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Pushed from the Curb: Optimizing Curb Space for Ride-Hail

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Pushed from the Curb: Optimizing Curb Space for Ride-Hail

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Research Topic

The recent rise of ride-hailing platforms such as Lyft and Uber calls into question many traditional paradigms in transportation planning. This is particularly evident in the realm of curb management, where ride-hailing trips may replace demand for vehicle parking with a need for short-term loading space. Traditionall y, cities have prioritized long-term vehicle occupancy over short-term loading, allocating most curb space for underpriced vehicle parking. The predominance of high-occupancy curb parking could deny ride-hailing vehicles access to the curb — encouraging them to double park — and may depress curb space's capacity to transport passengers. A graduate capstone project at the UCLA Luskin School of Public Affairs assessed whether allocating curb space for parking, rather than short-term passenger loading, on corridors with high ride-hailing activity is associated with increased illegal loading and decreased productivity of curb space.

Main Findings

- Curb parking zones primarily serve private cars parked for extended periods of time. On Melrose Avenue in Los Angeles, ride-hailing and other vehicles stop for a brief duration in loading zones or red curb zones, but rarely double park. On Santa Monica Boulevard, where passenger loading space is scarce, most ride-hailing vehicles either stop in red curb zones or double park in traffic lanes, creating safety risks and congestion.
- The higher proportion of curb parking on Santa Monica Boulevard also resulted in a higher occupancy of the curb. Most double parking on the street occurred in curb parking segments, while most ridehailing vehicles in the red and loading zones pulled over to the curb, further suggesting that the allocation of curb space for parking increases likelihood of double parking.
- Ride-hailing vehicles make for a more productive use of curb space than private automobiles and motorcycles, as they transport more people to or from the curb per minute of space occupied. On the observed corridors, ride-hailing vehicles transported two to six passengers per minute spent at the curb, while private cars transported only 0.1 passenger per minute.

KEY TAKEAWAYS

- When parking is the dominant curb use, cars hoard curb space and deprive ride-hailing vehicles of safe and legal places to pick up and drop off passengers.
- In the age of ridehailing, curb parking may accomodate passenger travel to a corridor less effectively than short-term loading space.
- Ride-hailing vehicles can deliver the same number of passengers to a corridor as private cars in a fraction of the time parked cars spend at the curb.

- Passenger loading spaces can more effectively deliver people to a corridor than parking spaces in places with high levels of ride-hailing activity. On Santa Monica Boulevard, passenger loading spaces transported four times as many passengers per hour as parking spaces. Effective loading space enforcement, to discourage private cars from overstaying, can help increase passenger throughput
- of curb parking can also help offset the loss of meter revenue from parking spaces converted to passenger loading spaces.
- Policymakers and planners should incentivize the use of ride-hailing and public transit on commercial corridors with a high level of activity, in tandem with converting parking to loading space, in order to increase curb productivity.

Study

The researchers observed curb use and double parking activity along segments of Santa Monica Boulevard in West Hollywood and Melrose Avenue in Los Angeles over three weekends in January and February of 2018. Since the majority of curb space on Santa Monica Boulevard is curb parking, while Melrose Avenue has a more even balance between curb parking and passenger loading space, the contrast allowed for an assessment of the effects of curb allocation on loading activity.

Recommendations

- Cities should convert curb parking and transit zones to short-term loading on commercial corridors at periods with high volumes of ride-hailing activity.
- Cities should charge a market price for metered curb parking, comparable to the price of offstreet private parking facilities, to increase parking availability and improve the transport of passengers via increased vehicle turnover. Raising the price

For More Information

Lu, R. (2018) *Pushed to the curb: Examining use of curb space by ride-sourcing vehicles in commercial corridors* (Masters capstone, UCLA). Retrieved from: https://drive.google.com/file/d/15VJTDvalUl_hF9NaPloT2Rd4xd0pRtU5/view

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