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Think Forward

Mind the Curb: Findings from Commercial Vehicle Curb Usage in California

presented to

Talking Freight Webinar

presented by

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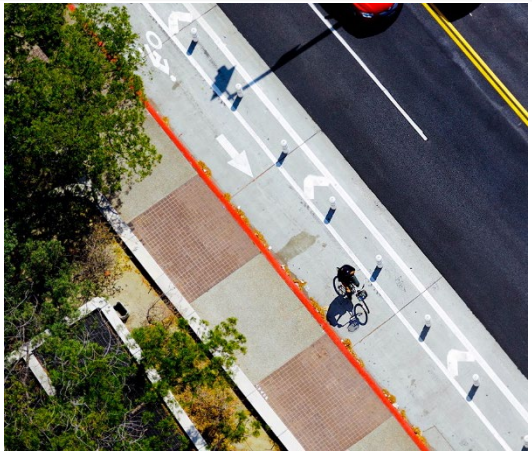
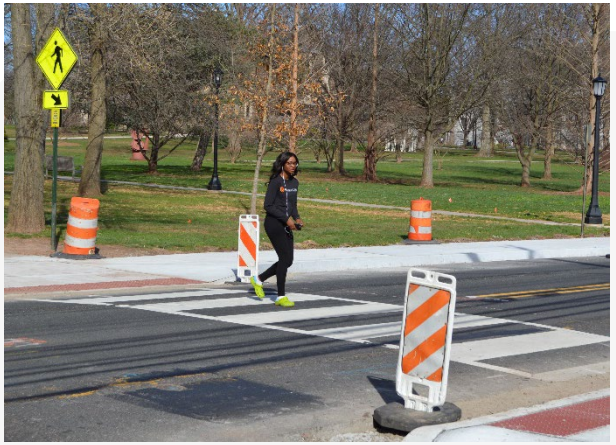
Everything comes together at the curb…including freight/truck





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Implications of Unmanaged Curb

- Public Notices:
  - Delayed transit service
  - Decrease in safety
  - Increase in congestion
  - Overall sense of difficulty getting around
- Internal Partners Notices:
  - Lack of knowledge of curb uses and utilization
  - Delayed projects (increased costs)
  - Inability to respond to questions related to curb uses
  - Reacting to issues rather than proactively addressing them

Today's Presentation

- Curb usage increasing due to the growth in shared ride & e-commerce delivery vehicles
- Three common challenges:
  - What type of data should be collected?
    - Nature of delivery vehicles – sedans/vans/trucks
    - Parking violation information
    - When? Where?
  - How can data collection be scaled?
    - How can pilot locations be chosen for greatest impact?
  - How to effectively digitize the curb to maximize innovation policy?
    - Enormous undertaking
    - City budgets continue to be strained
- Presentation covers initial steps on each of these topics

Truck Parking Data Collection

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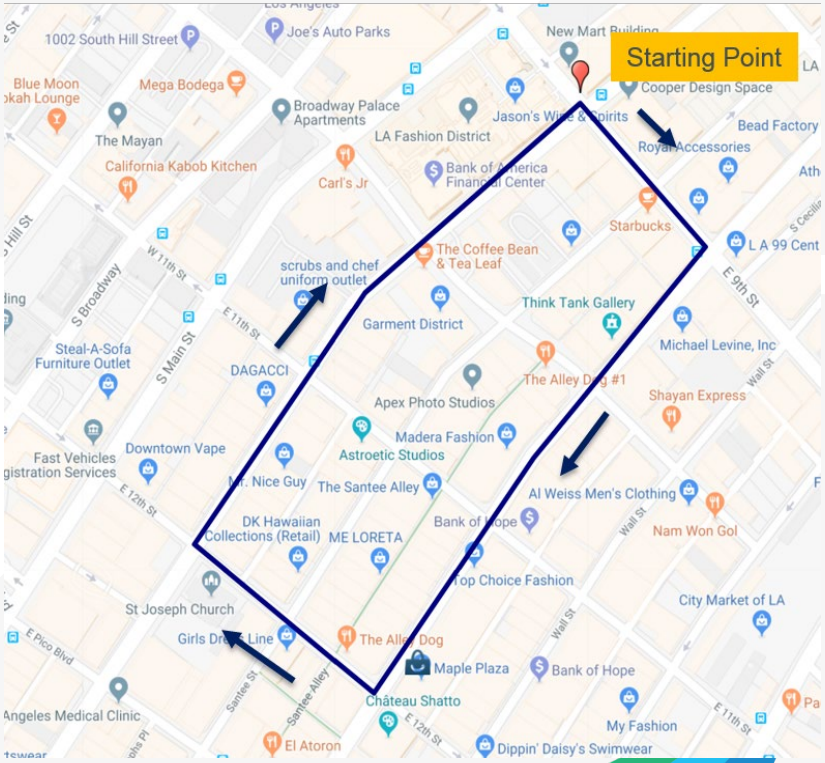
Location and Schedule

Data collection sites in Northern California
Oakland Downtown
Oakland Rockridge-Temescal
Berkeley North
Berkeley South
Berkeley Downtown

Data collection sites in Southern California
LA Downtown
LA Koreatown
Irvine
Santa Monica

Site Selection

- Each study area divided into walkable loops
- LA downtown was divided into the following :
  - Fashion district
  - Broadway
  - Financial district
  - 7th Street Loop
- Data collected during business hours for maximum impact



Methodology

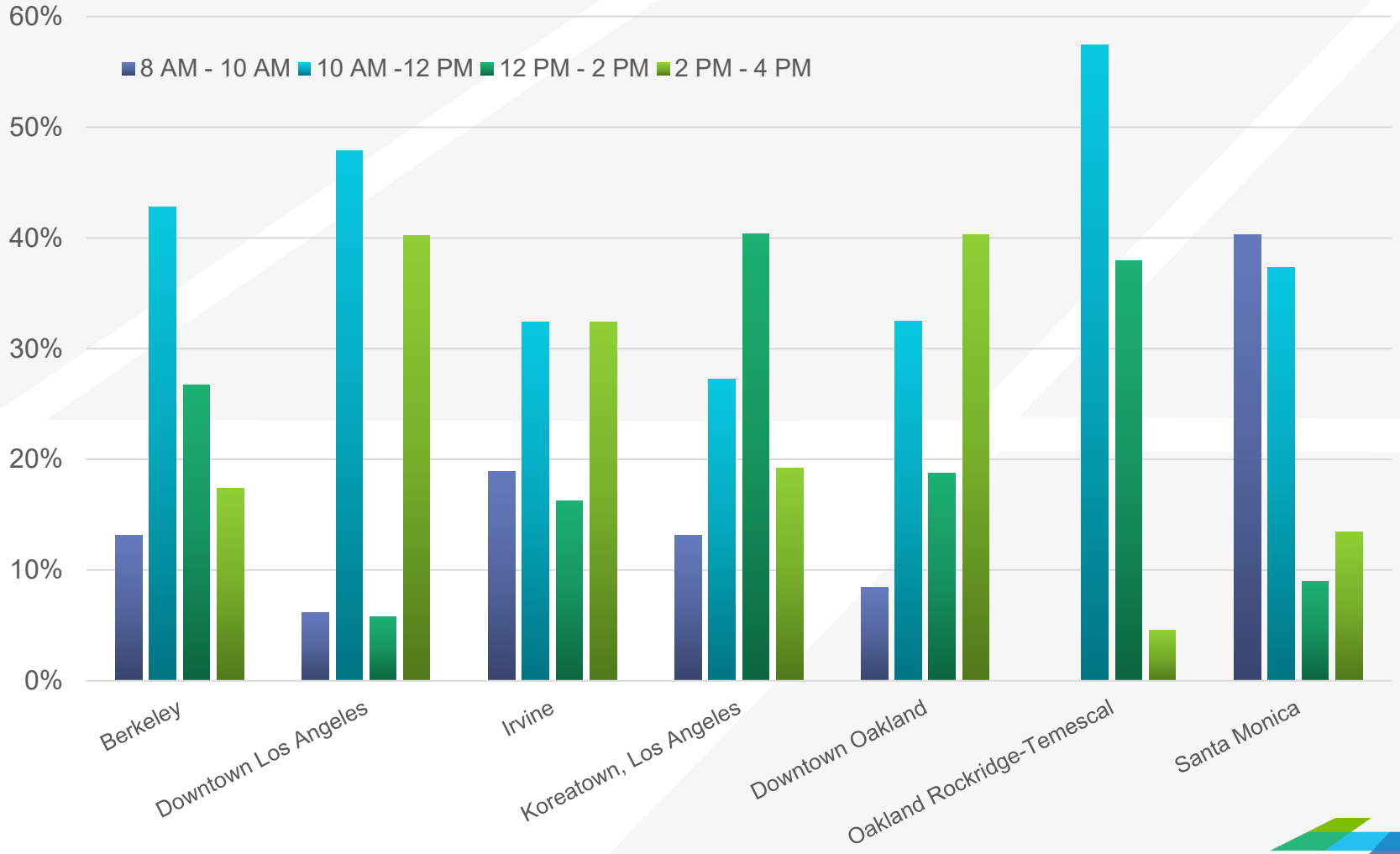
- Teams of two completed 2+ laps for each loop
- Information entered in a spreadsheet

1	2	3				4	5	6	7	8
Com. Veh. #	Closest Store	Time				Com. Veh. Type	Truck types	Com. Veh. Parking Location	Name/Logo	Comments
		Laps	Time 1	Time 2	Time 3	S,V, P, T	S, C	OP, OL, OI, OD, OM, AL		
1	City National Bank	1	2:00	2:37	3:02	V	--	OI	USPS	
2	Westin	1	2:00	2:37		P	--	OI	Blank	
3	Mendocino Farms	1	2:03			T	S	OL	R&K Ramos	
4	Biltmore	1	2:07			T	S	OI	UPS	
5	Biltmore	1	2:08	2:43		P	--	OL	Blank	
6	Biltmore	1*	2:08			P	--	OL	Thyssen Krupp	
7	Biltmore	1	2:08	2:40	3:06	T	S	OL	USPS	
8	Torrey Bank	1	2:11	2:40	3:06	V	--	OL	AT&T	w/Cone
9	Torrey Bank	1	2:11	2:43	3:06	T	S	OL	Andersen	
10	Peets	1*	2:11			T	S	OI	USPS	
11	Torrey Bank	1*	2:13			T	S	OI	Security	Armored car
12	606 Olive	1	2:18	2:51	3:10	V	--	OI	USPS	
13	Neilhule	1	2:19	2:51	3:10	V	--	OI	USPS	
14	GNC	1	2:19	2:51	3:10	T	S	OL	UPS	
15	Drunk Dog	1	2:20			V	--	OI	FedEx	
16	640 Olive	1	2:20			T	S	OL	FedEx	In front of parking garage
17	Astro	1	2:23			T	S	OI	USPS	
18	Vacant Building	1	2:25	2:55	3:18	P	--	OL	Blackdog	
19	Vacant Building	1	2:25	2:55		V	--	OL	DHL	
20	Vacant Building	1	2:25	2:55	3:18	P	--	OL	Royal	

Data Collection

- Information collected
  - Location of parked commercial vehicles
  - Type of delivery vehicle
  - Time of day when observation was made
  - Parking duration (same vehicle seen in multiple laps)
  - Information about parking (curbside, legal)
  - Delivery company
- Total vehicles tracked > 2,100
  - ~1,350 vehicles in Downtown LA

Time-of-Day by Geography



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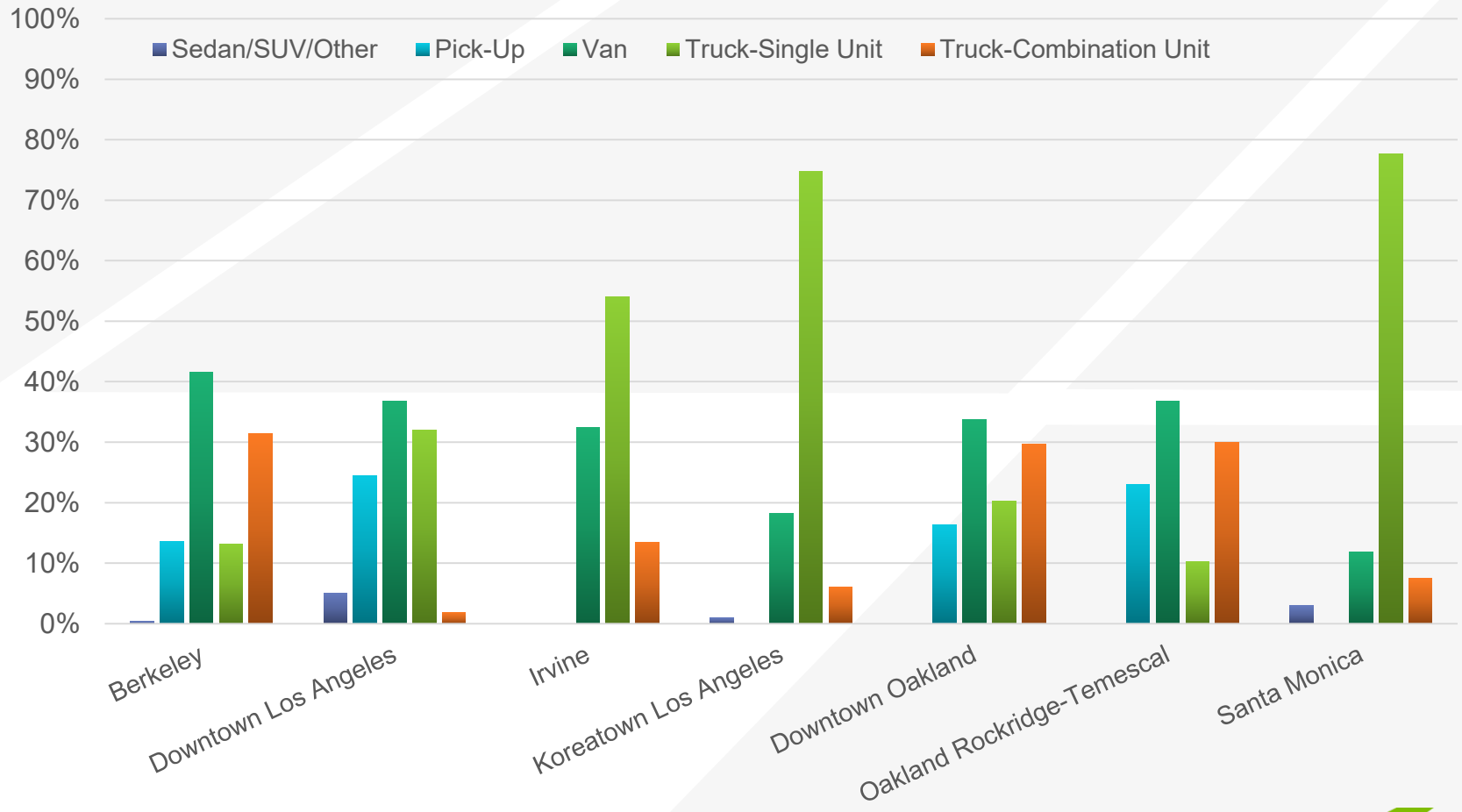
Vehicle Type by Geography



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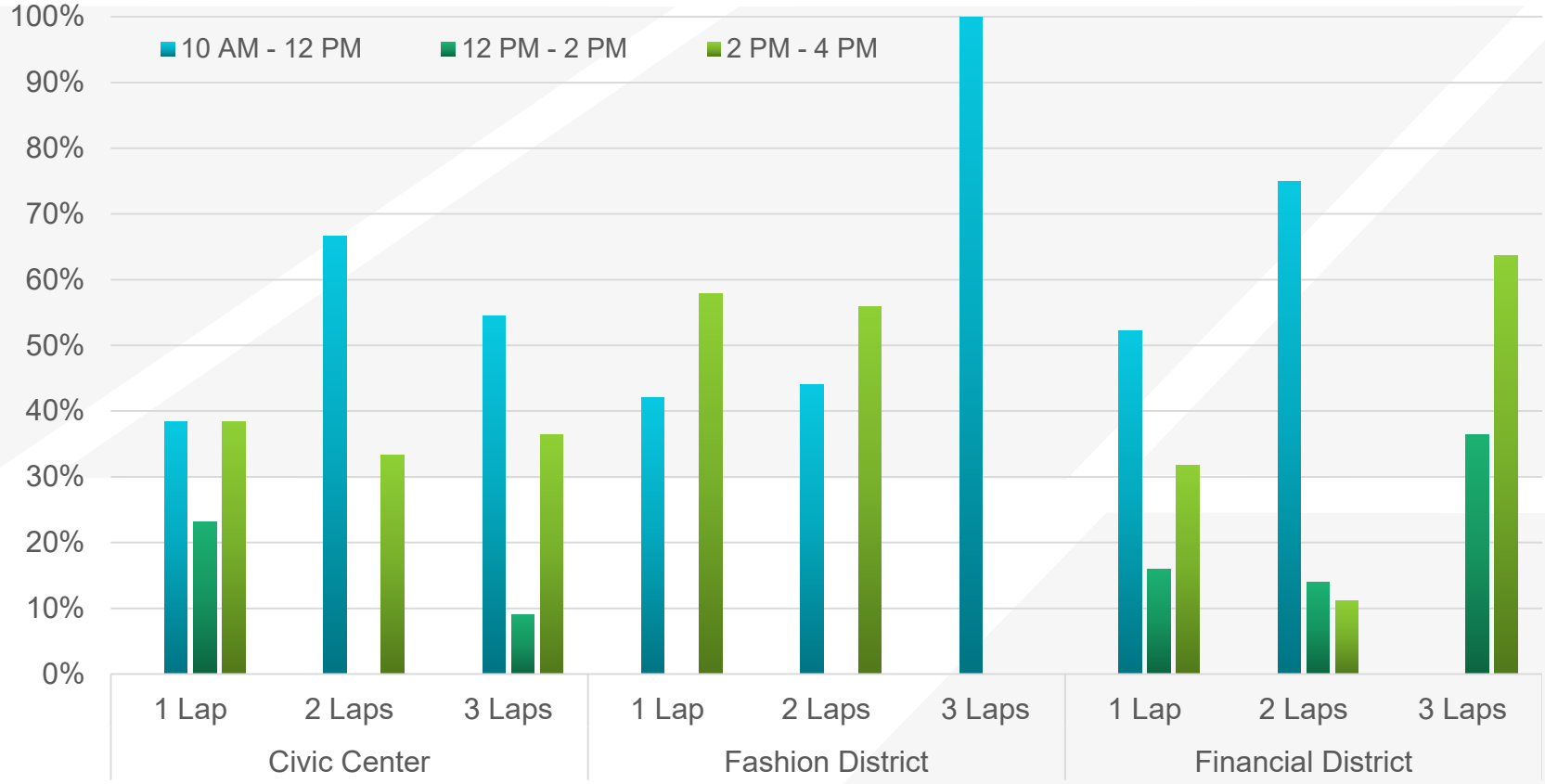
Parking Duration in DTLA



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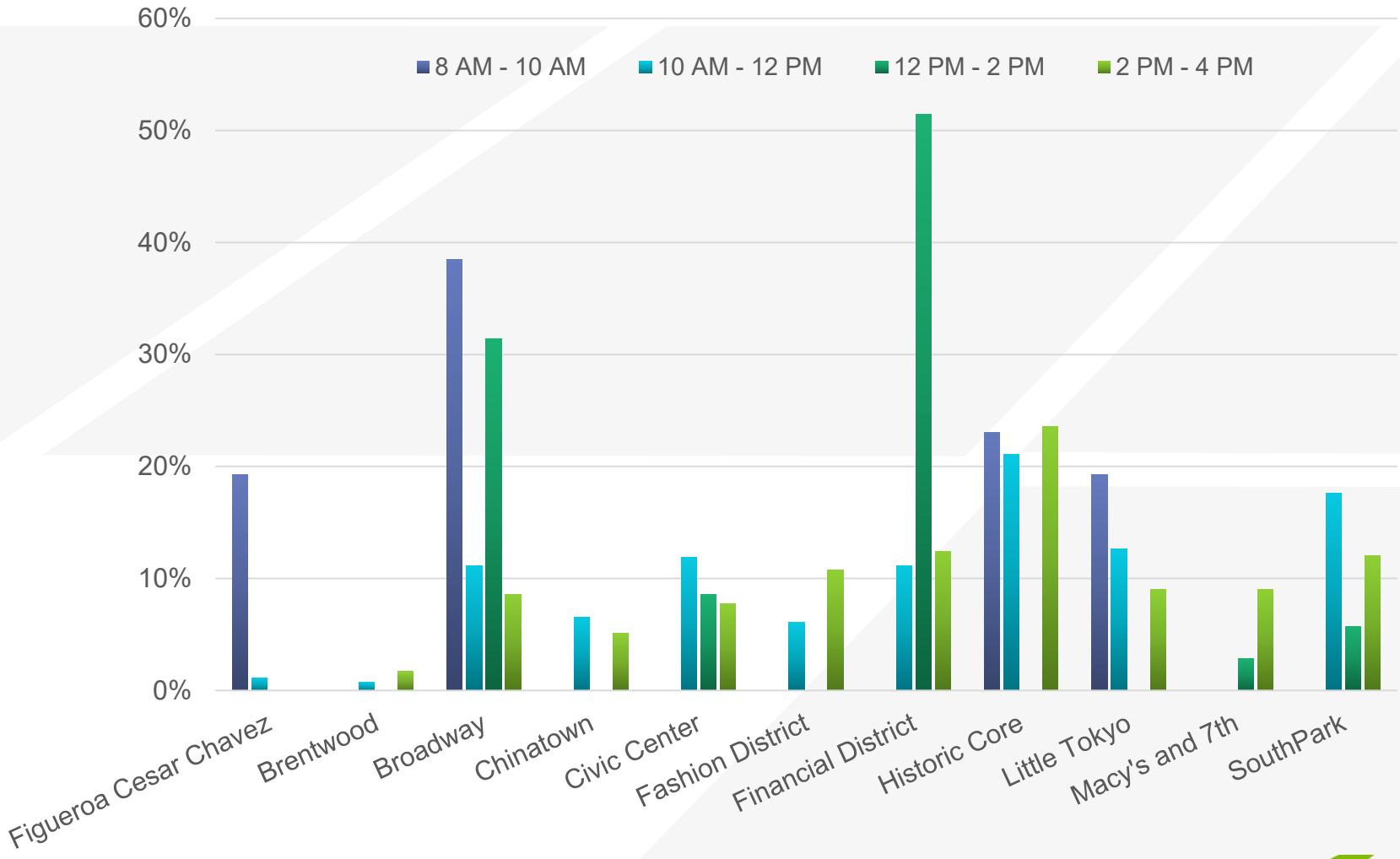
Parking Violations in DTLA



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Key Takeaways

- Identify commercial vehicle activity that is not captured elsewhere
  - Pick-up parcel delivery
  - Types of trucks
  - Parking/loading areas management
- Behavior varies a lot by location
  - More data collection necessary to understand behavior by segment
  - However, scalability is a challenge

Scaling Data Collection Using Passive Data

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Data Source

You agree to share your location with an app

The app shares your location with a data company

Apps can be paid for your location data

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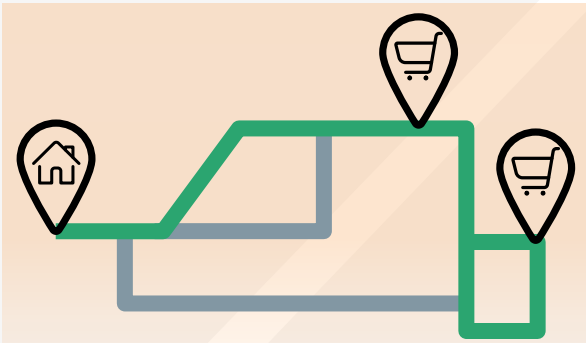
Key Algorithm Steps

IDENTIFY TRIP ENDS

Process Activity Stays

EXPAND THE DATA



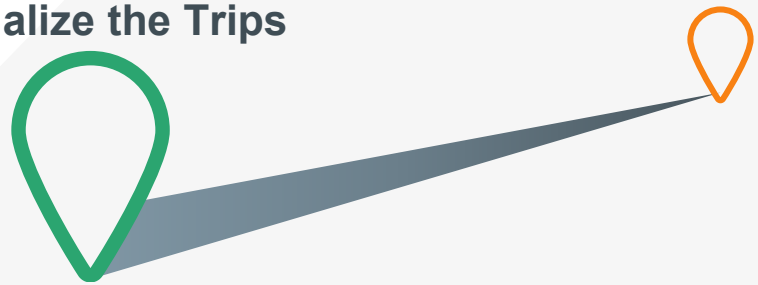
Devices with/without regular workplace

IDENTIFY HOME & WORK LOCATIONS

Determine home and work locations

SCALE TRAVEL PATTERNS

Normalize the Trips



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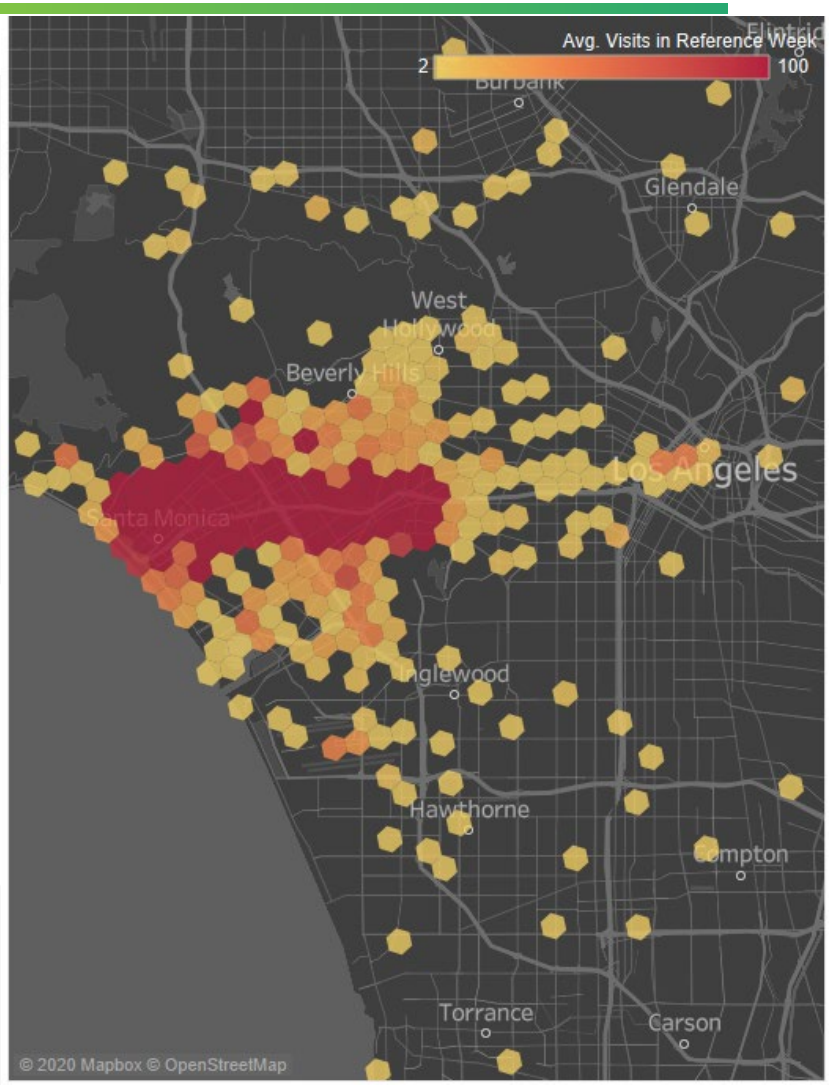
Summarize Flows by Small Zones

- Identify high intensity activity zones
- Overlay population and employment density
- Understand trip purpose + time-of-day of trip
- Mode agnostic, but helps prioritize areas of interest for more intensive data/policy assessments



Code the Curb

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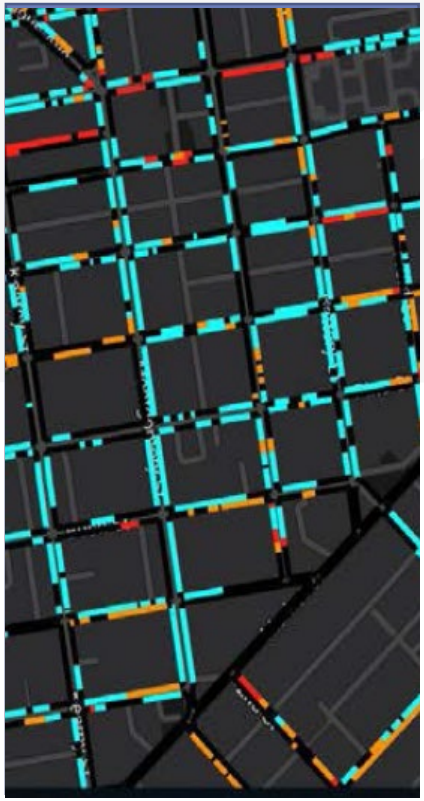
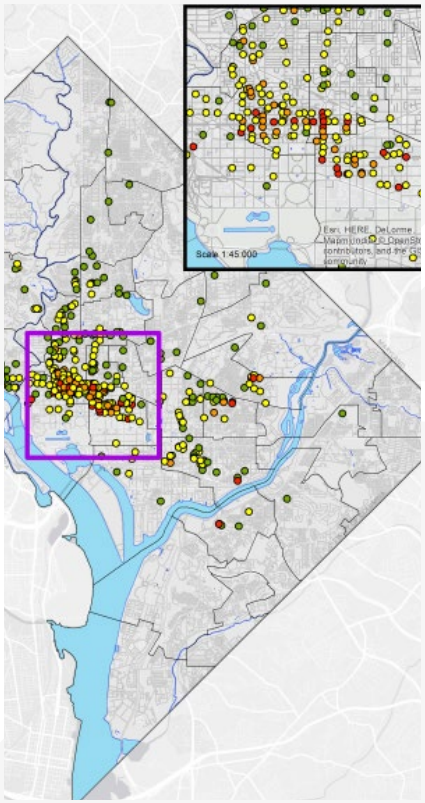
Aspects of Curb Management

Measure > Manage > Monitor > Optimize





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Project Roadmap

A Assess Existing Conditions

Where are we?

As-Is Assessment

- **People**: Interviews & Focus Groups
- **Process**: Document Practices, Processes, & Workflows
- **Technology**: Assess Tools & Integration
- **Data**: Inventory Assets & Classes

B Blueprint the Future

Where do we want to go?

Scoping Study

Goals & Performance Framework

- Goals, strategies, guiding principles, and performance metrics for Curb AM
- Aligned with LADOT organizational goals

Gap Analysis

- Compare As-Is Assessment to Best Practices, Industry Standards, LADOT Goals

C Chart a Path Forward

How will we get there?

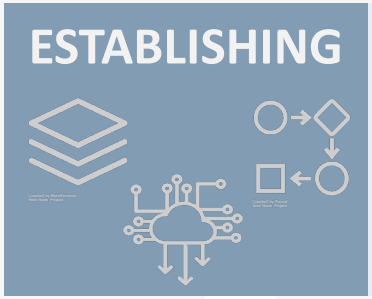
Asset Management Plan & Roadmap

- Vision and framework
- Roles and responsibilities
- Funding and needs
- Phasing and implementation steps

Adapting the Plan

- COVID-19 budget impacts
- Deferring/reframing activities

Asset Management Plan



14 ACTIVITIES

Begin by building a foundation of complete and accurate **DATA** and **INFORMATION**, handled and shared with innovative and user-friendly **TECHNOLOGY**, and managed and acted on through efficient **PROCESSES**.

10 ACTIVITIES

Continue by updating and standardizing **PLANS** and **POLICIES**, aligning for comprehensive **BUDGET** decisions, and incorporating **RISK** and **PERFORMANCE** into the process.

5 ACTIVITIES

Build to last by filling key **ROLES**, coordinating through internal and external **GOVERNANCE**, and programming for **TRAINING** and **CHANGE**.

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Questions?

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