

Santa Monica Zero Emissions Delivery Zone

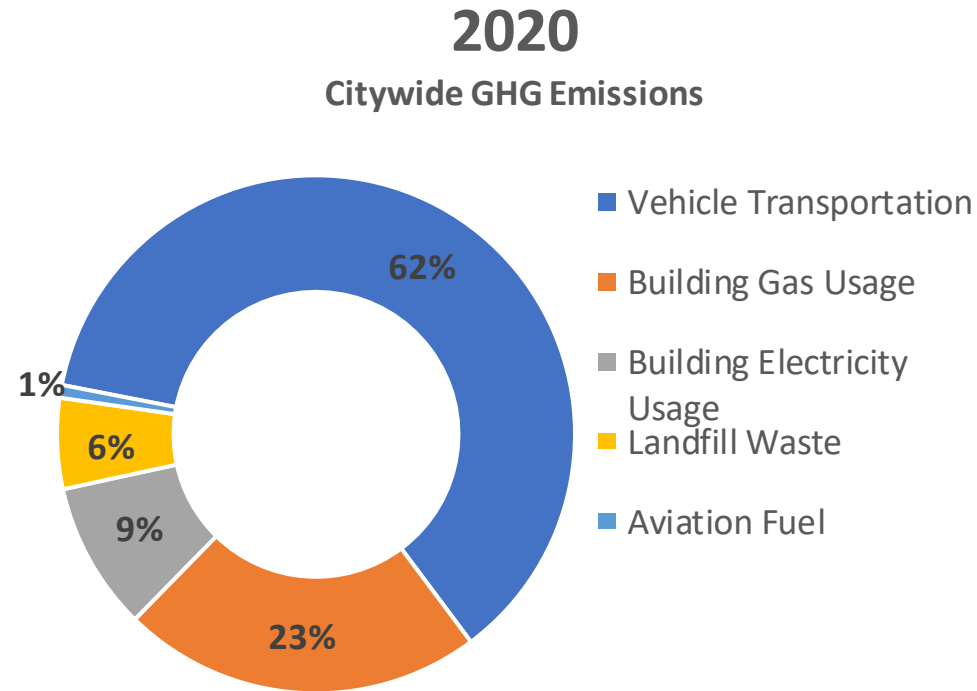
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A Partnership between the City of Santa Monica and the Los Angeles Cleantech Incubator (LACI)

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



Curb Management in Santa Monica

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
...and Parking

On the Docket

- Curb mapping
- OMF Curb Data Specification WG
- Expanded ZEDZs
- Curbside EV charging



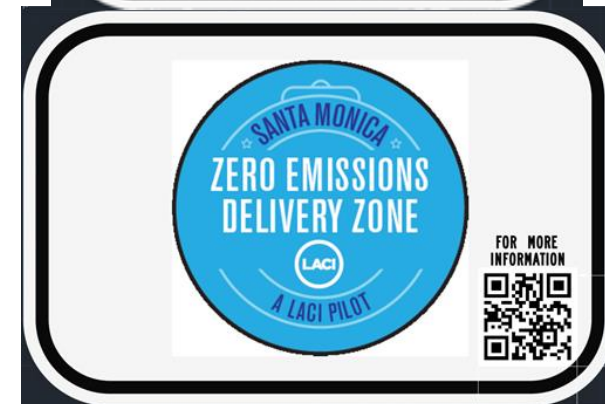
What is the ZEDZ?

- 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

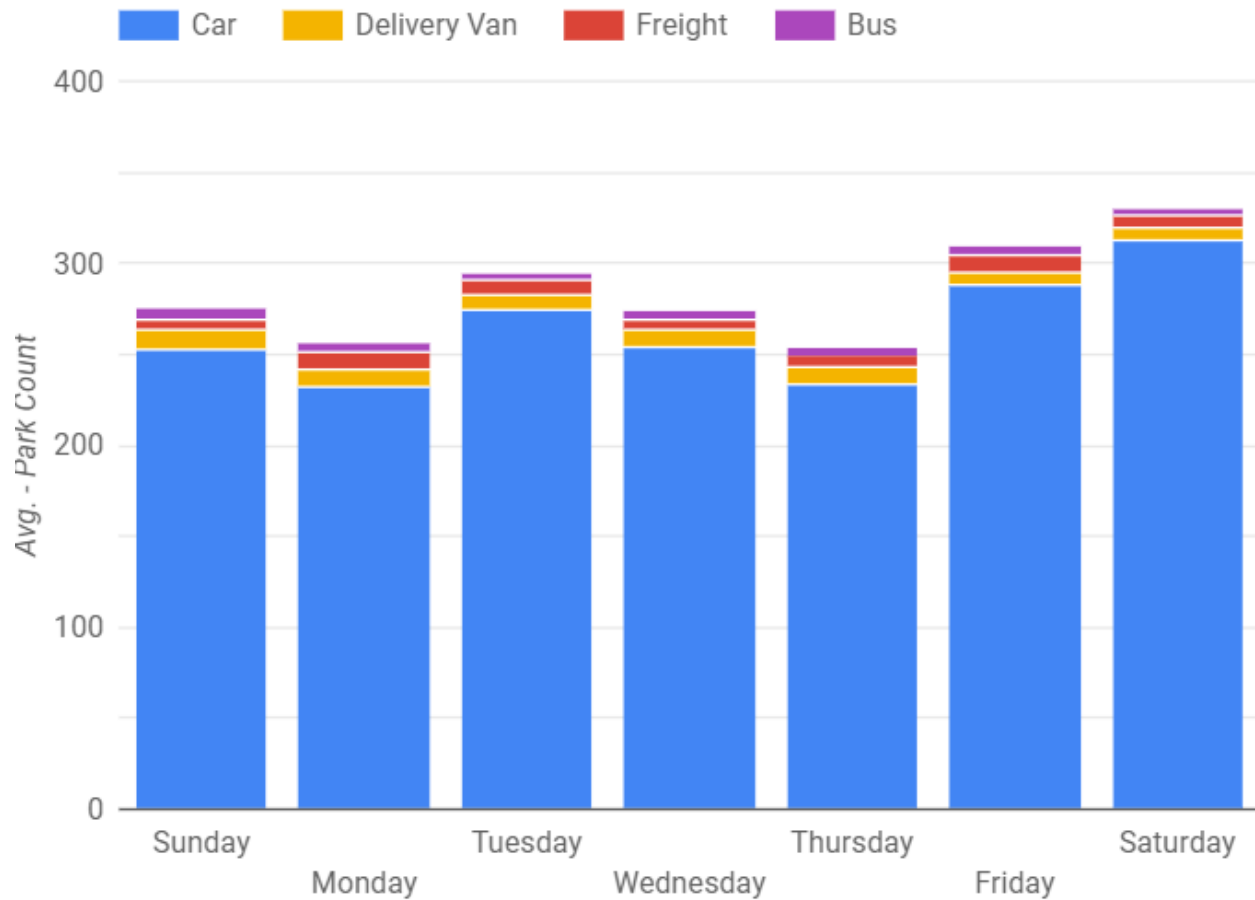


Goals and KPIs

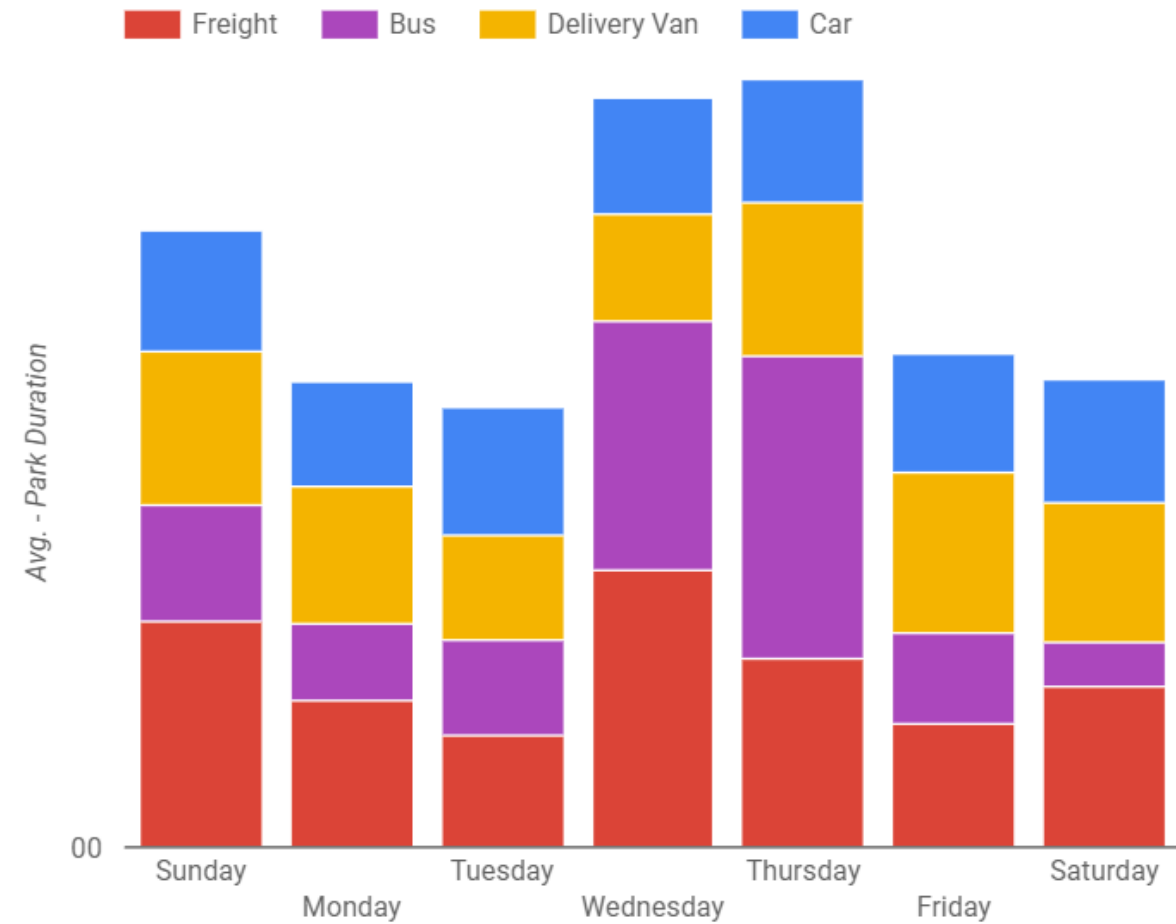
Goal	KPIs
Scalability: Develop a ZEDZ model	Identify 3 policies and/or regulations that encourage ZEV deployment
	(Post pilot): 3 additional communities deploy ZEDZ in Greater LA within 2 years
Community Benefits: Improve local business operations	10+ local businesses participate in the ZEDZ
GHG Reductions: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

ZEDZ Monitoring Data

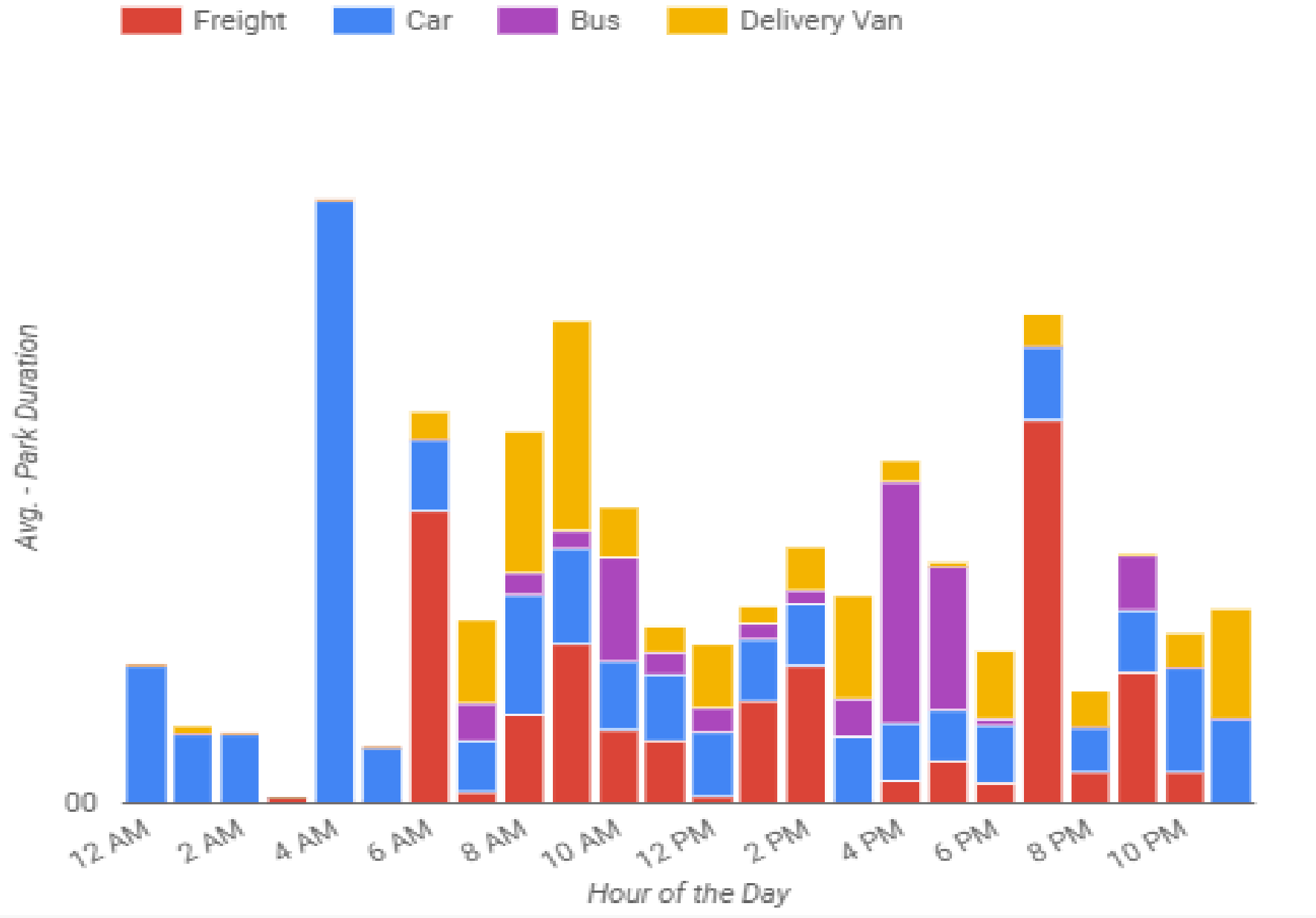
Avg Park Turnover Events



Avg Park Dwell Time by Vehicle Type



Avg Park Dwell Time by Vehicle Type and Hour of Day



ZEDZ Participants

LEADERSHIP TEAM



ADVISORY COMMITTEE

Delivery Partners



FOODCYCLE LA



AxleHire



GUAYAKÍ



shopify

REEF

Ecosystem Stakeholders



urban movement labs



INNOVATING FOR A BETTER TOMORROW



ROUSH CLEANTECH



Metro



SOUTHERN CALIFORNIA EDISON

An EDISON INTERNATIONAL Company

Community Partners



THIRD STREET PROMENADE



opa
www.opa-sm.org
Ocean Park Association



Measuring Success

- Partnerships - laying the groundwork for EV fleet deployment and cleaner delivery trips
 - AlSCO
 - Ikea +CRST
 - FluidTruck platform
 - AxleHire
 - Urb-E
 - Circuit

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



Phase 1

