Santa Monica Zero Emissions Delivery Zone
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A Partnership between the City of Santa Monica and the Los Angeles Cleantech Incubator (LACI)
Sustainability + Mobility in Santa Monica

- Land Use Circulation Element
- Bike Action Plan
- Vision Zero
- Sustainable City Plan
- Climate Action & Adaptation Plan
- EV Action Plan

- Shared goals – strategic design, reduced pollution + congestion, safety
Existing Curb Designations
• Standard loading zones
• Taxi zones
• Bus/tour bus/shuttle loading
• EV Charging
• Scooter and bike parking
• Food pick-up loading zones
• Parklets
• Zero Emissions Delivery Zones

On the Docket
• Curb mapping
• OMF Curb Data Specification WG
• Expanded ZEDZs
• Curbside EV charging
What is the ZEDZ?

- TEP Roadmap pilot
- 1 square-mile zone in Downtown Santa Monica and Main St (commercial/retail core)
- Incentivizes clean delivery modes with priority curb access
- Tests deployment of light-duty zero emission transportation technologies
- Supports businesses by offering alternative delivery options
The Details

- Pilot Period: Feb. 2021-Dec. 2022
- 11+ ZEV loading zones; 2 controls
- Curb monitoring
- Designated EV charging
- Delivery vehicles: robots, e-cargo bikes, e-scooters, electric cargo vans, light-medium duty vehicles
- Delivery vehicle rental platform
- Micro-distribution hubs
## Goals and KPIs

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<tr>
<th>Goal</th>
<th>KPIs</th>
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<td>Scalability: Develop a ZEDZ model</td>
<td>Identify 3 policies and/or regulations that encourage ZEV deployment</td>
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<td>(Post pilot): 3 additional communities deploy ZEDZ in Greater LA within 2 years</td>
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<td>Community Benefits: Improve local business operations</td>
<td>10+ local businesses participate in the ZEDZ</td>
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<td>GHG Reductions: Demonstrate AQ improvements</td>
<td>50% reduction in GHG emissions by participating delivery partners</td>
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<td>Technology Feasibility: Prove delivery companies can adopt ZE technologies</td>
<td>75% of delivery companies continue operating with ZEVs after the pilot</td>
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ZEDZ Monitoring Data

Avg Park Turnover Events

Avg Park Dwell Time by Vehicle Type
Avg Park Dwell Time by Vehicle Type and Hour of Day
Partnerships - laying the groundwork for EV fleet deployment and cleaner delivery trips
  • Alsco
  • Ikea +CRST
  • FluidTruck platform
  • AxleHire
  • Urb-E
  • Circuit

Measuring Success

Data Collection
  • VMT
  • Surveys: Delivery business partners, drivers, CBOs
  • PDD interviews
Challenges and Lessons Learned

- Securing major delivering partners
- Lack of compliance with ZEDZs
- Finding space for delivery hubs
- Limited vehicle inventory
- More incentives needed for urban freight deliveries
- Carrier feedback:
  - Vehicle/technology obstacles
  - Lack of public fast charging infrastructure
  - High cost of electricity in CA
  - Expensive vehicles (and expensive to insure)
Next Steps

• Add ZEDZ sites – DOE Grant
• Monitor curb data
• Enforcement
• Micro distribution hub
• Evaluation/final report