

#### The Final 50 Feet of the Urban Goods Delivery System

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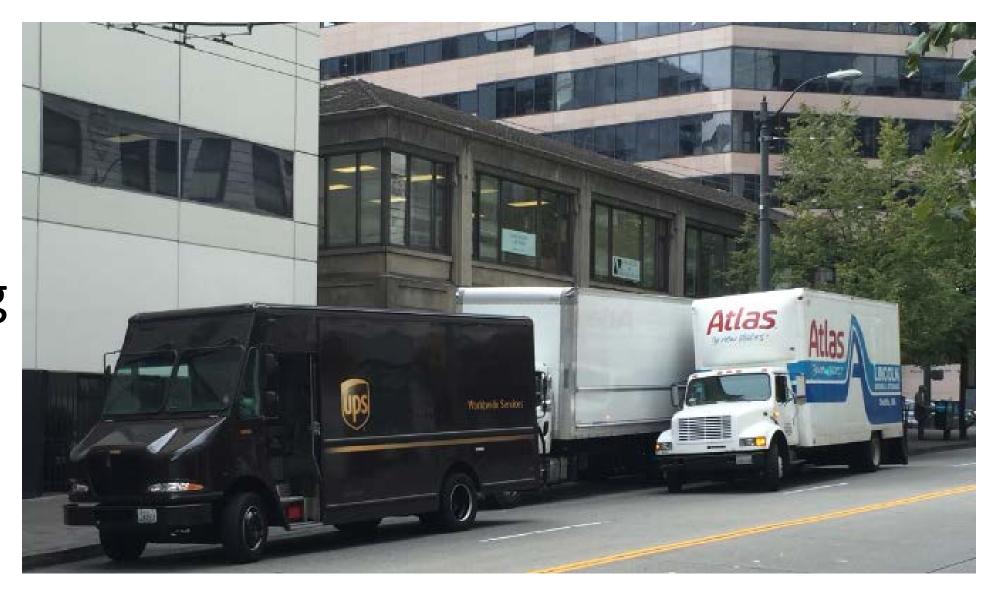
### Begins where the Truck Parks and ends at Delivery



## Is Not Functioning as Intended



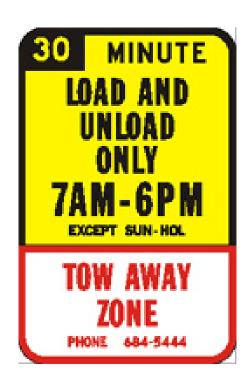
Curbs are intended for Loading and Unloading



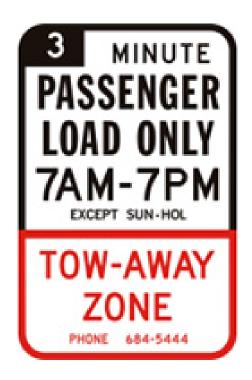
## Seattle's Top 3 Curb Space Priorities: Commercial and Business Areas

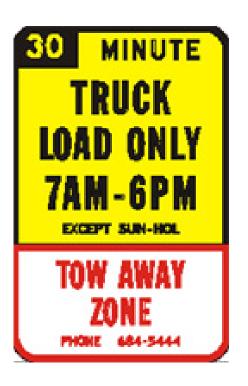
- 1. transit use (bus stops and spaces for bus layover),
- 2. passenger and commercial vehicle loading zones,
- 3. short-term customer parking (time limit signs and paid parking typically for 1- or 2-hours);

#### Seattle Load Zone Types









#### Violations are common





# Unintended use of Infrastructure







## High cost of the Last Mile





## Challenges

- Costly last mile
  - Failed delivery rates
- Congestion on city streets exacerbated by additional truck traffic and parking behavior
- Unsafe conditions



Stopping location and duration is determined by delivery behavior

#### Final 50 Feet Initial Research Questions

- 1. How do drivers select parking locations?
- 2. What are the steps the delivery process?
- 3. How long do each of these steps take?
- 4. What are the opportunities for reducing the amount of time for each step, or eliminating steps?
- 5. How does our infrastructure delay drivers?



#### Research and Data Collection Activities

- Developing accurate geospatial databases of freight infrastructure
- Understanding use of existing infrastructure
- Evaluating new technologies for addressing urban freight challenges
- Estimating the impact of delivery services on VMT, GHG, and other pollutants
  - Existing modes and new modes
- Understanding delivery process steps and time characteristics
- Understanding the impact of truck activity on cyclist safety and behavior



#### Longterm research goals

- Model urban freight as a system to understand capacity, impact of infrastructure and policy changes
- Conduct empirical as well as analytical experiments
- Work in partnership with freight system providers and operators
- •Supports development of a freight system that supports sustainable, enjoyable, safe, urban living





#### Urban Freight Lab

https://depts.washington.edu/sctlctr/members/urban-freight-lab

UW-SDOT: The final 50ft.

http://www.seattle.gov/transportation/thefinal50feet.htm

