



# Better Market Street Project

## Engineering, Maintenance and Safety Committee Meeting 8/23/17





# Market Street



# Market Street

<p>City's busiest <b>transit</b> corridor</p>	<p>Over 100 Muni buses/hour 14 surface transit lines + BART+ Muni Metro 464K daily transit boardings 67 Muni-Auto collisions (2012-2013)</p>
<p>City's busiest <b>pedestrian</b> street</p>	<p>85K pedestrians per weekend day (4<sup>th</sup> to 5<sup>th</sup>) 53 Bike/Ped-Auto collisions (2012-13)</p>
<p>City's busiest <b>bicycling</b> thoroughfare</p>	<p>Bicycle numbers have doubled since 2006 Bicycle counter data showing growth – over 3,500 riders on a good day</p>
<p>And we all want a <b>grand boulevard</b>... The City's premier civic and commercial corridor</p>	



# Market Street & Transit Modes

Central role in connecting existing and future transit modes and projected growth in employment and housing.



# Project Goals: To Improve...

- ***Safety***

- Private vehicle restrictions (buses, taxis, commercial vehicles, paratransit, and emergency vehicles exempt)
- Better, clearer, more separated facilities
- Commercial loading relocated onto other streets to reduce friction

- ***Walking and Accessibility***

- Wider transit islands
- Open new crosswalks
- Realign skewed crosswalks

- ***Cycling***

- A continuous protected cycletrack
- Two-stage left turn measures

- ***Transit***

- A BRT-like rapid service in the center track lane
- New streetcar turnback loop
- Travel time savings of 15-25%

- ***Infrastructure (old pavement, rusting signals, etc)***

- ***Public Space and Street Life***



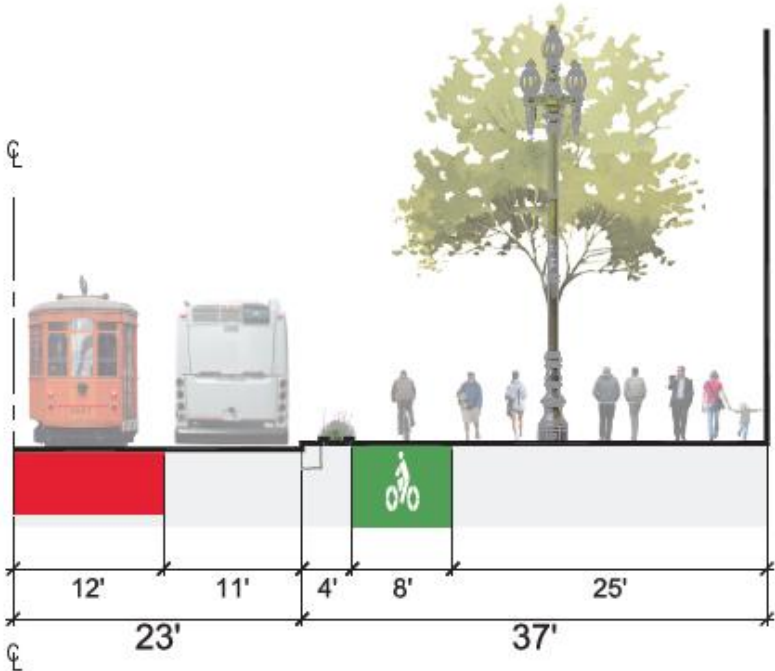
# Current Status of the Project

- Alternatives Analysis
- Initial Study
  - define the alternatives for further analysis
- Conceptual Engineering and Transportation Impact Study
- EIR
- Final Design
- Construction





# PREFERRED DESIGN



SECTION



PLAN

# Street level view of sidewalk today





# Proposed street level view of sidewalk



**1 TRANSIT DESIGN**

**2 BICYCLE AND PEDESTRIAN DESIGN**

**3 VEHICULAR RESTRICTIONS**

**4 LOADING**



# Market Transit Future: Reduce delays, 22% more capacity

Rapid Service  
Transit Stop Optimization  
Transit Only Lanes  
F Turnback Loop  
Auto restrictions  
Separate bicycle facility

**Anticipated travel  
time savings:  
15-20% Local  
20-25% Rapid**



# Rapid Service & Consolidated Stops

- Center lane Rapid stops at BART/Muni stations near station elevators (5R, 7R, 9R, 38R, F)
  - 50% decrease in stops on new Rapid Service
- Moderate increase in space between local stop

Existing	<u>24 stops</u> 950' spacing	
Proposed	Local: <u>21 stops</u> 1079' spacing	Rapid: <u>13 stops</u> 1905' spacing

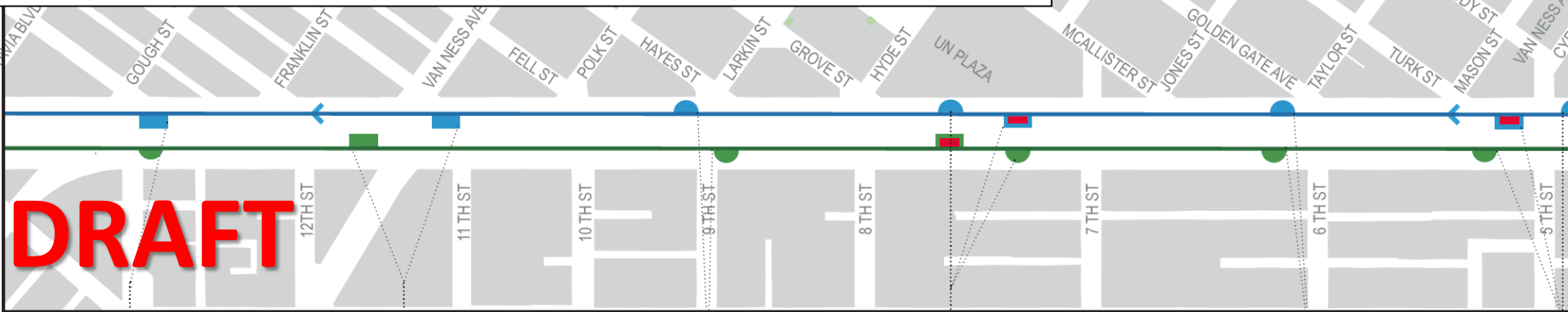


# Transit Stop Spacing Octavia to 5<sup>th</sup> Street

Existing

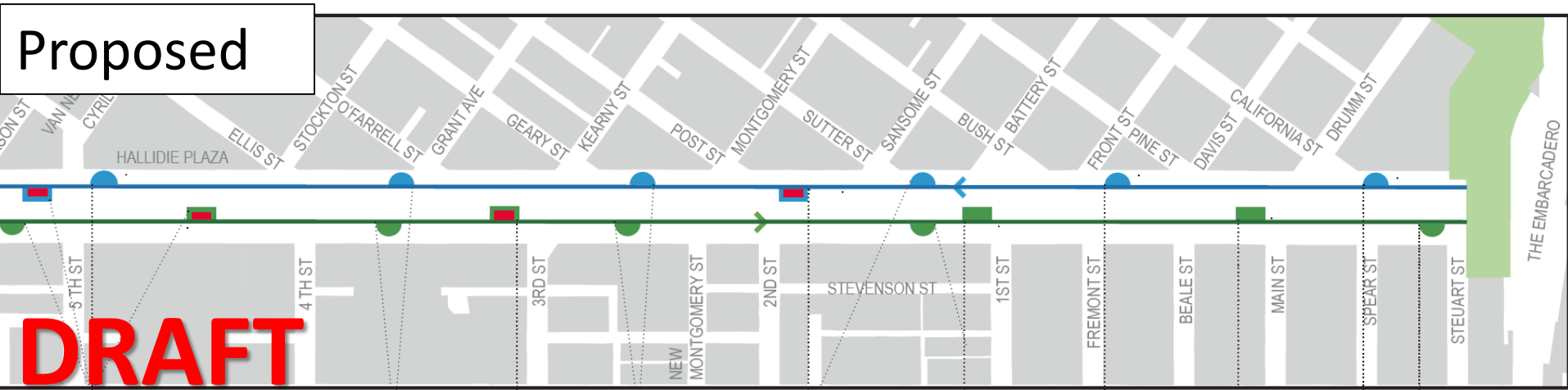


Proposed



 CURB  ISLAND (RAPID)  ISLAND (LOCAL)

# Transit Stop Spacing 5<sup>th</sup> Street to Embarcadero



**DRAFT**

 CURB  ISLAND (RAPID)  ISLAND (LOCAL)



# Doubling Transit Stop Capacity

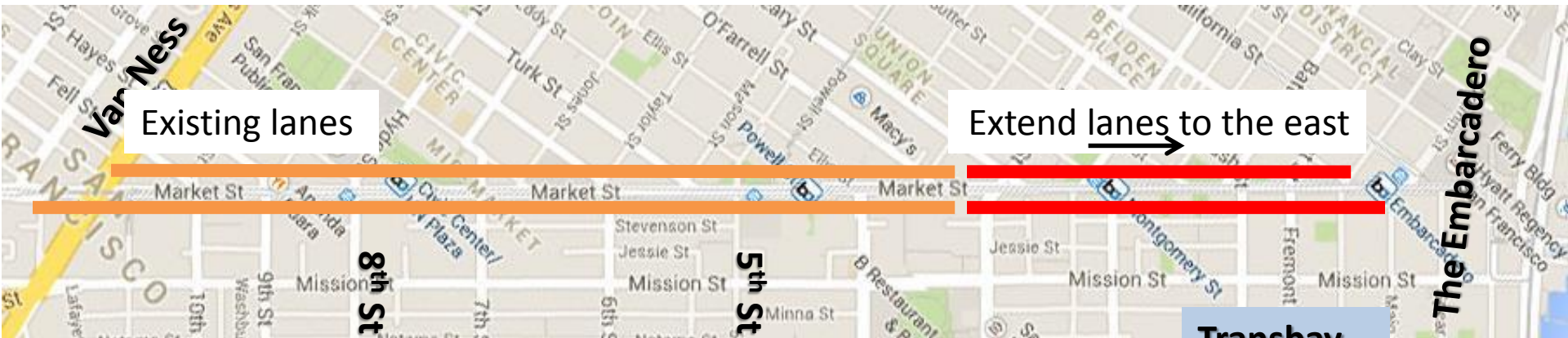
- Longer islands for more buses
  - Existing islands cannot load two 60' buses simultaneously.
  - Inbound stops would fit up to 3 articulated buses simultaneously. Outbound designed for 1-2 buses.
- Wider stops = better experience
  - Existing stops as narrow as 5'. New 8' wide islands to provide ADA wheelchair access. Currently only half are ADA accessible.



Existing boarding area  
Average 570 sq ft

Future boarding area  
Average 1130 sq ft

# Extend & Colorize Transit Only Lanes

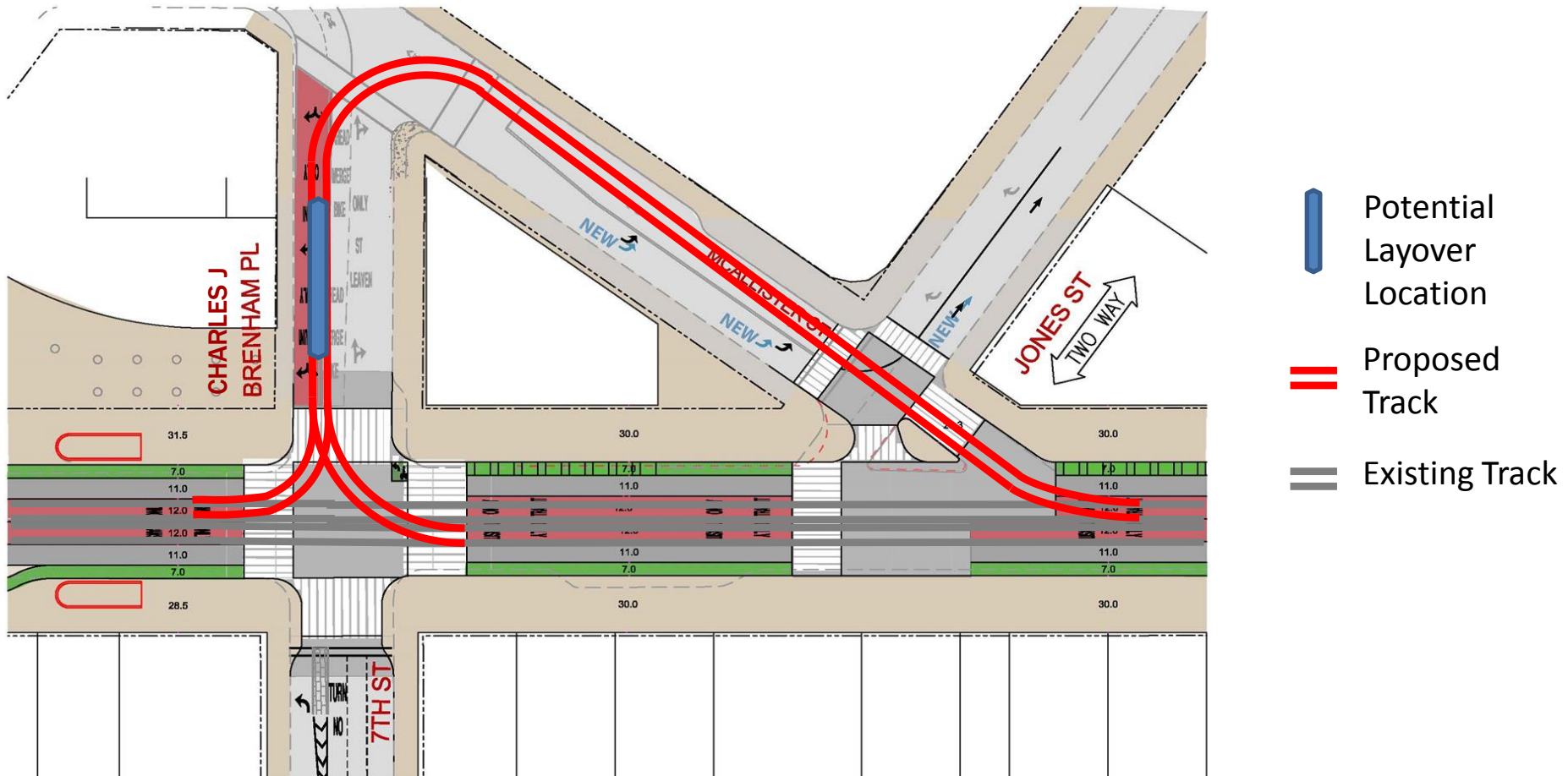


- Adding red treatment improves transit only lane visibility and self-enforcement
- Extending the transit only lanes will prioritize the Rapid service and improve safety through reduced lane changes
- Prohibiting taxis from center lane will prevent island blockages



# New F Turn-back Loop & Layover

Will better match F line service to higher demand between Powell and Fisherman's Wharf





# Cycle track Improves Safety & Operations

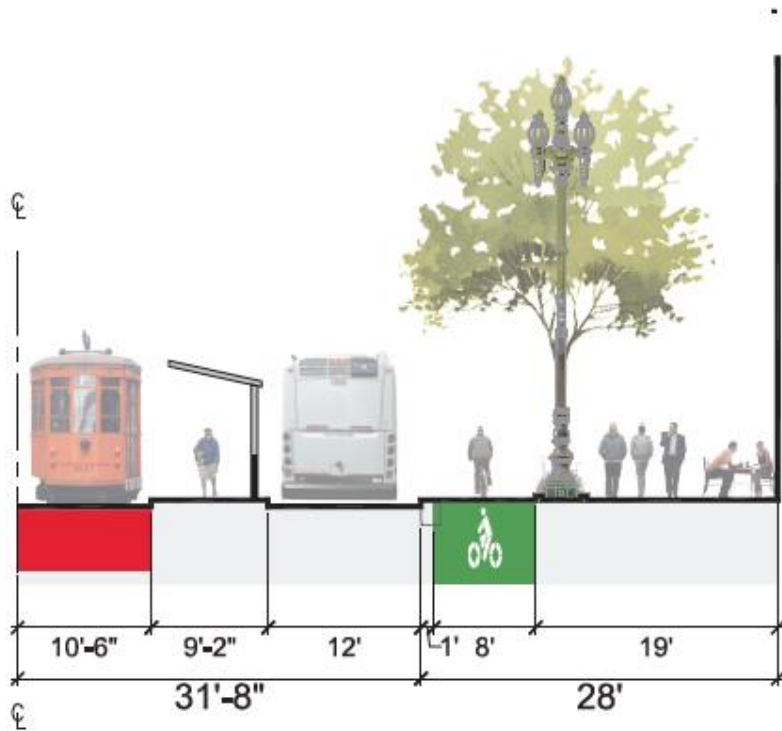


Market Street Today



Cycle Track & Transit Island: Church/Duboce

# Sidewalk Level Cycle Track—Center Boarding Island



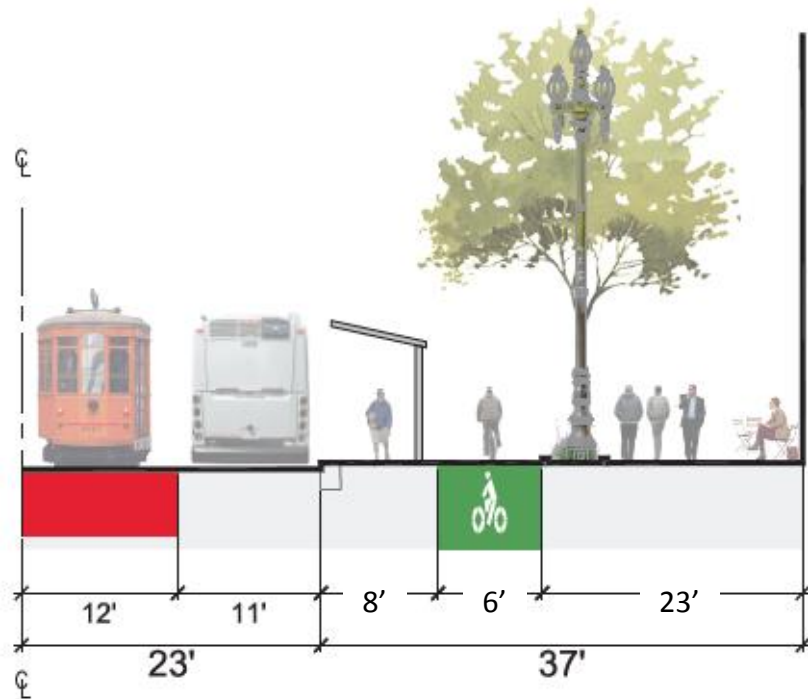
SECTION



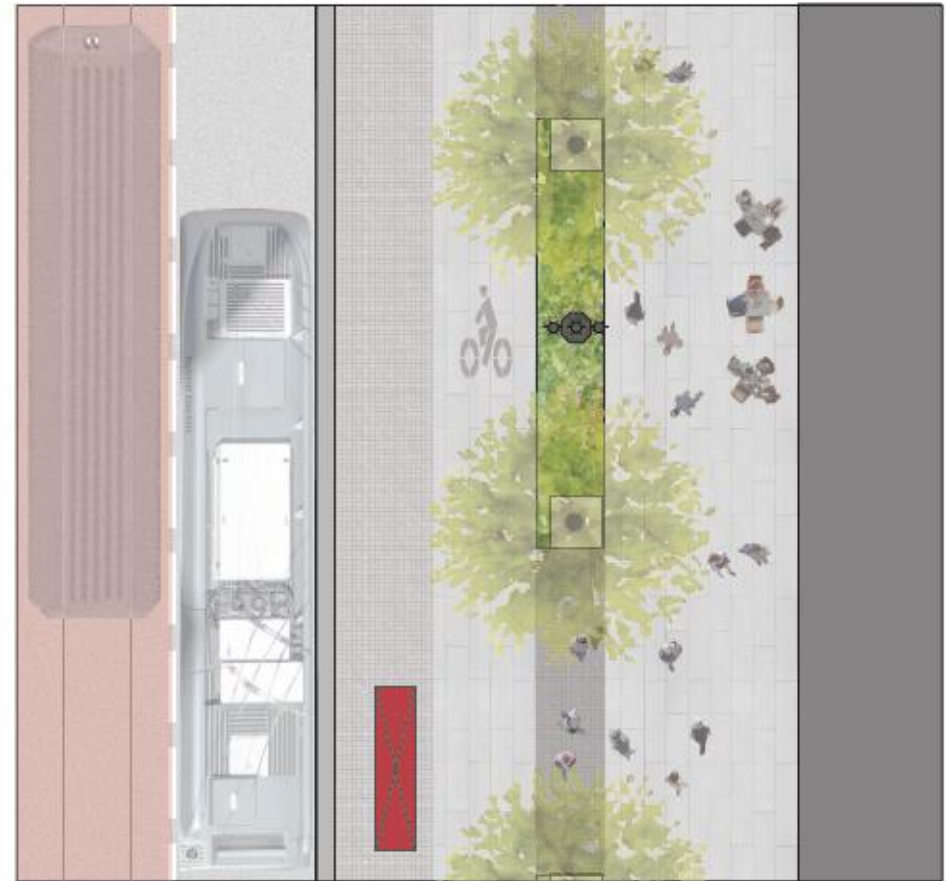
PLAN



# Sidewalk Level Cycle Track—Curbside Boarding Island



SECTION



PLAN





**1 TRANSIT DESIGN**

**2 BICYCLE AND PEDESTRIAN DESIGN**

**3 VEHICULAR RESTRICTIONS**

**4 LOADING**

# Pedestrian and Cycling Improvements

- Wider sidewalks and pedestrian bulbouts
- Jughandle / bike route connections
- Realigned crosswalks/opening closed crosswalks
- New pavers and site furnishings



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**3 VEHICULAR RESTRICTIONS**

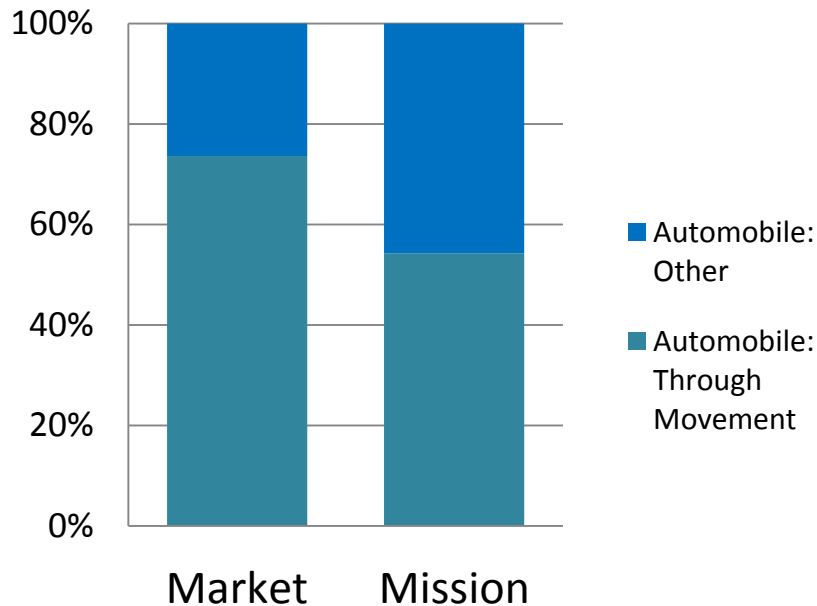
**4 LOADING**



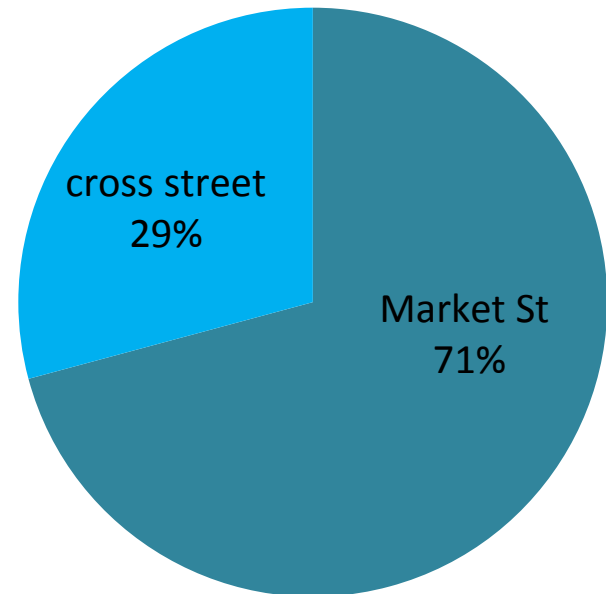
# Analysis of Collision Trends

- Market has collision rate >4 times higher than Mission Street
- More collisions caused by cars going straight

## Auto vs. Bike/Ped Collisions



## Street of At-Fault Vehicle



# Proposed Western Vehicle Restrictions

(Private vehicles only; buses, taxis, bicycles, trucks, paratransit exempt)

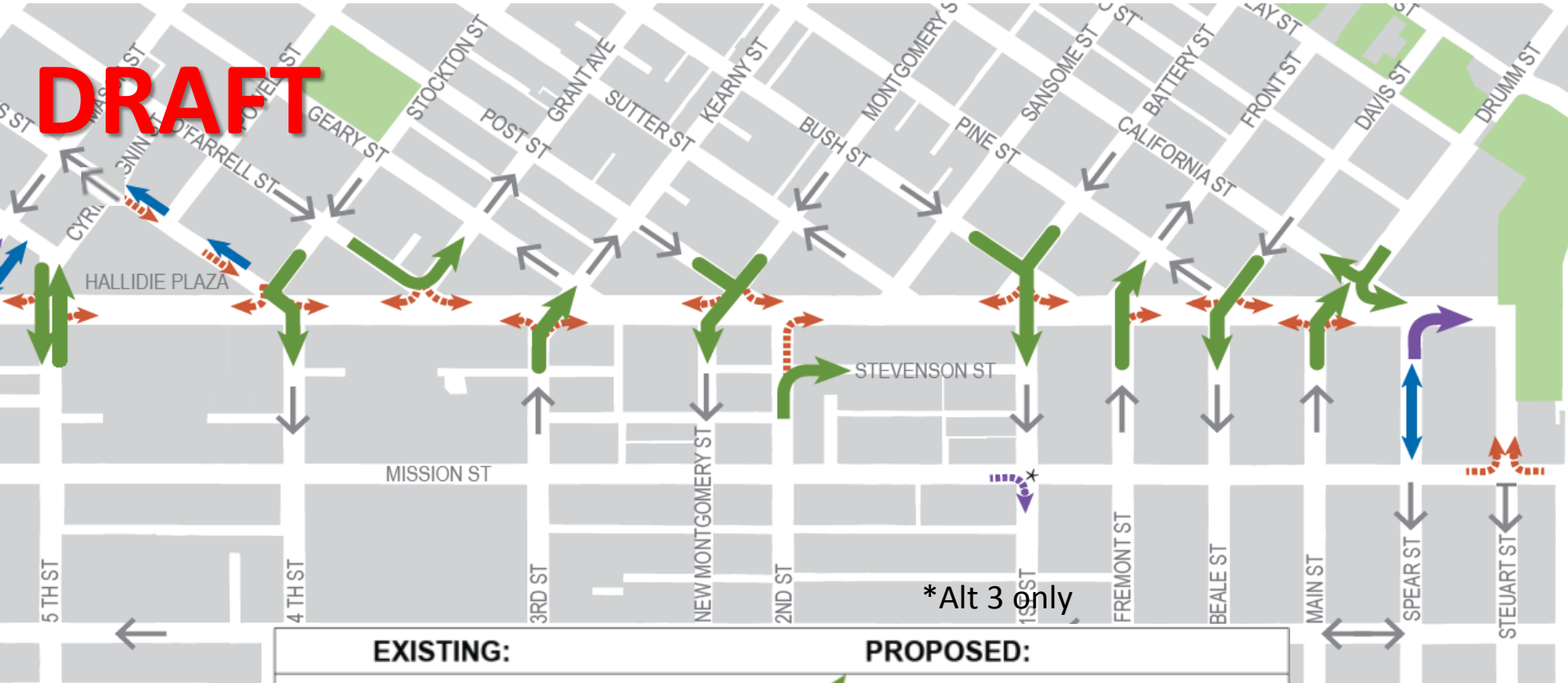
**DRAFT**



EXISTING:	PROPOSED:
One-Way Street	Allowed Traffic Movement
Existing Required Turn	New One-Way
Existing Movement Proposed to Be Restricted	Two-Way Conversion
	New Required Turn

# Proposed Eastern Vehicle Restrictions

(Private vehicles only; buses, taxis, bicycles, trucks, paratransit exempt)



EXISTING:	PROPOSED:
One-Way Street	Allowed Traffic Movement
Existing Required Turn	New One-Way
Existing Movement Proposed to Be Restricted	Two-Way Conversion
	New Required Turn



**1 TRANSIT DESIGN**

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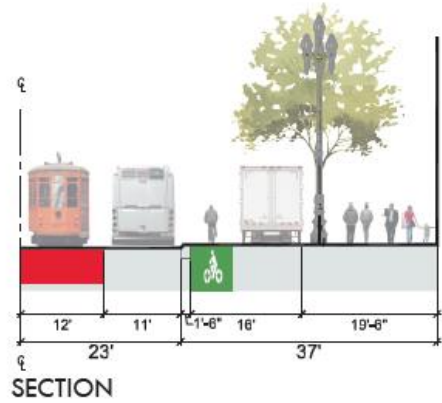
# Refining Loading Proposals

- Work with new buildings being developed to avoid need to load on Market
- Work with property owners/businesses to shift loading activities to alleys or cross streets
- Identify locations where none of the above maintain access and work with them on a case-by-case basis, perhaps:
  - Time-of-day restrictions (promoting nighttime deliveries)
  - Retaining key loading bays
  - Promoting last mile delivery methods

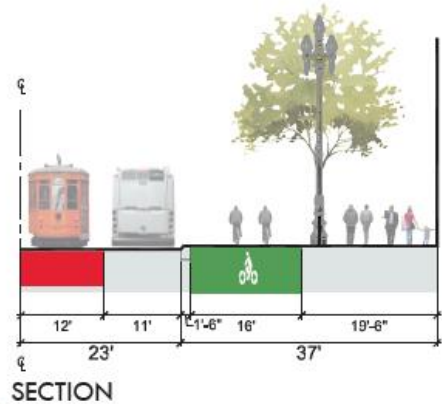


# Sidewalk Level Cycle Track—Flex zone design

NON-PEAK



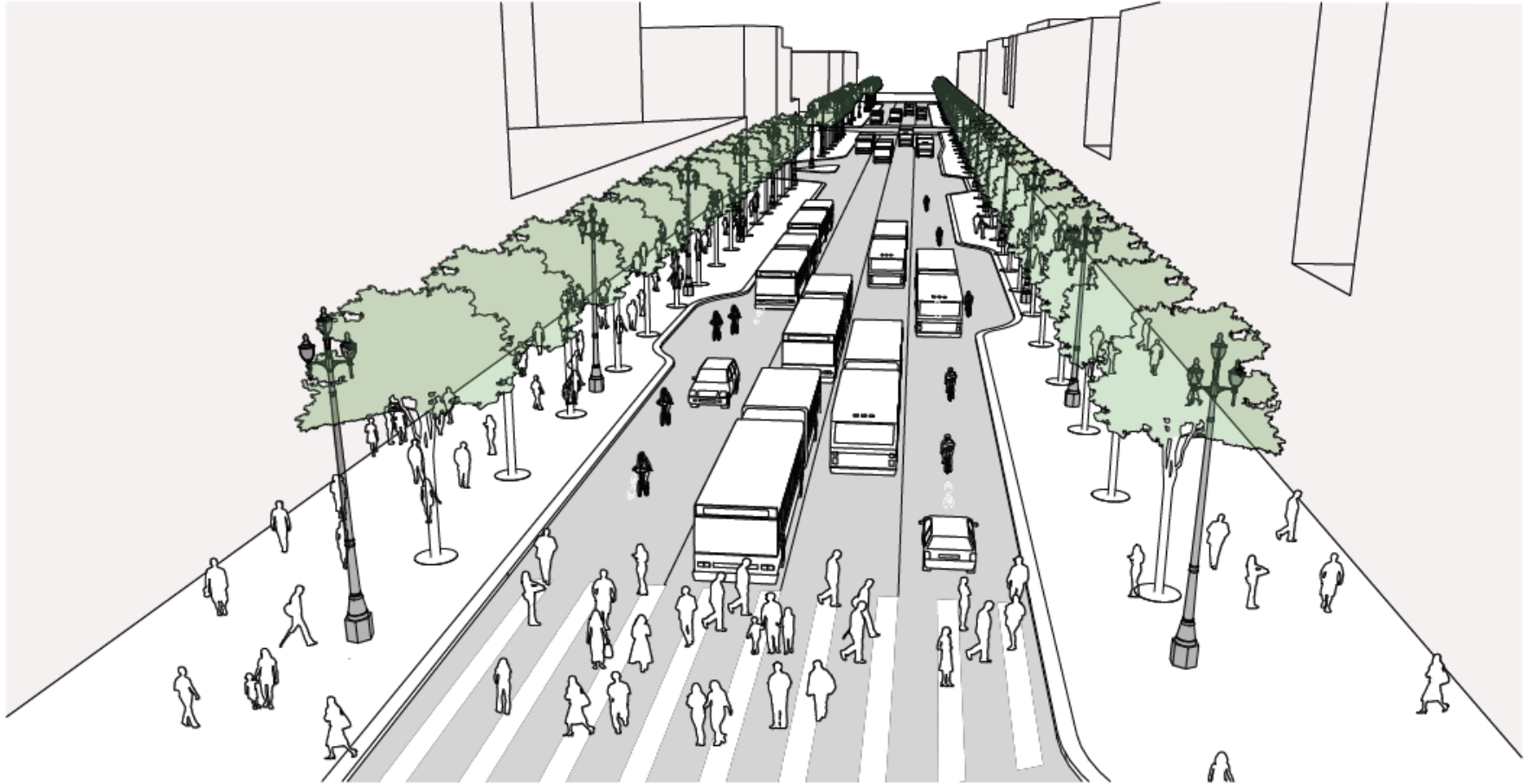
PEAK





# Isometric view

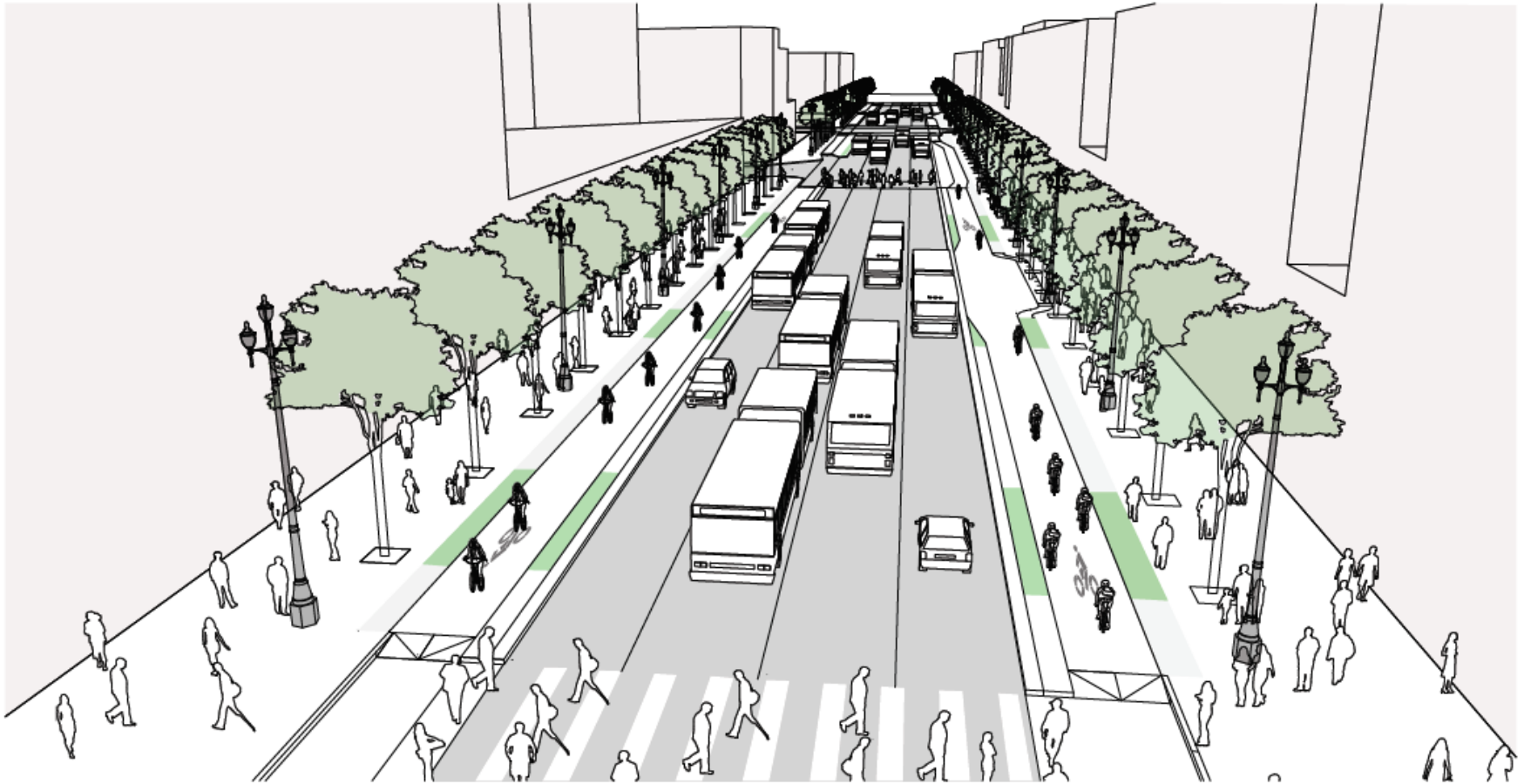
## EXISTING CONDITION



35' WIDE SIDEWALK // 15' PEDESTRIAN ZONE // 10'-18' FURNISHING ZONE // SHARED BIKE LANE



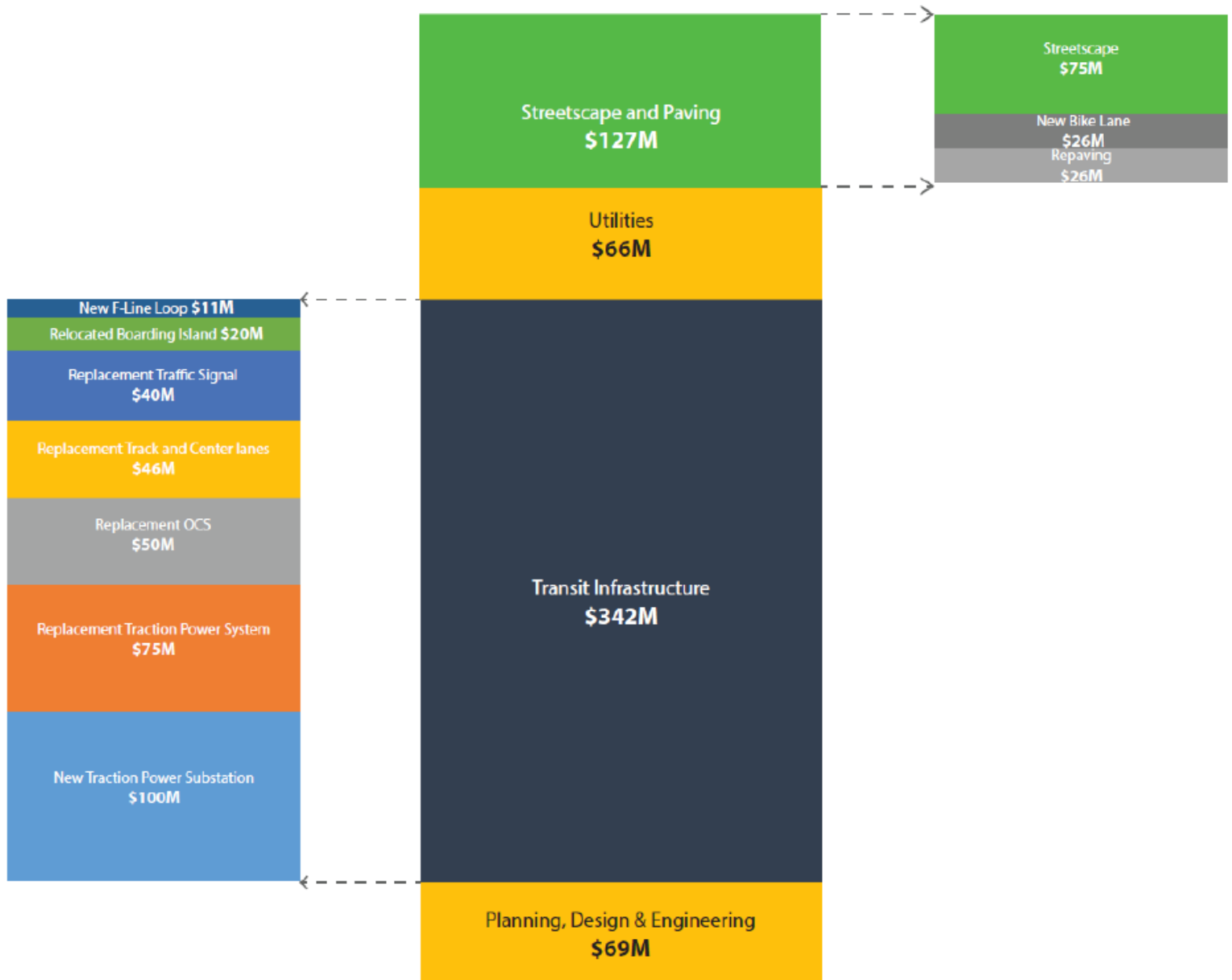
# Isometric view



37' WIDE SIDEWALK // 15' PEDESTRIAN ZONE // 8'-10' FURNISHING ZONE // PROTECTED BIKE LANE



# Better Market Street is a \$604 million project



\$604M Cost Estimate



# Outreach

This project has been in the works for the past several years and has had over a hundred community meetings and presentations to interested parties.

BMS Citizen Advisory Committee meetings since 2011.

As we continue our design, the project team will perform additional outreach to the community, residents, stakeholders, community organizations, advocacy groups, and local businesses.

Your input is needed to finalize paving materials for sidewalk, loading locations, and other streetscape features.



# Timeline & Approvals

Date	What
May 2017	Sidewalk level bicycle lane design presented to Directors' working group for approval
August 2017	Identify Phase 1 segment for construction
September 2017	Develop schedule for delivery of Phase 1 construction package
Winter 2019	Complete Design
Winter 2019	DEIR release for CEQA/NEPA
Summer 2019	Complete CEQA/NEPA
Summer/Fall: 2019	SF Planning Commission approval of FEIR
Fall 2019	SFMTA Board approval
Fall 2019	BOS legislation for sidewalks
2019	Construction of 1 <sup>st</sup> segment



# Thank You!



Photo by Mark Dreger

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