

MTI Research Snaps presents:

# Curbside Chaos: Managing the Curb After COVID



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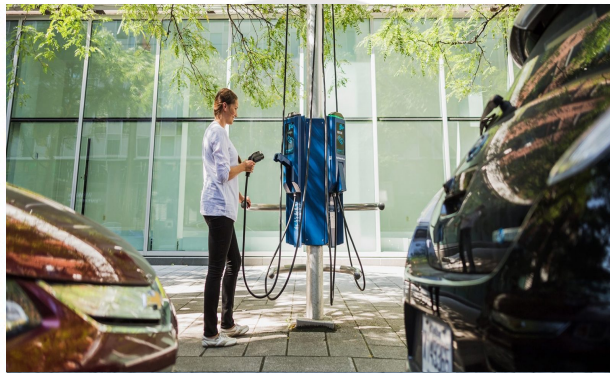
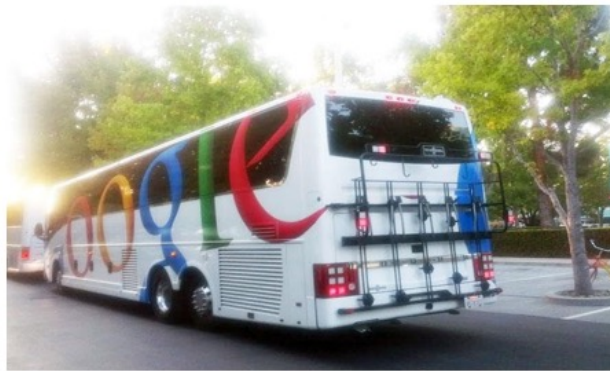
# PRESENTATION OVERVIEW

- Setting the Stage
  - What is happening now?
- 6 Key CurbSpace Planning and Management Steps
- What Does the Curb Post-COVID Look Like?
  - Outdoor dining, robotic delivery, TNCs, and AVs





# SETTING THE STAGE: WHAT IS HAPPENING NOW?





# PLANNING AND MANAGING THE CURB: 6 KEY STEPS





# PLANNING THE CURB

- Planning Considerations
  - Planning Philosophy / Guiding Principles (e.g., auto-oriented, transit-oriented, complete streets, others)
  - Surrounding Land Uses
  - Minimizing Modal Conflicts
  - ADA Access and Equity
  - Safety
  - Community and Stakeholder Engagement
  - Preparing for Emerging Mobility
  - Others ...





# ALLOCATING RIGHTS-OF-WAY

## Competitive Strategies

- Auction
- First-Come, First-Serve
- Requests for Proposals (RFPs)

## Non-Competitive Strategies

- Collaborative Approaches
- Equal Distribution
- Lotteries
- Permits
- Preferential Treatment (based on objective, pre-established criteria)
- Real Estate Agreements



# VALUING RIGHTS-OF-WAY AND PRICING STRATEGIES

## Congestion/Temporal

- Fee for parking/loading during a period of increased congestion or use (e.g., 6 AM to 9 AM)

## Dynamic

- Fees that fluctuate based on demand for access

## Flat Rate

- Fixed fee used for access

## Zone

- Fees paid parking or loading within a geographic area





# MANAGING THE CURB: A FEW STRATEGIES

## Active Transportation and Device Management Strategies

- Physical and digital corrals and geofencing
- Adding protected bike lanes
- Establishing permissible riding areas
- Adding supportive infrastructure (e.g., curb extensions, parklets, etc.)

## Loading Zone Strategies

- Repurpose parking for loading zones
- Consider establishing staging areas (e.g., places vehicles wait for goods or passenger pick-up before going to a high-demand location (e.g., airport cell phone lots)

## Parking Strategies

- Adapt/change parking restrictions
- Implement paid parking





# ENFORCEMENT STRATEGIES

- Education and Outreach
- Geofencing
- Cease and Desist Notices
- Fines/Citations
- Impounding





# MONITORING AND EVALUATION: CURBSPACE PERFORMANCE METRICS

| Impact Category                   | Description  | Metrics  |
|-----------------------------------|--|--|
| <b>Bike Ability</b>               | Analysis of supportive biking infrastructure and potential safety risks                                  | Number of bike parking stations<br>Number of bicyclists on a block per hour  |
| <b>Curb Productivity</b>          | Measurement of how productive a segment of the curb based on its designated use (e.g., loading zone)     | Number of passengers loading on a bus at a public transit stop<br>Number of deliveries made                        |
| <b>Economic Vitality</b>          | Analysis of changes in economic activity in the area   | Number of commercial vacancies<br>Number of users  |
| <b>Parking Demand</b>             | Evaluation of the current and desired parking amount   | Number of available parking spaces per day<br>Parking requests   |
| <b>Parking Efficiency</b>         | Measurement of how efficiently parking in an area is used  | Duration of time vehicles are parked for<br>Number of vehicles doubled park  |
| <b>Passenger Loading Activity</b> | Quantitative measurement of the number and type of passenger loading activities taking place at the curb | Number of passengers loading<br>Number of passengers unloading<br>Number of passenger vehicles per loading zone    |
| <b>Passenger Loading Demand</b>   | Evaluation of the number of vehicles that need curb access and the length of curb needed                 | Curb length<br>Number of vehicles trying to access the curb  |
| <b>Passenger Loading Impact</b>   | Description of how passenger loading activity impacts travel conditions or other modes                   | Number of cars forced to go around by a vehicle loading or unloading<br>Number of minutes traffic flow was delayed |
| <b>Transit Reliability</b>        | Evaluation of the impact of curb changes on transit service  | Average travel speeds<br>Ridership rates<br>Transit schedule adherence   |
| <b>Safety</b>                     | Evaluation of how design changes have impacted safety  | Number of accidents reported over time<br>Number of police citations for traffic violations                        |



# WHAT DOES THE CURB POST-COVID LOOK LIKE?

*A FEW EXAMPLES OF HOW COMMUNITIES ARE  
RESPONDING AND PREPARING*



Growing interest in outdoor dining, curbside pick-up, curbside deliveries, and parklets in response to the pandemic.





## LA COUNTY OUTDOOR DINING PERMITS

| Permit Type                    | Location                                | Cost   | Placement Requirements  |
|--------------------------------|---|--------|---|
| <b>Alley and Road Closures</b> | Public alley or closed street           | Varies | In a public alley or street maintained by the Department of Public Works<br>Only available to participating restaurants or with written support from other businesses<br>Protected by traffic controls  |
| <b>Offsite Outdoor Dining</b>  | Off-site private parking lot or walkway | \$234  | Approved by a valid planning commission authoring the use of the facility   |
| <b>Onsite Outdoor Dining</b>   | On-site private parking lot or walkway  | \$234  | On a pre-existing on-site walkway or parking facility   |
| <b>Parklet</b>                 | On-street parking area                  | Varies | Along a two-lane road maintained by the Department of Public Works with a posted speed of under 25 miles per hour<br>At least as large as two parallel or four diagonal parking spaces<br>Protected by traffic safety barriers<br>Aligned with ADA requirements |
| <b>Food Pick-Up Zone</b>       | Designated curbspace                    | Free   | In commercial or business district<br>At least 15 feet from a fire hydrant<br>Not currently a designed loading, no stopping, or accessible parking zone<br>Limited with a maximum waiting time of 15 minutes  |

# ROBOTIC DELIVERY / PERSONAL DELIVERY DEVICES

## Pennsylvania Policy

- Size: 32x42x72 inches or less; 550 lbs or less w/o cargo; limited to 12 MPH or less in pedestrian areas; 25 MPH or less in vehicle areas
- Vehicle code classifies PDDs as “pedestrians” and afforded the same rights
- PDDs must yield the right-of-way to all pedestrians and cyclists
- Must travel in the same direction of traffic when on a roadway or shoulder
- May operate in a travel lane under specific circumstances





# RESPONDING TO TNCs AND PREPARING FOR AUTOMATED VEHICLES

New policies needed to ...

- Reduce minimum parking requirements as parking demand changes in response to TNCs, AVs, and SAVs
- Encourage developers and property managers to install loading zones

Example: Existing land uses may have difficulty installing loading zones without removing parking, resulting in non-compliance with minimum parking requirements



# ADDITIONAL RESOURCES

## COVID Mobility Works

[Home](#)[Find mobility responses](#)[Insights](#)[Act](#)[About](#)

## Find mobility responses to COVID-19

Search initiatives by keywords (New York, transit, delivery...)



And/or browse by

Type ▾

Purpose ▾

Approach ▾

Mode type ▾

Country ▾

### Insights



How are communities using open streets to accommodate economic recovery during the COVID-19 pandemic?



How are communities reallocating the street right-of-way to safely accommodate recreational and social activities during the COVID-19 pandemic?



How did taxis and mobility service providers in the United States shift their focus to moving goods as an impact of COVID-19?

INSIGHTS »

## Start taking action

Resources and knowledge sharing activities to help you take action.

ACT NOW »



Thank you for joining us for:  
Curbside Chaos:  
Managing the Curb After COVID

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Resources:

Upcoming Report: **MTI Project 1904**

**NEW:** USDOT MOD Planning and Implementation

Shared mobility policy primer for the American Planning Association

Tune in for our Annual Transportation Finance Summit “Electrifying the Transportation future” on June 11, 2021 at 10a.m. (PT)! Visit <https://transweb.sjsu.edu/events> for details and registration.

Have a suggestion for a webinar topic you’d like to see featured? Email [irma.garcia@sjsu.edu](mailto:irma.garcia@sjsu.edu)

