Transportation Recovery Plan

Board of Directors
June 2, 2020
Bay Bridge Weekday AM Peak Toll Plaza Volumes

Shelter-in-place order begins
Travel time increase predictions
Square F required to move one person

- Driving: 120 square feet
- Walking: 10 square feet
- Bicycling: 15 square feet
- Muni: 3 square feet
- Full: 4.5 square feet
- Packed: 11 square feet

COVID
In this diagram, the 45 people in cars are taking 89% of the space on the street, the 100 people walking, bicycling and riding the bus are taking up 11%.
Assuming our downtown streets were

Street space, post-COVID
Recovery Plan
Recovery Plan
Post-recovery
<table>
<thead>
<tr>
<th>Transportation Demand Drivers</th>
<th>Shelter-in-place Essential trips only</th>
<th>Increase in trips for outdoor recreation and to neighborhood commercial (pickup/delivery)</th>
<th>Expansion of trips to neighborhood commercial corridors and to large institutional employers</th>
<th>Increased trips to neighborhood commercial corridors</th>
<th>School trips</th>
<th>Trips to downtown increase until transit and roadway capacity is exceeded</th>
<th>Relaxation of distancing requirements permits transit to carry more people per vehicle, allowing trips downtown to increase</th>
<th>Health orders lifted, permitting return of travel behaviors to &quot;new normal&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Muni Service</strong></td>
<td>Core Service</td>
<td>Increased frequency on Core Service routes.</td>
<td>Core Service + two additional routes, and capacity increases.</td>
<td>No change</td>
<td>Rail service resumes, expansion of coverage and frequencies</td>
<td>No change</td>
<td>Final expansion of service coverage and frequencies</td>
<td>Final expansion of service coverage and frequencies</td>
</tr>
<tr>
<td><strong>Transit Lanes</strong></td>
<td>Existing network</td>
<td>No change</td>
<td>Begin installation of temporary treatments in critical locations.</td>
<td>No change</td>
<td>Continuing targeted temporary treatments installation</td>
<td>No change</td>
<td>Wrap up installation of temporary treatment, install permanently legislated lanes</td>
<td>Resume regular Muni Forward program</td>
</tr>
<tr>
<td><strong>Bicycle Network</strong></td>
<td>Existing network</td>
<td>No change</td>
<td>Begin installation of previously approved bike lanes.</td>
<td>No change</td>
<td>Continue installation of previously approved bike lanes</td>
<td>No change</td>
<td>Potential expansion of bicycle network</td>
<td>Resume bike network expansion program</td>
</tr>
<tr>
<td><strong>Slow Streets</strong></td>
<td>5 corridors</td>
<td>Citywide expansion of Slow Streets program</td>
<td>Continued expansion of Slow Streets locations</td>
<td>No change</td>
<td>Continue installation of previously approved bike lanes</td>
<td>No change</td>
<td>Slow Streets becomes ongoing tool for short term street closures</td>
<td>No change</td>
</tr>
<tr>
<td><strong>Sustainable Streets Operations</strong></td>
<td>Emergency and essential repairs only</td>
<td>Field staff return to work; prioritize 311 calls &amp; deferred maintenance.</td>
<td>Bikeshare / scootershare resume full service, implement transit/bike lanes</td>
<td>No change</td>
<td>Program includes permanent Quick Build features</td>
<td>No change</td>
<td>Implement/refine projects in response to emerging demands</td>
<td>No change</td>
</tr>
<tr>
<td><strong>Parking Enforcement</strong></td>
<td>Ticketing suspended for most violations except color curb. Meter time limits waived</td>
<td>No change</td>
<td>Enforcement for street sweeping will resume; review of meter policies to support businesses</td>
<td>Possible changes in meter policy to support businesses</td>
<td>Parking enforcement resumes for all violations. Customer Service Center reopens</td>
<td>No change</td>
<td>No change</td>
<td>No change</td>
</tr>
<tr>
<td><strong>Parking &amp; Curb Management</strong></td>
<td>Some city-owned garages closed. Addi! curb space given to COVID testing, grocery stores, Muni stops, curbside pickup</td>
<td>No change</td>
<td>Parking garages reopen; Support Shared Spaces program</td>
<td>Support Shared Spaces program</td>
<td>Review/repurpose curb space to support economic recovery</td>
<td>Review of temporary expansion of sidewalks to support increased capacity while distancing</td>
<td>Transition to long-term curb management strategy</td>
<td>No change</td>
</tr>
<tr>
<td><strong>Taxi, Paratransit &amp; Accessibility</strong></td>
<td>ETC card established to provide assistance to people too far from core Muni service</td>
<td>No change</td>
<td>Taxi customer service window reopens</td>
<td>No change</td>
<td>Discount ID center reopens</td>
<td>No change</td>
<td>Continuation of ETC program after emergency ends</td>
<td>No change</td>
</tr>
</tbody>
</table>

Note: Subject to Change
Evaluation

- Ongoing effort as the Bay Area progresses from shelter-in-place through different levels of economic activity
- Ensures the transportation network evolves to meet changing mobility needs
- Includes ongoing monitoring and regular reporting
- Involves public input on what gets evaluated
Public Engagement

• Informs community of Transportation Recovery Plan as its implemented
• Involves community in evaluation process
• Ensures community concerns and aspirations are reflected in the evaluation framework, monitoring and evaluation tools
Today’s Session

Transit

Bikeways & Slow Streets

Neighborhood Business Corridors

Managing Congestion & Travel Demand
Transit: Challenges
Muni service hours lost in this crisis

4-5% pre-COVID missed service
4-5% from eliminating overtime
8-10% service reduction through attrition without replacement
10% lost hours due to increased leave/COVID vulnerability

Today, service is 70% of what was scheduled in January 2020
Effects of traffic congestion on service

Today, service is 70% of pre-COVID levels.

However, due to fewer cars on the road, we are seeing travel time savings between 15% and 50% on our lines.

As traffic congestion returns, with the same amount of hours, our service delivery will approach 60% of pre-COVID levels.
Distancing requirements restrict capacity

Pre-Covid = Today x3
Muni serves those who need it most

<table>
<thead>
<tr>
<th>Core Network Line</th>
<th>Title VI</th>
<th>Minority</th>
<th>Low Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 California</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Fulton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Bayshore</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>9 San Bruno</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>9R San Bruno Rapid</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>12 Folsom/Pacific</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Mission</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>14R Mission Rapid</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>19 Polk</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Fillmore</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Divisadero</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 Treasure Island</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>28 19th Avenue</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
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</tr>
</thead>
<tbody>
<tr>
<td>29 Sunset</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>38 Geary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38R Geary Rapid</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>44 O'Shaughnessy</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>49 Van Ness/Mission</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>54 Felton</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>LBUS Taraval Bus/Owl</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>MBUS Shuttle</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>NBUS Judah Bus/Owl</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>TBUS Third Bus</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>90 San Bruno Owl</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>91 3rd-19th Ave Owl</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

71% of today’s service hours are delivered on routes where a high proportion of riders are people of color or are members of a low-income household.
1. Emergency Implementation of Transit Lanes
   During Local Emergency Declaration
   Planning, Design, Implementation
   Muni Forward Teams
   Outreach, Legislation
   DOC

2. Evaluation, Permanent Legislation and Implementation of Transit Lanes
   July 2020 to July 2021
   Planning, Outreach, Design, Legislation, Implementation
   Muni Forward Teams

3. Development and Legislation of Full Muni Forward Elements
   January 2021 to January 2022
   Planning, Outreach, Design, Legislation
   Muni Forward Teams

4. Full Muni Forward Project Construction
   June 2021 onwards
   Outreach and Implementation
   Muni Forward Teams
Transit: Tradeoffs
Bikeways & Slow Streets
Bikeways & Slow Streets: Overview

- Maintain priorities
  - Quick-build program
  - Protected bike lanes
  - Bikeshare expansion

- Adjust workplan to meet recovery needs
  - Slow Streets
  - Tenderloin neighborhood plan
  - Fell St
Existing Network
Approved Projects
Design In-Process
Bikeway Expansion – Recovery Plan

• Protected lanes
  • Complex design challenges
  • $1M per mile (even for quick-builds)
  • Fewer opportunities in outer neighborhoods

• Slow Streets
  • Low cost
  • Widespread applicability
  • Maintenance burden?
Slow Streets
Bikeshare: current status

- 230 stations out of 320 installed
- 4-year contract with Lyft for e-bikes signed in Jan 2020
- 17,000 daily trips (Feb 2020)
Recovery Plan: Bikeshare Expansion

• 85 new stations
• 100+ new bike racks per month
• Deploy 4,000 hybrid e-bikes with citywide service area
Bikeshare Expansion: Focus Areas
Bike Infrastructure: Discussion
Neighborhood Commercial Corridors
Curbside Pick-up and Queueing Space

Using valuable curb space for:

- Curbside pick-ups
- Social distancing space
Shared Spaces Program
Parking meters and enforcement
Public space for economic recovery: Tradeoffs
Neighborhood Commercial Corridors: Discussion
Managing Congestion & Travel Demand
Pre-COVID: 34 minute commute
Scenario One: 55 minute commute
Scenario Two: 25 minute commute

Predicted travel time in post-Covid scenario

- BPR curve fit
- Historical data
- Prediction

Transit shift to SOV: 34%
Carpool shift to SOV: 34%
Jobs lost: 5%
Shift to remote work: 20%
Select city: San Francisco, CA
Scenario Three: 31 minute commute
Managing Congestion & Travel Demand: Challenges
Managing Congestion & Travel Demand: Possible Solutions
Managing Congestion & Travel Demand: Tradeoffs
Managing Congestion & Travel Demand: Discussion
Next Steps