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Retail Environment

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Tobacco Swamps

Tobacco retailer density and resident-to-retailer proximity in 30 ASPiRE cities

Veronica Chaitan | March 2, 2023



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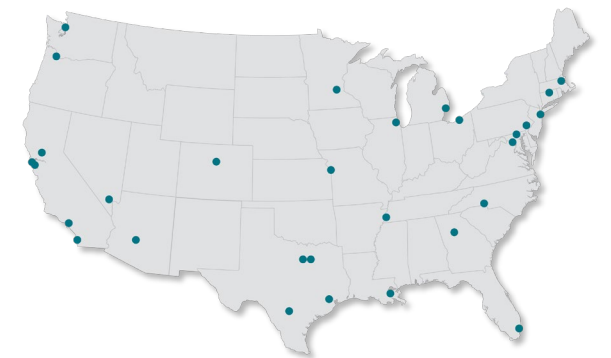
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Tobacco Swamps

- Areas with a glut of tobacco retailers
- Areas with high tobacco retailer concentration
 - High tobacco retailer density
 - Large # per square mile or per 1,000 people
 - High tobacco retailer proximity
 - Large % of population within a 5- or 10-minute walk to a retailer
 - Short median distance from residents to retailers, e.g., 500m, 1000m
 - Proximity \neq Density

Retailer concentration in ASPIRE cities

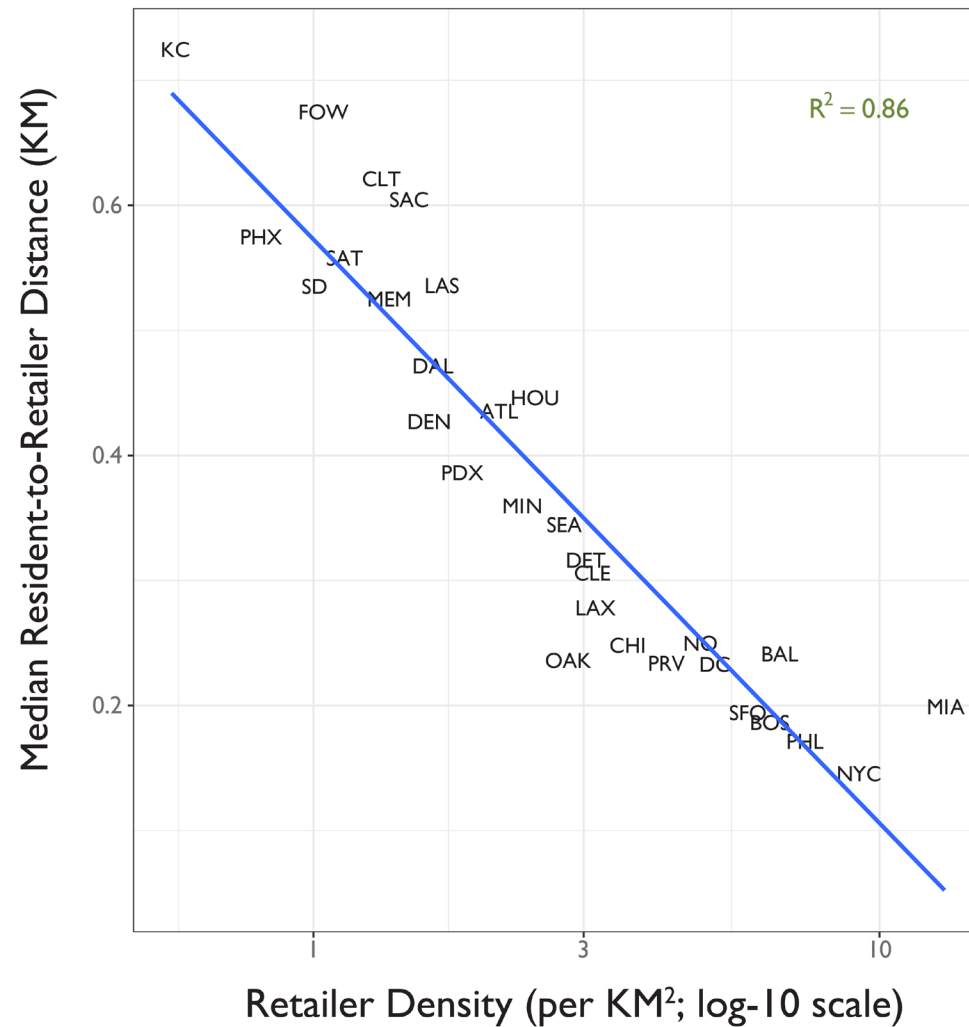
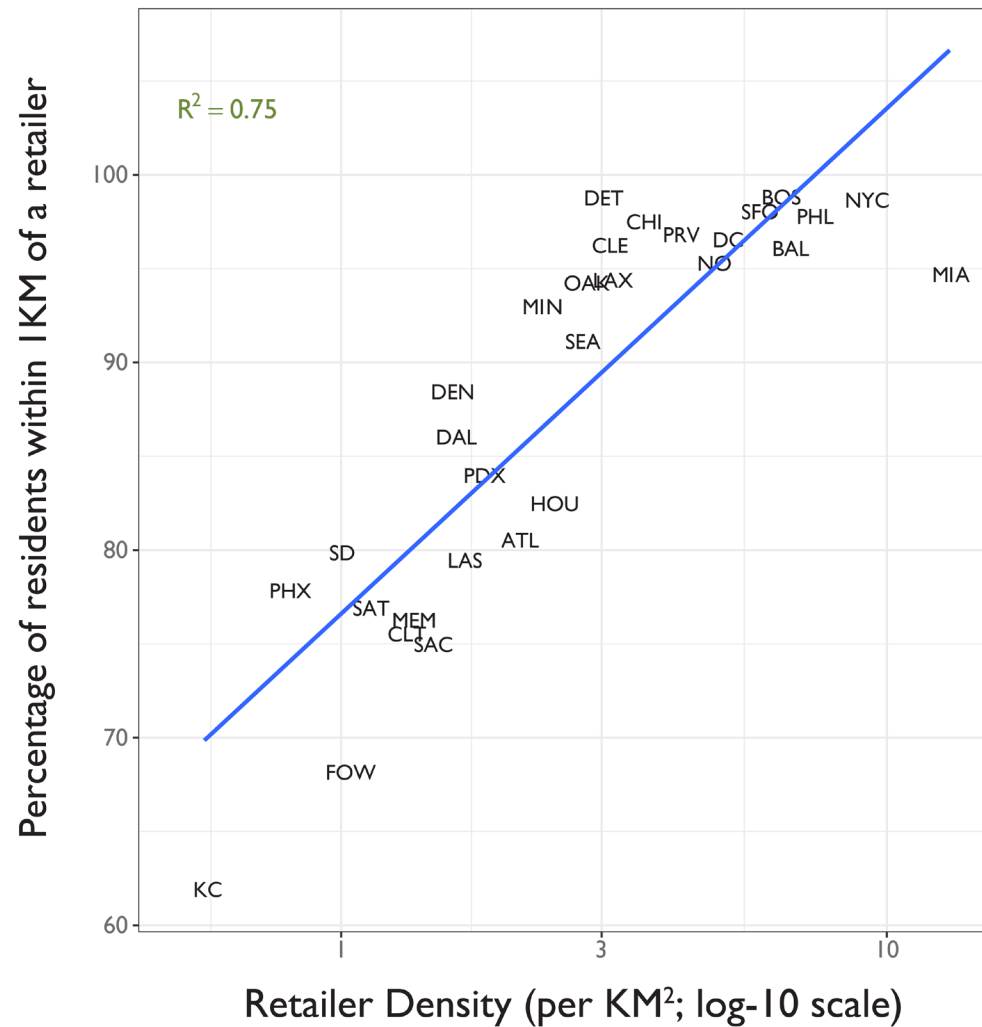
- Goals
 - Compare measures of tobacco retailer density and resident-to-retailer proximity in the 30 cities
 - Compare the impact of retail policies on density and proximity
 - Consider the importance of context for policy impact



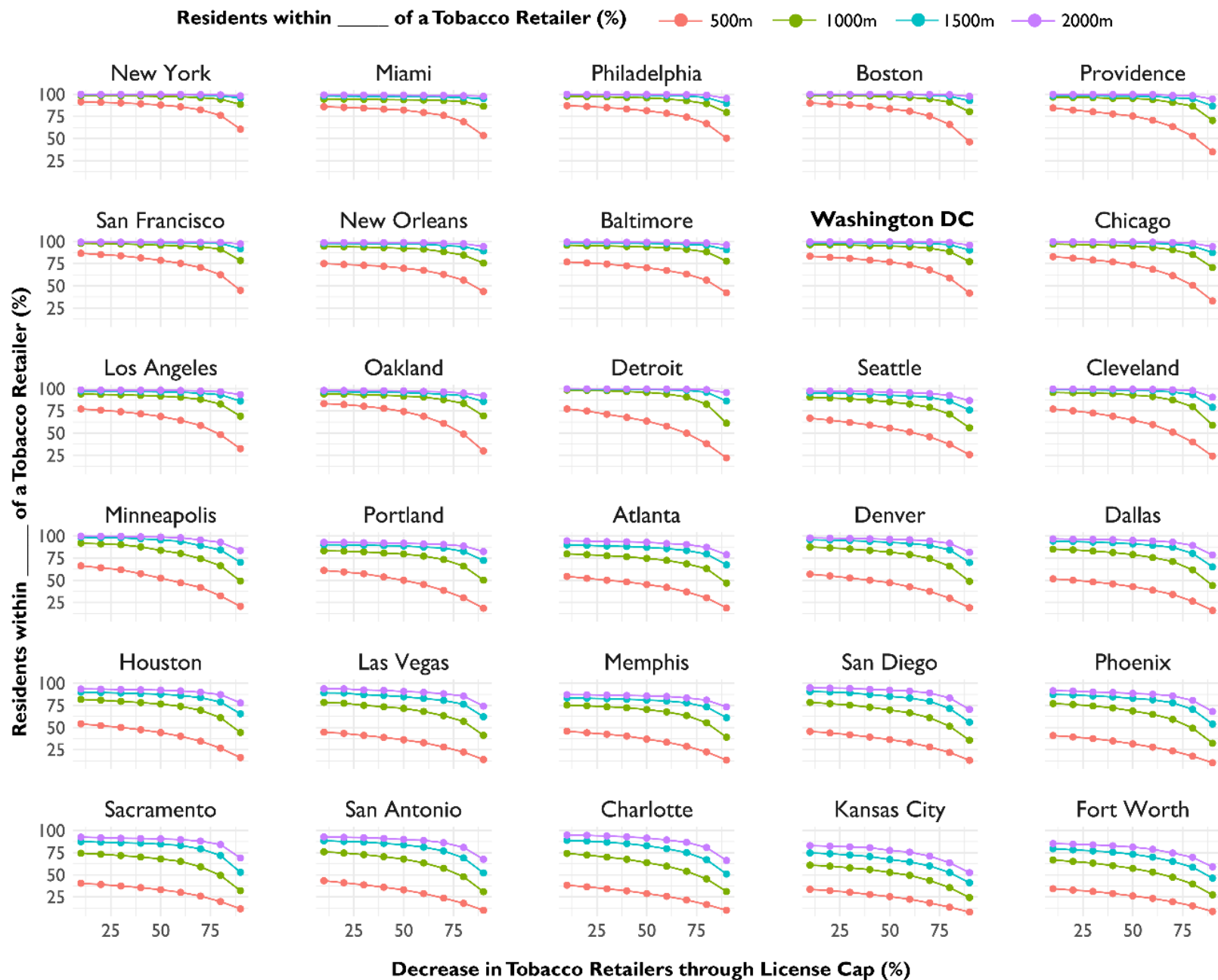
Retail policy simulations

- License Cap (LC)
- Retailer-to-Retailer Buffer (R2R)
- School-to-Retailer Buffer (S2R)

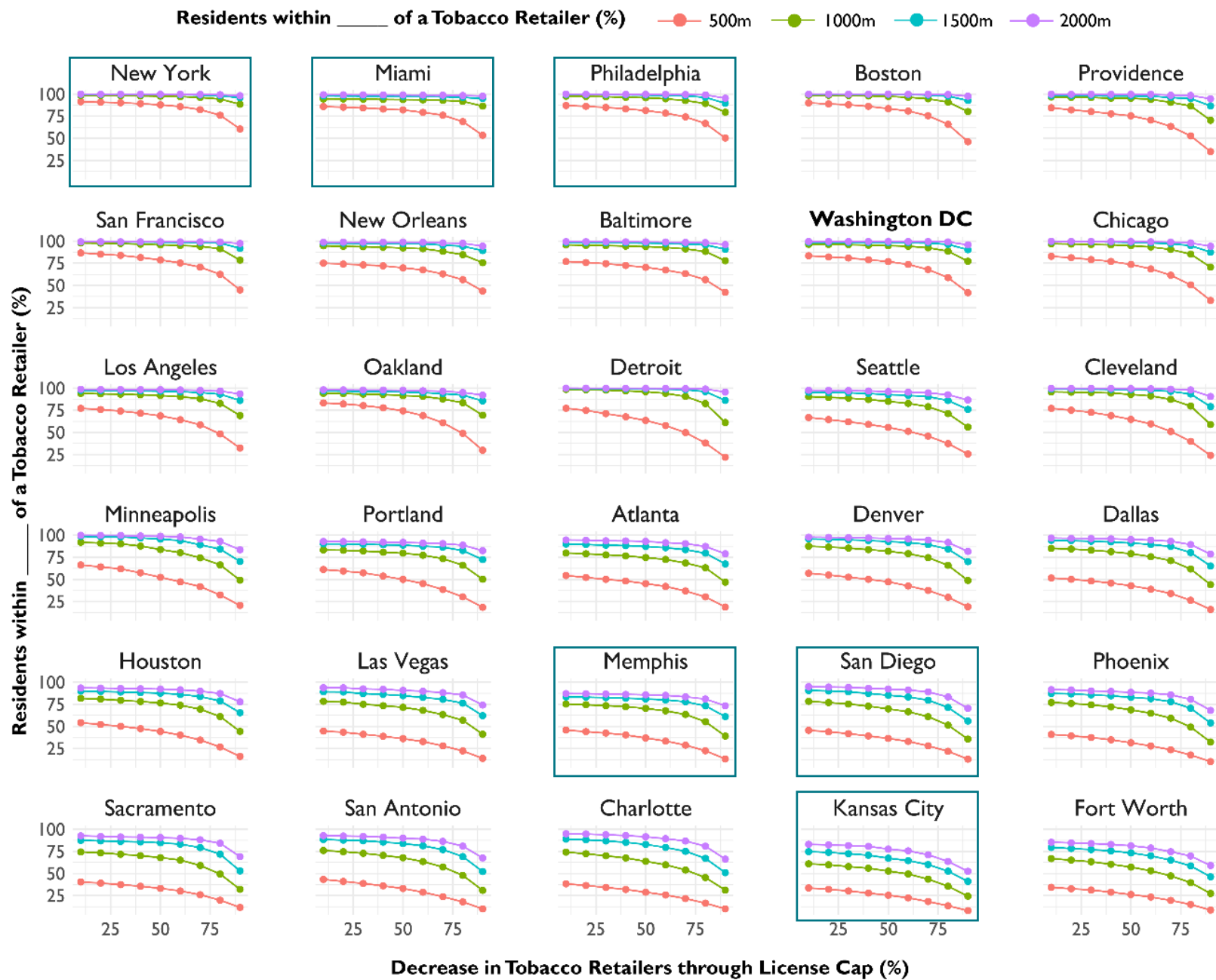
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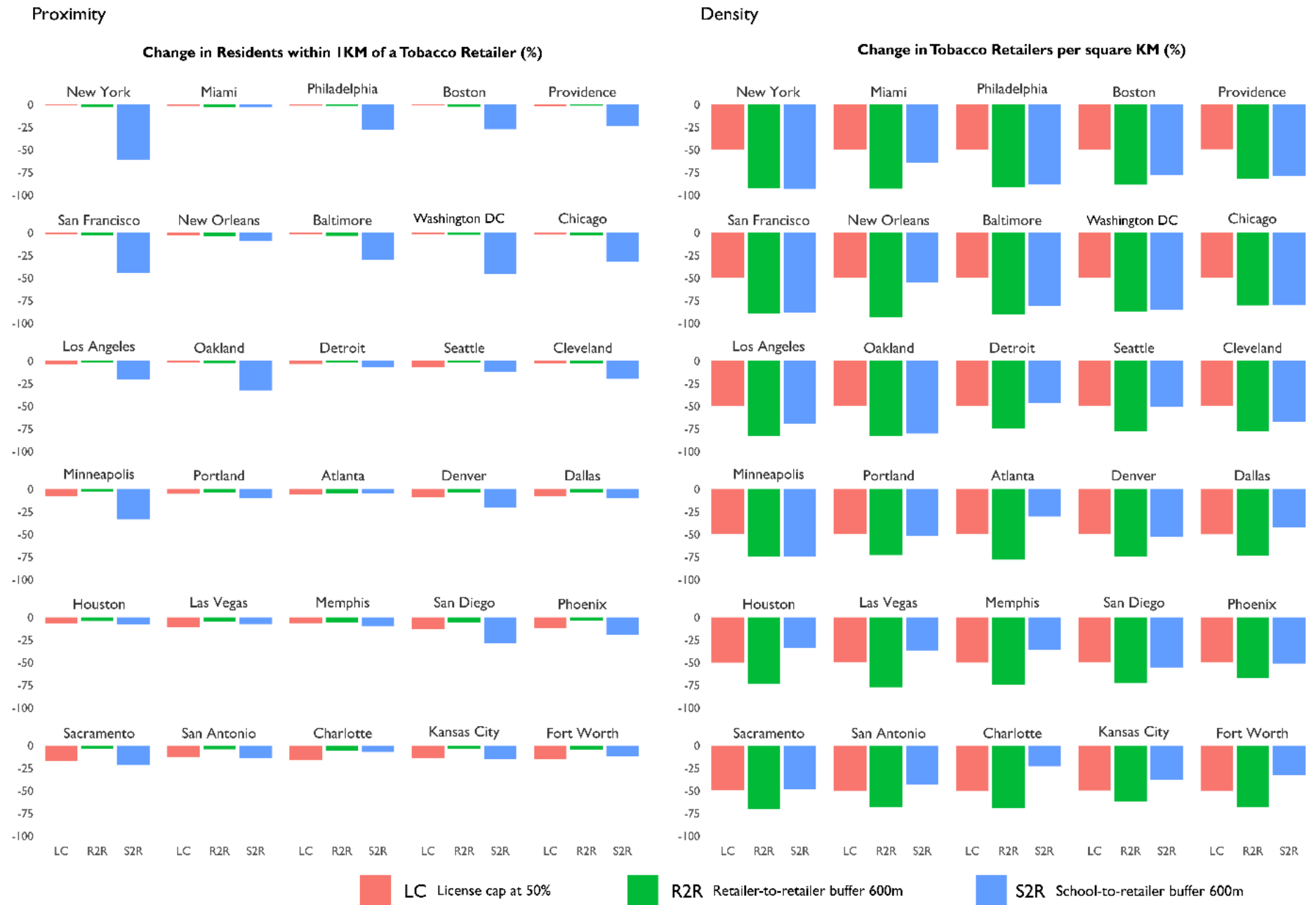
Policy impact on proximity



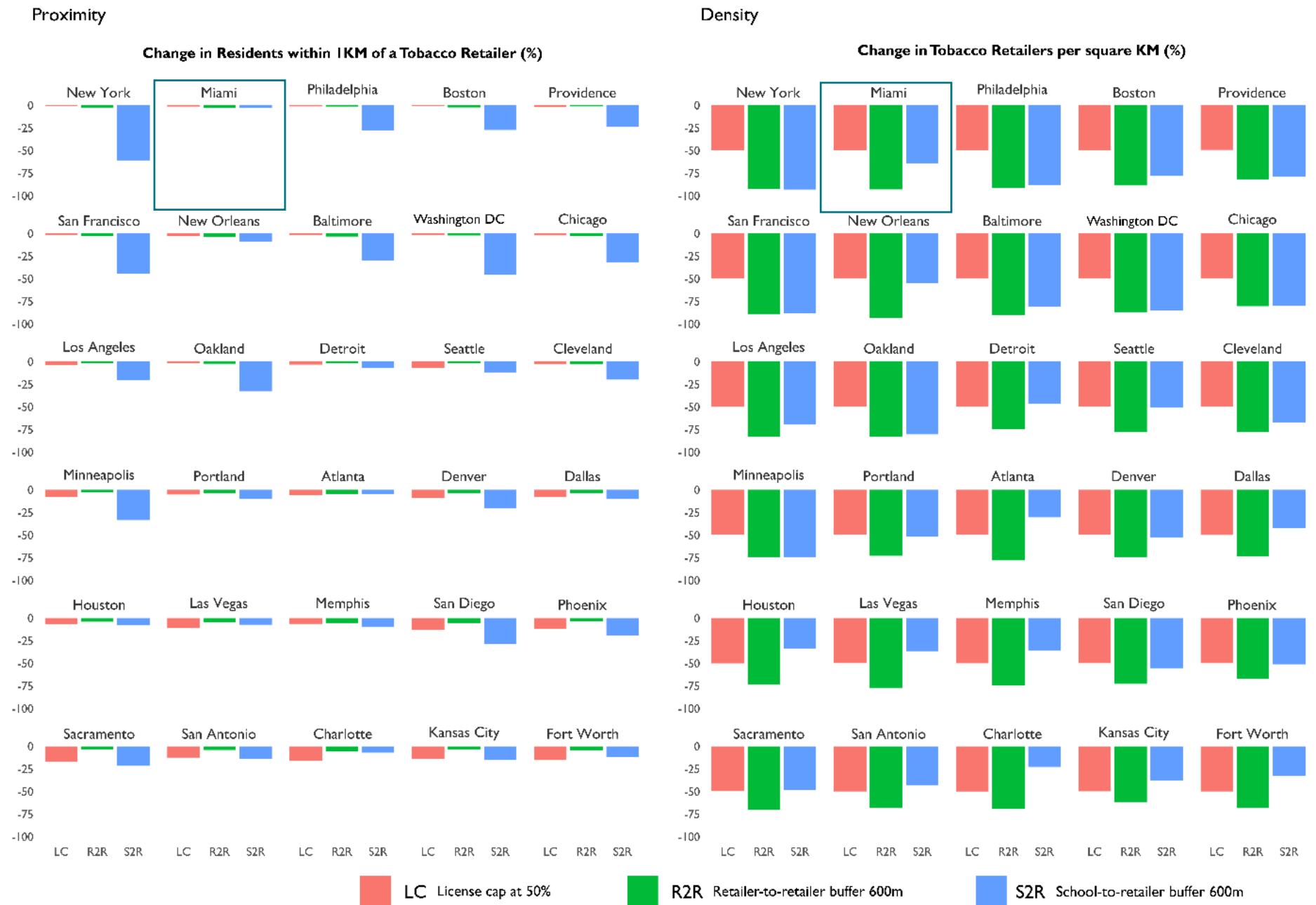
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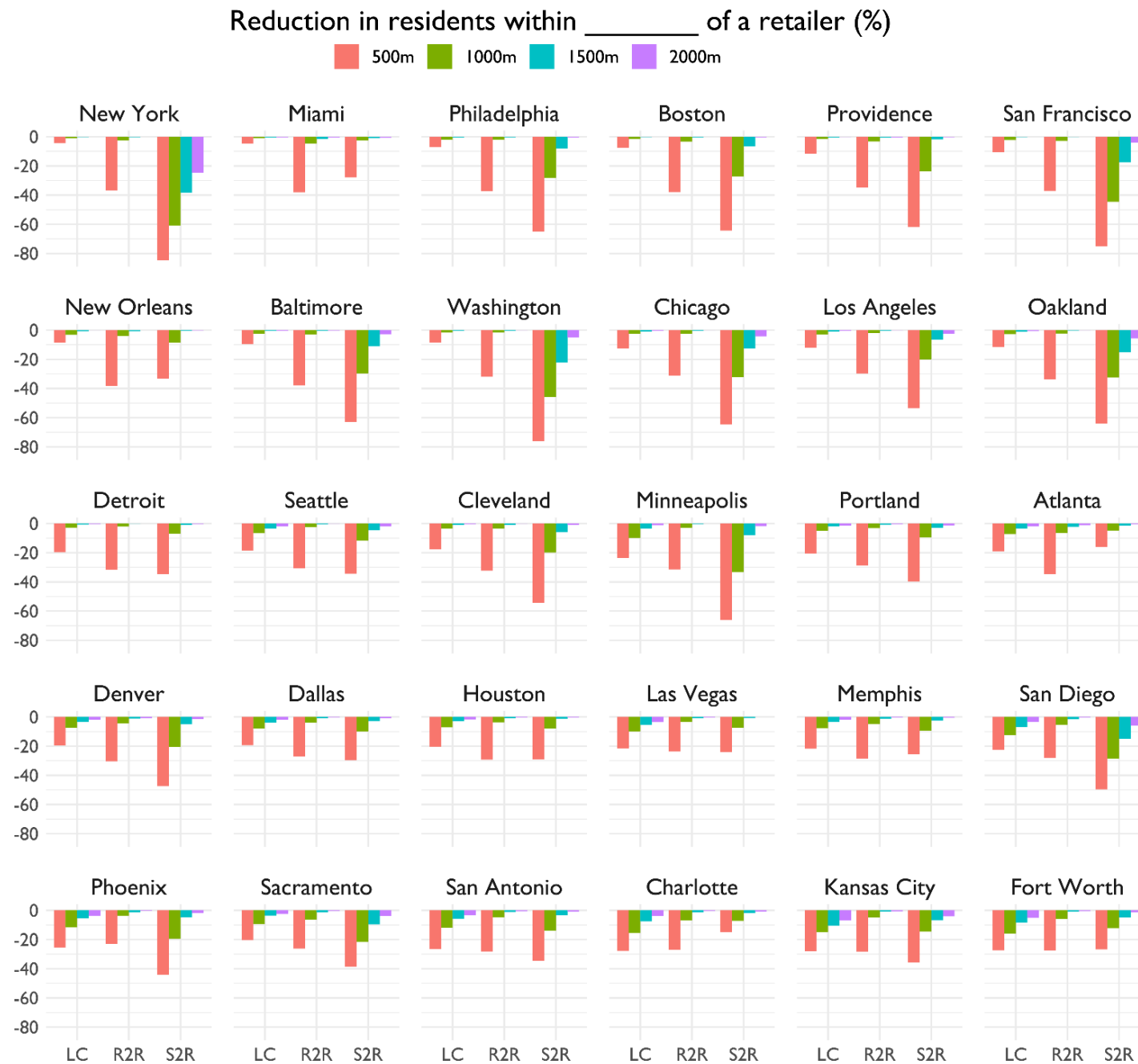
Policy impact on proximity and density



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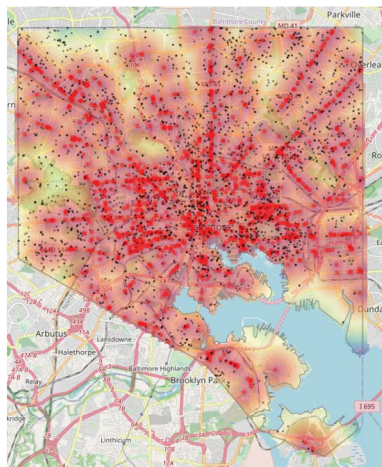


Policy impact on proximity at different levels



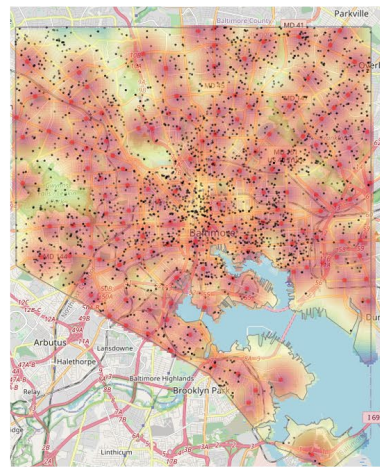
Policy impact on proximity and density: take 2

Baltimore Baseline



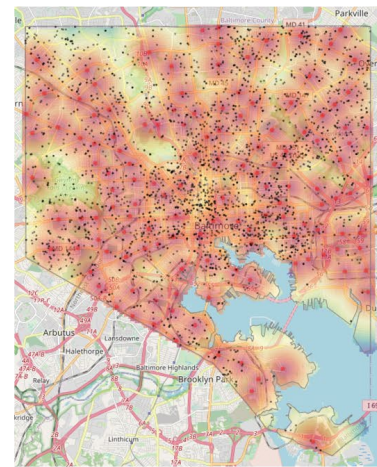
Density 5.80/km²
 Median proximity 0.24 km
 Residents within 1km 96%

License cap 50%



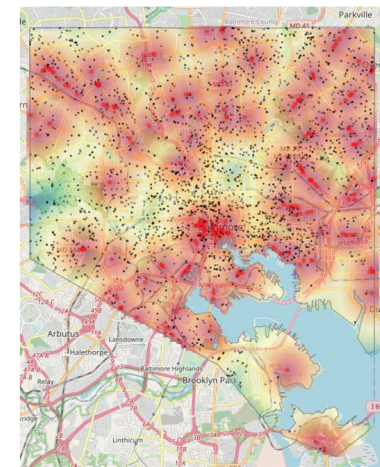
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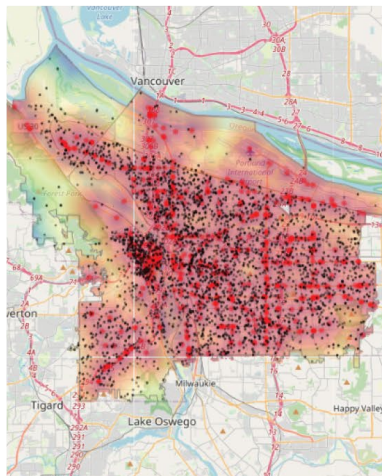
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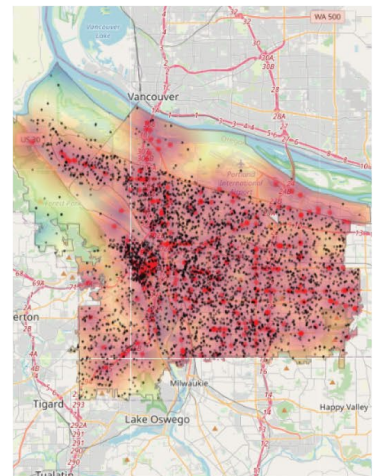


Density 1.1/km²
 Median proximity 0.74 km
 Residents within 1km 68%

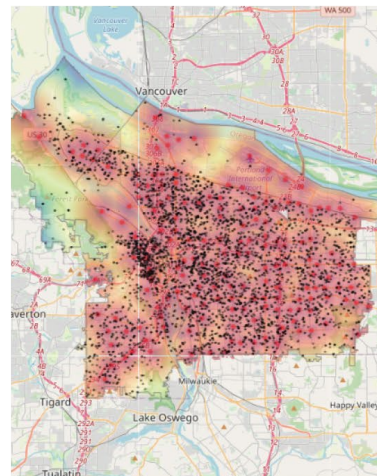
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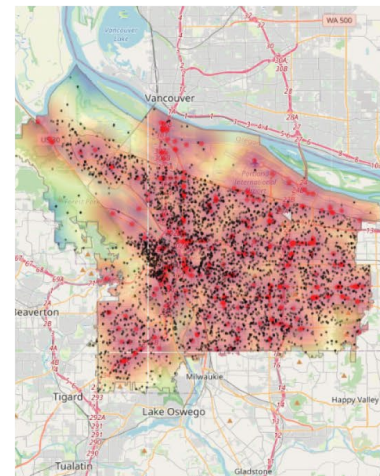
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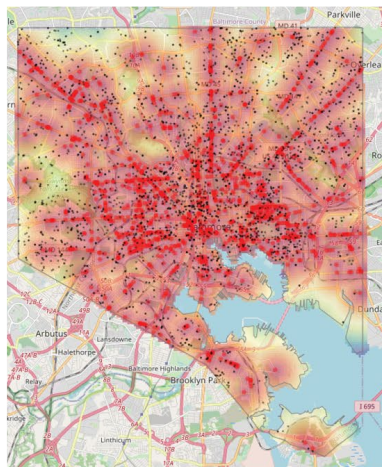
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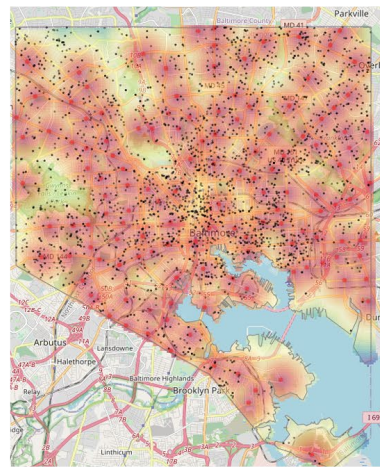
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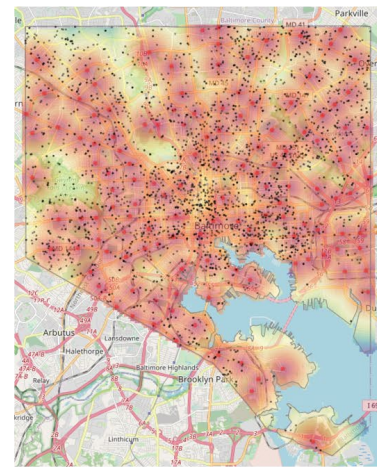
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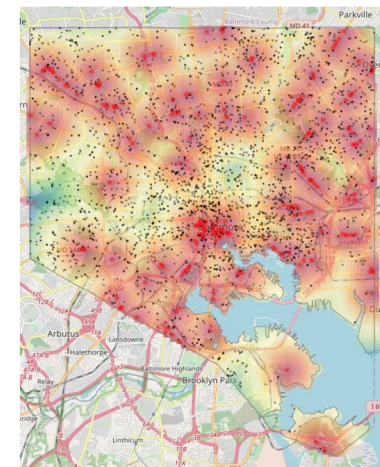
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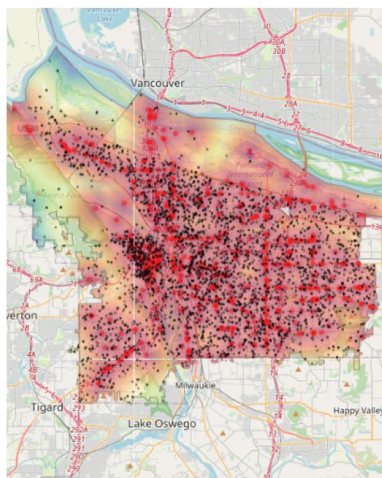
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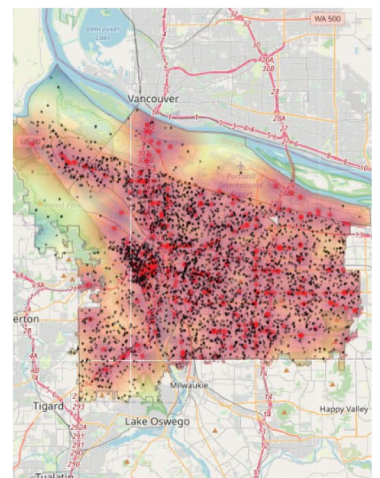


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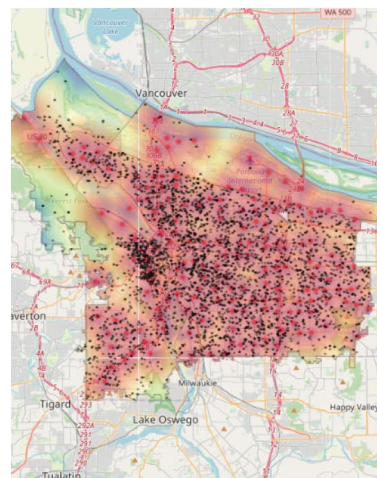
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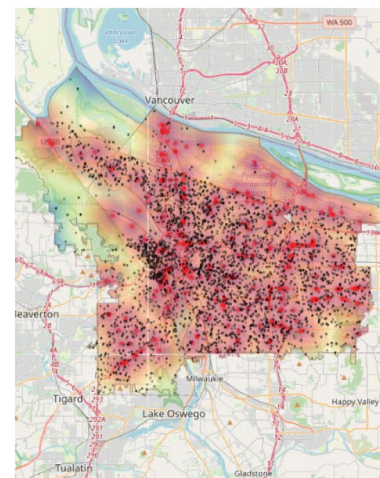
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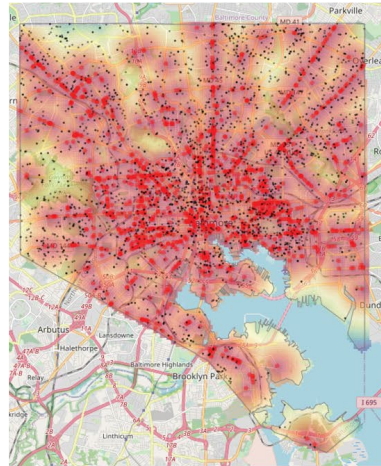
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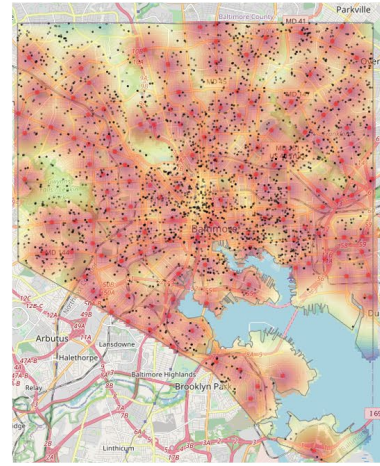
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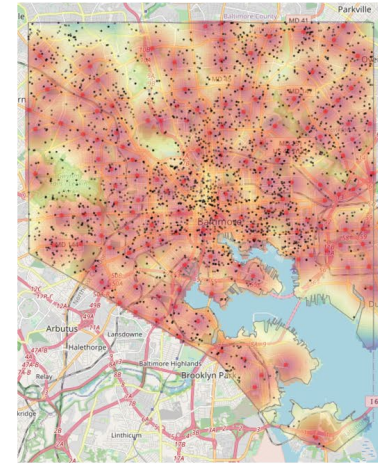
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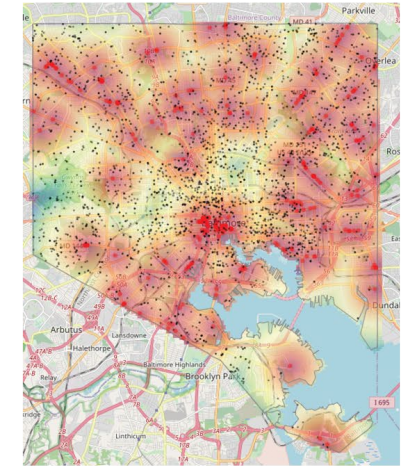
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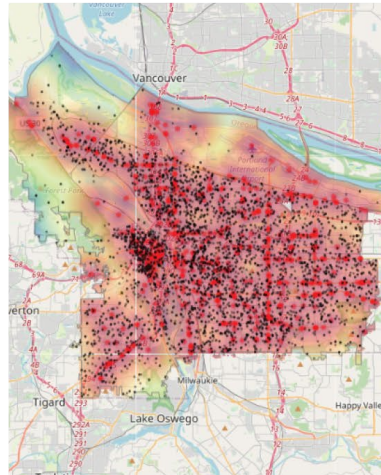
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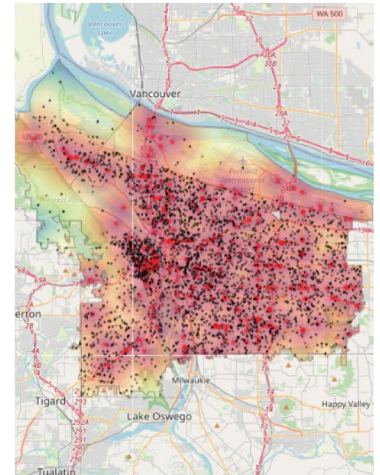


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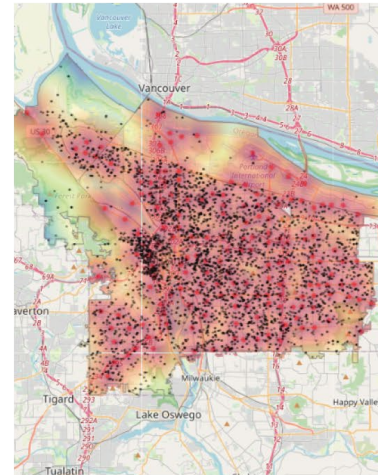
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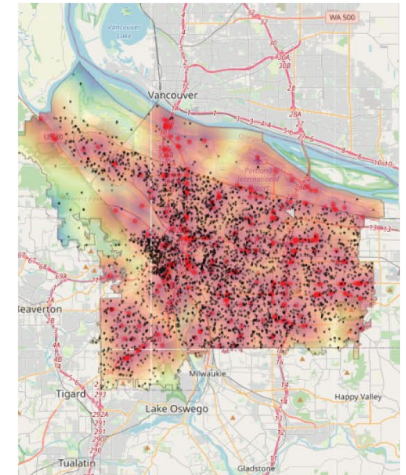
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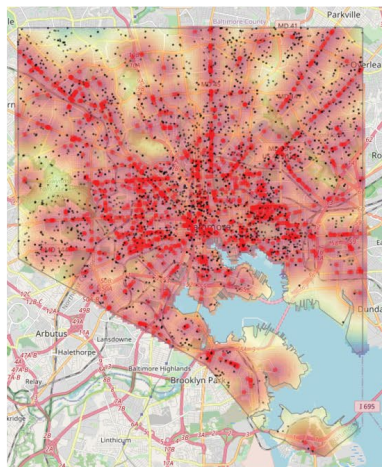
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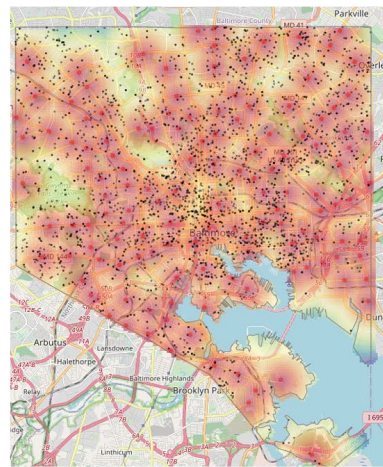
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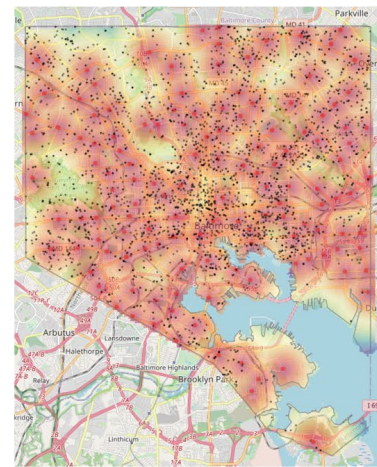
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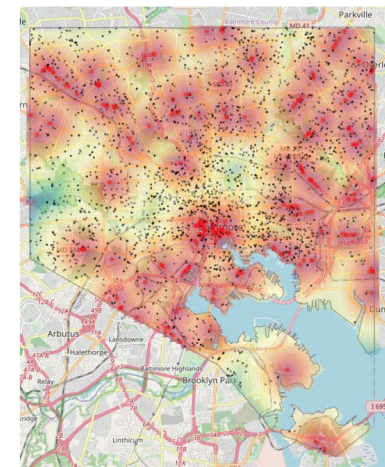
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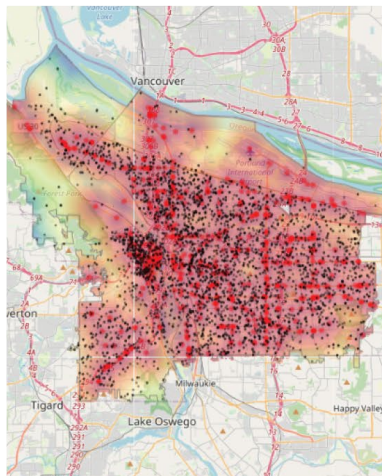
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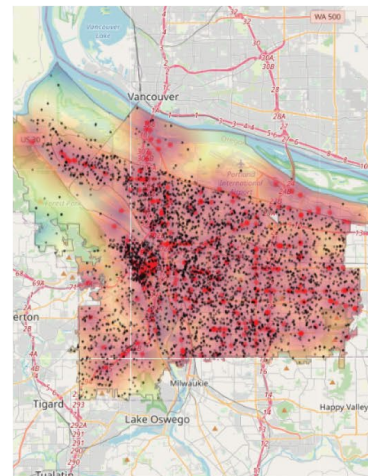


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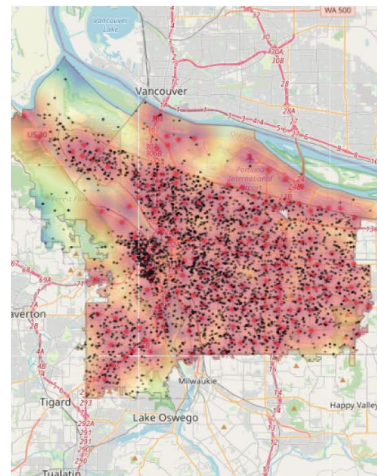
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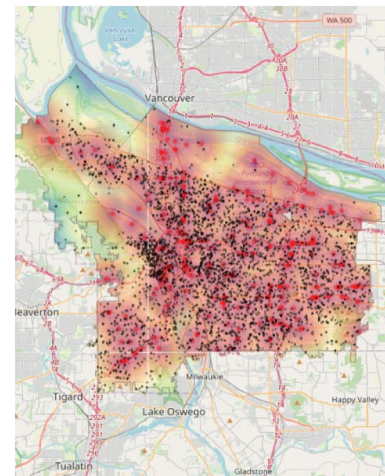
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Key takeaways

- Proximity \neq Density
 - And the impact of policies is different
- Context is important
 - Baseline built environment for tobacco matters
 - Other factors likely matter as well
- Policymakers should know that policies will affect the measures differently
 - Plan for this for gauging policy successes
 - Different measures, e.g., proximity of retailers to schools, may resonate differently across groups



Open access publication

Draining the tobacco swamps: Shaping the built environment to reduce tobacco retailer proximity to residents in 30 big US cities

Todd B. Combs, Joseph T. Ornstein, Veronica L. Chaitan, Shelley D. Golden, Lisa Henriksen, Douglas A. Luke

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Next steps

- Simulations with a focus on equity
 - We know there are racial, ethnic, and economic disparities in tobacco retailer density and resident-to-retailer proximity
 - There are likely differential impacts across groups and communities from retailer reduction policies as well
 - For example, how does a 600m (~2000ft) school-to-retailer buffer affect low-income communities as compared to higher-income ones, or communities of color and predominately non-Hispanic white communities, in terms of tobacco retailer density and proximity reductions?

Contact us



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