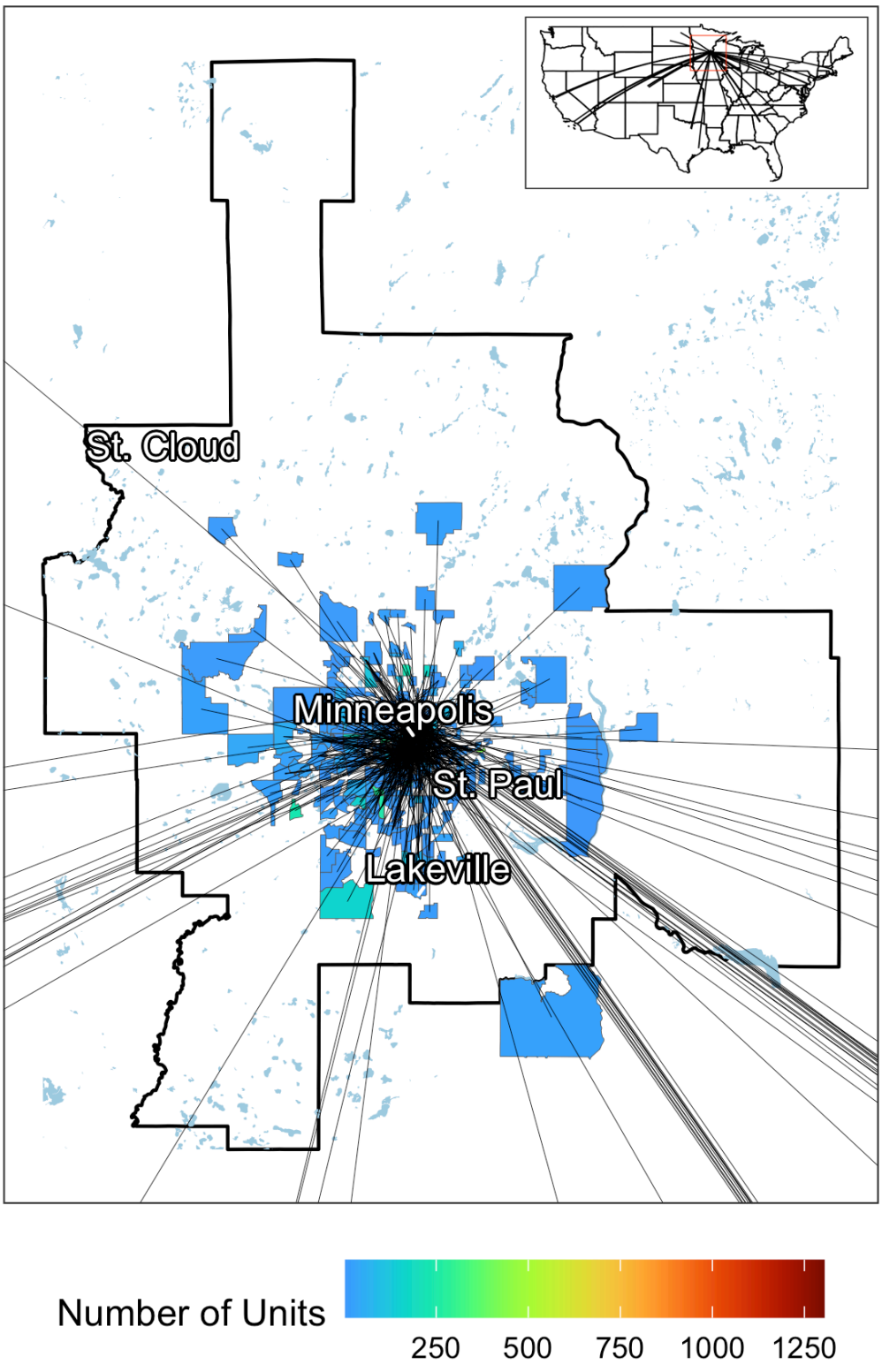

Figure 1: The Network Backbone of the Rental Ownership Market in Minneapolis, MN, USA. Extracted with the backbone package in R using a disparity filter. Overlaid on the Metropolitan Statistical Area definition with a black border. The national map in the top right hand corner shows how the rental property backbone extends throughout the entire US.

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