



Freight and the Seattle's CBD: giving insight  
about the battle for the curb

**Presenter:**

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Talking Freight Webinar: Curbside management and freight deliveries

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# The Load/Unload Infrastructure



**Curb Parking Spaces**



**Alleys**



**Private loading/unloading infrastructure**



Credits: SDOT (2017)

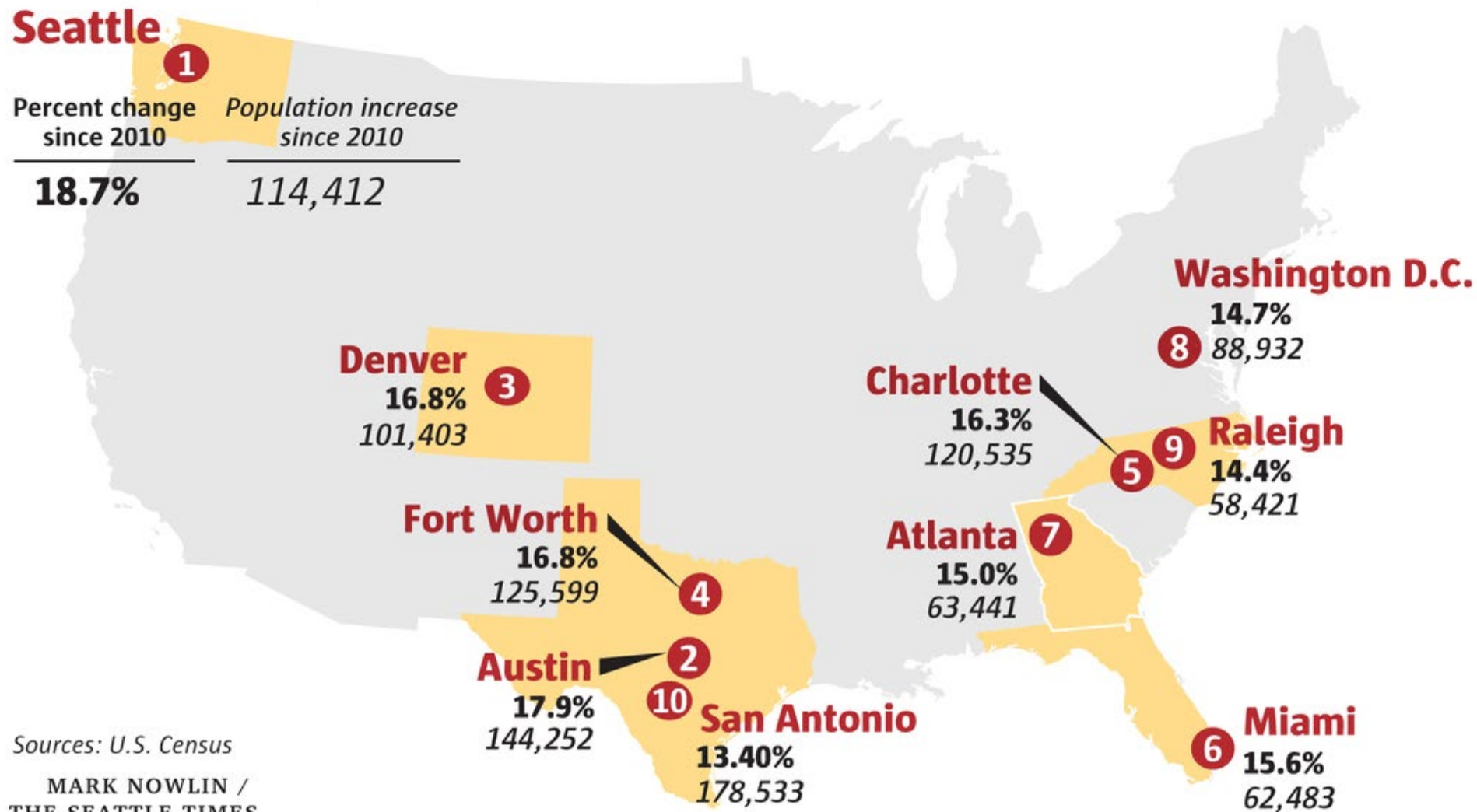


Credits: Gabriela Giron (2017)



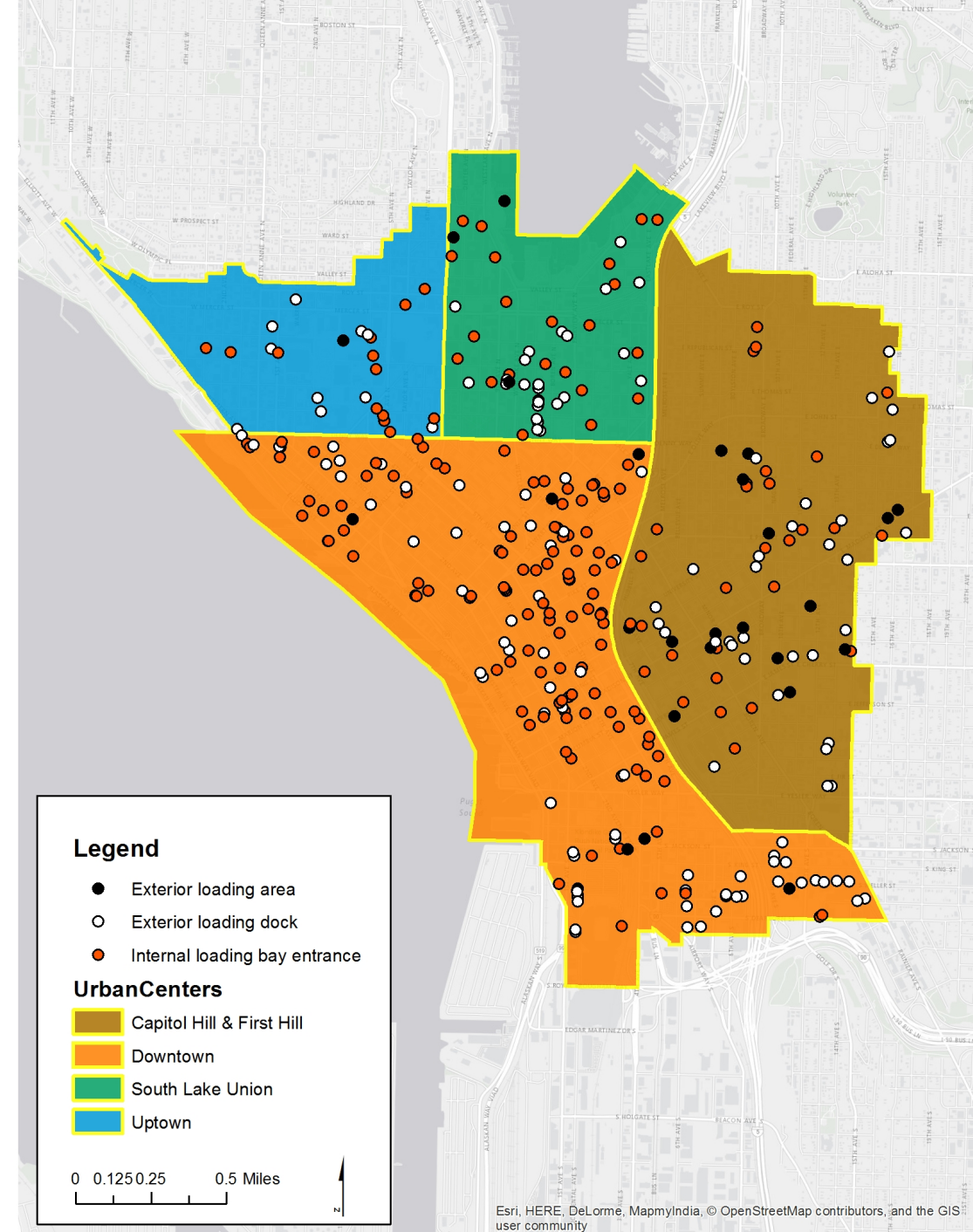
Credits: Buck Ennis – Crain's (2013)

# Seattle: the No. 1 growing U.S. city of the last decade



# UFL Survey of Center City Private Loading/Unloading Infrastructure

- Residents and businesses depend overwhelmingly on the curb, not private loading bays
- 87% of Seattle's Center City buildings rely solely on deliveries from curb and alley load/unload spaces, documenting the importance of public spaces.

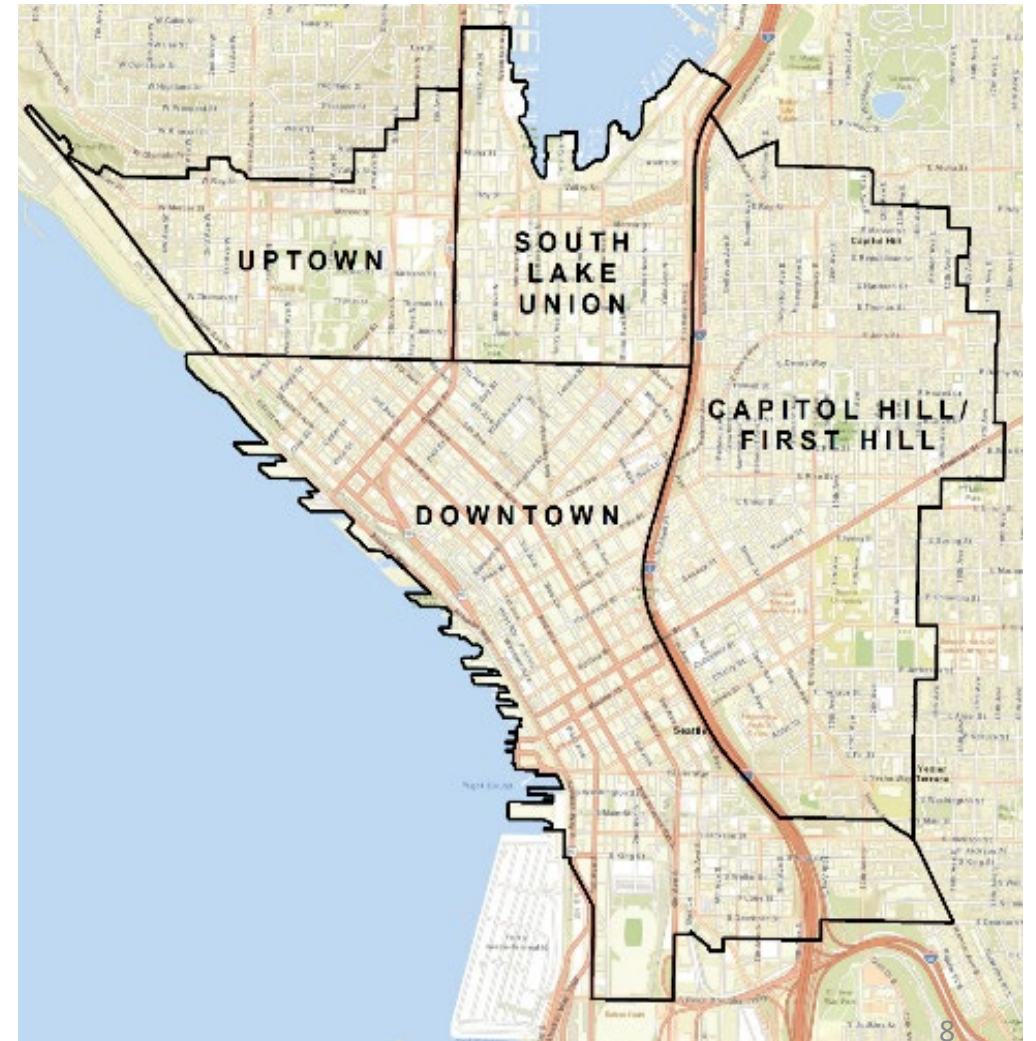


# Center City Occupancy Studies

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SDOT commissioned this research to understand current commercial vehicle operations in urban curb spaces.

The UFL research team observed all types of commercial vehicles loading/unloading at the curb.





**Q1. Where were Commercial Vehicles parking?**

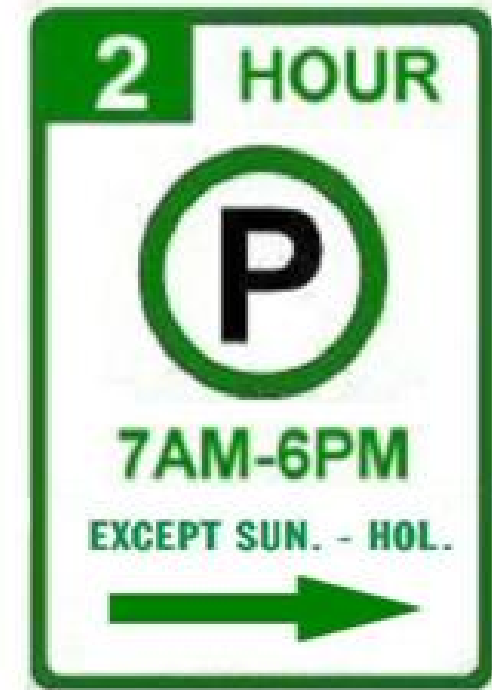
# Seattle's Load Zones



Load zones provide areas solely for loading and unloading people and goods. Load zones should not be used for parking.

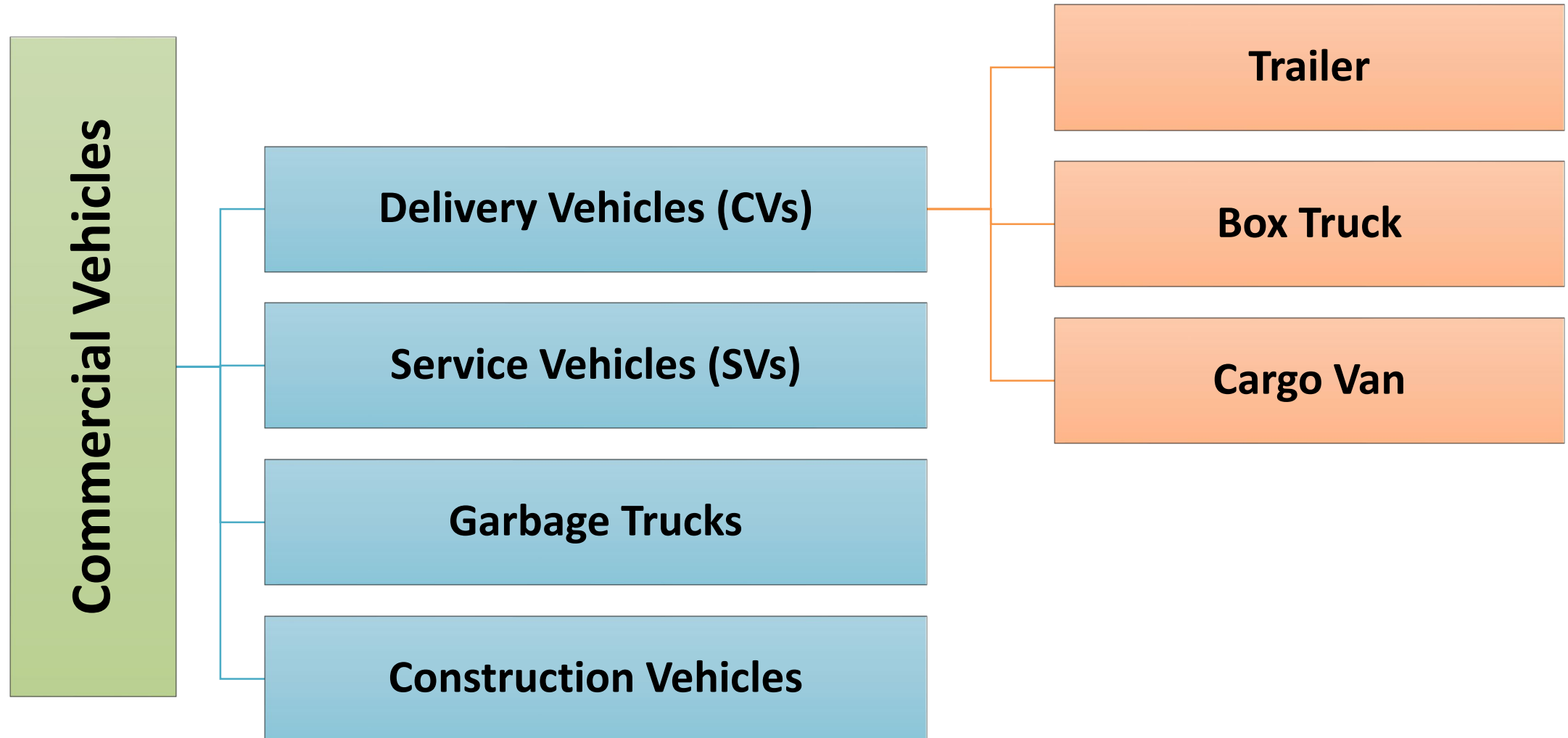
# Other Seattle's Curb Uses

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**Q2. What is the commercial vehicle fleet configuration?**

# Data Collected



**Q3. Who is using the Commercial Vehicle Load Zones (CVLZs)?**

# Data Collected

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**Commercial Vehicles**

**Passenger Vehicles**

**Taxi**

**Motorcycles**

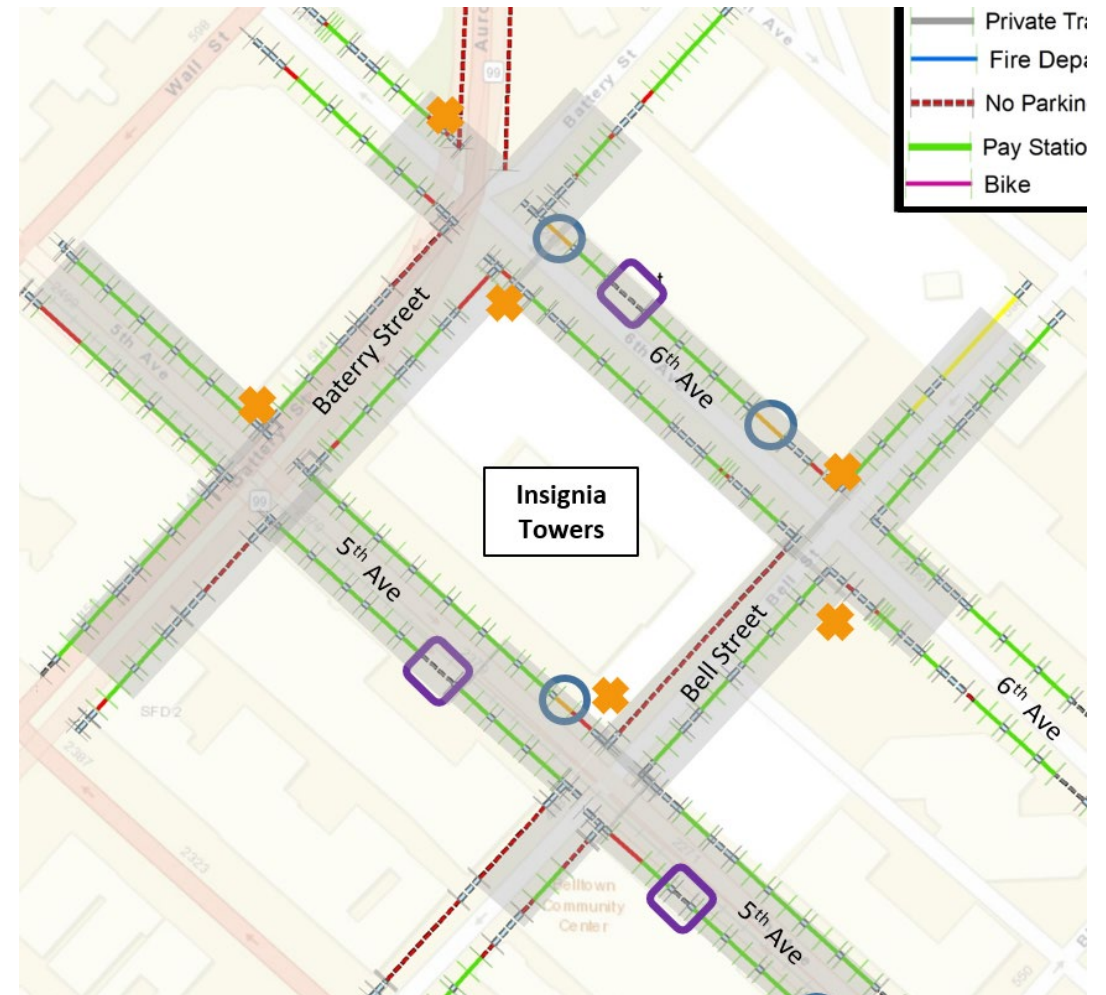
**Public transit**

**Others**

# Study Area

The study was conducted in a three-by-three city block grid around one building in each of the following categories:

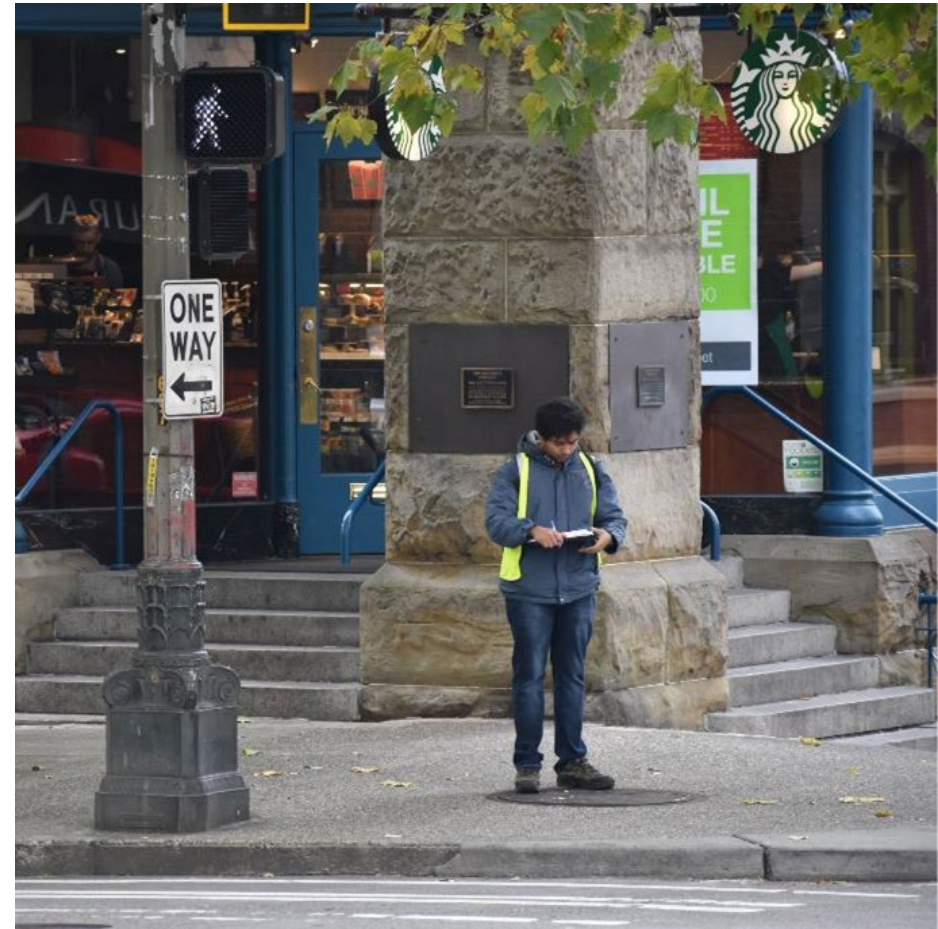
1. Hotel;
2. Historic commercial building;
3. Residential tower;
4. High-rise office building; and
5. Retail Center.





# Data Collection Method

- Human observers monitored:
- the time commercial vehicles (CVs) spent in the curb;
  - where CVs parked; and
  - the time non-CVs spent in CVLZs.



Credits: Gabriela Giron (2017)

# Curb Occupancy Study

Data were collected during the morning peak of each building.

For the residential tower, data were collected from 8:00 am to 5:00pm.

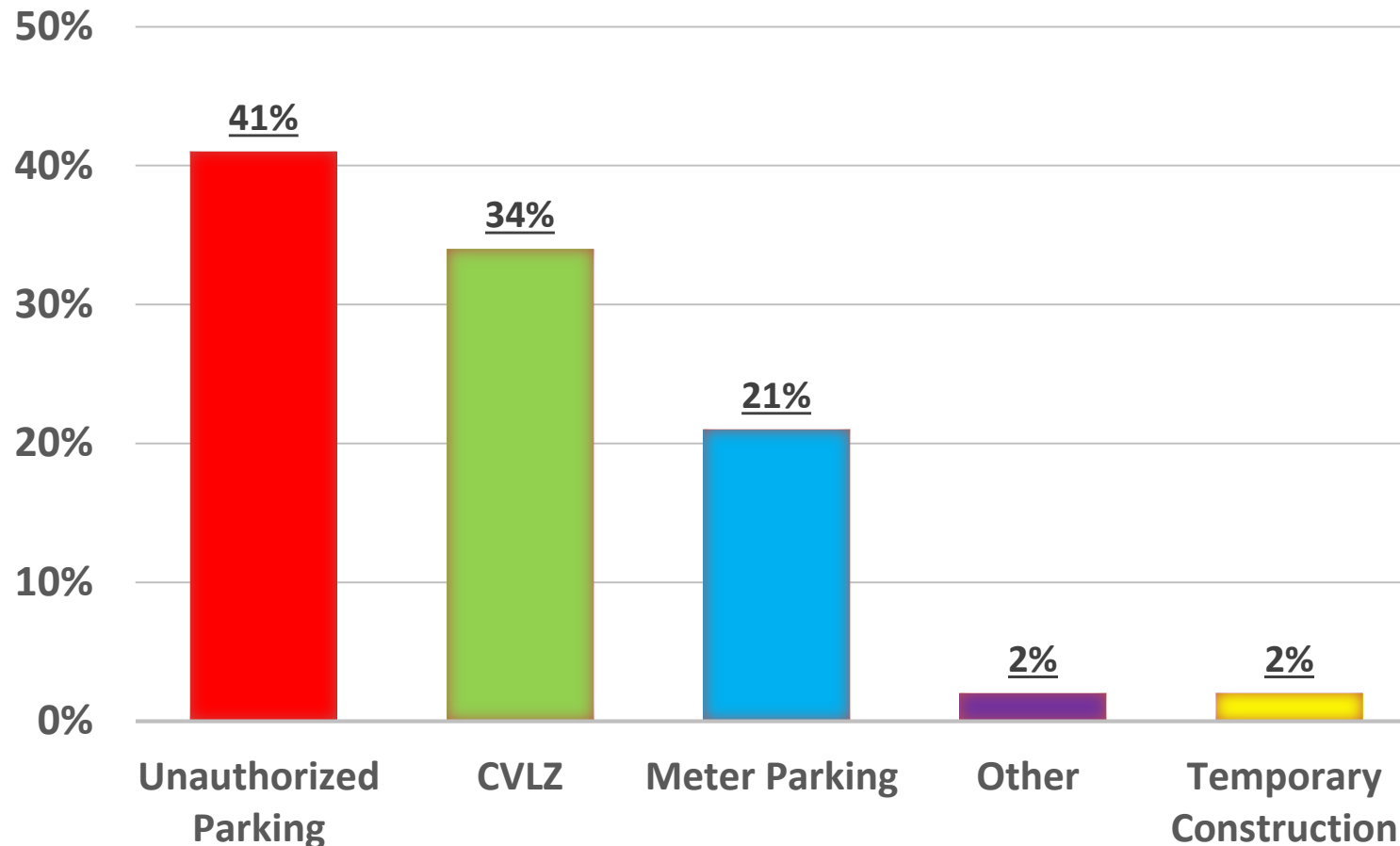
The data collected provided a sample of **1,816** on-street parking operations: **1,254** CVs and **562** non-CVs.



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# **Curb Occupancy Findings**

# Most commercial vehicles were parked outside CVLZs



# CVs and passenger vehicle drivers are using CVLZs and PLZs fluidly

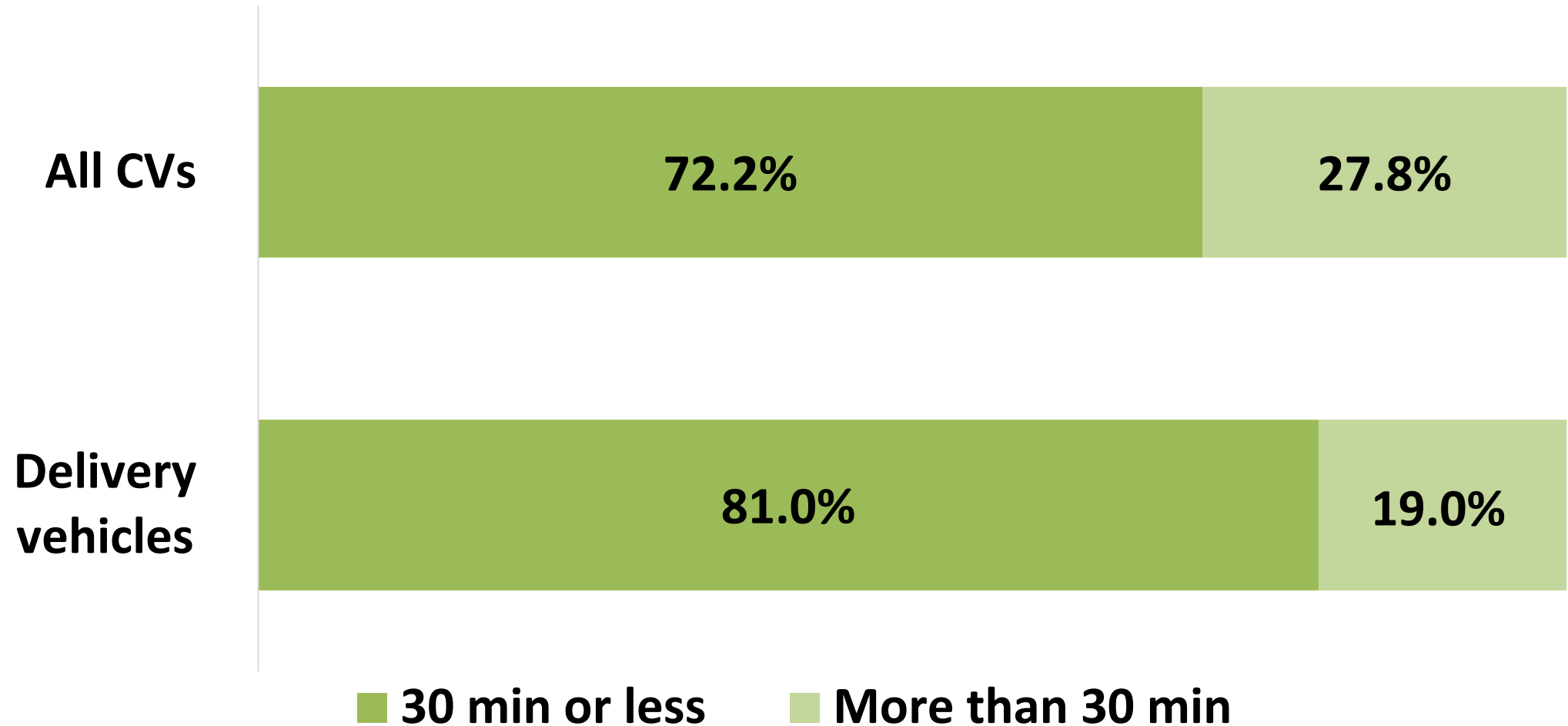


**26% of all CVs** parked in PLZs.

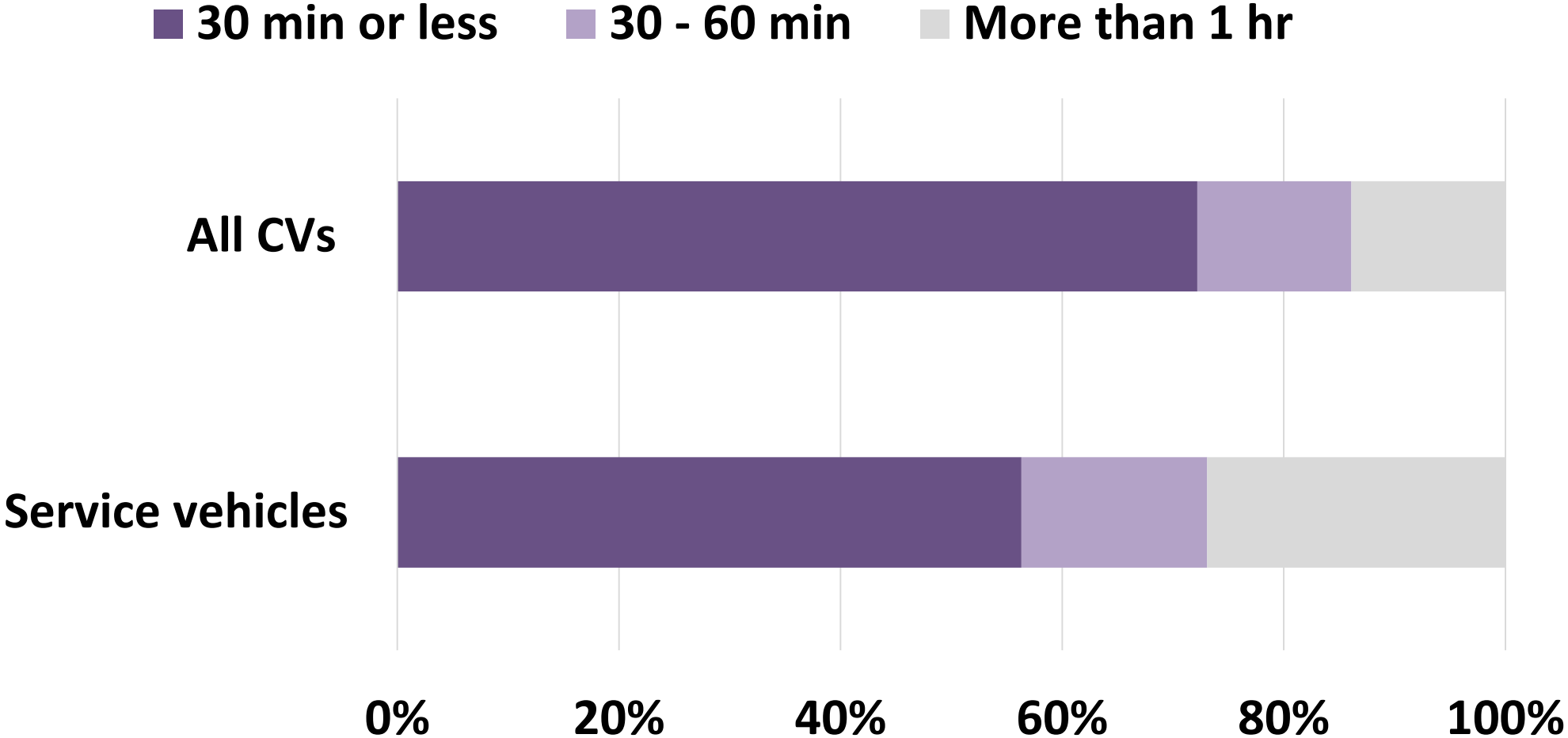


Of all vehicles parked in CVLZs **52% were passenger vehicles**; but half of these were only there 5 min.

# CVs dwell times are mostly short, but some operations clearly take longer



# 27% of SVs parked for an hour or more



# Service vehicles (SVs) made up 36% of the total CVs parked in the five locations



The Seattle data shows between 20 and 40% of commercial parking operations are service trips across study areas.



# Conclusion

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The research team developed a replicable and transferable data collection method to record commercial vehicle parking behavior.

This data informed about Seattle's CVs parking behavior and gave the opportunity to revise existing parking policies.

Seattle's data shows that a big share of commercial users of the on-street parking infrastructure were not in compliance with the current parking management strategies.

This research displays the importance of providing tailored solutions that consider the spectrum of load/unload operations. For example, servicing trips could skew the dwell time distribution of all CVs, as they tend to take over most of the longer CV parking operations.



Credits: Gabriela Giron (2017)

# Other SCTL's Research

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- Curb allocation Project
- Common Locker Test Pilot
- Common MicroHub
- Technology Integration to Gain Commercial Efficiency for the Urban Good Delivery System, Meet Future Demand For City Passenger and Delivery Load/Unload Spaces and Reduce Energy Consumption

**For more information:**

<http://depts.washington.edu/sctlctr/research>

# Questions?

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