

A blue-tinted photograph of the Seattle skyline at night. The Space Needle is the central focus, illuminated with its characteristic lights. Other skyscrapers are visible in the background, their windows glowing. The overall scene is a dense urban landscape under a dark sky.

# SDOT Commercial E-cargo Bike Program

Seattle Bicycle Advisory Board  
April 16, 2024



**Seattle**  
Department of  
Transportation

# Presentation Outline

- Seattle urban goods, critical access needs
- C40 Zero Emission Freight grant
- Commercial E-cargo Bike Program
- Upcoming legislation
- Next steps
- Q&A





# So many deliveries get delivered every day

- Rapid increase in commercial urban goods and on-demand delivery trips
  - Current loading permit rules from 1990
- Need modern tools to manage modern problems
  - Access and enhance Critical Access Needs
  - Upgrade Commercial Load Zone permit system
  - Launch Electric Cargo Bikes program



**80% of commercial buildings in urban core rely on the curb for deliveries in greater downtown**

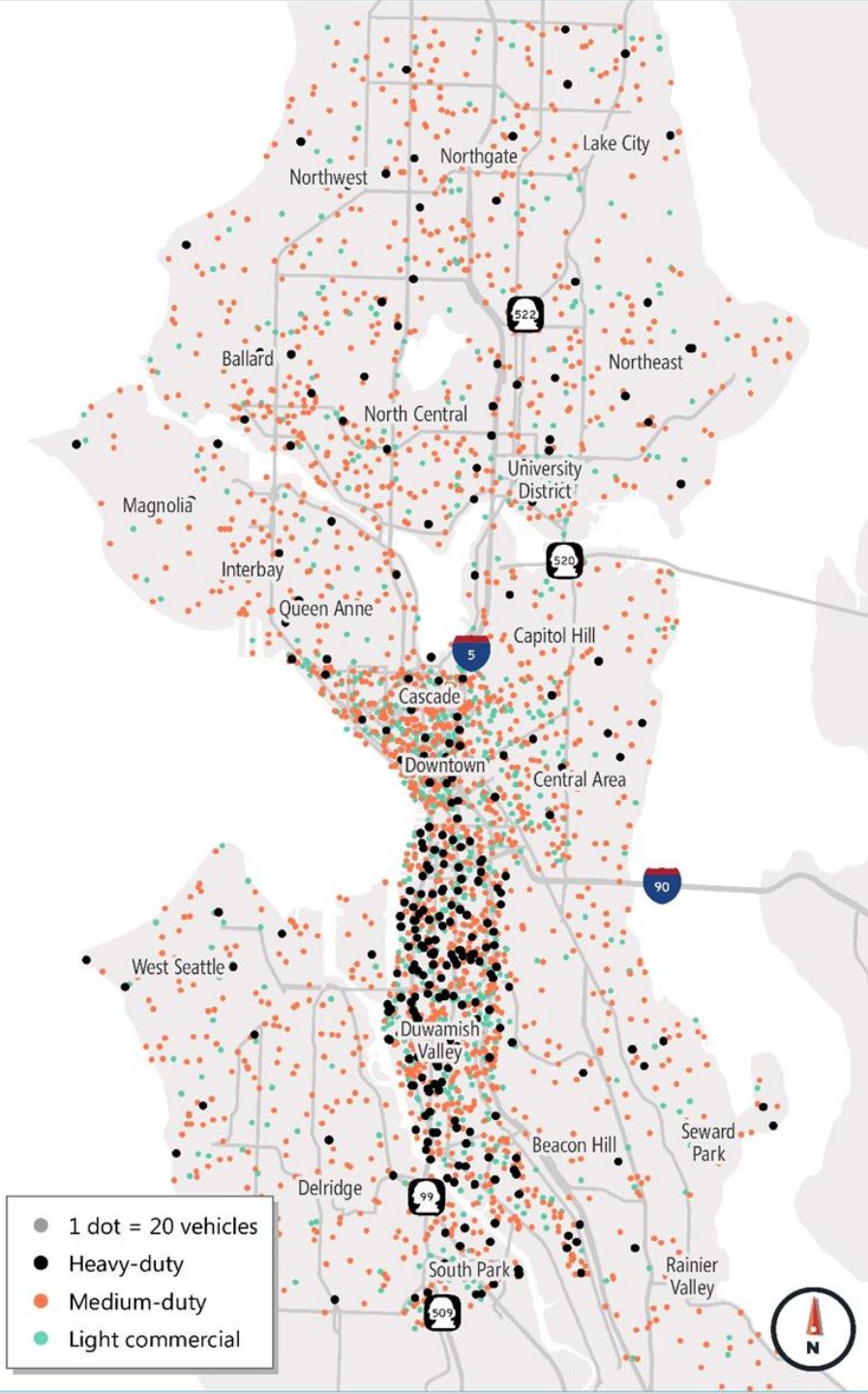
*The Final 50 Feet of the Urban Goods Delivery System, Executive Summary, 2017.*

# Seattle freight delivery snapshot

- Map shows freight vehicles, 2021 one-day snapshot
- Many vehicles are medium-sized or passenger vehicles; goods and services delivery times are fluid over time of day, weekday/weekend
- Building services, catering vehicles are important component of commercial activity

## Strategic Importance

- Transportation Electrification Blueprint goal to move to 30% zero emission delivery by 2030
- 2022 Climate Executive Order directs SDOT to “work with private-sector partners and others to explore ways to incentivize zero emissions freight options at the curb.”



# E-cargo bike and ZEF program goals

- Build partnerships with Seattle business community
- Support programs to reduce emissions from freight activity
- Provide education and training on delivery options that encourage businesses to 'right size and then electrify' fleet resources





# What is an e-cargo bike?

- Electric-assisted bicycle
- Specially designed for goods delivery
- Maximum speed of 20 miles per hour
- Used to increase efficiency of goods delivery in dense areas and lower emissions



# C40 Grant Background

In March 2023, Curbside Management completed a C40 Zero Emission Freight (ZEF) Program Grant

- Awarded \$85,000 to work with a consultant and research a ZEF topic in Seattle

## Objectives

- Explore pilot options for e-cargo bikes and climate friendly loading
- Find out what businesses and freight partners need to move to zero emissions
- Develop pilot designs for launch in Seattle

# Outreach Takeaways

## Local Business

Businesses are looking for solutions but will need assistance from SDOT to adopt new delivery options. Many participants are ready to convert.

## Freight Operators

Large freight operators are focused on zero emission transitions and will move faster with the right incentives

## Peer Cities

Pilots have been successful for both e-cargo bikes and zero emission loading. Cities need to identify partners and work together with the private sector.



# Grant Project Recommendations

Step 1	Step 2	Step 3
Launch Seattle E-cargo Bike Program and Begin Permit System	Introduce neighborhood delivery hubs	Pilot small-medium business e-cargo bike lending library

Flexibility is key!

**Step 1:** Staff and launch a Seattle Commercial E-cargo Bike Program, including a new permit and curb space use allowance for commercial cargo bikes and exploration of community partnerships.

**Step 2:** "Next frontier model" - Establish Zero Emission Community Delivery Hubs. Businesses, small and large carriers, can benefit from locations far from warehouses for centralized off-street loading space.

**Step 3:** To further assist the small/medium business community, launch a public e-cargo bike lending library at Community Delivery Hubs, allowing businesses and the public to test e-cargo bikes on a trial basis before purchasing.

# Commercial E-cargo Bike Program Development

- Planning to launch program in 2024
  - Emphasize small-medium businesses
  - Address city strategic goals
  - Demonstrate community need
- Establishing an external advisory group to inform program designs and encourage participation
  - Big delivery players, alongside our small business community





# What would a program look like with legislation?

- Allow e-cargo bikes to stop, load at curb instead of sidewalk
- Set requirements for data collection with companies, riders
- Establish annual permit fee
- Set cargo bike business and rider rules



# Draft legislation – Cargo bike form factors

E-cargo Bikes in the program must be:

- Width no larger than 48": This is the standard pallet size used for deliveries and is becoming a standard for e-cargo bikes used for delivery both in the US and abroad.
- Bikes could have 2-4 wheels under the program
  - Quad style cargo bicycles are under discussion
- Bicycle sign on front or back of the bike noting the company they are associated with and a unique identification number
- Other standard bike rules and city contracting language

CMY-001





# Draft legislation for curb access

- Program would allow permitted bikes in the following curb zones:
  - 30, 15 and 5-minute load zones (free), allowed today
  - Unrestricted parking areas, allowed today
  - Restricted parking zones, allowed today
  - 3-minute passenger load zones, *pending legislation*
  - Paid parking areas, *pending legislation*
  - Paid 30-minute load zones, *pending legislation*

\*Without legislation, bikes cannot stay in paid areas/load zones without valid license plate #\*



# E-cargo bike lending library – in development

- Planning e-cargo bike lending libraries
  - Rent e-cargo bikes on a trial basis to see if they fit your operations
  - Get 1:1 assistance from e-cargo bike experts
- First of its kind in the US
- Ideally, library locations will be located in areas that have voiced interest





# What's Next?

Date	Action
Ongoing	Outreach to share program requirements and collect community feedback
Jan-June	Pilot planning and implementation prep
	Work with marketing consultant for program launch, with C40
February- June 2024	Work to queue up legislation for consideration
Summer 2024	Potential consideration at City Council
Late Summer 2024	Formal Commerical E-cargo Bike program launches



We want to hear from you!



# Seattle Bicycle Advisory Board



- Any feedback or thoughts on the upcoming Commercial E-cargo Bike program?
- Are there partners that we should reach out to?
- What assistance can the city offer to uplift bike programs like this?



# Thank you!



**Seattle**  
Department of  
Transportation



# Questions?

## Stay in touch:



[Katherine.rice@seattle.gov](mailto:Katherine.rice@seattle.gov)



206.256.5495



[Curbspace Climate Program - Transportation | seattle.gov](https://seattle.gov/transportation/curbspace-climate-program)

