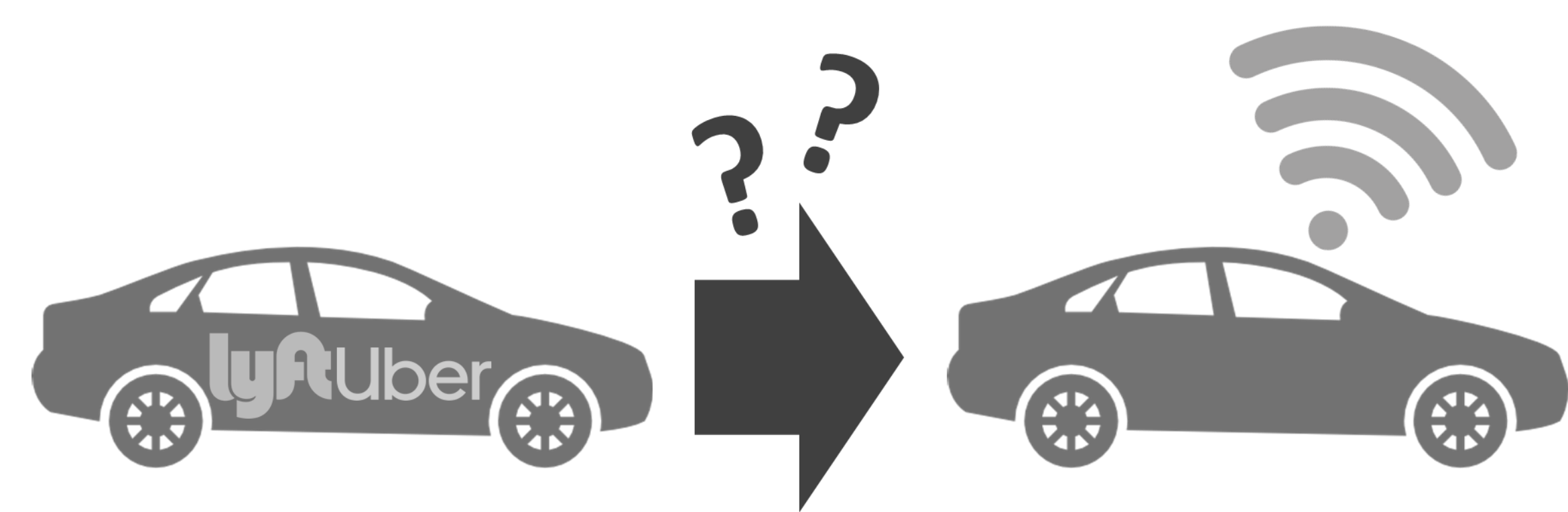


How are Uber/Lyft Shaping Municipal On-Street Parking Revenue?

BENJAMIN Y. CLARK AND ANNE BROWN

AIMS

Autonomous vehicles (AVs) will likely disrupt more than just travel behavior: they could reshape municipal budgets and cities' bottom lines through affected parking revenues. The challenge for cities is that, without AVs on city streets, the potential effects on parking revenues remains unknown. Ride-hailing can serve as a proxy for an uncertain future.



Research Question

What is the association between ride-hail trips in a neighborhood and parking revenue?

DATA & METHODS

This research uses Uber and Lyft trip data, specifically the number of trips serving neighborhoods in the City of Seattle every day, at different times of the day, from 2013-2016.

Study Areas: census tracts with paid on-street parking in the City of Seattle

Parking revenue data from the City of Seattle based on transaction & parking occupancy

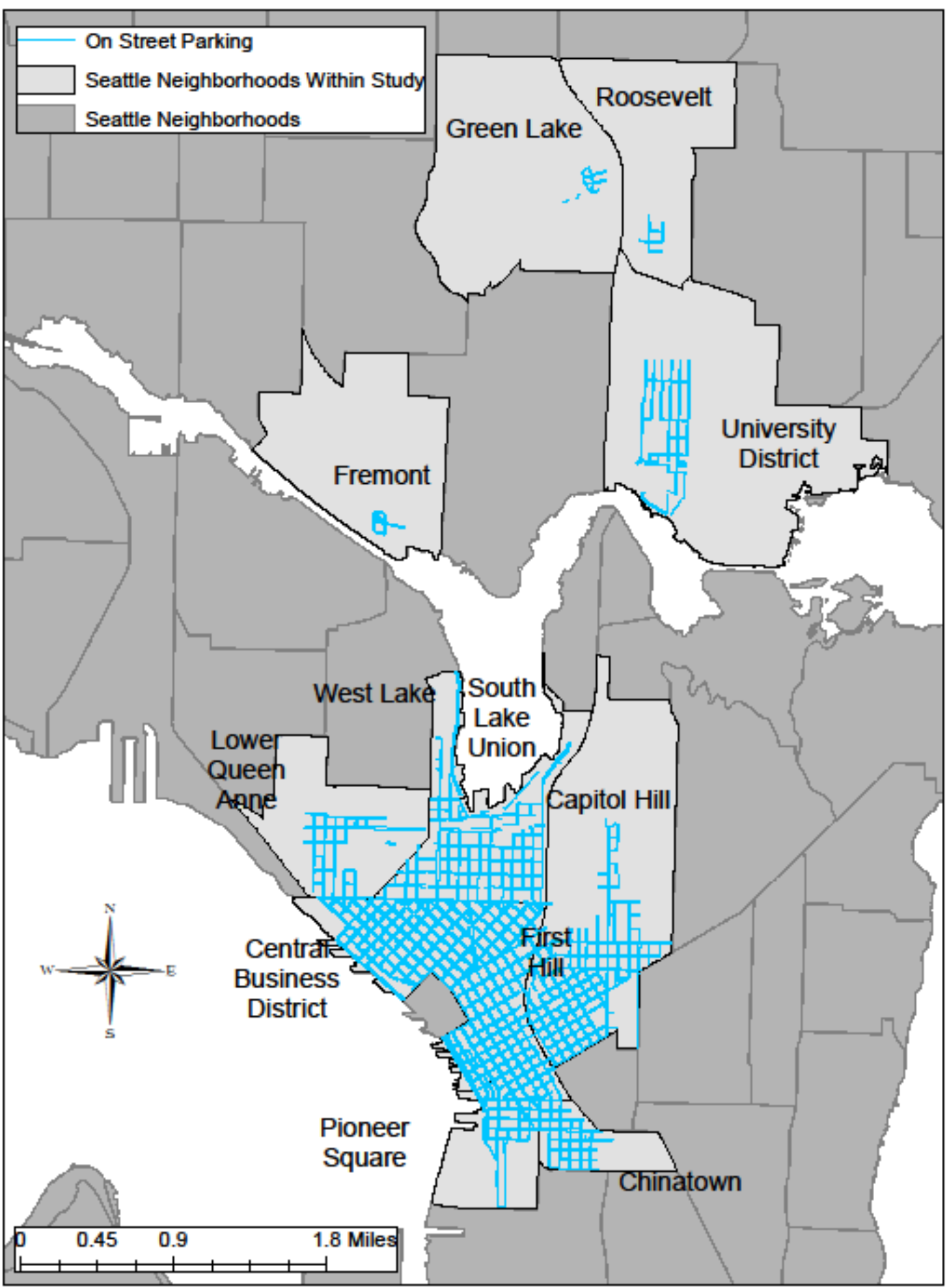
Neighborhood data provides context

- American Community Survey: Car ownership, population density, car ownership, median household income
- State of Washington: beer/wine/liquor licenses
- US Energy Administration: fuel price data

Methods

Controlling for built environment and resident characteristics, **estimated two Poisson regression models:**

- Total tract revenue per time period
- Average revenue per parking space per time period



RESULTS

In a nutshell, effects vary by time horizon.



In the **near term**, and at current (or even higher) ride-hailing use, don't expect parking revenues to fall.

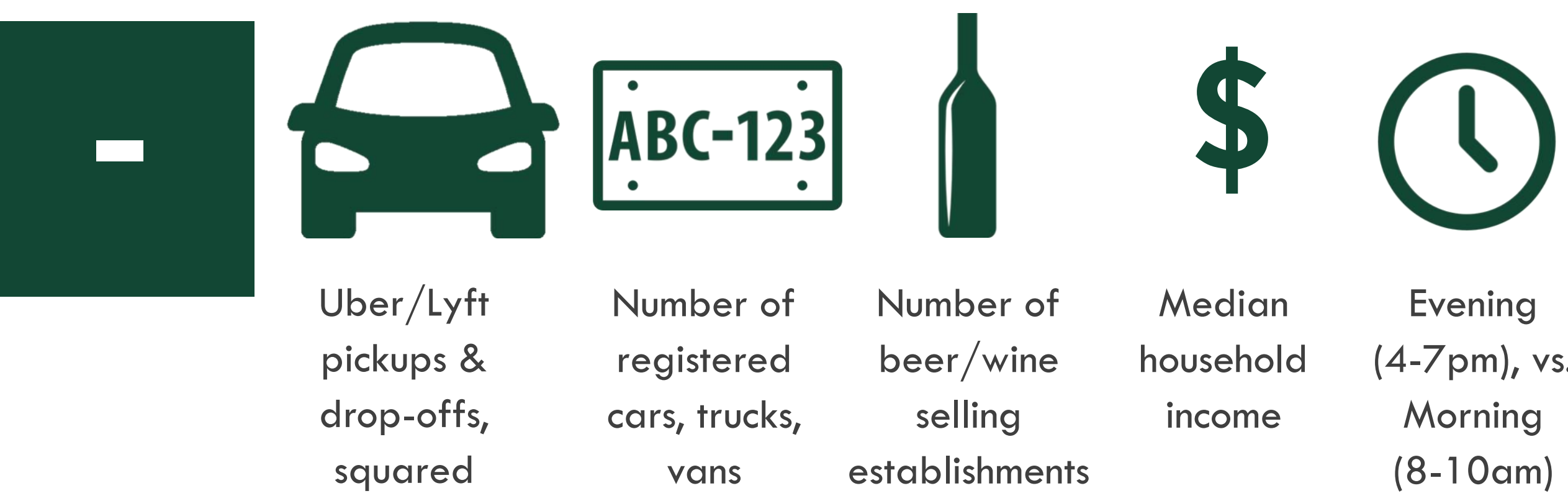
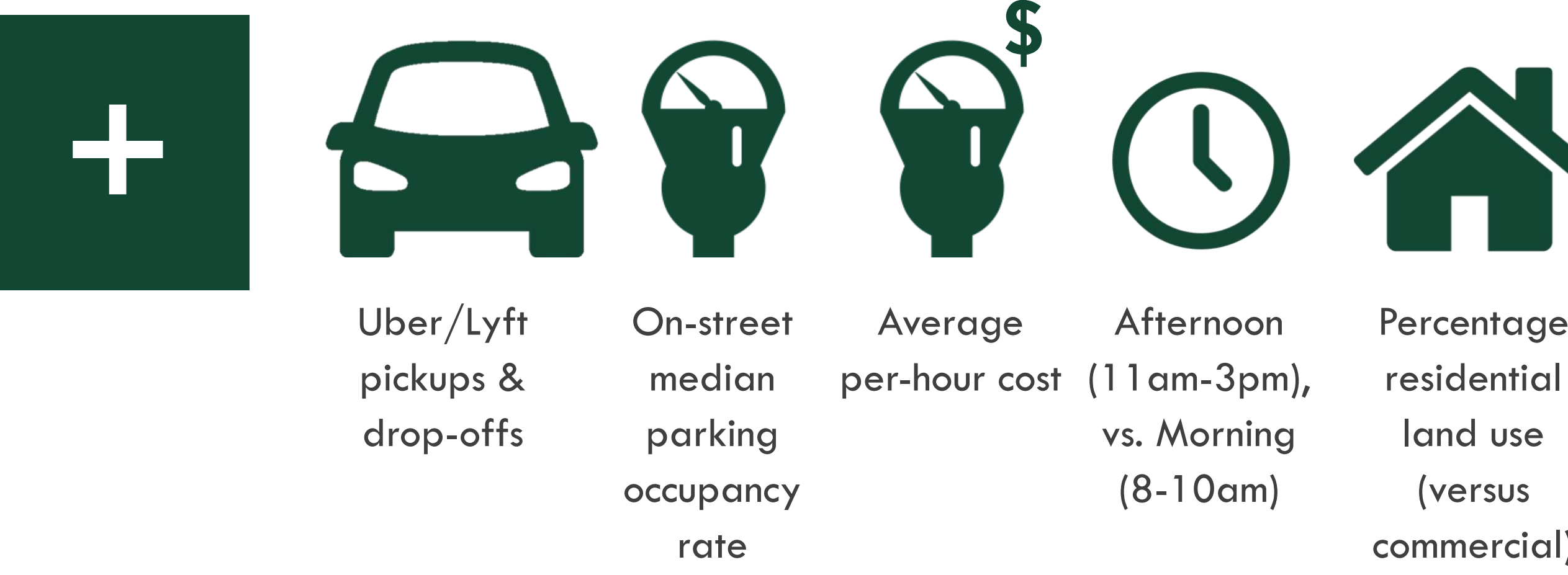


In **long-term**, revenue will decline over time with no policy change.

RESULTS

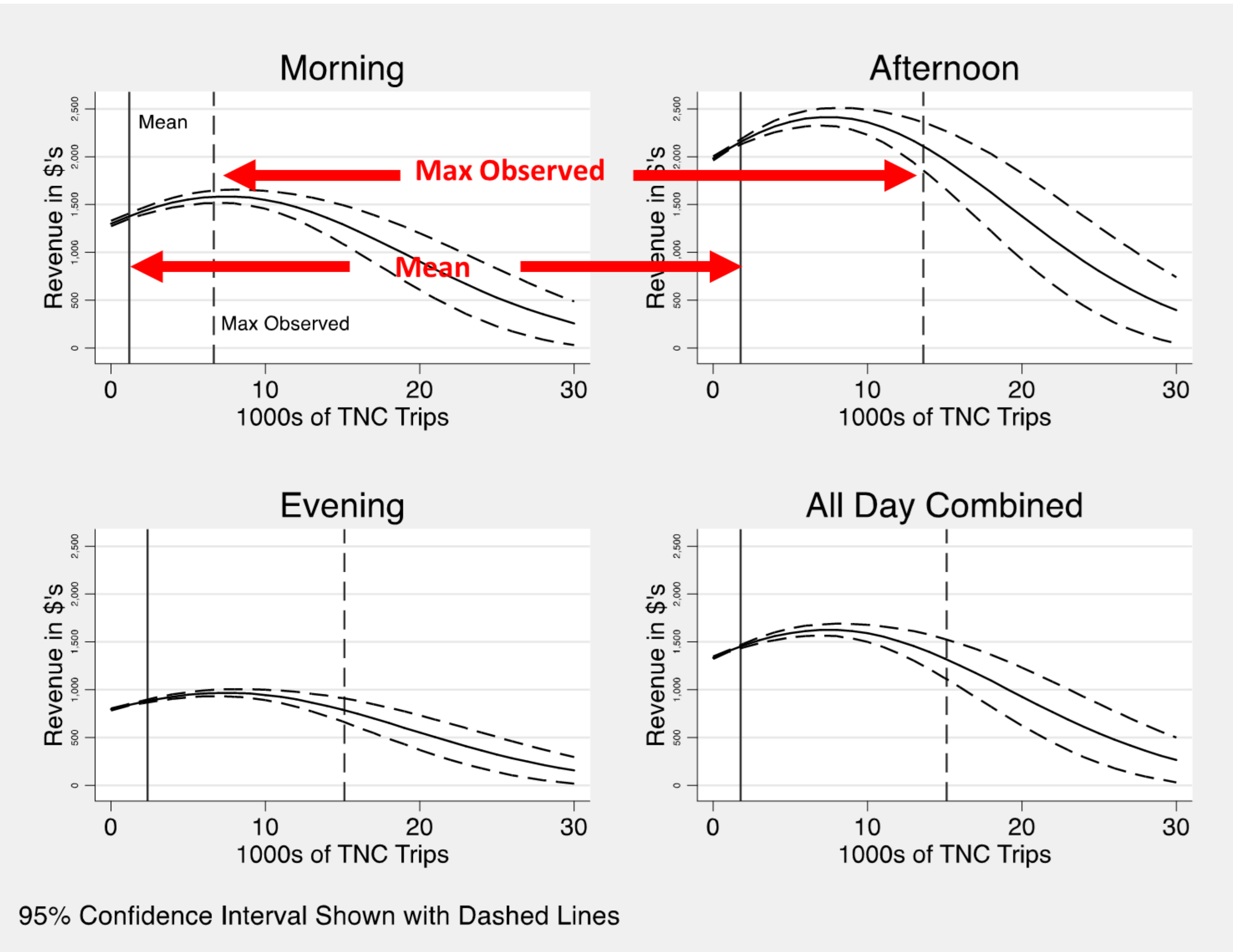
Measured either as total or per-space revenue, factors affecting predicted revenue are relatively consistent. **Predicted revenues are associated with many elements, most strongly time of day.**

Factors associated with projected revenue by parking space



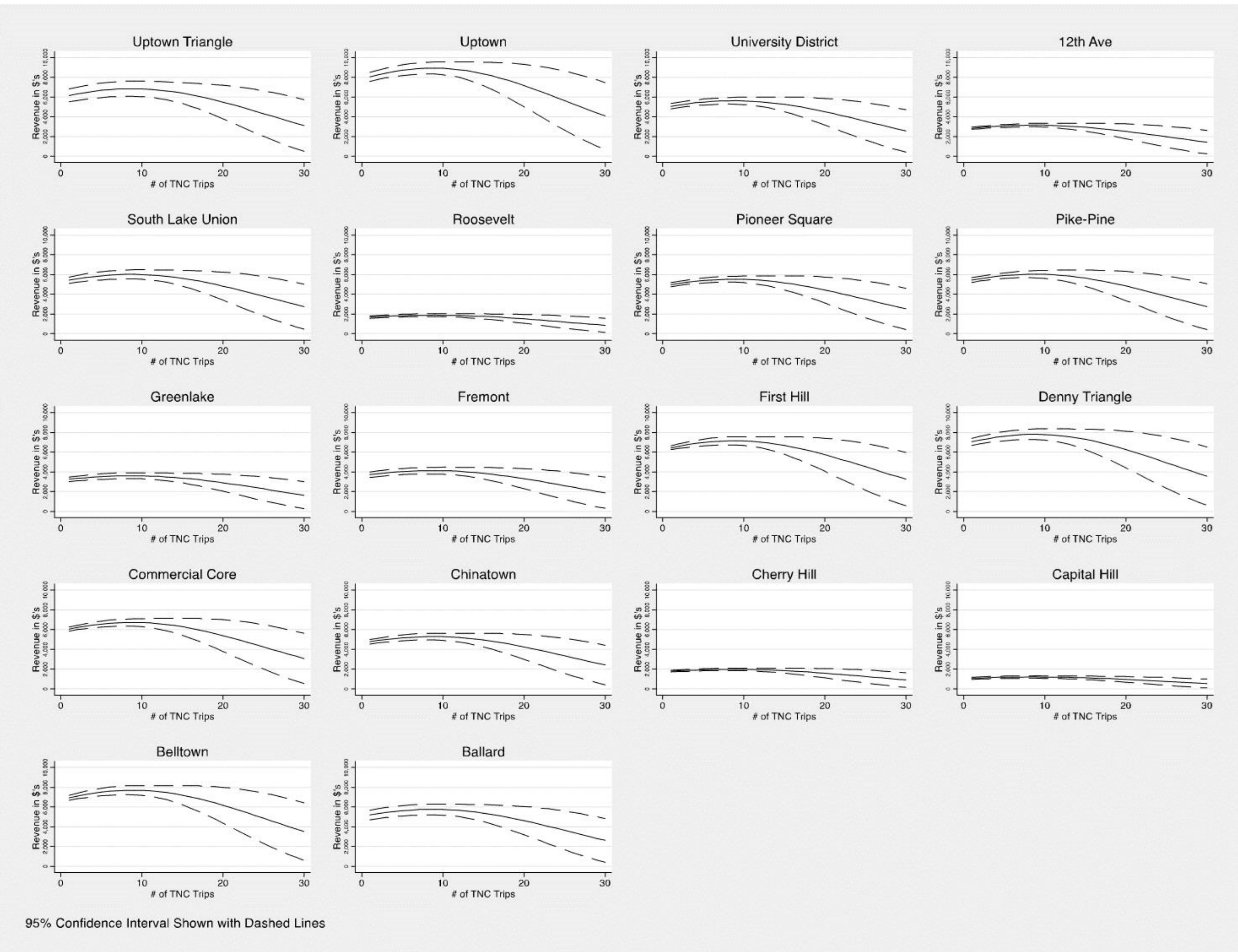
► **Revenue is predicted to peak** at about 4.8 times 2016 ride-hail trip volumes.

Projected revenue by parking space



► Effects on total parking revenue vary by neighborhood.

Projected parking revenue by neighborhood



POLICY IMPLICATIONS

- Consider policy aims of on-street parking in the future
- Use this opportunity to reshape public rights-of-way for new or different uses.

ACKNOWLEDGEMENTS

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