



Better Market Street

CAC Presentation | April 26, 2021



1. Welcome and CAC Member Roll Call [5 Minutes]
2. Car-Free Market Street Compliance Update [5 Minutes]
3. Review Phase 1 Critical Infrastructure Improvements
Scope of Work [30 Minutes]
4. Construction Sequencing Update [5 Minutes]
5. Open CAC Discussion/Questions: [15 Minutes]

Enforcement push started March 29

- SFPD Traffic Company and SFMTA PCOs had visible presence
- PCOs positioned at 8th, 5th and 3rd Streets
- SFPD monitored corridor and cross streets within one block of Market
- In first three weeks, SFPD had 917 “contacts” which resulted in 783 warnings, and 134 citations, of which 47 were to TNCs (e.g. uber/lyft).

| Violation* | Warnings | Citations |
|---|------------|------------|
| 7.2.72 TC (Drive in Transit Lane) | 240 | 42 |
| 21461(a) CVC (Fail to obey sign or signal) | 272 | 40 |
| 22101(d) CVC (Disobey directions of traffic control device) | 110 | 25 |
| Various - obstruct lane, speed, drive in bike lane, failure to yield to pedestrian, red light violation, riding scooter on sidewalk, u-turn | 69 | 20 |
| Other (unspecified) | 92 | 7 |
| TOTAL | 783 | 132 |

Violations both on Market and on adjacent cross streets. Data by location not available



Better Market Street

Critical Infrastructure Improvements



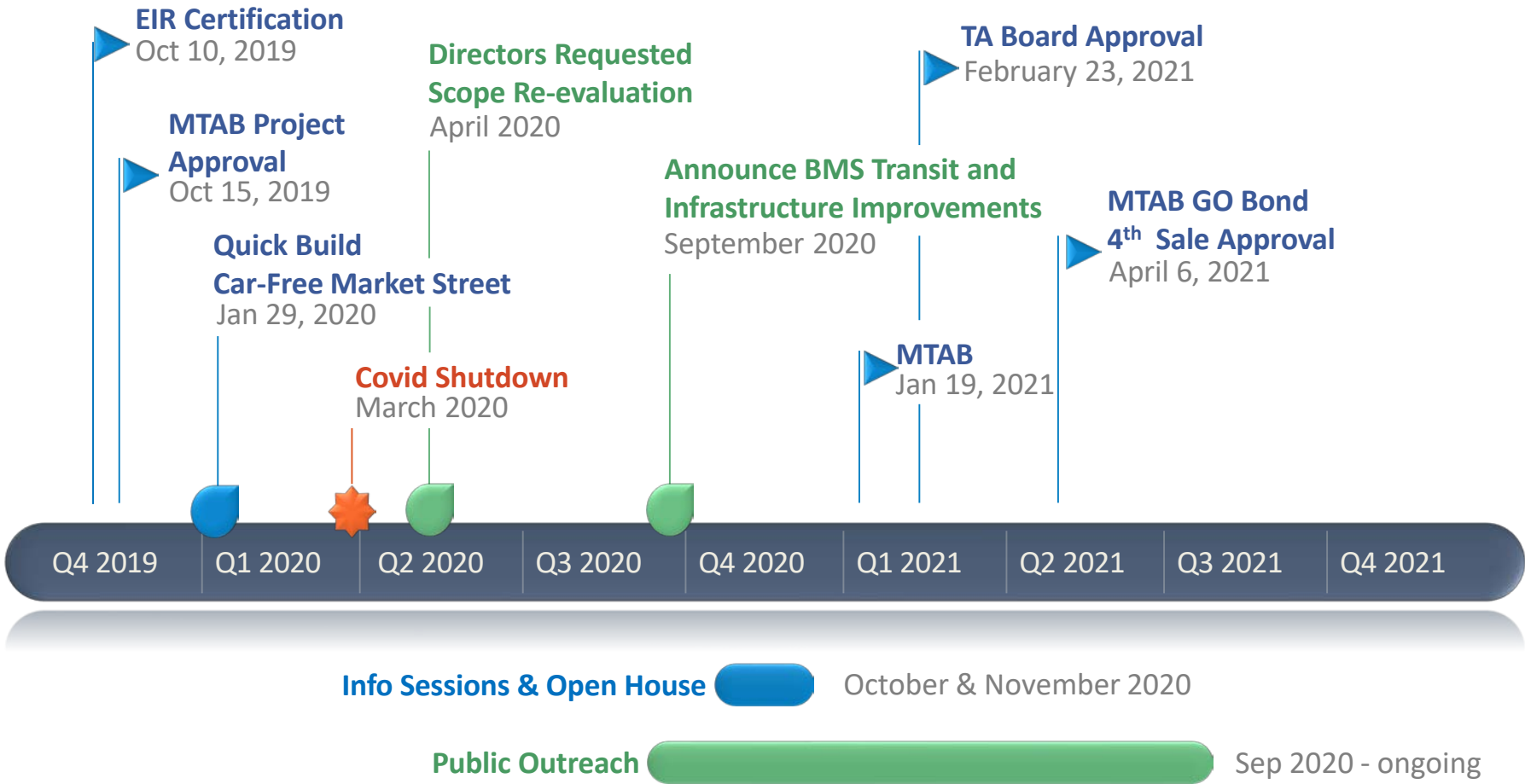
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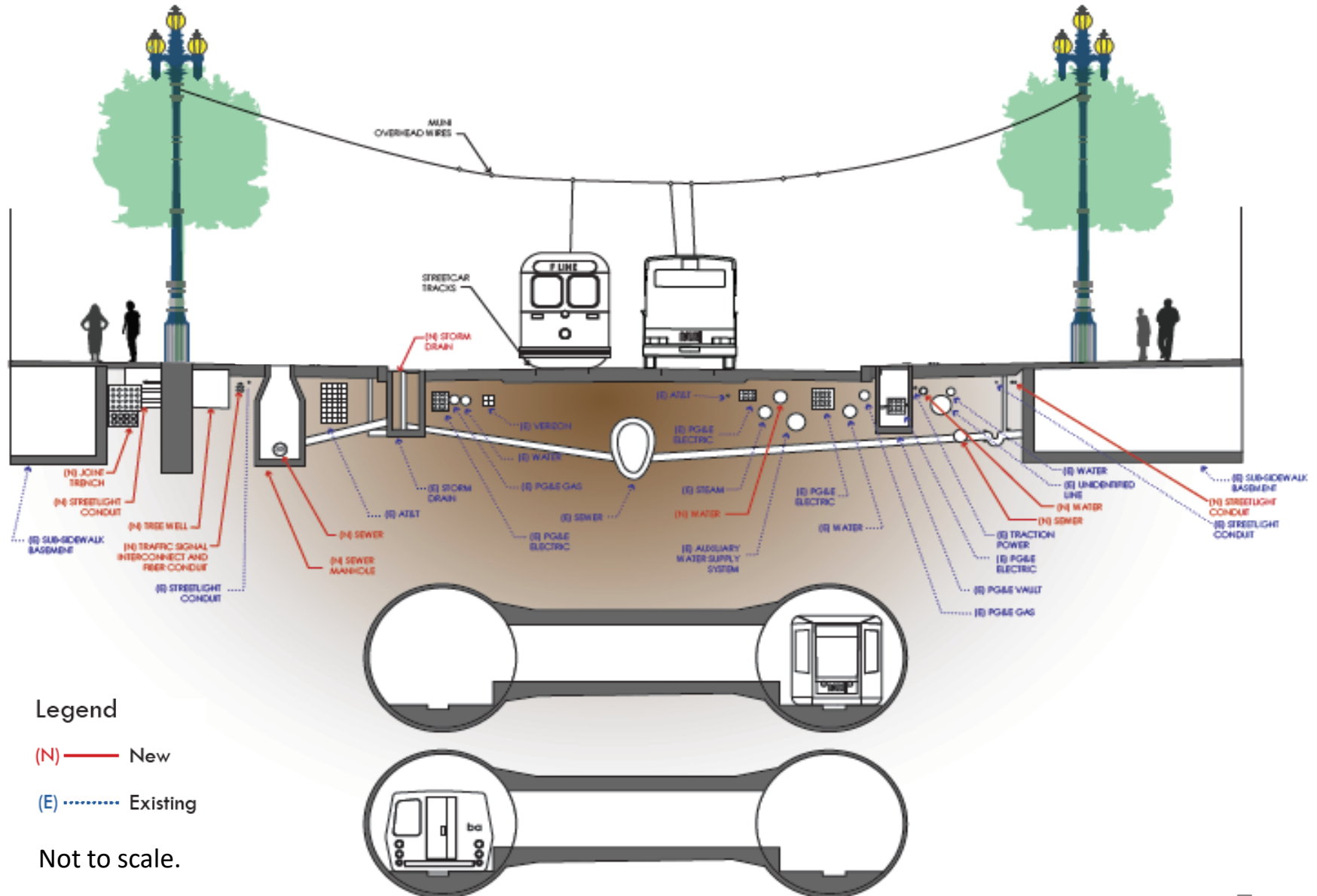
Partner agencies with scope of work



Timeline



Conceptual Market Street Cross Section



What is below Market Street?



Market and Spear

Public Works

- Repaving and new ADA compliant curb ramps
- Replace dead or unhealthy trees, limited sidewalk replacement, 1-2 benches

SFMTA

- Full traffic signal upgrade and new bike racks
- New center boarding islands
- New direct fixation trackway
- New OCS wires and more than 20 new 770 poles
- Upgraded SFMTA traction power

BART

- New BART grates

PUC Sewer

- Reline existing 3'x 5' sewer
- Replace sewer laterals

PUC Water

- Relining 16" Water Transmission
- Replacing 8" Water Distribution in same alignment

PUC AWSS

- AWSS lines relocation due to infrastructure improvements

Paving Moratorium

- The San Francisco Excavation Code establishes a 5-year moratorium on excavating in streets that have been reconstructed, repaved and/ or resurfaced
- Need to replace aging infrastructure while we have the opportunity
- Dig Once Policy (One SF)

Crowded Utility Corridor

- Market Street Utility corridor is already crowded.
- Limited space to accommodate new pipelines or infrastructure underground
- Underground conditions on older corridors often poorly marked
- This impacts construction scope and sequence.
- Need for temporary top line for 8 inch main to maintain water service during construction.

SFPUC provides high-quality, reliable and resilient Water, Power, and Sewer services.

Water Capital Improvements

- Ensure reliable drinking water through replacement of vulnerable pipelines

Sewer System Improvement Program (SSIP)

- Ensure our aging system can continue to protect public health and the environment

Auxiliary Water Supply System (AWSS)

- Enhance the reliability of San Francisco's emergency firefighting water supplies
- Provide backup potable water if the drinking water distribution system is damaged in an earthquake

To ensure reliable and resilient utility services for customers, the San Francisco Public Utilities Commission (SFPUC) will repair, rehabilitate and replace aging and seismically vulnerable underground sewer pipes.

- Many of the large sewer pipes in center of Market Street were made of brick in the 1880's
- Some smaller sewers were installed in 1970's next to BART station
- Sewer laterals are of varying age depending on when properties were built



Initial scope - relocate and replace brick sewer mains (3' x 5') currently in middle of street under tracks

- Pipe replacement provides ~120 years of service life.
- Facilitate future sewer maintenance and repair

Revised scope – trenchless reline of existing brick sewer mains without the need to relocate

- Minimize surface impacts
- Reduce construction duration
- Relining extends service lifespan by 50 -75 years.

Some smaller sewers (on either side) will be replaced along existing alignment

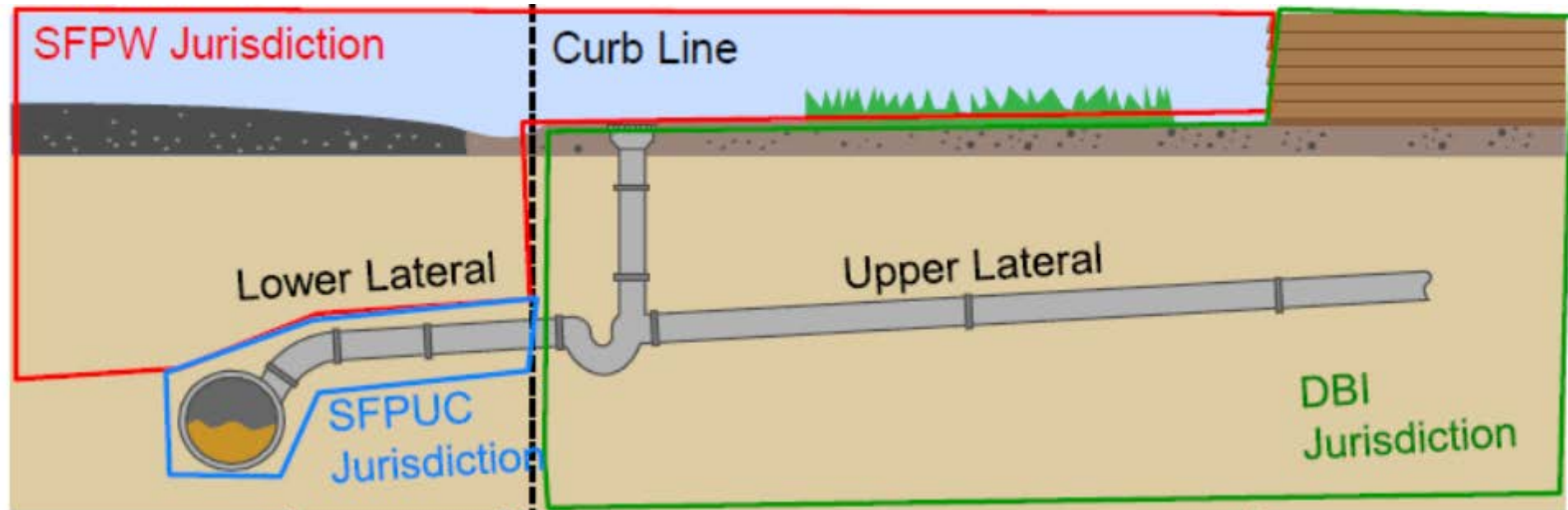
- If trenchless method not feasible
- Fix structural deficiencies
- Minimize utility conflict

Service laterals replaced within existing alignment

- Reduce future risk of transit disruption
- Provide benefit to property owners
- No expected disruption of sewer service during construction

Service lateral failures are most common 311 sewer requests, and repairs may now be the owner's responsibility.

Sewer Lateral Responsibilities



Lower Lateral

Property Owner

- Maintenance
- Inspection

SFPUC

- Repair and replacement of structural defects

Upper Lateral

Property Owner

- Maintenance
- Inspection
- Repair and replacement

SFDBI

- Inspection and enforcement of Plumbing Code

SFPUC

- No jurisdiction

Water Pipeline on Market Street between 5th and 8th Street

- Replaces existing cast iron water distribution mains at the end of useful life
- Replace 3,200 linear feet of 8-inch ductile iron water distribution main
- Replace 600 linear feet of 12-inch ductile iron water distribution main
- Install 1,600 linear feet of cure in place liner within existing 16-inch main



Keeping the water flowing during and after construction

- Replace 8-inch pipe in existing alignment.
- Requires the installation of a temporary top line during construction

Water distribution and transmission pipelines along Market Street are critical to water delivery to San Francisco customers.

Seismic Vulnerability

- The existing pipeline joints are made of lead and will fail in an earthquake.
- Current pipeline construction standards use rubber gasket connections that are much more seismically reliable.

Auxiliary Water Supply System (AWSS) lines for firefighting will be relocated only in areas impacted by track/project work

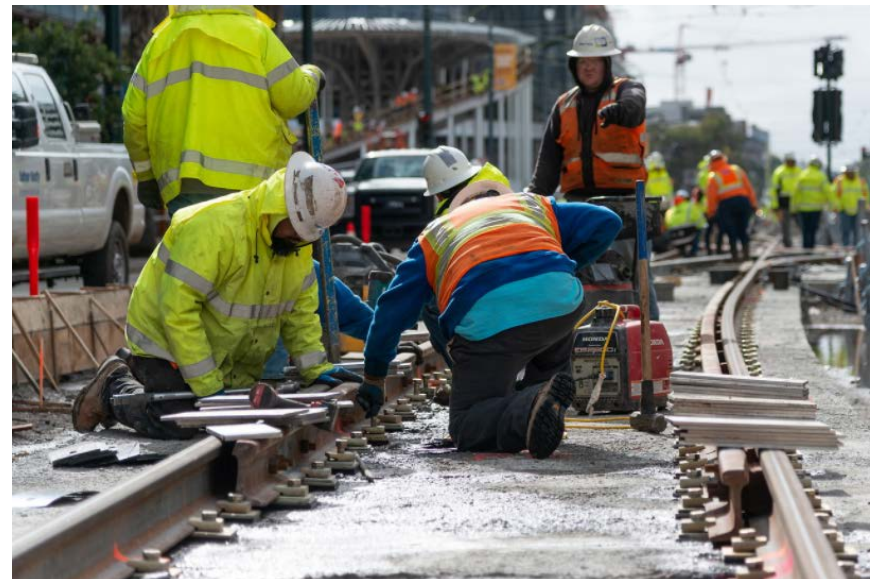
- Replacing existing tie & ballast with direct fixation track bed to extend life of pavement and reduces maintenance
- Upgrading rail from 90# to 115# and rail fixation structure over BART vents
- Upgrading rail from 128 RE 7A to 115#
- Improving usability of crossover at 5th St



Existing pavement conditions



Installation of tie & ballast tracks (1988)



Direct fixation tracks at Mission Bay (2019)

Cost by Trade






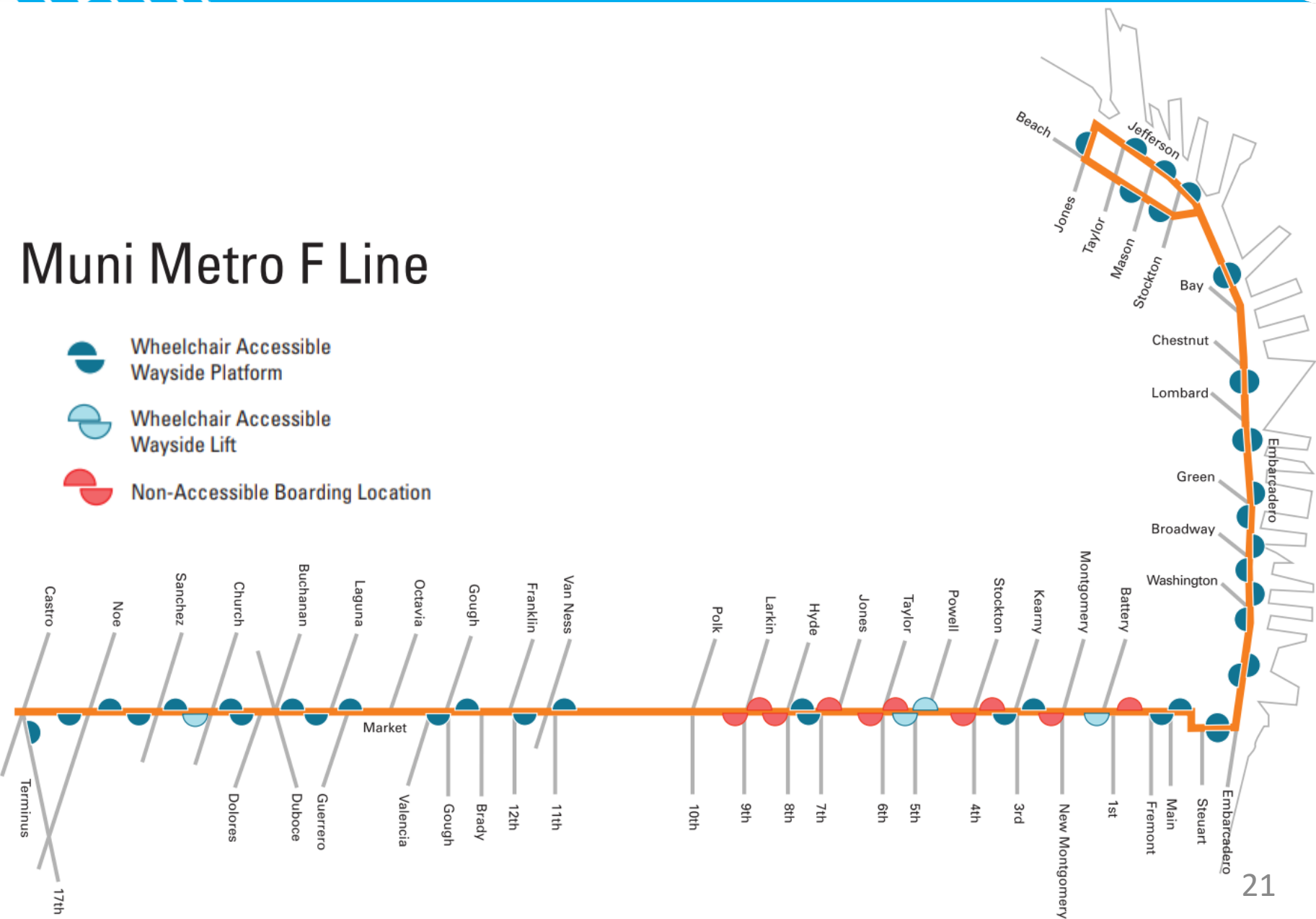
| Construction Costs by Trade | Department / Agency | Phase 1 March 2021 |
|---|---------------------|-----------------------|
| Track | MTA | \$12.9 M |
| Traction Power | MTA | \$6.6 M |
| Overhead Contact System (OCS) | MTA | \$7.9 M |
| Roadway | Public Works | \$7.1 M |
| Auxiliary Water Supply System (AWSS) | PUC | \$8.2 M |
| Water | PUC | \$6.5 M |
| Sewer | PUC | \$6.1 M |
| Landscape | Public Works | \$4.6 M |
| Traffic Signal | MTA | \$4.9 M |
| Traffic Routing | MTA | \$5.3 M |
| Structural | MTA | \$4.0 M |
| BART Grate Replacement | BART | \$1.9 M |
| Site Assessment & Remediation (SAR) | Public Works | \$2.1 M |
| Other Construction Cost | | \$2.4 M |
| Subtotal of Construction Costs by Trade: | | \$80.5 M |
| | | |
| | | |

F Line Route Accessibility



Muni Metro F Line

-  Wheelchair Accessible Wayside Platform
-  Wheelchair Accessible Wayside Lift
-  Non-Accessible Boarding Location



- Implement safety enhancements to align with Vision Zero goals
- Improve accessibility for pedestrians and transit riders
- Critical accessibility improvements – center boarding islands and curb ramps
- Improve Transit efficiency by moving busses to the center lane and having larger transit boarding islands that can accommodate more passengers and multiple busses at a time.
- Rehabilitate and replace critical infrastructure now to ensure they do not fail during an emergency later

- Critical infrastructure, including traffic signals and BART grates, continues to deteriorate.
- Stakeholders would experience another delay before starting construction.
- Underground work is a precursor to any other scope of work on a project. Delaying underground construction now will not reduce duration later on.
- We risk losing Federal and State grants. Impact credibility and ability to secure future grants on this and other projects.
- Bidding climate
- We would lose momentum.
- The cost of designing the project a 3rd time.

Construction Sequencing Update

Open CAC Discussion/Q&A

May 17 or May 24, 2021
6:00 – 7:30 PM