Better Market Street Project

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

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

<table>
<thead>
<tr>
<th>Existing</th>
<th>Proposed</th>
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<tr>
<td>24 stops</td>
<td>Local: 21 stops</td>
</tr>
<tr>
<td>950’ spacing</td>
<td>1079’ spacing</td>
</tr>
<tr>
<td></td>
<td>Rapid: 13 stops</td>
</tr>
<tr>
<td></td>
<td>1905’ spacing</td>
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Transit Stop Spacing
Octavia to 5th Street

Existing

Proposed

DRAFT

CURB  ISLAND (RAPID)  ISLAND (LOCAL)
Transit Stop Spacing
5th Street to Embarcadero

Existing

Proposed

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
Sidewalk Level Cycle Track—Curbside Boarding Island
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
1 TRANSIT DESIGN
2 BICYCLE AND PEDESTRIAN DESIGN
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**

Market: 80%
Mission: 60%

- Automobile: Other (60% Market, 40% Mission)
- Automobile: Through Movement (40% Market, 60% Mission)

**Street of At-Fault Vehicle**

- Market St: 71%
- Cross street: 29%
Proposed Western Vehicle Restrictions
(Private vehicles only; buses, taxis, bicycles, trucks, paratransit exempt)
Proposed Eastern Vehicle Restrictions

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

*Alt 3 only

EXISTING:
- One-Way Street
- Existing Required Turn
- Existing Movement Proposed to Be Restricted

PROPOSED:
- Allowed Traffic Movement
- New One-Way
- Two-Way Conversion
- New Required Turn

DRAFT
1 TRANSIT DESIGN
2 BICYCLE AND PEDESTRIAN DESIGN
3 VEHICULAR RESTRICTIONS
4 LOADING
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
Isometric view

EXISTING CONDITION

35' WIDE SIDEWALK // 15' PEDESTRIAN ZONE // 10'-18' FURNISHING ZONE // SHARED BIKE LANE
37’ WIDE SIDEWALK // 15’ PEDESTRIAN ZONE // 8’-10’ FURNISHING ZONE // PROTECTED BIKE LANE
Better Market Street is a $604 million project

- Streetscape and Paving $127M
- Utilities $66M
- Transit Infrastructure $342M
- Planning, Design & Engineering $69M
- New F-Line Loop $11M
- Relocated Boarding Island $20M
- Replacement Traffic Signal $40M
- Replacement Track and Center lanes $46M
- Replacement OCS $50M
- Replacement Traction Power System $75M
- New Traction Power Substation $100M
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

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