



# Digital Curb Asset Management

Overview of LADOT's Code the Curb Program

May 2022





2014 - 2015	2016 - 2018	2018 - 2019	2019 - 2020	2021	2022 - 2024	2025+
<p><b>Code the Curb has LA debut</b></p> <p>Mayor Garcetti's Parking Reform WG makes suggestions, including call for a digital parking management system</p>	<p><b>Mobility in a digital age explored</b></p> <p>LA sets goals for complex and evolving ecosystem of public and private services for mobility</p>	<p><b>Tech for transportation is realized</b></p> <p>LA uses tech-enabled policy tools to manage changes in LA mobility market and learns key lessons</p>	<p><b>Desired curb asset management planned</b></p> <p>LA studies existing curb asset practices and develops roadmap towards desired future state</p>	<p><b>Digital curb pilot phase to measure community benefits</b></p> <p>LA tests curb data and policy ecosystems needed to realize active digital curb management</p>	<p><b>Incremental shift towards integrated curb management</b></p> <p>LA aims to design an integrated digital curb management system based on lessons learned during pilot projects and OMF MDS &amp; CDS user community</p>	<p><b>Continuous system development and maintenance</b></p> <p>LA would operate, continue to develop, and maintain new practices to enable digital expression of curb rules and access permits</p>

# Asset Management Roadmap - Redirection

## Pre March 2020:

- Adopted Curb Asset Management Roadmap: 29 specific activities, 6 work categories
- Each activity included cost, benefit, & timeline
- Roadmap (if fully resourced) would take 5 years to deliver

## Interim Approach (March 2020 to present):

- Test and evaluate (Pilots)
- Leverage other curb management efforts (Partnerships)
- Seek outside grants (Funding)



# Recent Successes



## Completed:

- Code the Curb Phase 1 – Roadmap
- Zero Emission Delivery Zones – installation of 5
- Digitizing the Curb Pilot (CurbIQ)

## In Progress:

- Pilots (Curbside Monitoring, ZE Delivery Zones)
- Partnerships (UML, OMF, SCAG, LA County Metro)
- Funding (Department of Energy, SCAG)



# Zero Emission Delivery Zones



# Why a Zero Emission Delivery Zone?

- Curbside management strategy
- Delivery companies are investing in ZEV fleet
- Air quality improvements benefit communities
- Demonstrate, evaluate, and learn



# Site Selection Criteria - Proposed

Recommended criteria:

→ **High demand curbsides**

Based on Southern California Association of Governments (SCAG) Last Mile Freight Delivery Study and limited delivery company provided data

→ **Areas burdened by pollution**

California Communities Environmental Health Screening Tool (CalEnviroScreen)

→ **Feasible & not disruptive**

Creating loading spaces and not taking away highly utilized parking spaces

→ **Administratively realistic**

Adequate resources to implement, monitor and enforce





# Enforcement

- Adopted municipal code (law) to enforce
- Educated the public and officers
- Allow delivery companies to register ZEV vehicles
- Two week warning period
- Cargo bikes and other light electric freight vehicles allowed



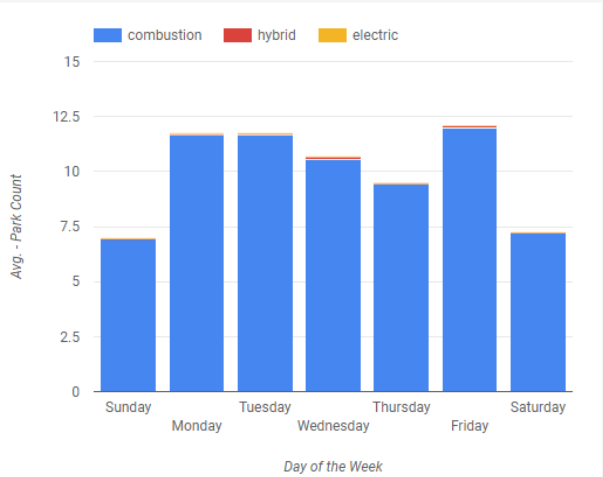


# Results To Date

Average Park Turnover Events

By: Day of Week  
Also By: Hour of Day

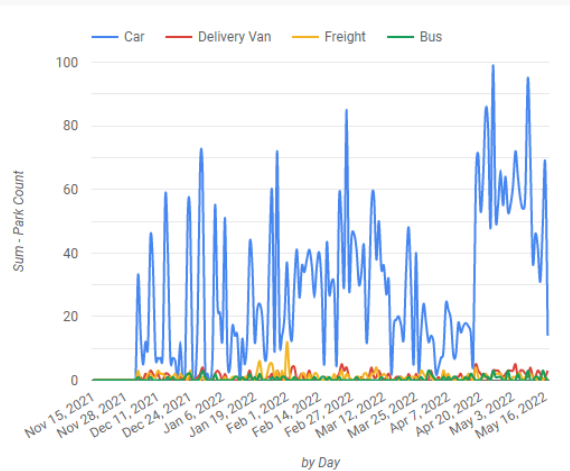
By: Propulsion Type



Total Park Turnover Events

By: Hour  
Also By: Day

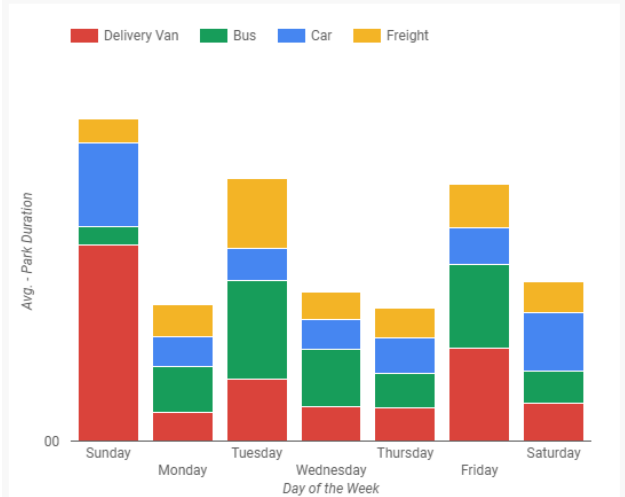
By: Modality



Average Park Dwell Time

By: Day of Week  
Also By: Hour of Day

By: Modality



## Digitizing the Curb Pilot

The screenshot displays the CurbiQ software interface. On the left, there is a 'Filters' panel with a 'RESET' button and a search bar. Below the search bar, there are dropdown menus for 'Search Location' and 'Search Time Limit'. The time is set to 01:11 AM on Tue, Mar 1. The 'Parking Restrictions' section includes checkboxes for 'Select All', 'Parking (Permit)', 'Parking (Paid)', 'Parking (Free)', 'No Stopping', and 'No Parking'. The 'Special Designations' and 'Curbside Signs' sections are collapsed. The 'Curbside Assets' section includes checkboxes for 'Select All', 'Traffic pole without pedestrian push button', 'Traffic pole with pedestrian push button', 'Stand-alone pedestrian push button', 'Signal Controller Cabinet', and 'Fire Hydrant'. The main map area shows a grid of streets in downtown Los Angeles, with various colored lines (red, green, blue) overlaid on the map, representing digitized parking regulations and assets. A 'MEASUREMENT TOOL' is visible in the bottom left corner of the map. The bottom of the screen shows a Windows taskbar with several open applications.

### CurbiQ Screen Shot

- Digitized parking regulations
- Digitized assets:
  - Bike racks
  - Parking meters
  - Fire hydrants
  - Signal cabinet
  - Traffic signal equipment



# Future of Urban Delivery in LA

## Near Term

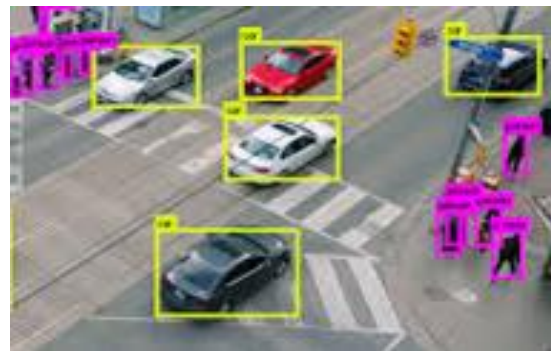
- Expansion of ZEDZs
- Meter Commercial Loading Zones (CLZs)
  - Frictionless payments
  - Invest to create more CLZs

## Mid Term

- Prioritize ZEVs access to Downtown LA

## Long Term

- Real-time digital curb management and integration





# Questions

**Questions?**

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