

Evaluation of Walkability, Constant-quality Home Price Appreciation(HPA), & Leverage: Top 50 Metros

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Joint work with Ed Pinto and Tobias Peter

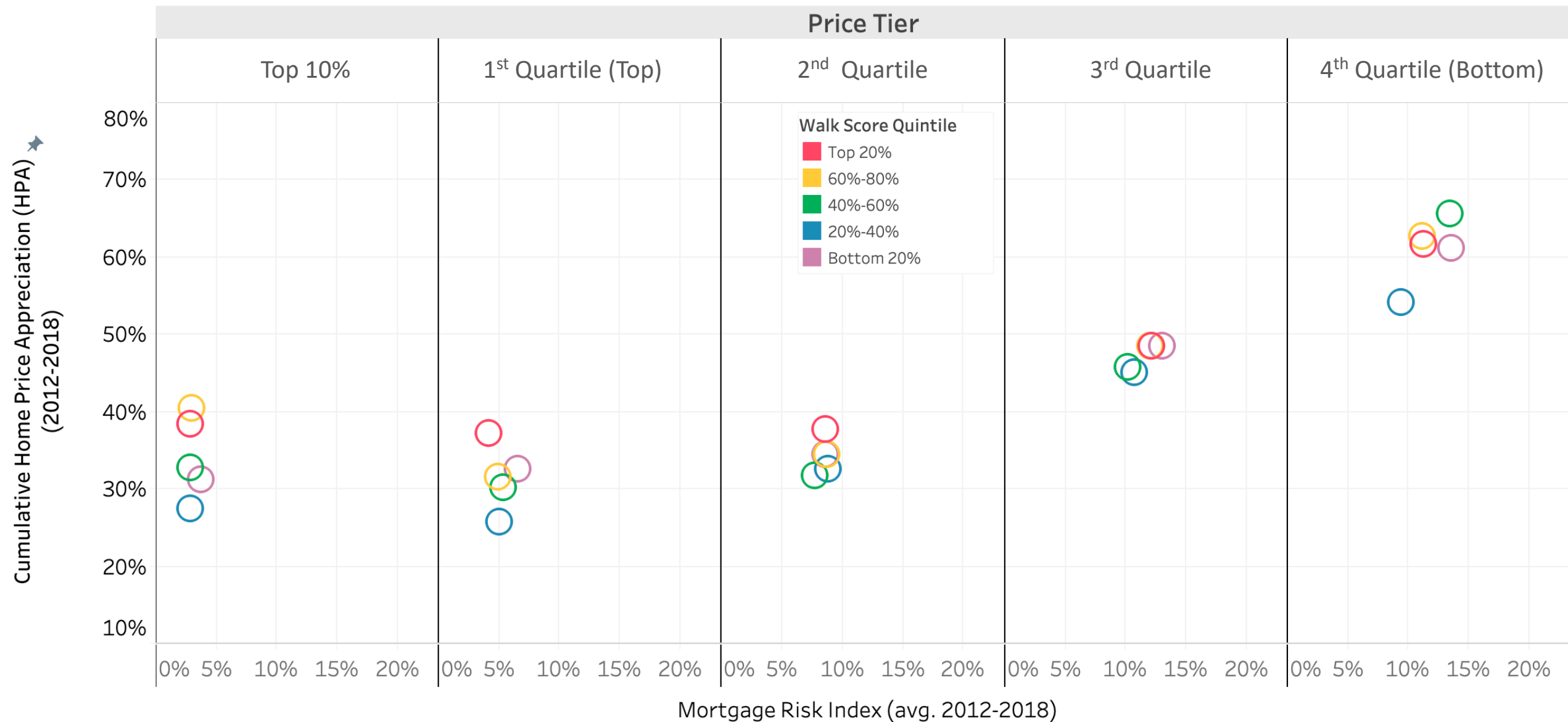
HPA Trend by Walk Score and Price Tiers: Washington, DC Metro Area



Note: Price Segment is defined by the AVM of each sale as of Dec-2018. Each sale is assigned a walk score based on its census tract score.

Source: Redfin Real Estate <https://www.walkscore.com/> and AEI Housing Center, www.AEI.org/housing

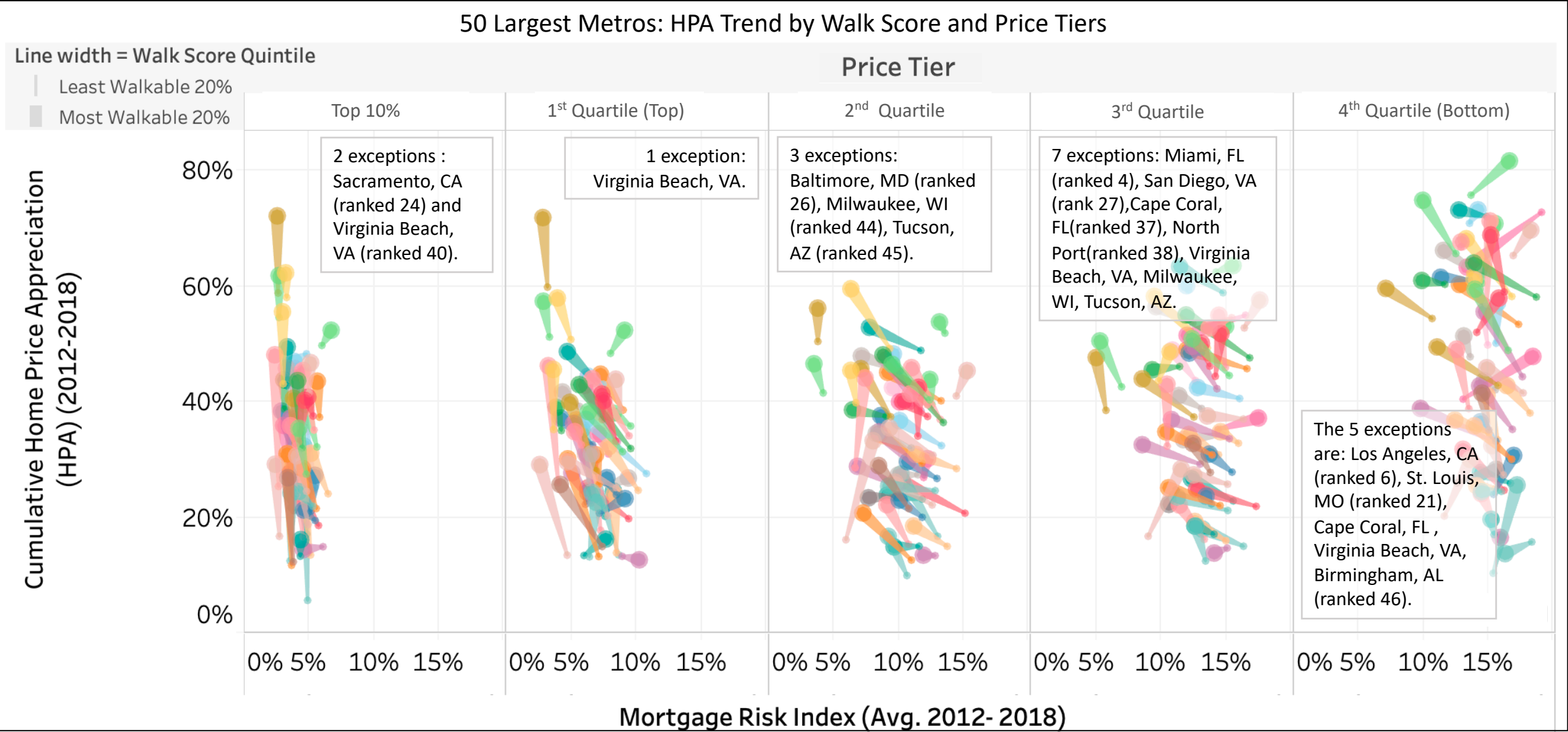
HPA Trend by Walk Score and Price Tiers: North Port, FL Metro Area



Note: Price Segment is defined by the AVM of each sale as of Dec-2018. Each sale is assigned a walk score based on its census tract score.

Source: Redfin Real Estate <https://www.walkscore.com/> and AEI Housing Center, www.AEI.org/housing

Walkability matters. For the five price tier scenarios of 50 metros (total 250 scenarios), walkability provides HPA lift in 93% of the cases.

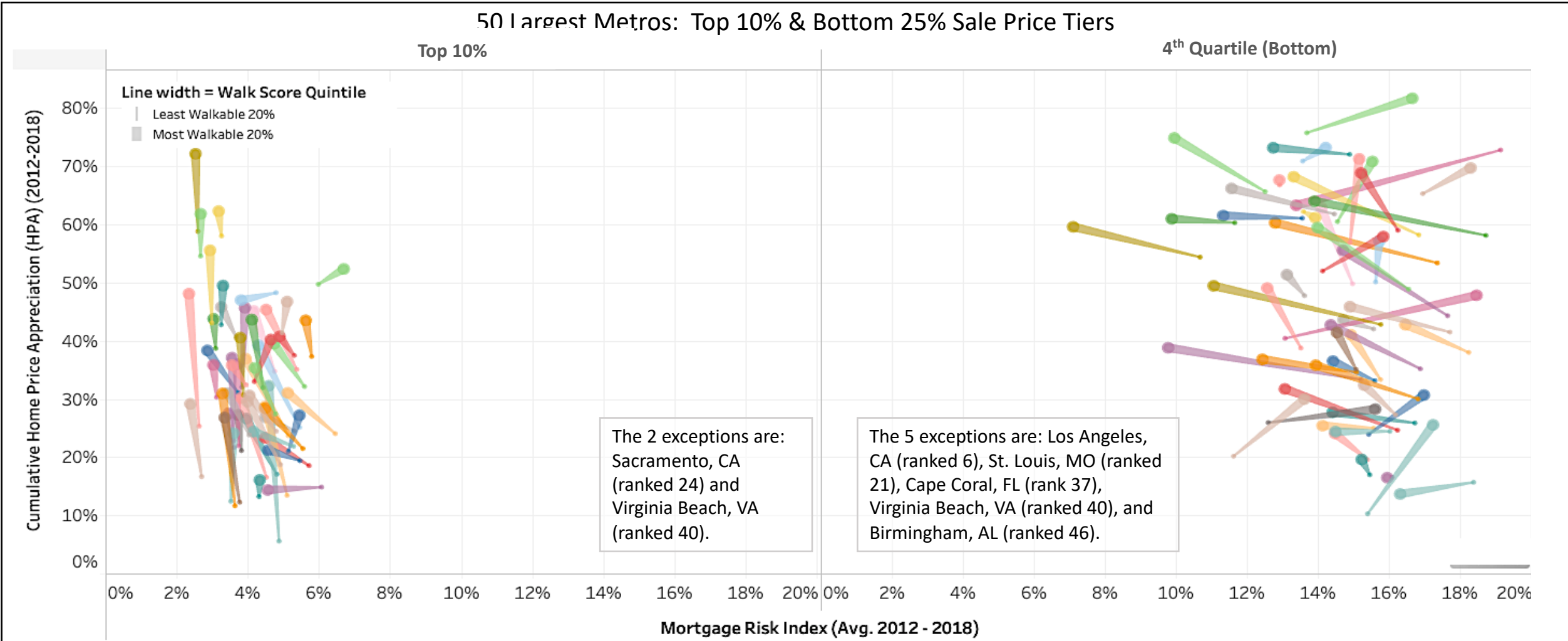


Note: Top 50 metros cover 20.4 million single-family 1-4 sales from 2012-2018, about 50% of all US single-family home sales over the period. In the chart, each color represents a metro.

Source: Redfin Real Estate <https://www.walkscore.com/> and AEI Housing Center, www.AEI.org/housing

(Intrinsic) Value Depends on Location, & Location on Convenience, & Convenience on Nearness (Hurd, *The Principles of City Land Values*, 1903)

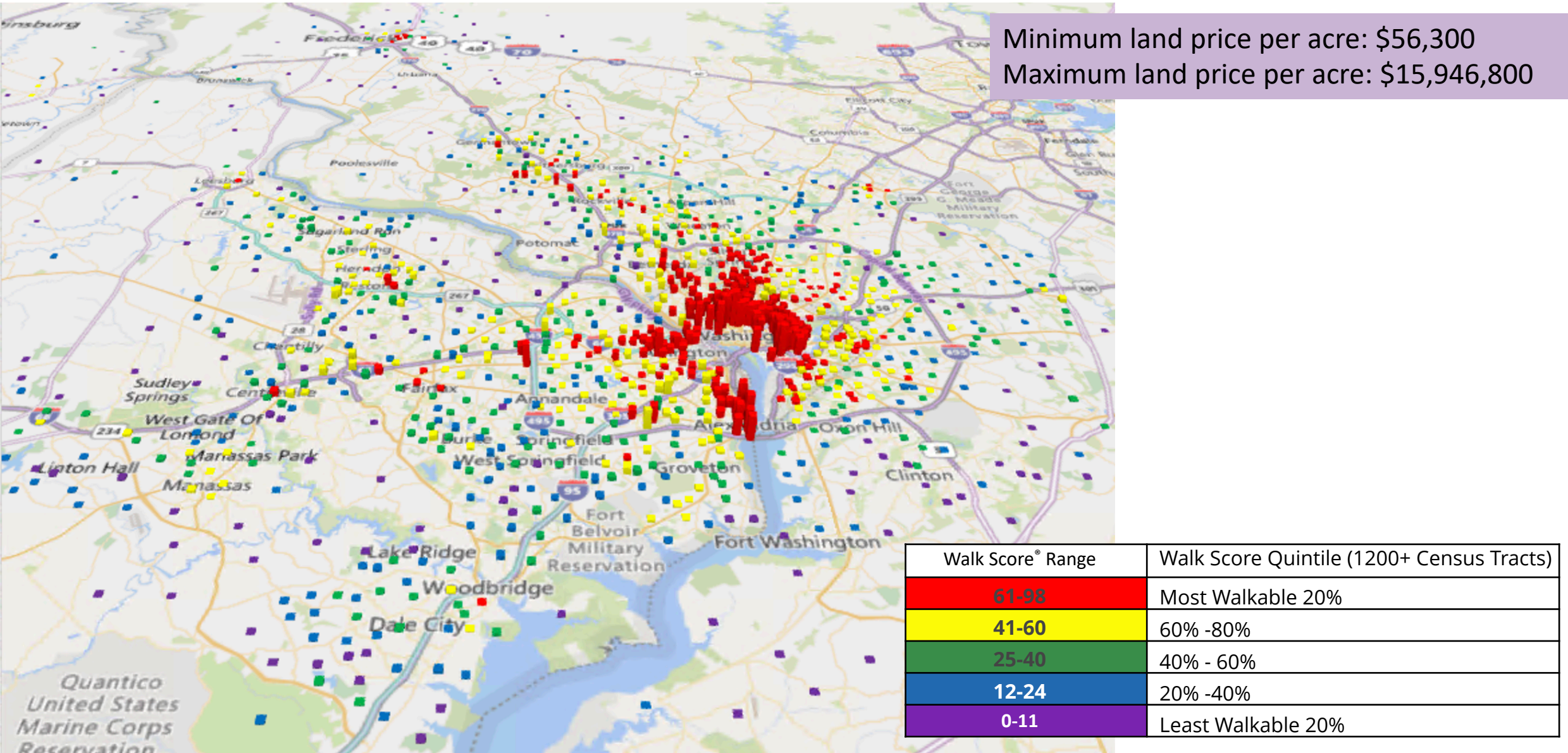
- Top 10% sale price tier: for 48 metros, House Price Appreciation (HPA) was higher in the most walkable quintile than the least walkable one (avg. HPA premium of 8.6%) and the MRI range is very tight, with the average MRI difference being only 0.5%.
- Bottom 25% sale price tier: for 45 metros HPA was higher in the most walkable quintile than the least walkable one (avg. HPA premium of 5.2%) and the MRI range is much wider, with the average MRI difference being 2.1%.



Note: Top 50 metros cover 20.4 million single-family 1-4 sales from 2012-2018, about 50% of all US single-family home sales over the period. In the chart, each color represents a metro.

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Depiction of Walkability and Land Price Per Acre: Washington, DC Census Tract 3D Map



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Source: AEI Housing Center, www.AEI.org/housing, Redfin Real Estate <https://www.walkscore.com/> and land price per acre from joint FHFA/AEI/Rutgers University research.