Digital Curb Asset Management

Overview of LADOT’s Code the Curb Program

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

Average Park Dwell Time
By: Modality

Total Park Turnover Events
By: Modality

By: Hour
Also By: Day

Avg. Park Duration
- Delivery Van
- Bus
- Car
- Freight

Day of the Week
- Sunday
- Monday
- Tuesday
- Wednesday
- Thursday
- Friday
- Saturday
Digitizing the Curb Pilot

- Digitized parking regulations
- Digitized assets:
  - Bike racks
  - Parking meters
  - Fire hydrants
  - Signal cabinet
  - Traffic signal equipment
CDS allows cities to digitally represent their curb space, communicate with curb users in different ways, and use metrics to improve those curbs.
Future of Urban Delivery in LA

Near Term
• Expansion of ZEDZs
• Meter Commercial Loading Zones (CLZs)
  o Frictionless payments
  o 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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