

ABAG-MTC Webinar: Developing a Curb Management Strategy

Local Parking Policy Technical Assistance
November 30, 2021



ASSOCIATION OF BAY AREA GOVERNMENTS
METROPOLITAN TRANSPORTATION COMMISSION

N NELSON
NYGAARD

Impact of Parking on Goals

VMT and Emission Reduction

- Parking increases vehicle miles traveled, resulting in more traffic, more emissions, and reduced safety

Focused Growth and Vibrant Communities

- Parking takes up space that could be used for other purposes

Affordable Housing and Transportation

- Parking increases costs and hinders equitable development and access

Regional & Local Policies and Priorities

- *VMT mitigation (SB 743, TDM Ordinances, PDAs and transit-oriented developments)*
- *GHG mitigation (Plan Bay Area 2050, Climate Action Plans)*
- *Health and safety (Vision Zero, AB 617 and air quality improvement)*
- *Mobility and activation improvements (Complete Streets, Slow Streets, multimodal and emerging mobility planning)*
- *Housing planning and development (PDA, RHNA, General Plan and Housing Element)*
- *Equity goals (affordability, transportation accessibility, Environmental Justice)*

Local Parking Policy Technical Assistance

Focus on identifying needs and developing resources to support parking policy implementation

- **Bay Area Parking Policy Database**
- **Parking Policy Playbook**
- **Webinar Series**
- **Office Hours**



Parking Policy Resources



[Playbook](#)

Reduced
Parking
Minimums

Parking
Maximums

Reduced
Parking for
Affordable
Housing

Reduced
Parking for
Transit
Proximity

Shared Parking

Unbundled
Parking

Parking In-Lieu
Fees

Priced Parking

Demand-
Responsive
Pricing

Parking Benefit
Districts

Curb Strategy

TDM Policy for
New
Development

Parking Policy Resources

POLICY #1

Reduced Parking Minimums

Used For

- Reducing systematic overbuilding of parking.
- Avoiding unnecessary cost barriers to development, and the inflationary impacts of excess parking construction on housing and commercial-lease costs.
- Encouraging more sustainable growth and more walkable and multimodal urban design patterns.
- Supporting infill development, particularly in dense, urban areas with constrained space.

Policy Overview

Many cities require new developments to build a minimum number of parking spaces, regardless of whether they are needed or desired. Parking requirements tend to overstate demand, lead to an excessive supply of parking, increase development and housing costs, and contribute to sprawl. Eliminating minimum parking requirements does not mean that no new parking will be constructed, but rather developers will determine the appropriate level of supply based upon market demand.

Benefits

- Provides developers with flexibility to right-size parking supplies according to their own demand projections and other factors.
- Removes a key contributor to excess parking supplies, particularly in areas where walking and multimodal mobility are most viable as alternatives to driving.
- Facilitates change-of-use projects that might otherwise trigger increased parking requirements that can be difficult to meet.
- Facilitates infill projects.

Level of Difficulty: ●●●

Impact: ●●●

Implementation Steps

1. Articulate impacts of current parking standards. Lead process with solid data, including cost of unnecessary parking and data on how much less is provided when minimums are removed.
2. Communicate the true cost and negative outcomes of parking minimums (e.g., increased housing costs, sprawl) and identify specific opportunities that are hindered by parking requirements (e.g., a developer who wants to reuse a historic building, businesses that cannot expand).
3. Build community support by establishing partnerships and communicating shared goals with stakeholders.
4. If removal is not citywide, conduct a parking analysis to determine the geographic areas, land uses, and development scales that will not be subject to parking minimums.
5. Work through the draft policymaking and approval process in close concert with liaisons to elected officials to craft messaging to gain support when put forward for adoption.
6. Communicate the change and new policy to stakeholders clearly.

Key Features

- **Universal application.** Policy should be broadly implemented with exceptions where needed. Other policy features can help to reinforce effectiveness of elimination of parking minimums.
- **Parking occupancy.** Parking counts post-implementation can assuage community concerns of a lack of parking and on-street parking spillover.
- **Track results.** Documenting new development that otherwise would not have been occurred due to restrictive parking requirements helps communicate the value of further removing minimums. Developers need evidence on past successful projects with lower ratios.

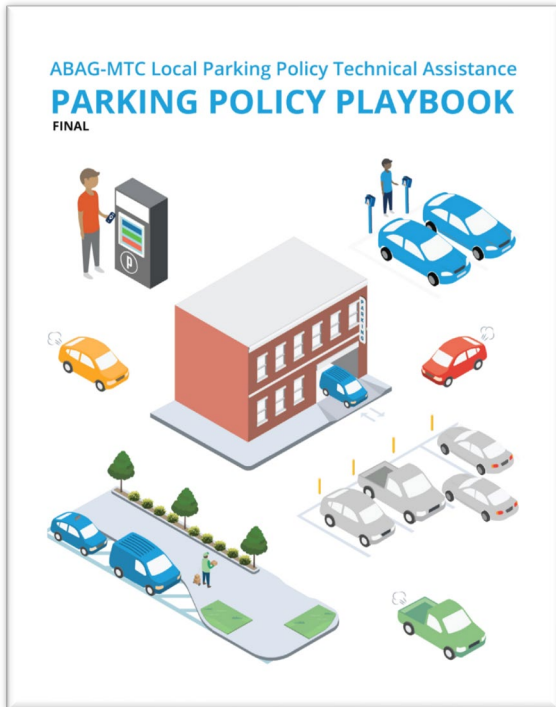
Pro Tips

- Combine with parking maximums (**Policy #2**) where developers are likely to continue to oversupply projects.
- It is acceptable to begin with incremental changes to parking requirements – remove or reduce them in certain areas or for certain uses. For example, some cities start with eliminating requirements for affordable housing (**Policy #3**) or near transit-rich areas (**Policy #4**) before eventually moving on to citywide elimination. Eliminating minimums may be applied citywide but will provide the most significant benefits in areas that combine walkable densities and use mixes with robust multimodal networks.
- Combine with unbundling requirements (**Policy #6**) to further discourage parking oversupply at new developments.
- Negates the need for parking in-lieu fees (**Policy #7**).

- Complement with a comprehensive curbside management plan (**Policy #11**), including strategies for commercial, residential, and transitional streets, to address concerns about impact on nearby streets (spillover) should new development create more parking demand than it can accommodate on-site.
- Complement with TDM requirements (**Policy #12**) to further reduce on-site parking.
- Address the impact of previous minimums via code updates that allow off-site shared parking spaces to be used to help meet requirements.
- Work with the City Attorney's Office early on.
- If information is lacking, conduct an on- and off-street parking occupancy study to confirm the typical oversupply of parking and impacts on land use.
- As with many parking changes, a strong and dedicated champion has been behind most successful parking minimum removals.
- One recent Southern California policy leader found it helpful to complete a peer city evaluation to benchmark parking requirements against aspirational cities.
- A reduction in minimum parking requirements encourages affordable housing developments. While it is a concern that introducing a complete removal of minimum parking may undermine and weaken existing incentive levers for developers to build more affordable housing, there is no empirical evidence to support this trade-off.¹

Parking Policy Resources

Appendix



Sample
Policy Code
Language

A



Sample
Staff
Reports &
Council
Resolutions

B



Parking
Policy Cut
Sheet

C



Parking
Policy
Database

D

Parking Policy Resources

POLICY #2 Parking Maximums

Used For

- Reducing systematic overbuilding of parking.
- Encouraging sustainable growth through more walkable and multimodal urban design patterns.
- Supporting infill development, particularly in dense, urban areas with constrained space.

Policy Overview

- Parking maximums set a cap on the number of parking spaces that developers can provide as part of a proposed project. This practice reverses the practice of minimum requirements, by defining limits on off-street parking based on the land uses proposed for a development project. Parking maximums can be implemented in addition to, or instead of, minimum parking requirements. Parking minimums can also simply be converted directly into maximums.
- Maximums ensure that parking is not oversupplied and incentivize developers to plan and design for use of alternative transportation modes. Parking maximums can also increase development densities, improving area walkability and multimodal functionality in support of core TDM objectives. One option is to establish fixed maximums, which limit on-site parking supplies with minimal or no exceptions. Another option is to provide a "soft" or

Level of Difficulty: ●●●

Impact: ●●●

"flexible" maximum that is paired with one or more options that allow more parking, the most common options being:

- The provision of publicly shared parking, with these spaces simply not counted toward the project's maximum.
- The payment of a fee for each space provided in excess of the maximum.
- The provision of mobility improvements and/or implementation of TDM measures
- Whether using a fixed or flexible approach, establishing maximum parking limits can achieve several key benefits, not limited to:
 - o Facilitates and encouraging higher development densities.
 - o Incentivizes investments in alternative transportation modes.
 - o Reduces traffic congestion and VMT by reducing parking activity.
 - o Reduces housing costs by reducing the cost of constructing parking and increasing the potential number of units that can be developed.
 - o Emphasizes the expectation of reduced parking needs in key development areas.

ABAG-MTC Local Parking Policy Technical Assistance PARKING POLICY PLAYBOOK FINAL



Policy #1 Reduced Parking Minimums

Mountain View (North Bayshore)

[North Bayshore Precise Plan 6.11 Off-Street Parking Requirements Standards](#)

1. **Minimum parking requirements.** No minimum amount of parking will be required in North Bayshore.
2. **Maximum allowable parking.** Projects shall follow the maximum parking requirements in Table 23.
3. **Residential parking maximum exception.** Residential projects requesting a higher parking maximum than permitted by the Plan shall submit a parking study completed by a traffic engineer. The request shall follow the process and requirements outlined in Section 3.5.6 of the Plan (Development Standard Exceptions). The parking study shall include a justification to support an alternative parking maximum. The study shall include, but is not limited to, the following: comparison of parking rates between the proposed project and similar projects, including density, mix of units, FAR, market data, office/residential internalization rates, available TMA services, and TDM strategies; and a confirmation that surrounding commercial parking facilities are infeasible to be shared by the proposed residential project. Information from the City's North Bayshore District transportation performance monitoring, including recent transportation infrastructure improvements, may also be used to help inform a project's specific parking ratio.

The study shall also include a strategy for monitoring and reporting parking usage at the site, and shall recommend a process and design strategy for eliminating and converting excess parking spaces to other uses, such as usable building area, electric vehicle (EV) charging or car-share spaces, personal storage, bike parking, amenity areas, landscaping, etc.

Table 23 Maximum Parking Requirements

Land Use	Maximum
Office/Research and Development	2.7 parking spaces per 1,000 sq. ft. of gross building floor area
Institutional (Performing arts, museums, etc.)	No maximum
Retail/Commercial less than 1,000 sq. ft.	No maximum
Retail/Commercial greater than 1,000 sq. ft.	Equivalent to the Institute of Transportation Engineers Parking Generation manual peak period parking demand for the most comparable land use as determined by the Zoning Administrator. The peak period may occur during the a.m. peak period or the p.m. peak period depending on the land use.
Residential	Parking ratio maximums by unit type: Micro-units ¹ : 0.25 spaces/unit 1 BR: 0.5 spaces/unit 2 BR: 1.0 spaces/unit 3 BR: 1.0 spaces/unit
Other uses, including residential guest parking requirements	As determined by the Zoning Administrator

¹ Up to 450 sf and without a separate bedroom.

Parking Policy Resources

Appendix B: Sample Staff Reports & Council Resolutions (Berkeley)

An example staff report to the City of Berkeley City Council for ordinance amendments to parking requirements.

Appendix B: Sample Staff Reports & Council Resolutions (Santa Rosa Resolution)

An example of a City of Santa Rosa council resolution authorizing parking user fees.

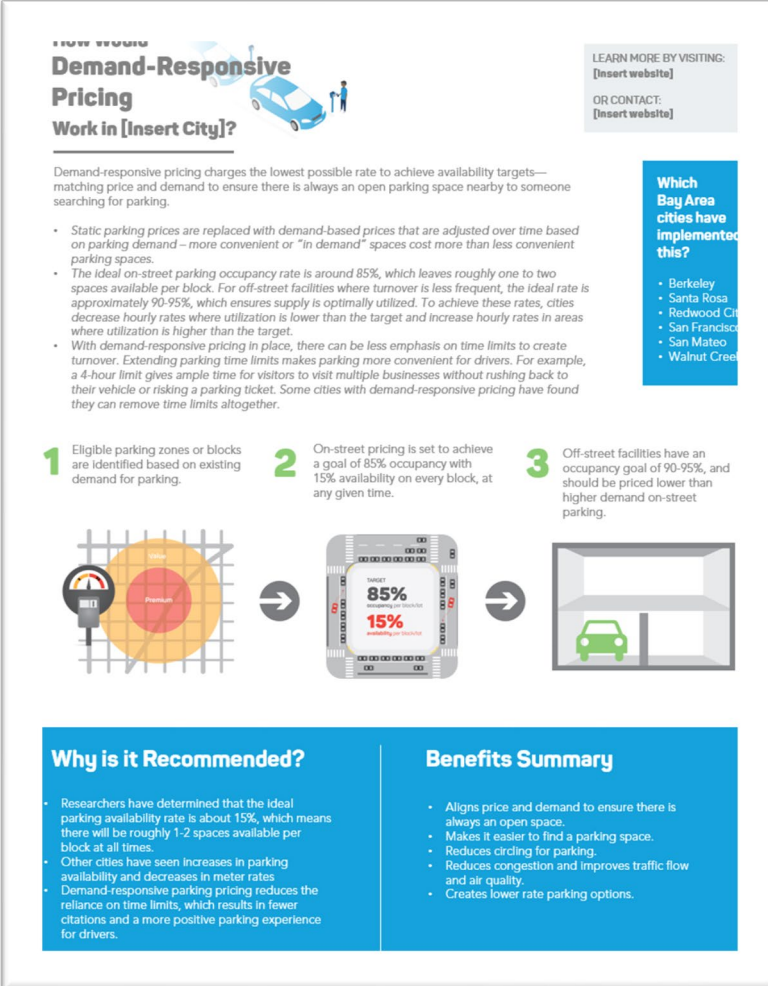
Appendix B: Sample Staff Reports & Council Resolutions (Santa Rosa Staff Report)

An example staff report to the City of Santa Rosa City Council for parking rate changes and parking ordinance amendment.

[Appendix B:
Berkeley Staff
Report](#)

[Appendix B:
Santa Rosa
Resolution](#)

[Appendix B:
Santa Rosa Staff
Report](#)



HOW DOES Demand-Responsive Pricing Work in [Insert City]?

LEARN MORE BY VISITING: [Insert website]
OR CONTACT: [Insert website]

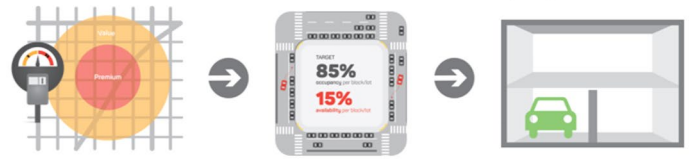
Which Bay Area cities have implemented this?

- Berkeley
- Santa Rosa
- Redwood City
- San Francisco
- San Mateo
- Walnut Creek

Demand-responsive pricing charges the lowest possible rate to achieve availability targets—matching price and demand to ensure there is always an open parking space nearby to someone searching for parking.

- Static parking prices are replaced with demand-based prices that are adjusted over time based on parking demand—more convenient or “in demand” spaces cost more than less convenient parking spaces.
- The ideal on-street parking occupancy rate is around 85%, which leaves roughly one to two spaces available per block. For off-street facilities where turnover is less frequent, the ideal rate is approximately 90-95%, which ensures supply is optimally utilized. To achieve these rates, cities decrease hourly rates where utilization is lower than the target and increase hourly rates in areas where utilization is higher than the target.
- With demand-responsive pricing in place, there can be less emphasis on time limits to create turnover. Extending parking time limits makes parking more convenient for drivers. For example, a 4-hour limit gives ample time for visitors to visit multiple businesses without rushing back to their vehicle or risking a parking ticket. Some cities with demand-responsive pricing have found they can remove time limits altogether.

- 1 Eligible parking zones or blocks are identified based on existing demand for parking.
- 2 On-street pricing is set to achieve a goal of 85% occupancy with 15% availability on every block, at any given time.
- 3 Off-street facilities have an occupancy goal of 90-95%, and should be priced lower than higher demand on-street parking.



Why is it Recommended?

- Researchers have determined that the ideal parking availability rate is about 15%, which means there will be roughly 1-2 spaces available per block at all times.
- Other cities have seen increases in parking availability and decreases in meter rates.
- Demand-responsive pricing reduces the reliance on time limits, which results in fewer citations and a more positive parking experience for drivers.

Benefits Summary

- Aligns price and demand to ensure there is always an open space.
- Makes it easier to find a parking space.
- Reduces circling for parking.
- Reduces congestion and improves traffic flow and air quality.
- Creates lower rate parking options.

[Appendix C: Fact Sheet Template](#)

Parking Policy Resources

General						Residential Parking Standards							Retail Parking Standards				Office Parking Standards			Mixed Use Parking Standards				
Previous Database	Date Updated	County	City	Place Type	Population (2020)	Lowest Minimum (lowest parking spaces per unit)	Highest Minimum (highest parking spaces per unit)	Minimum covered (not in addition to minimum)	Maximum (parking spaces per unit)	Guest Parking (per unit)	Guest Parking Detail	Rules for Determining Required Parking	Notes	Lowest Minimum (parking spaces per 1,000 sq. ft.)	Highest Minimum (parking spaces per 1,000 sq. ft.)	Maximum (parking spaces per 1,000 sq. ft.)	Special Rules for Determining Required Parking	Lowest Minimum (parking spaces per 1,000 sq. ft.)	Highest Minimum (parking spaces per 1,000 sq. ft.)	Maximum (parking spaces per 1,000 sq. ft.)	Rules for Determining Required Parking	Minimum (parking spaces per 1,000 sq. ft.)	Rules for Determining Required Parking	
Yes	4/1/2021	Alameda	Alameda	Urban Area	81,312	1.00	3.00	-	2.00	-	-	A, U	+/- 3,000 SF	5.00	5.00	-	-	4.00	4.00	-	-	1.00	Floor area beyond the 1 sq. ft. Sum of required u	
Yes		Contra Costa	Antioch	Outer Suburb	112,520	1.50	3.00	1.00	-	0.20	MF	B, L, T, U	-	5.00	5.00	-	-	4.00	5.00	-	sq. ft. of gross floor area	-	-	
No	4/15/2021	San Mateo	Belmont	Core Suburb	26,813	1.00	4.00	2.00	-	-	-	U	-	4.00	4.00	-	Establishments Dispensing Food or Beverages for Consumption on the Premises - One space for each 60 sq. ft. of customer area plus one	4.00	4.00	-	-	3.33	1.0 for each 333 square net floor area within the Plan Area when office & uses are mixed	
Yes	3/18/2021	Solano	Benicia	Outer Suburb	27,175	1.20	2.00	1.00	-	-	-	B, T, U	-	1.00	5.00	-	-	3.33	5.00	-	-	0.5 per studio	0.5 per studio, 1 per bedroom, no parking req other uses below 3,000	
No	4/4/2021	Alameda	Berkeley	Urban Area	122,580	0.00	1.00	-	-	-	-	U	-	-	-	4.00	-	3.33	3.00	-	-	-	Any mixed use build (residential and comm) shall satisfy the off-street standards and requirem	
Yes	3/31/2021	San Mateo	Brisbane	Core Suburb	4,633	1.00	4.00	1-2	-	0.20	Additional guest parking spaces shall be provided for all residential	A, B, S, T, U	-	3.33	3.33	-	-	3.33	5.00	-	-	-	-	
No	2/7/2021	San Mateo	Burlingame	Core Suburb	30,118	1.00	2.00	-	-	0.00	-	B, T, U	-	1.00	2.50	-	-	3.33	4.00	-	-	-	The ratio of required sp floor area shall be comp measuring within the grc area of the building. W	
Yes		Santa Clara	Campbell	Outer Suburb	42,288	1.50	3.50	1.00	-	0.20	MF	B, S, U	-	4.00	5.00	-	Plus one space per 1,000 sf of outdoor display area. Lower rate for take-out food. Sit-down calc based on seats.	4.44	5.00	-	GFA	-	-	
Yes		Sonoma	Cloverdale	Outer Suburb	9,213	1.00	2.00	-	-	0.5-2	-	B, S, T, U	-	4.00	4.00	-	-	4.00	4.00	-	-	1 per unit	Provided residential is r the area of first floor com & commercial use prov required parking.	
Yes	4/4/2021	Contra Costa	Concord	Urban Area	130,143	1.00	2.00	1.00	-	0.33	MF	B, T, U	-	4.00	5.00	-	-	1.00	5.00	-	GFA	-	-	
Yes	1/31/2021	San Mateo	Daly City	Urban Area	109,142	1.00	2.00	-	-	-	Yes for Mobile Home. 1 in 10 units guest parking	B, S, T, U	-	2.86	3.33	-	All Other Retail or Service Commercial—one space for each three hundred square feet of gross floor area up to twenty-one thousand	3.33	3.33	-	GFA 3.3 up to 21,000, 5 after 21,000	-	-	In no event shall e administrative varian issued which reduce overall off-street par
Yes		Alameda	Dublin	Outer Suburb	65,716	1.00	2.00	1-2	-	0.50	Projects with 10+ dwelling units	A, B, S, U	+/- 4,000 SF	3.33	5.00	-	Per CUP	2.85	4.00	-	-	-	Based on primary use Parking reduction. In th that a mixed use devel includes uses that have peaks in parking deman	
Yes	3/31/2021	San Mateo	East Palo Alto	Urban Area	30,794	1.00	3.00	-	-	0.20	MF	B, S, T	-	2.00	5.00	-	-	3.33	5.00	-	-	-	-	
Yes	1/31/2021	Contra Costa	El Cerrito	Urban Area	24,953	0.50	2.00	1-2	-	-	-	T, B, S, U	-	1.00	3.33	-	-	4.00	4.00	-	-	-	19.24.050 - Parking red Shared Parking.	
No	4/4/2021	Alameda	Emeryville	Core Suburb	12,298	1.00	1.00	0.00	-	0.20	Guest parking for developments with five or more	S, U	(f) Minimum and Maximum Parking Requirements. There is no minimum number of parking spaces required for	3.00	3.00	-	-	2.40	2.40	-	-	-	-	

Appendix D: Parking Policy Database

Today's Speakers

Francesca Napolitan

Curb Access
Manager

SFMTA

Amber Evans

Economic Development
Coordinator

City of Emeryville

Someone

OMF

OMF

San Francisco's Curb Management Strategy



Competition for Space

2010



PERSONAL PERSONAL PERSONAL MUNI BART CALTRAIN PARATRANSIT PERSONAL TAXI

2020



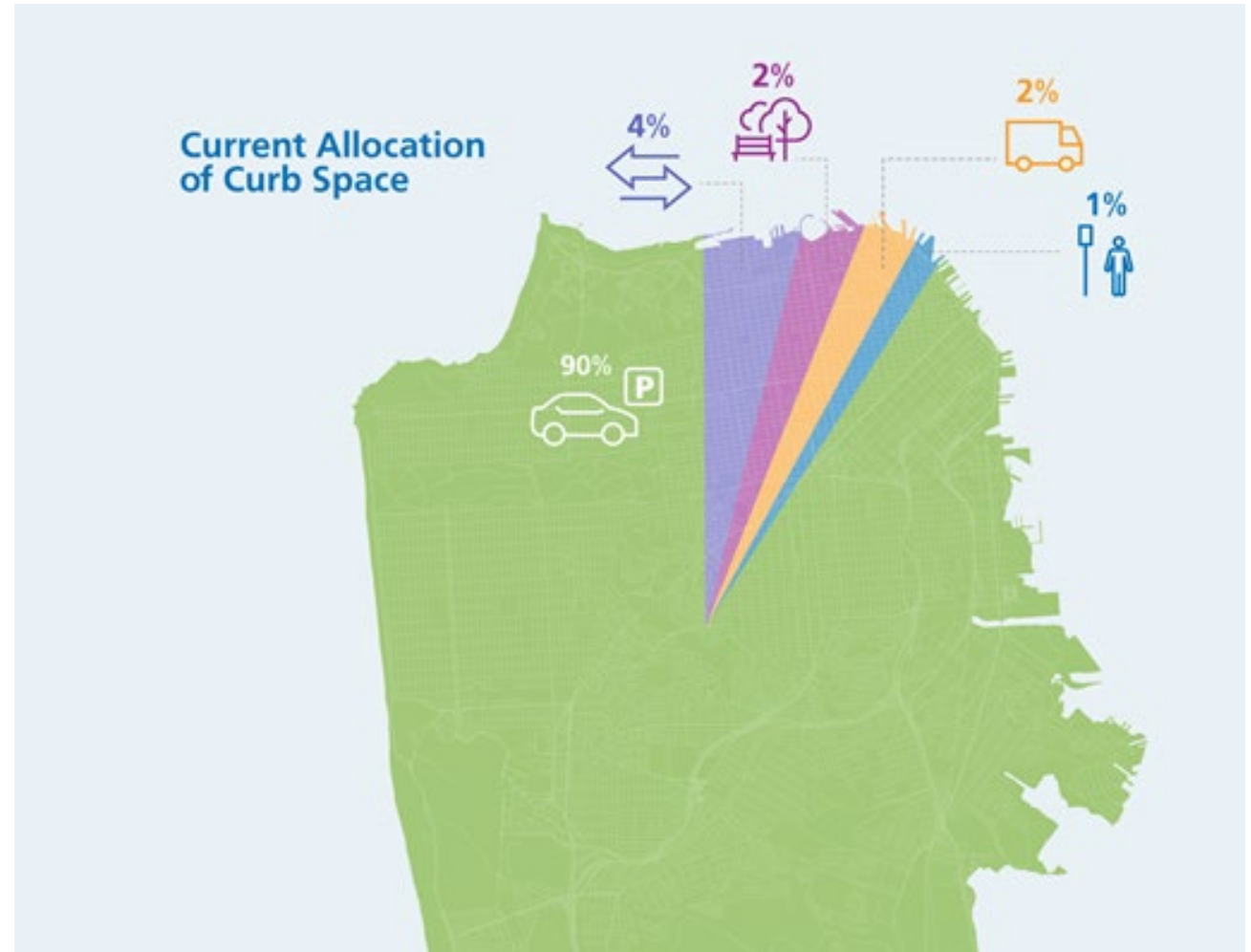
PERSONAL STATION-BASED BIKESHARE STATION-LESS BIKESHARE PERSONAL POWERED SCOOTER SHARE SHARED MOPED MUNI BART CALTRAIN COMMUTER SHUTTLE PRIVATE TRANSIT PARATRANSIT PERSONAL TAXI TNCs ON-STREET VEHICLE SHARE

Lack of Loading Impacts



Limitations of Current Approach

- Mismatch between curb allocation and how people get around
- Storage for vehicles – 90% of the curb
- Active uses – 1% of the curb
- Does not align with San Francisco's larger goals



Curb Management Strategy

Purpose

- A holistic and proactive approach
- Align limited curb space with City's values
- Support wider goals: Vision Zero, Transit First

Process

- Staff interviews across agencies
- Multi-agency workshops

Elements

- Curb hierarchy
 - Prioritizing curb functions by land use
 - Curb productivity
- Recommended strategies
 - New tools
 - Policies
 - Legislative changes
 - Process improvements
- Design guidelines
 - Guidance to planners, engineers, and project managers

Curb Hierarchy: Functions



ACCESS FOR PEOPLE

Active space that prioritizes transit boardings, and accommodates pick-ups/drop-offs, and shared-mobility services



ACCESS FOR GOODS

Space for deliveries of different types and sizes, used for short periods of time



PUBLIC SPACE AND SERVICES

Curb designated for use by people and public services



STORAGE FOR VEHICLES

Space intended to be occupied by vehicles for extended periods, such that no other users can access the space



MOVEMENT

Curb lane is used for the through-movement of motorized and non-motorized means of transportation, such that the curb lane is unavailable for other functions

Curb Hierarchy: Land Use Types



Low-density residential



Neighborhood commercial



Major attractor



Mid/high-density residential

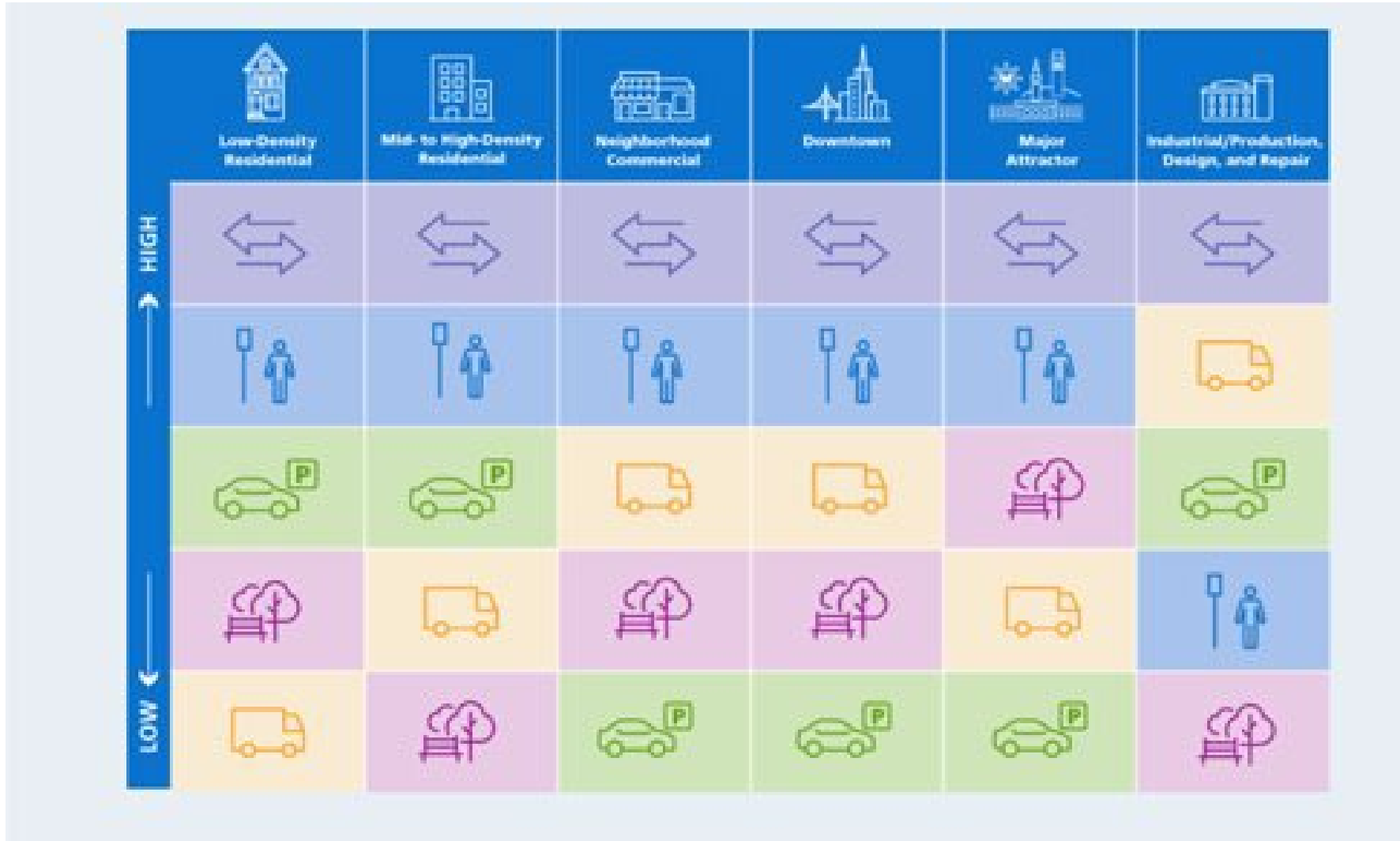


Downtown

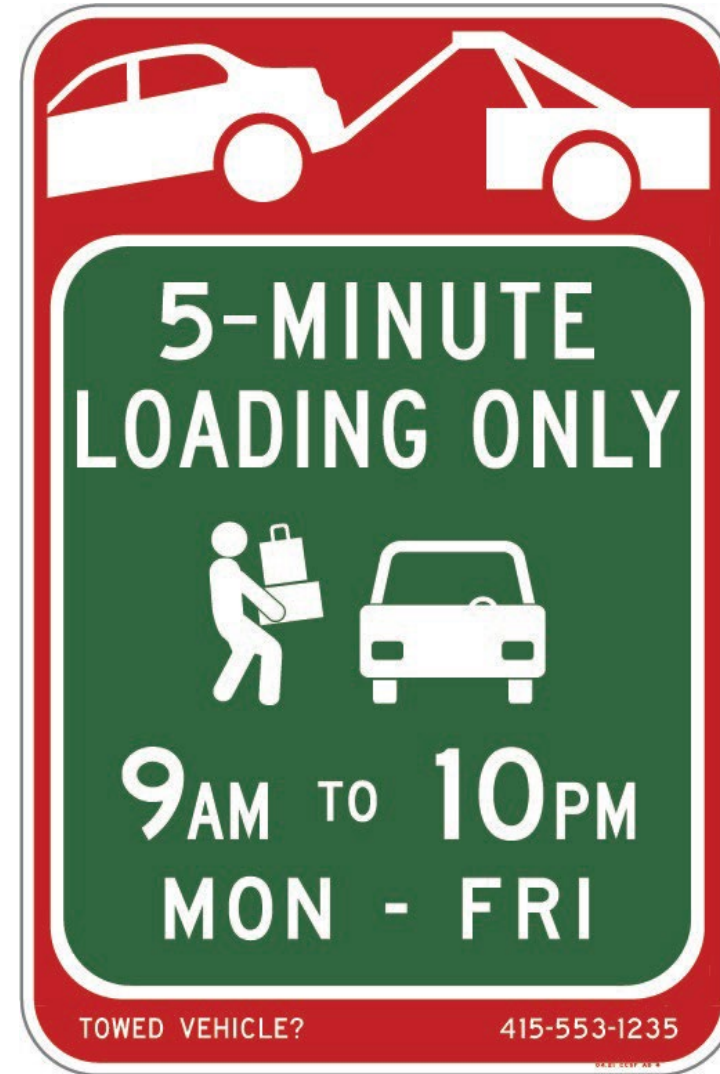


Industrial/PDR

Curb Hierarchy: Prioritization



Implementation





Seattle Curbside Management Program Highlights

Today's topics

- Curbside Management Team overview
- Seattle's evolving curbside priorities
- Curbside tools
 - Key themes
 - Many uses of The Curb
 - Curb planning tools
 - Data collection and mapping



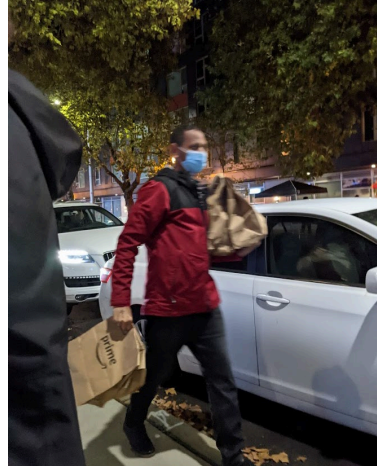
Curbside Management key themes

Curbspace – valuable, limited resource in high demand

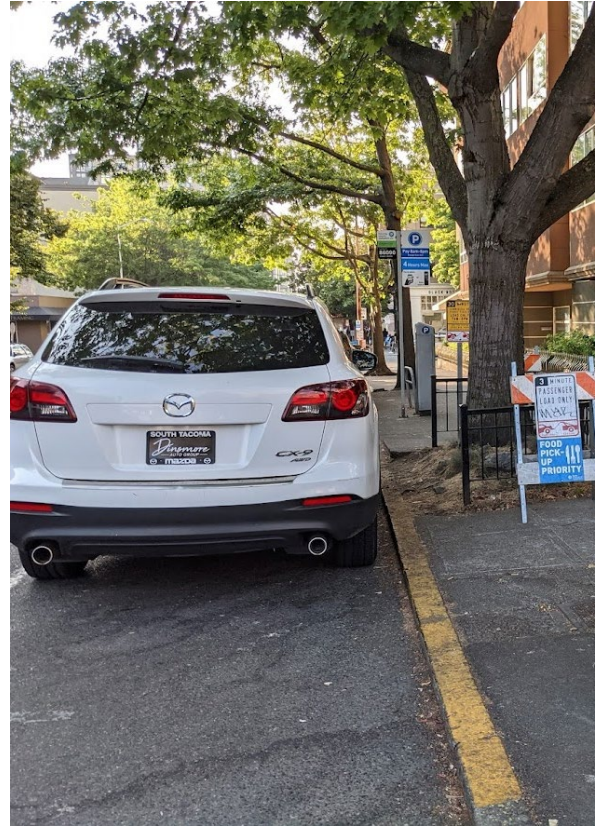
Team key themes:

- Meet / manage competing needs (transit, urban goods and services, customers, residents, shared vehicles)
- Vibrant biz districts depend on curb access for loading
- Make data-driven, performance-based decisions
- Be action, operations oriented

The Curb: Many functions + users



Curbspace planning and tools





Outdoor eating, Dinner delivery

Importance of data management

- Tracking and maintaining space inventory
- Manual street parking counts
- Video based load zone turnover, usage
- Vehicle detection sensors at load zones

Seattle Department of Transportation

2020 PAID PARKING ANNUAL REPORT

Making it Easier to Find Parking

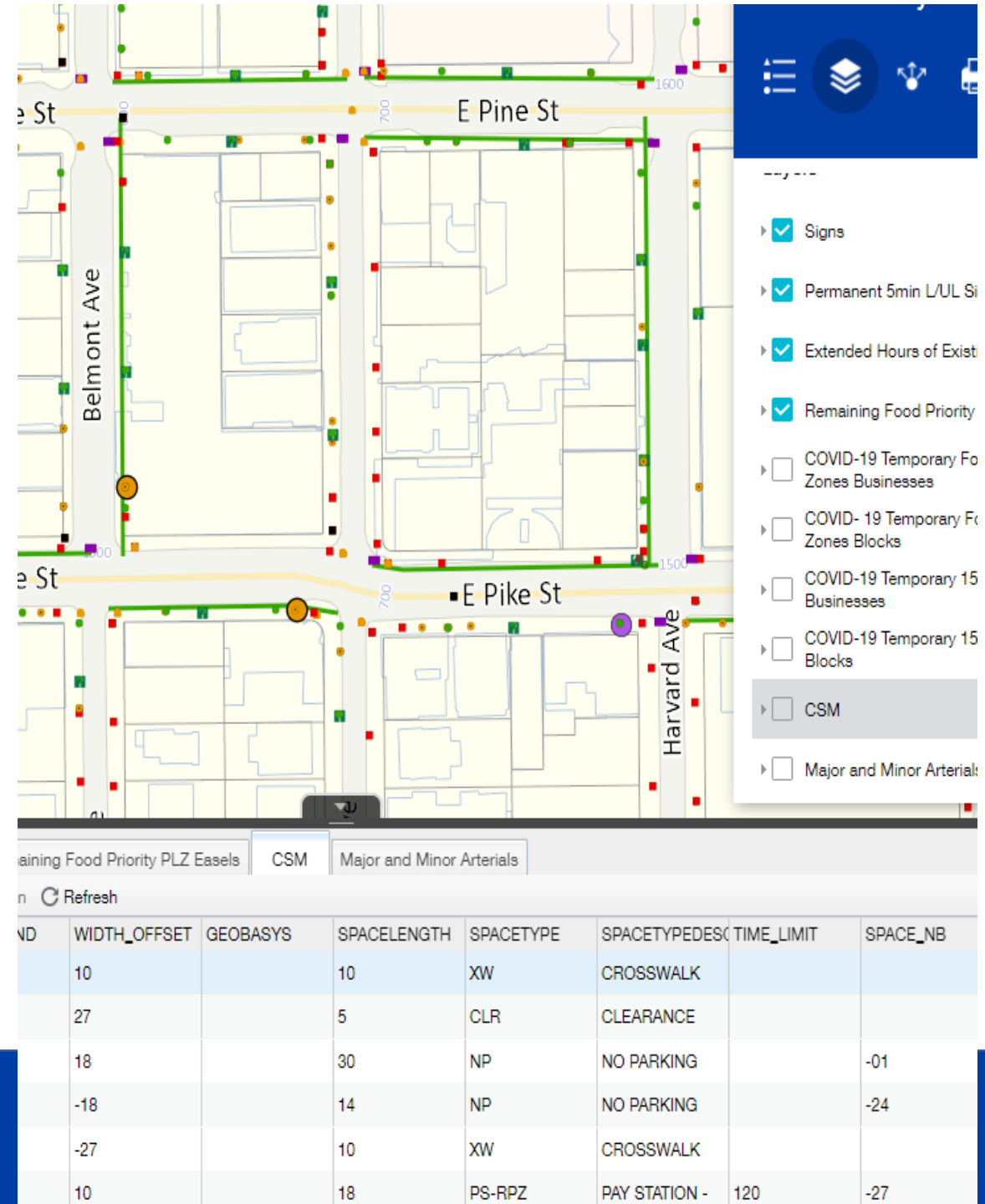


October 2021

 Seattle
Department of
Transportation

Data mapping + analytics

- Keep ongoing inventory – sign and other assets
- Interested in creating curb data by time of day, past and current
- Sharing with delivery companies to improve effectiveness



Questions?



www.seattle.gov/parking

Mary Catherine Snyder

Parking Strategist

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Mike Estey

Manager, Curbside Management

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DEVELOPING A
HIGHEST AND BEST
USE OF CURB
TOOL

Amber Evans
City of Emeryville

Emeryville had an Un-restricted, Unenforced Curb

- Occupancy at 90% -95% on some commercial corridors
- Restaurants' customers unable to find spots at lunch
- A successful shuttle facing congestion on key commercial corridor
- Meters were ripped out on San Pablo after vandalism a decade prior
- 2006 planning efforts for paid parking in the northern commercial area were stalled by the Great Recession, followed by the 2012 elimination of Redevelopment, which halved Emeryville's operating budget
- EPD had no enforcement: not even red curbs or driveways – it was the wild, west
- City poured green paint in 2013 to set the ground for curb controls but lack of enforcement stymied impact
- Parking was discussed at lunch spots as completely unenforced



IMPLEMENTED PAID PARKING IN 2021

- Pay by License Kiosks
- Park Mobile
- Meter mounted sensors
- Online receipts
- Virtual permits
- Variable Pricing
- Controls for street sweeping
- Pathway to time managed transit only lane



WITH ALL THE BELLS AND WHISTLES

Parking management led to curb management discussions

The development of a methodology for determining the highest and best use of a curb can advance conversations for:

- Curb Extensions for Active Uses
- Green Infrastructure
- Through Lanes to Promote Modal Shift
- Temporary Vehicle Stops
- Other vehicle storage
- Infrastructure
- Property access

MTC funded Highest Best Use Curb Efforts for this

50 Uses to be Considered

Curb Extensions for Active Uses

1. Parklets
2. Artlets
3. Side walk cafes
4. Curb extensions at crosswalks
5. Curb widening
6. Bus bulb-outs
7. Bike share

Green infrastructure

1. Permeable paving/passive storm water treatment
2. Planters
3. Rain gardens
4. Tree bulb-outs
5. Trees in sidewalk
6. Bike corrals
7. Bike repair

Thru Lane to Promote Modal Shift /Green Infrastructure

1. Protected bike lanes
2. Standard bike lanes
3. Transit lanes (by time)
4. Transit lanes permanent
5. Turning or sight line preservation (use restrictions)
6. Street cleaning
7. Emergency vehicle by-pass
8. Autonomous vehicle Infrastructure (RFI chips)

Temporary Vehicle Stops

1. Transit stops
2. Shuttle stops
3. Drop off and loading for cars for hire
4. Delivery and pickup of goods
5. Trash and recycling collection

Vehicle storage

1. Taxi parking
2. Rideshare parking
3. Carshare parking
4. Paid parking
5. Free parking
6. Permitted parking
7. Handicapped parking
8. Bus layovers
9. Autonomous vehicles self-parking (Infrastructure)
10. Construction parking

Infrastructure

1. Hydrant
2. Electrical poles
3. Electrical vaults
4. Temporary encroachment permit
5. Traffic signal
6. Utility boxes
7. Wifi signal poles
8. Street lights
9. Pedestrian lights

Private Access

1. Driveways
2. Loading docks
3. Construction staging

Partners

AC Transit

Amtrak

Caltrans

Commission on aging (Paratransit)

PGE

Pony Scooter

Populus

Taxi Association (Friendly Cab)

Transform

Uber

UPS

Waste Management

WayMo

Zipcar

Project Overview

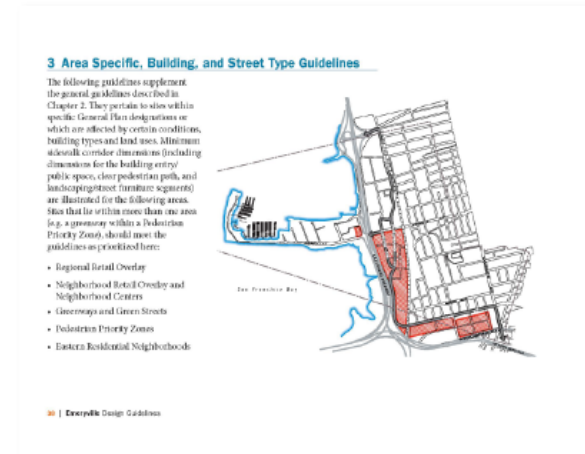
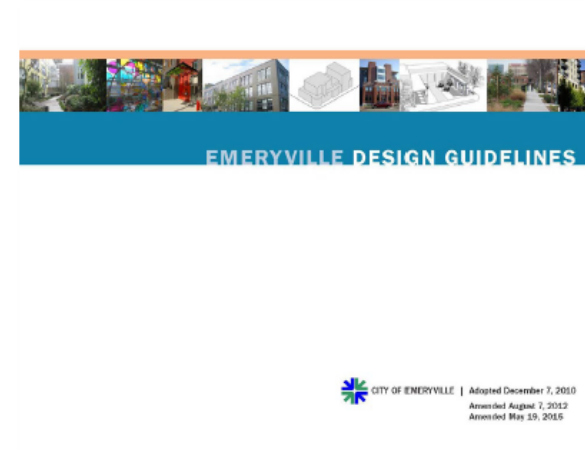
- A. Curb Use Compatibility**
- B. Flexible Curb Uses**
- C. Cost/Benefit Valuation**
- D. Curb Use Prioritization**

Cost/Benefit Valuation

	<i>Fixed</i>		<i>Fixed</i>	
	COST/BENEFIT VALUATION			
	Installation Cost	GHG Emission Reduction	City Benefit	
	Annualized Installation Cost per Parking Space Footprint	Annual GHG Emissions Reduction Value per Parking Space Footprint	Annual City Benefit per Parking Space Footprint	Annual Cost/Benefit Adjusted per Parking Space Footprint
	\$	\$	\$	\$
Activation				
Bike repair (DIY)	\$765.00			\$765.00
Sidewalk cafés	\$1,275.00		\$648	\$627.00
Parklets/Artlets	\$2,500.00			\$2,500.00
Mobility				
Pedestrian thru-way				\$0.00
Right or left turn-only lanes	\$66.25			\$66.25
Emergency vehicle by-pass				
Protected bike lane/cycle track	\$63.00	\$156		\$92.82
Bike lane	\$13.50	\$156		\$142.32
Drop off and loading for cars for hire	\$5.25			\$5.25
Electric Vehicle charging	\$1,400.00	\$1,588		\$187.90
Taxi parking	\$187.75			\$187.75

Curb Use Prioritization: General Plan Designations

- **General Plan designations based on relevant applicability**
 - Area Specific
 - Street Type
 - Building and Use Type
- **Assignment of points based on guidance from Emeryville Design Guidelines**
 - HIGH (30 pts.)
 - MEDIUM (20 pts.)
 - LOW (10 pts.)



Curb Use Prioritization: Area Specific Example

■ Pedestrian Priority Zone

- Pedestrian safety and movement are priority
- Busy activity centers, such as transit stations, neighborhood centers, schools, and City Hall
- Includes outdoor cafés and restaurant seating
- Has consistent landscaping and street furnishings
- Curb bulb-outs at intersections
- Places for public art

HIGH (30 pts.)	MEDIUM (20 pts.)	LOW (10 pts.)
<ul style="list-style-type: none">• Sidewalk café• Parklet/artlet• Curb ramp• Curb widening• Curb extension at crosswalk• Pedestrian light• Bulb-out at intersection	<ul style="list-style-type: none">• Tree well• Planter	<ul style="list-style-type: none">• Bike repair• Permeable paving/passive stormwater• Rain garden• Tree bulb-out• Bus bulb-out

Curb Use Prioritization: Street Type Example

■ Transit Street

- **Prioritized for transit service, but also accommodates pedestrians, with sidewalks and amenities, as well as automobiles, bicycles, and trucks**
- **Primary routes for public buses, including AC Transit and Emery Go-Round**
- **Provide signal preemption for transit vehicles, bus stops, and where appropriate, bus lanes**
- **Provide ample sidewalks on both sides of the street and amenities around bus stops, such as shelters, benches, and lighting**

HIGH (30 pts.)	MEDIUM (20 pts.)	LOW (10 pts.)
<ul style="list-style-type: none">• Transit-only lane• Transit queue jump• Bus bulb-out• Transit/shuttle stop• Transit/shuttle passenger environment	<ul style="list-style-type: none">• Pedestrian thru-way• Planter• Pedestrian light• Tree well• Curb ramp• Bike rack• Bike share station	<ul style="list-style-type: none">• Protected bike lane/cycle track• Bike lane• Bulb-out at intersection• Driveway or loading dock• Delivery and pickup of goods• Sidewalk café• Parklet/artlets• Permeable paving/passive stormwater• Rain garden• Curb widening• Curb extension at crosswalk

Curb Use Prioritization: Building and Use Type Example

- **Mixed-use Developments**

- **Prioritize active uses on the ground level**

HIGH (30 pts.)	MEDIUM (20 pts.)	LOW (10 pts.)
<ul style="list-style-type: none">• Sidewalk café• Parklet/artlet	<ul style="list-style-type: none">• Pedestrian thru-way• Drop off and loading for cars for hire• Driveway or loading dock• Delivery and pickup of goods• Pedestrian light	<ul style="list-style-type: none">• Curb ramp• Bike repair• Bike rack• Bike share station• Curb widening• Curb extension at crosswalk• EV charging• Paid parking

Curb Use Prioritization: People Throughput

- **Curb uses with potential for people throughput assigned points on a range from 1 to 100**
 - **HIGHEST (80-100 pts.) include transit-related uses**
 - **MEDIUM range (50-80 pts.) include pedestrian and bike facilities**
 - **LOW range (<50 pts.) include car parking, bike parking, etc.**
- **People throughput points only awarded if the curb use is a priority in the relevant General Plan designation**

Case Study Application: Hollis Street

- ✓ Transit Hub
- ✓ Transit Street
- ✓ Truck Route
- ✓ Mixed-use

■ Curb use prioritization:

1. Transit/shuttle stop (150)
2. Transit passenger environment (130)
3. Bus bulb-out (130)
4. Transit-only lane (130)
5. Transit queue jump (130)
6. Shuttle passenger environment (120)
7. Pedestrian thru-way (110)

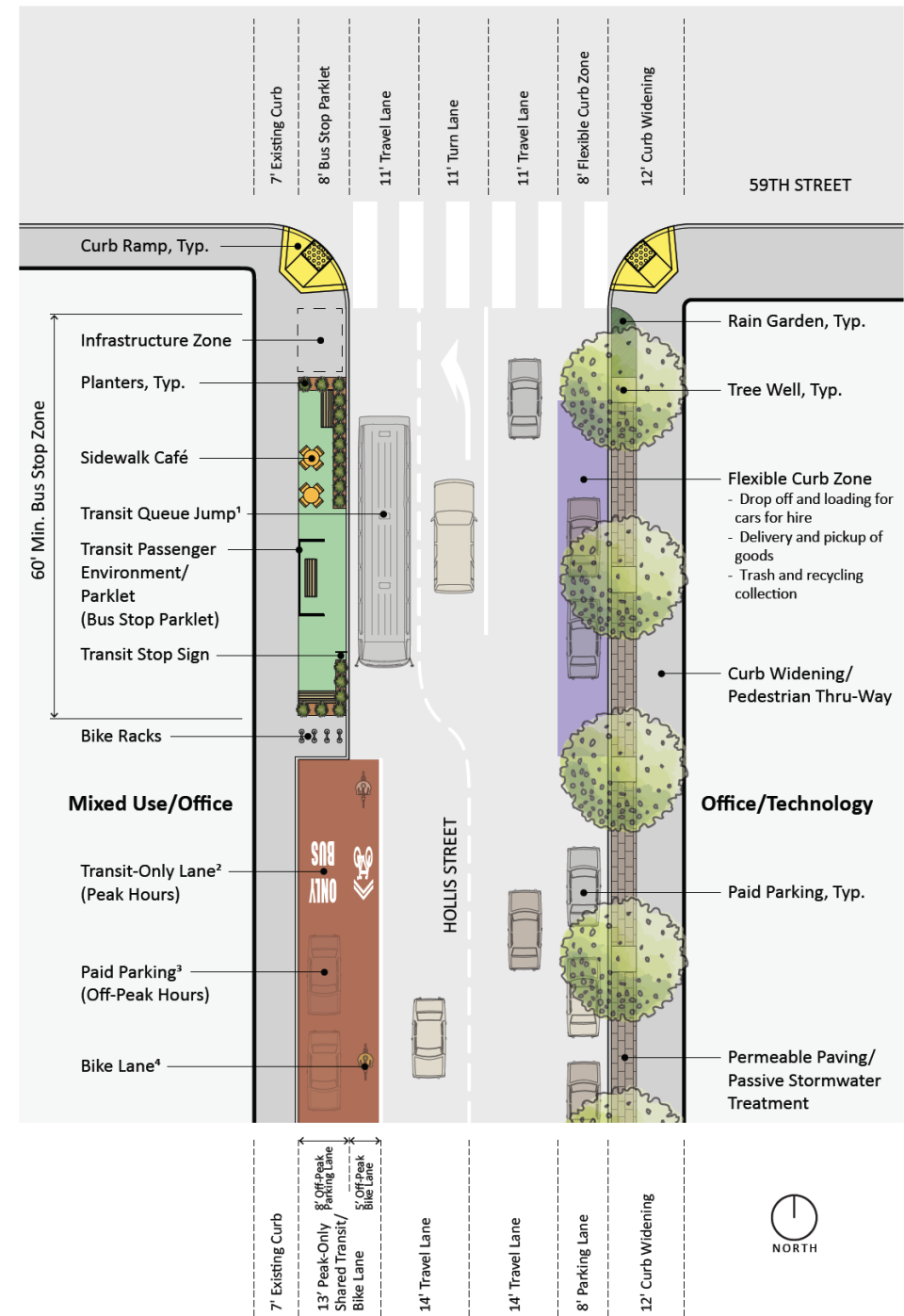


Hollis Street Corridor (between 59th and Powell Streets)

8. Bike rack (100)
9. Parklet/Artlet (100)
10. Bike share station (95)
11. Curb extension at crosswalk (90)
12. Curb widening (90)
13. Sidewalk café (90)
14. Drop off and loading for cars for hire (90)

SAMPLE HBUC DESIGN OF HOLLIS STREET AT 59TH STREET

Existing ROW: 68' Wide



Lessons

- Vertical vs Horizontal compatibility raise key tool development issues
- Mandatory infrastructure/standard set of approvals for infrastructure integration critical
- Policy documents are the backbone of basis for decisions – MTC's tool operationalizes these decisions
- Changing operations is challenging and made more challenging by remote work and sheltering in place
- Crowdsourcing of inputs is need to truly assess HBUC for capital and operation costs and thruput (proprietary data complicates)

Q&A

What questions do you have for this team as you approach your work?

Francesca Napolitan

Curb Access
Manager

SFMTA

Amber Evans

Economic Development
Coordinator

City of Emeryville

Someone

OMF

OMF

Thank you!

Click to add text

ABAG-MTC Webinar: Reconsidering Parking Development Requirements

Local Parking Policy Technical Assistance



ASSOCIATION OF BAY AREA GOVERNMENTS
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