SFMTA

Muni Metro Capacity Study

Community Working Group Meeting #7

July 24, 2025

Agenda

1. Ice breaker
2. Study recap
3. Forecasting update
4. Draft 10-15 year recommendations
5. Draft longer-term recommendations
6. What's not recommended
7. Observer comment time

Study Team and Study Funders

Name	Agency/Firm	Role
Liz Brisson	SFMTA	Project Manager
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Krute Singa	MTC	Study Funding Partner
Tyler Brown	Caltrans	Study Funding Partner
Stephen Conteh	Caltrans	Study Funding Partner
Esteban Villegas	Caltrans	Study Funding Partner

Ice Breaker

What comes to mind when you think of a Muni Metro ***stop*** and what comes to mind when you think of a Muni Metro ***station***?

Meeting Roadmap

Meeting #1 (November 2, 2023): Introduction

Meeting #2 (November 16, 2023): Project need and potential solutions to be studied

Meeting #3 (May 9, 2024): Structured group discussion about benefits and tradeoffs of potential solutions

Meeting #4 (September 19, 2024): Range of potential packages of improvements and group discussion

Meeting #5 (November 20, 2024): Follow-ups from meeting #4

Meeting #6 (Tonight – March 20, 2025): New forecasting scenarios, initial Study findings, and Muni Metro rider focus group feedback

Meeting #7 (TBD June 2025?): Completion of forecasting, additional Study findings and preliminary recommendations

Tentative future meetings

Meeting #8 (TBD October 2025?): refinements to recommendations based on feedback, funding/implementation strategy, Study wrap-up

Study recap

The problem: Muni Metro is experiencing

- **Aging pains**: old infrastructure needs renewal
- **Growing pains:** some crowding today and more growth planned

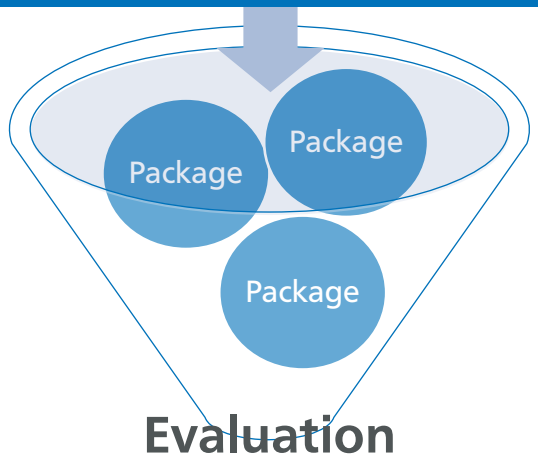
The opportunity: Develop a capital program to address state of good repair and expand Metro capacity over the next 10-15 years **so that we can apply for an FTA Core Capacity grant**

Study process

Outreach:

- Community Working Group meetings
- Muni rider focus groups
- Presentations to interested community groups

Assessment of capacity solutions



Evaluation

Recommendations ← **We are here**

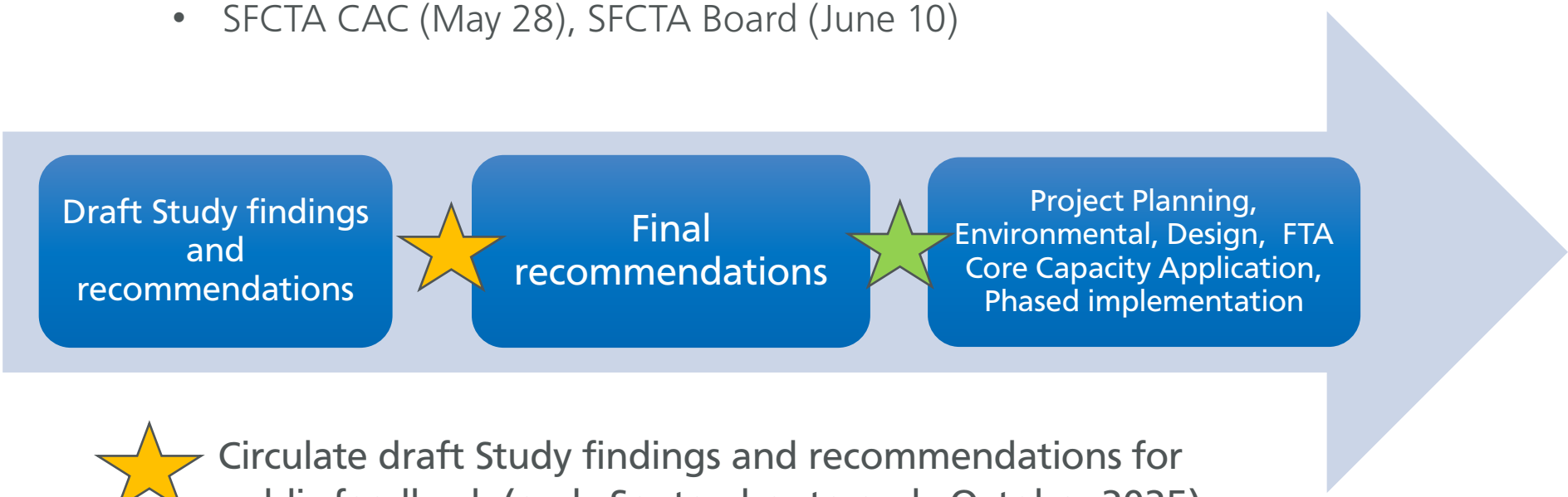
Funding and Implementation Strategy

Core Capacity Grant Program (10-15 years)

Other Recommendations for Longer-Term Future Muni Metro (Vision, >15 years)

Study timeline

- Since our last CWG meeting, we gave information updates on the Study's progress to:
  - SFMTA CAC (April 3), SFMTA Board (May 6)
  - SFCTA CAC (May 28), SFCTA Board (June 10)

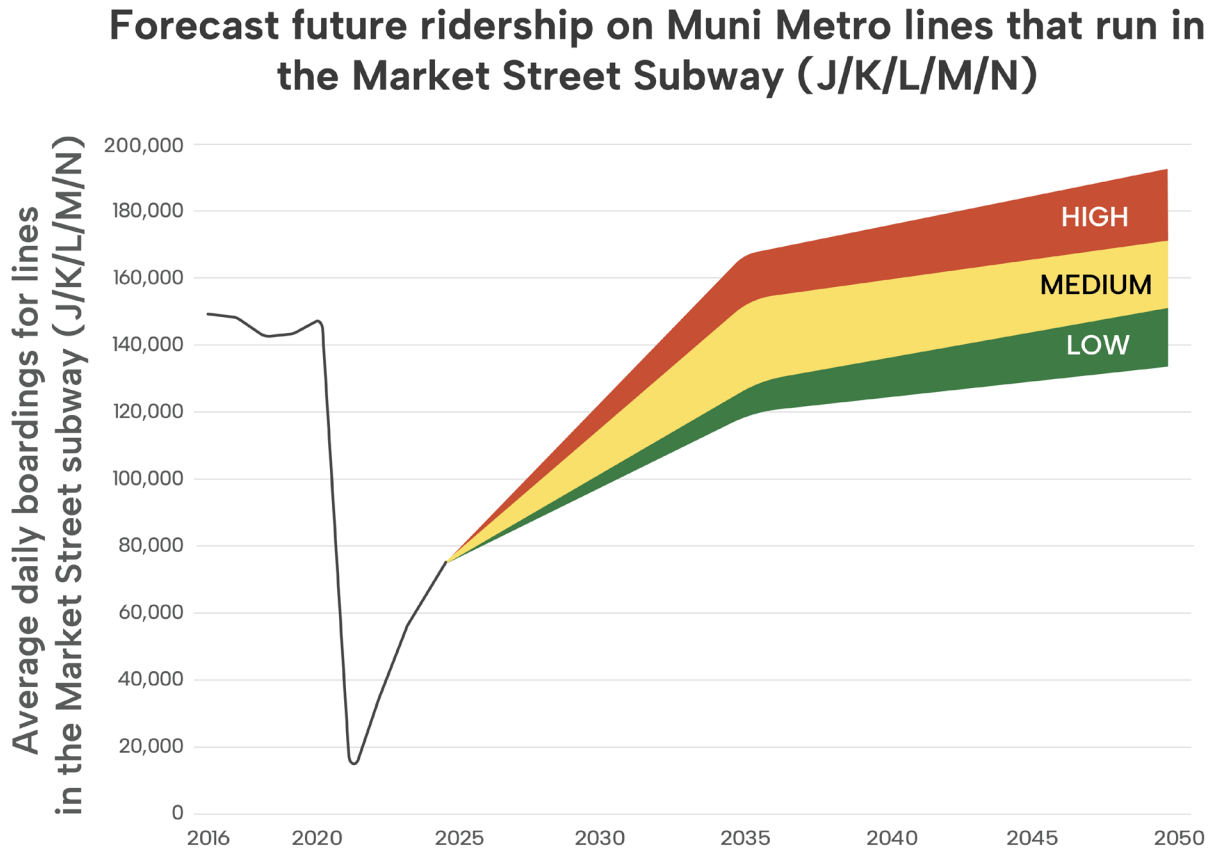


Circulate draft Study findings and recommendations for public feedback (early September to early October 2025)

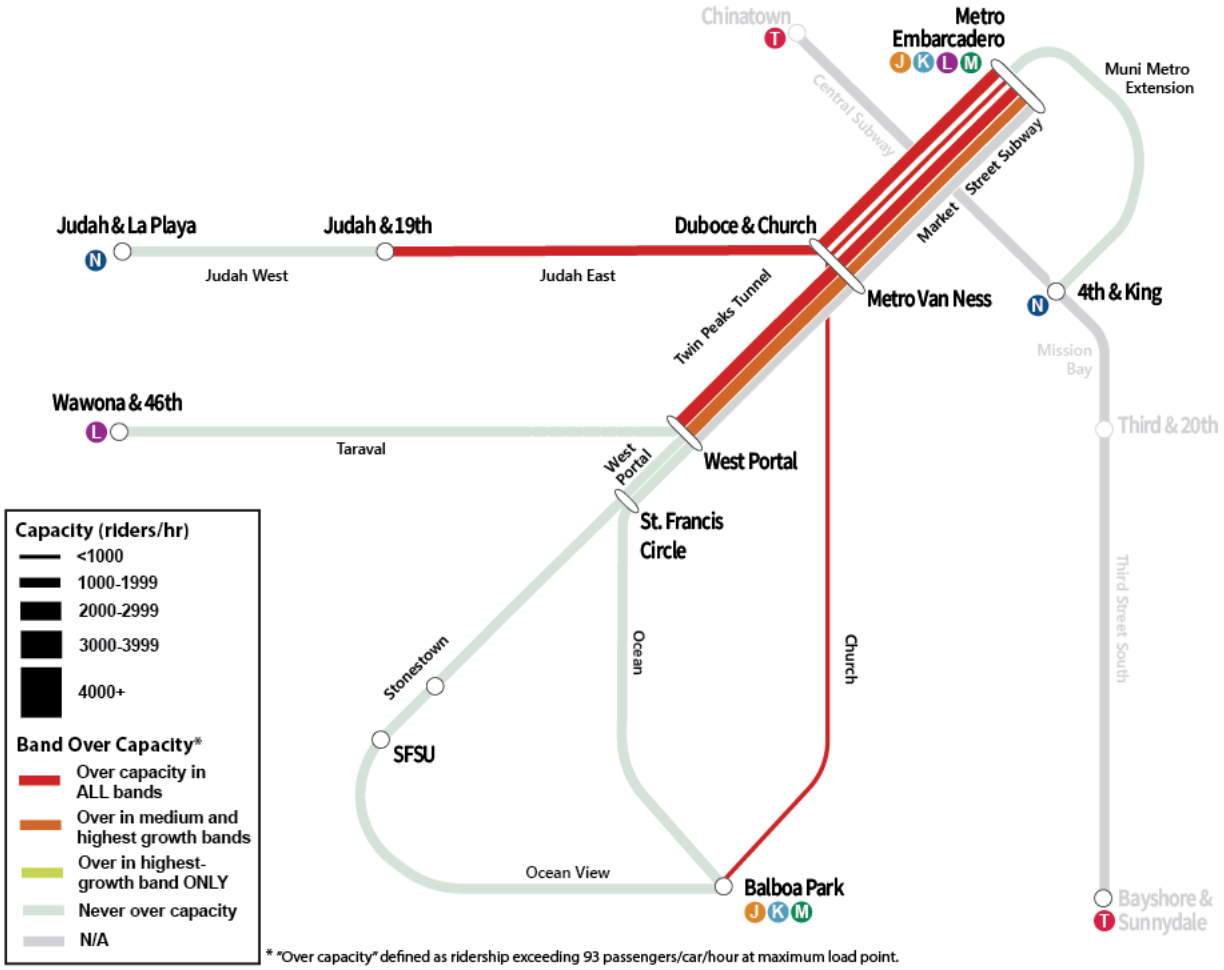
Final report presented to MTAB for acceptance (by December 2025)

Forecast future ridership on Muni Metro lines in the Market Street subway

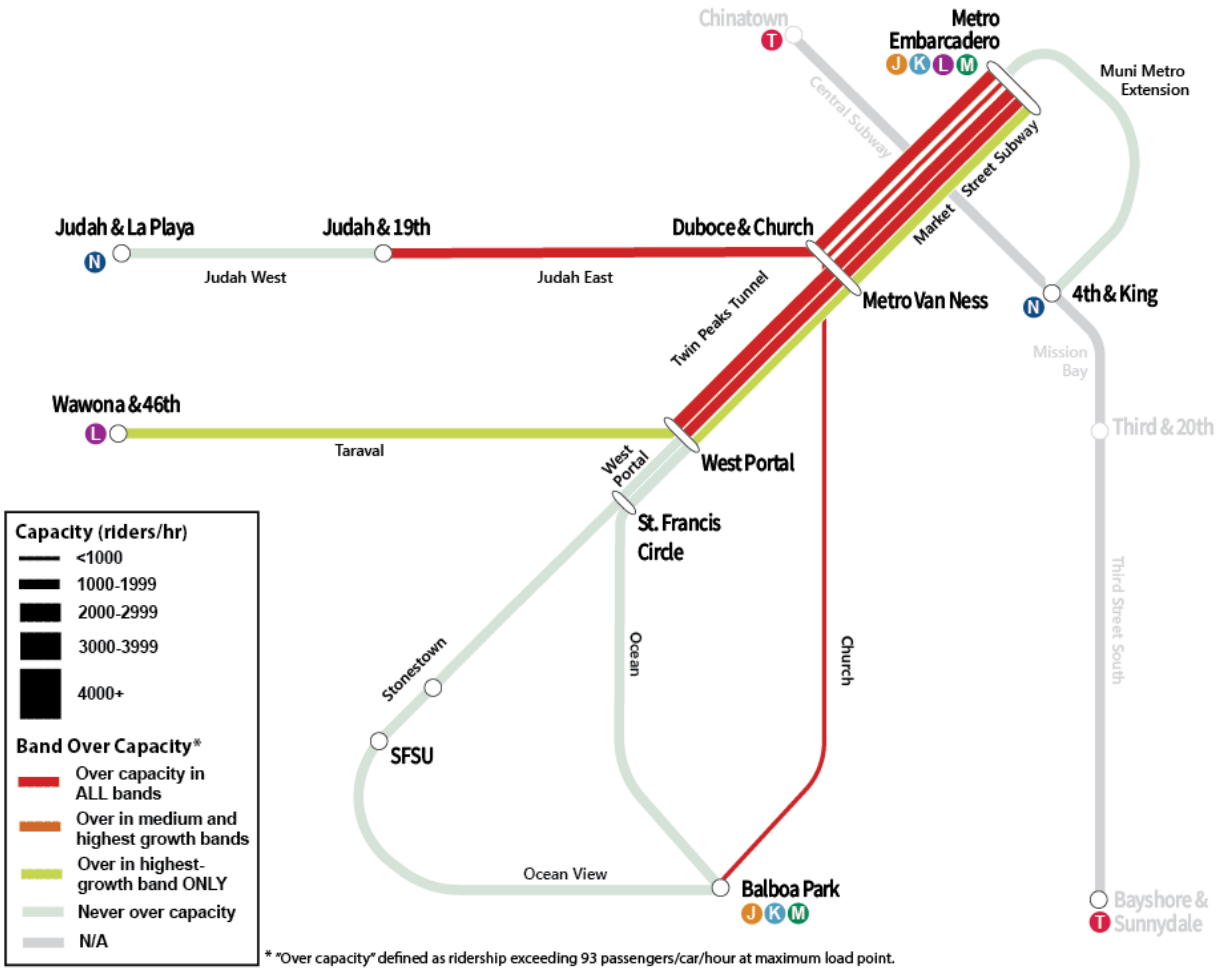
Low, medium, and high ridership "bands" were developed considering a range of different population/job growth rates and post-pandemic ridership recovery trends



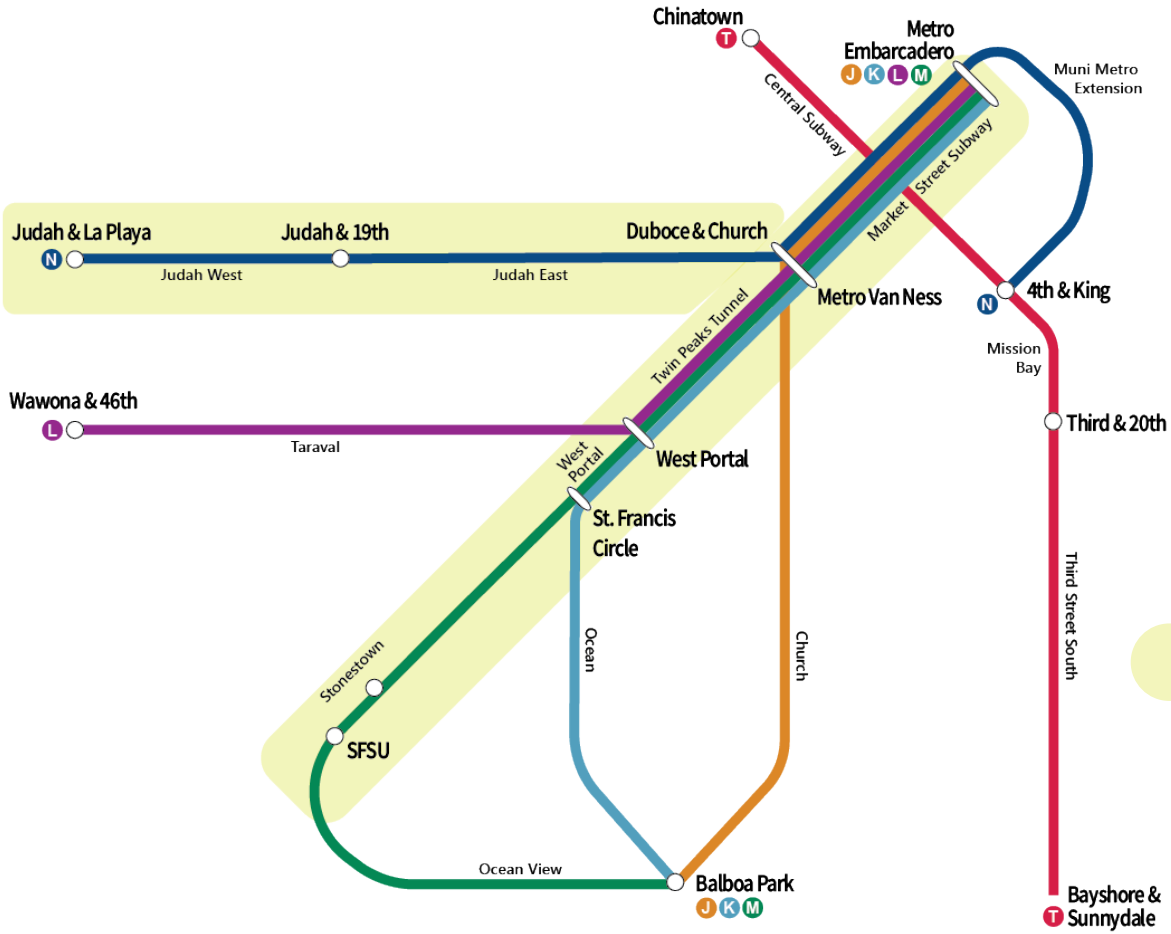
Future overcrowding in 2035
(baseline, assumes existing service frequencies)



Future overcrowding in 2050
(baseline, assumes existing service frequencies)



10-15-year capital program: Where we need to plan now for future investment



Locations where capital investments are needed now to address crowding

Investments recommended would undergo additional community planning to co-create designs before seeking future approvals

10-15-year capital program draft recommendations

1. **Capacity-enhancing upgrades to old infrastructure** such as new light rail track, overhead wires, and traction power
2. **Expanded transit priority infrastructure** such as transit lanes, expanded signal priority, signal pre-emption, and potentially crossing gates
3. **Upgrade infrastructure to accommodate 3-car trains** for the N Judah line and the M Ocean View between Downtown and SF State*
    - **Boarding infrastructure for 3-car trains, including upgrades to station accessibility**
    - **Infrastructure to provide operational flexibility** to operate different service patterns in the future (enable 3-car service between Downtown and SF State and J Church extension to Stonestown)

*We recommend continuing to advance this strategy, although implementation could be deferred if ridership growth is in the low range of our future forecasts

1. Capacity-enhancing upgrades to old infrastructure

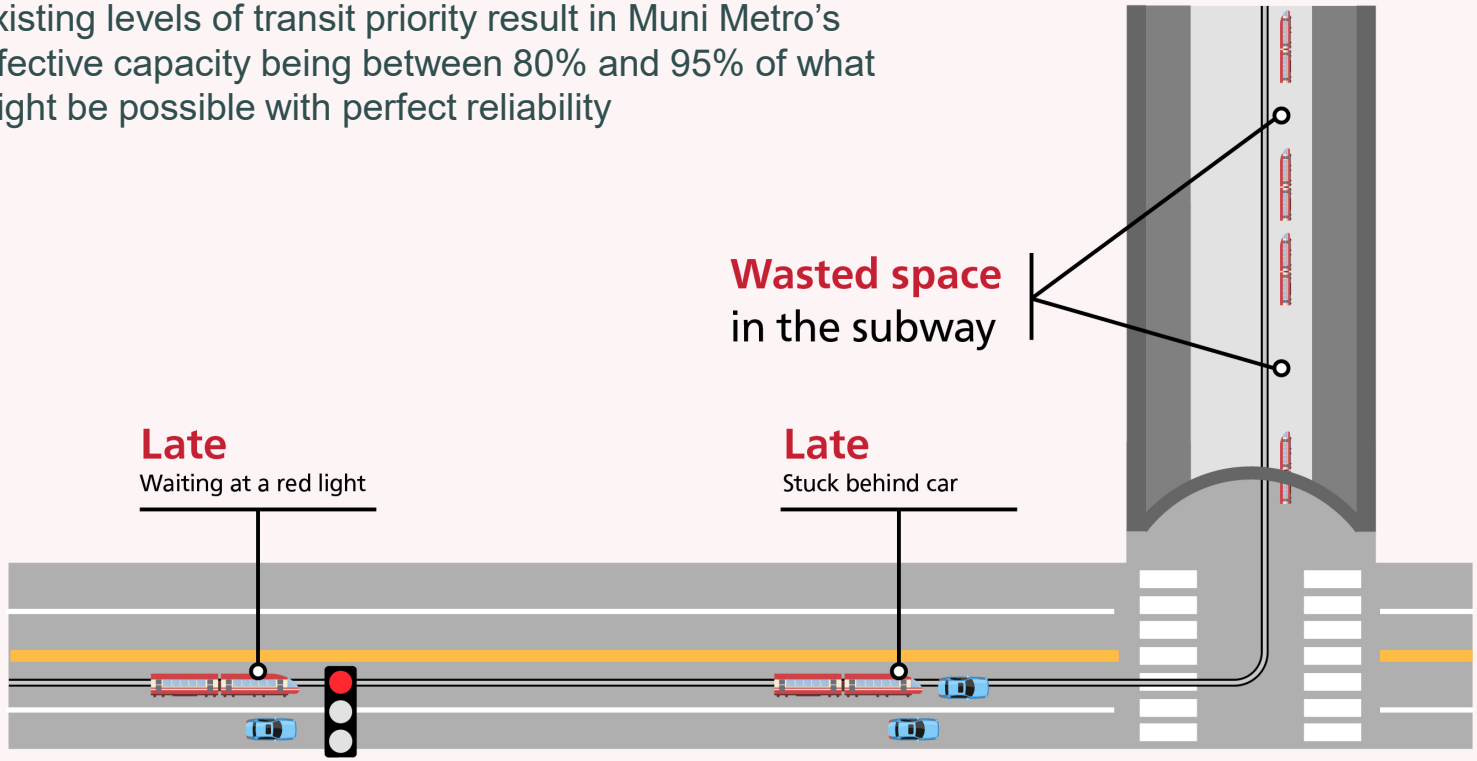
Much of the M Ocean View and N Judah surface sections are due for re-railing in the 2030s, creating significant opportunity to combine infrastructure renewal and capacity-enhancing investments

Potential capacity-enhancing State of Good Repair enhancements we are studying

Old infrastructure in need of replacement	Modern capacity-enhancing equivalent
Old track supported by tie-and-ballast (ballast rock)	New track embedded in concrete (direct fixation), designed to accommodate 3-car trains at higher frequency
Old traction power system that was designed to run 2-car trains	New upgraded traction power system with more powerful substations designed to power 3-car trains at a higher frequency, new cabling and overhead system
Old standard switches that allow a train to switch from one track to another	New upgraded switches that allow trains to switch at higher speeds
Old train control system operating via floppy disk	New train control system using modern technology (i.e. the Train Control Upgrade Project) and capable of reliably more trains/hour in the Market Street subway

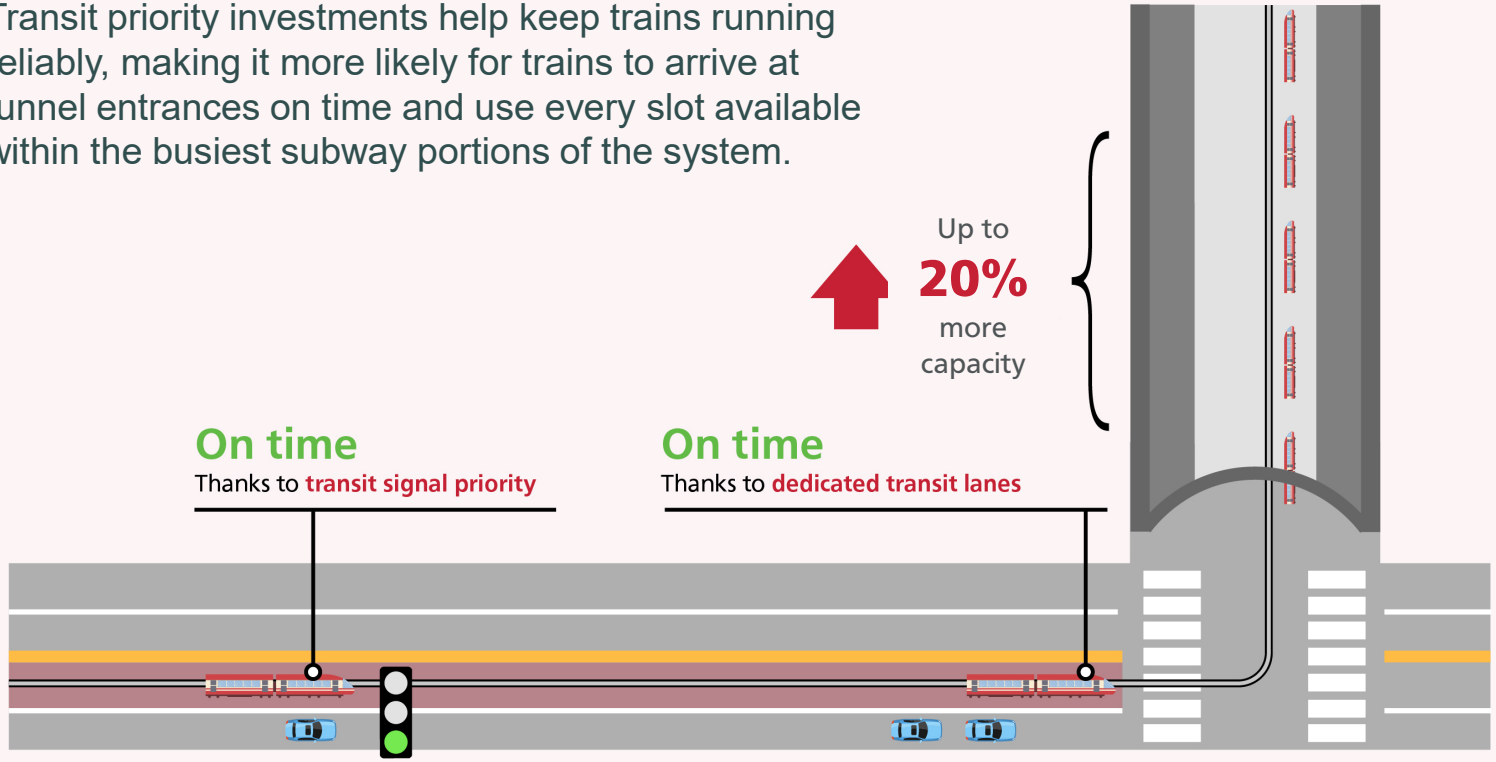
2. Expanded transit priority infrastructure

Existing levels of transit priority result in Muni Metro's effective capacity being between 80% and 95% of what might be possible with perfect reliability



2. Expanded transit priority infrastructure

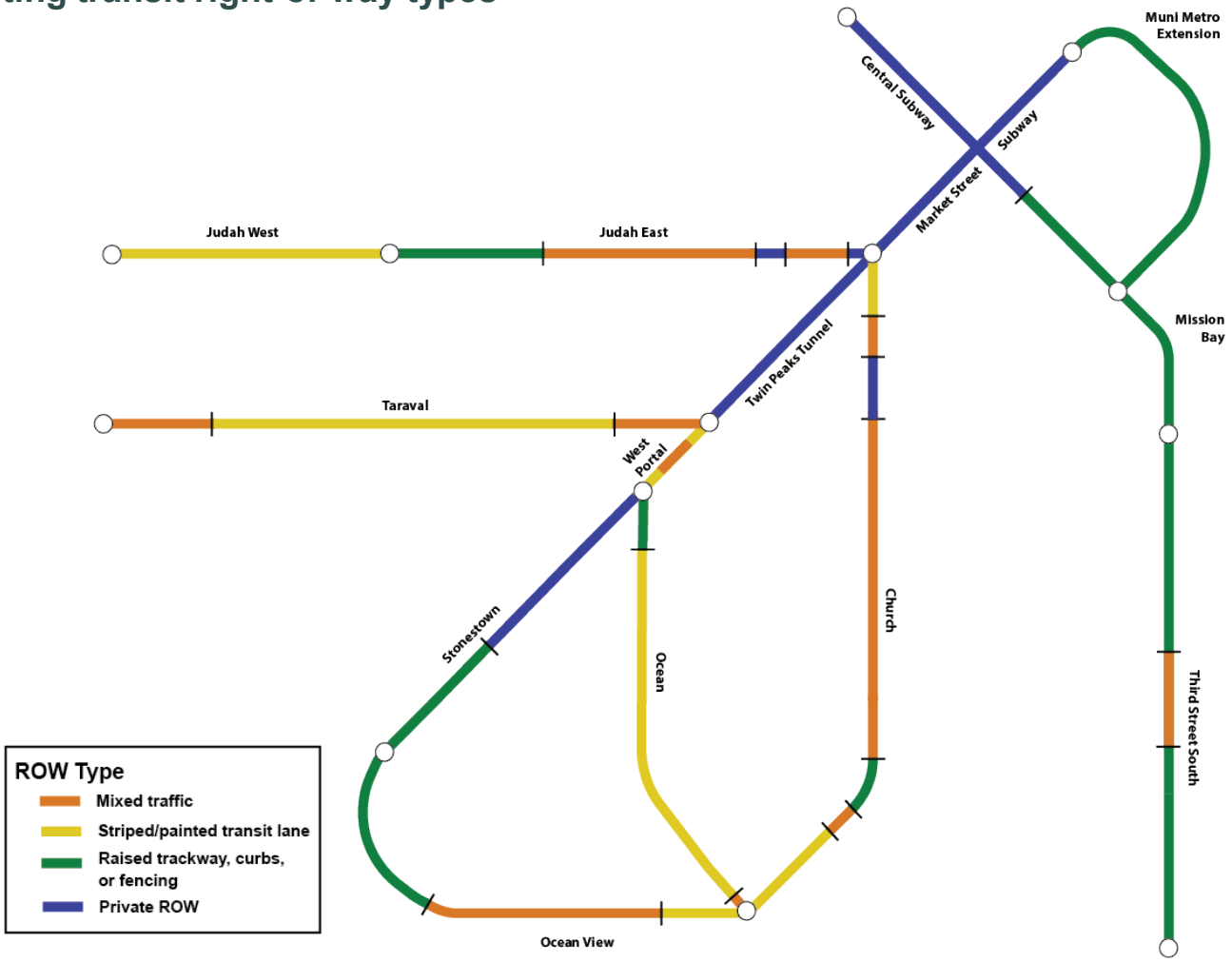
Transit priority investments help keep trains running reliably, making it more likely for trains to arrive at tunnel entrances on time and use every slot available within the busiest subway portions of the system.



On Street Opportunities: Expansion of transit lanes
Intersection Opportunities: modifying 4-way stops to 2-way, traffic signal instead of stop, transit signal priority, transit signal pre-emption

2. Expanded transit priority

Existing transit right-of-way types



2. Expanded transit priority

Existing level of transit priority at intersections (surface portions of N Judah and M Ocean View between West Portal and SF State)

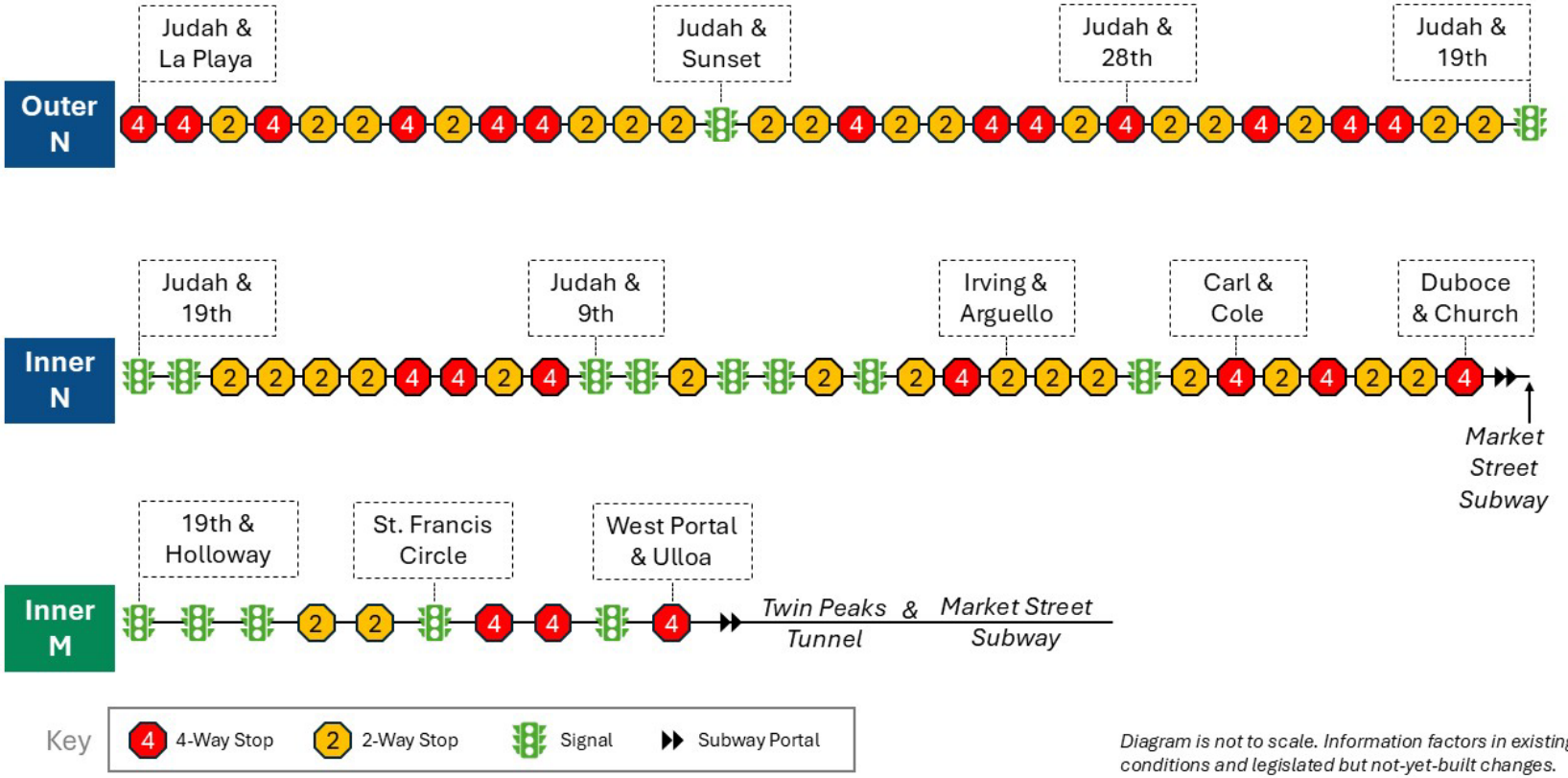
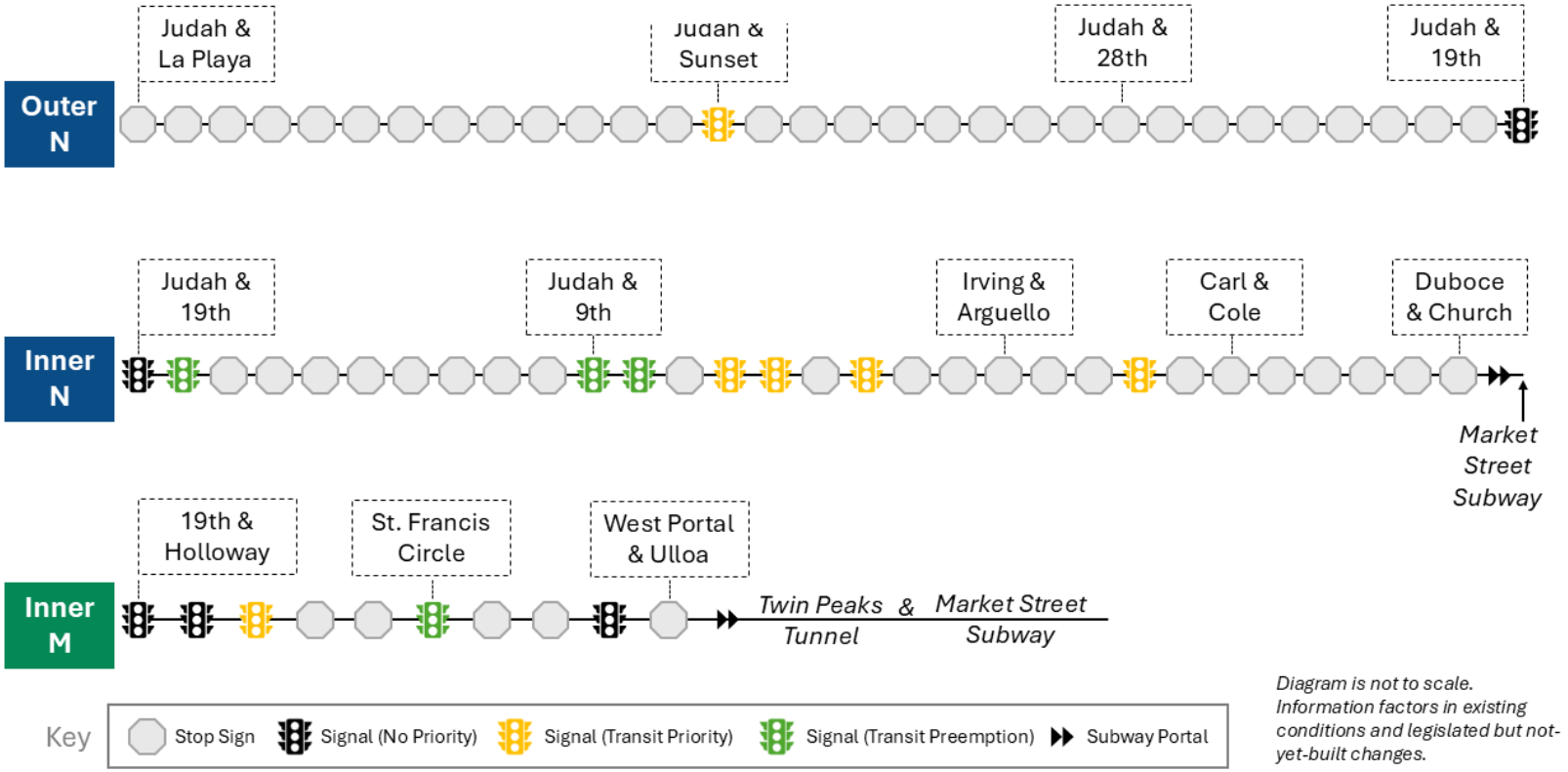


Diagram is not to scale. Information factors in existing conditions and legislated but not-yet-built changes.

2. Expanded transit priority

Existing level of transit priority at signalized intersections (surface portions of N Judah and M Ocean View between West Portal and SF State)



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2. Expanded transit priority infrastructure

Crossing gates may help improve the safety of transit signal pre-emption, particularly at unusual intersections where cars may be surprised by a stop light. This strategy should be considered at select locations.

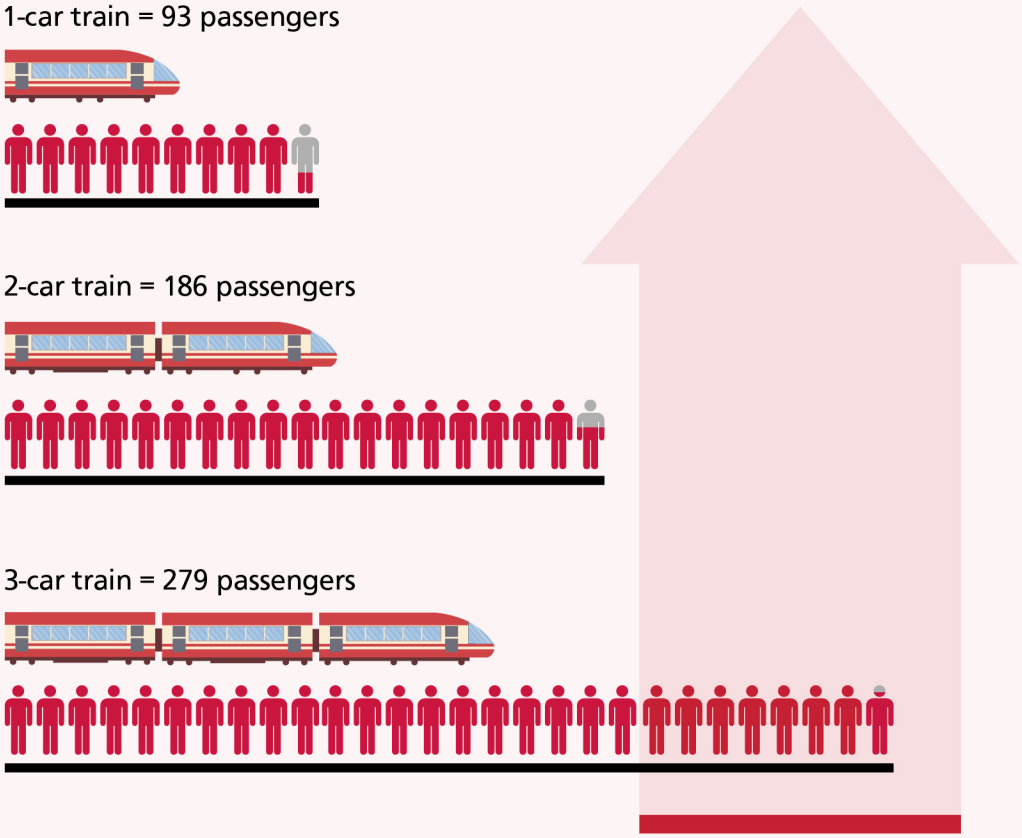
Ocean Avenue at M Ocean View private right-of-way, existing conditions

2. Expanded transit priority infrastructure

Crossing gates may help improve the safety of transit signal pre-emption, particularly at unusual intersections where cars may be surprised by a stop light. This strategy should be considered at select locations.

Illustration of possible upgrades at Ocean Avenue, including crossing gates

3. 3-car trains for the N Judah and the M Ocean View between Downtown and SF State



3-car trains provide up to

50%
more capacity

= 10 passengers

3. Boarding infrastructure for 3-car trains

Stonestown Station – existing conditions

3. Boarding infrastructure for 3-car trains

Illustration of possible upgrades at Stonestown Station for 3-car trains

3. Boarding infrastructure for 3-car trains

St. Francis Circle station– Existing Conditions

3. Boarding infrastructure for 3-car trains

Illustration of possible upgrades at St. Francis Circle to provide full level boarding

3. Boarding infrastructure for 3-car trains

N Judah stop on Judah Street – Existing Conditions

3. Boarding infrastructure for 3-car trains

Illustration of possible upgrades along Judah Street to provide boarding islands for 3-car trains

3. Boarding infrastructure for 3-car trains: accessibility

Any rail upgrade project should make all stops within the project area accessible with at least a mini-high at each stop, except where it's not physically possible.

Recommendations for core capacity capital program:

- **West Portal to SF State**: Upgrade stations with fully level boarding platforms
- **N Judah:** Upgrade stations with mini-high ramps to provide level boarding at one-door

Existing mini-high ramp on the J Church

3. Boarding infrastructure for 3-car trains: accessibility

Existing accessibility for surface stops along the N Judah and M Ocean View between West Portal and SF State

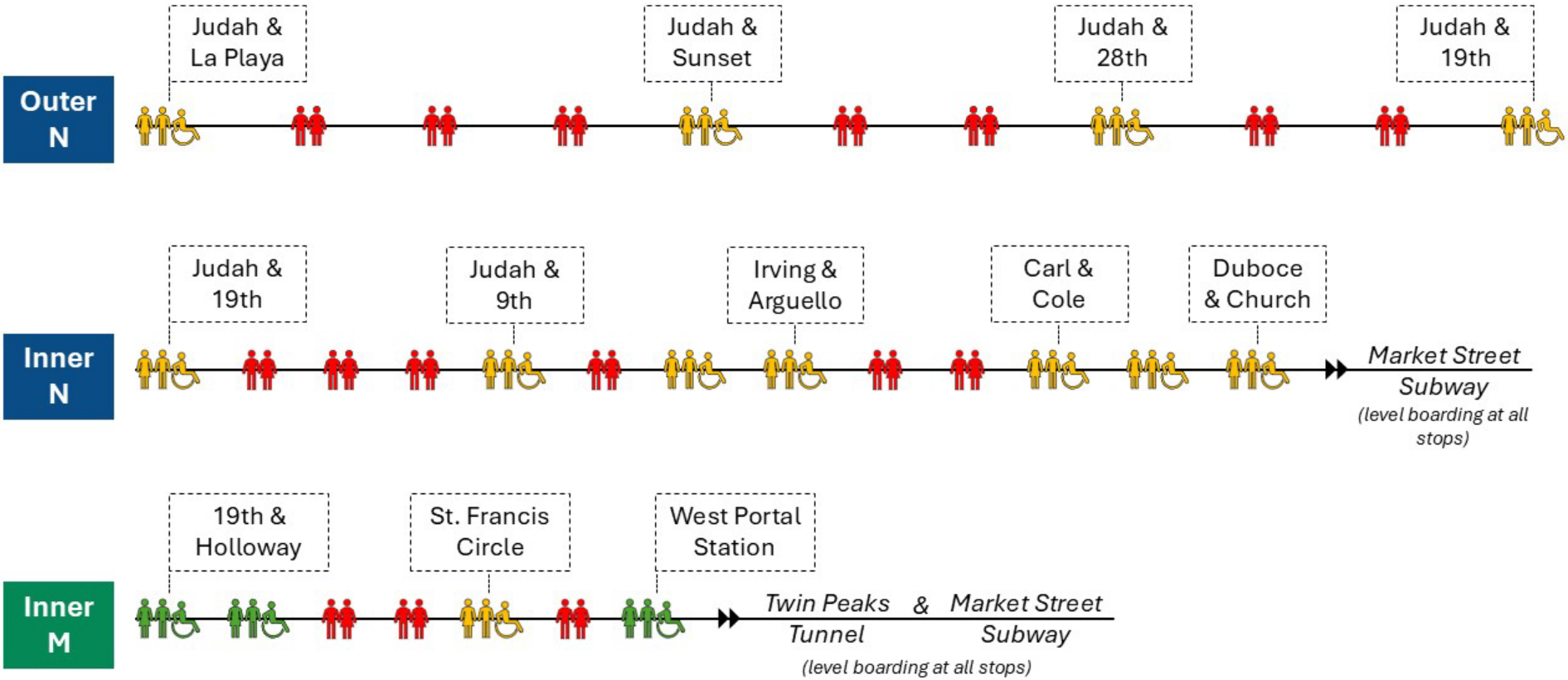
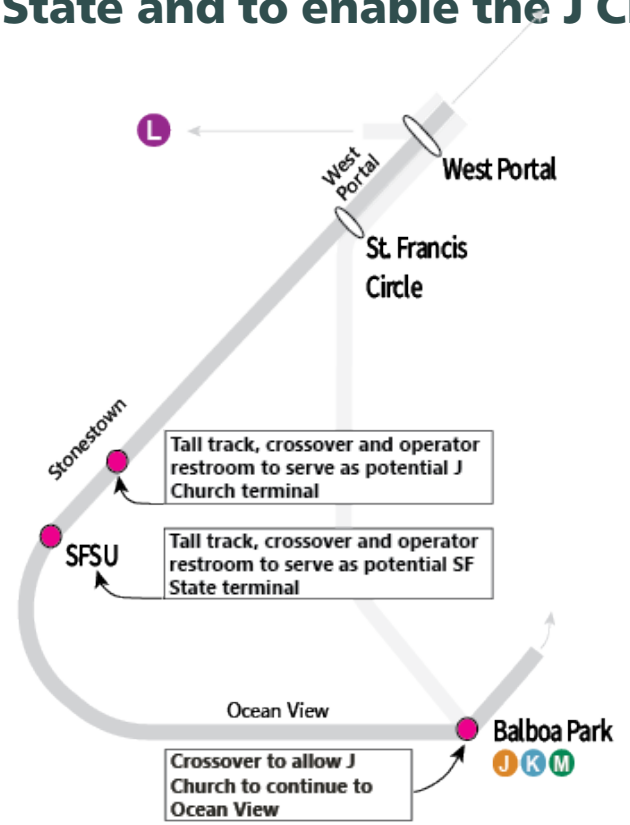


Diagram is not to scale. Information factors in existing conditions and legislated but not-yet-built changes.

3. 3-car trains: infrastructure to provide operational flexibility

Recommended new infrastructure to enable 3-car service between Downtown and SF State and to enable the J Church to be extended to Stonestown.

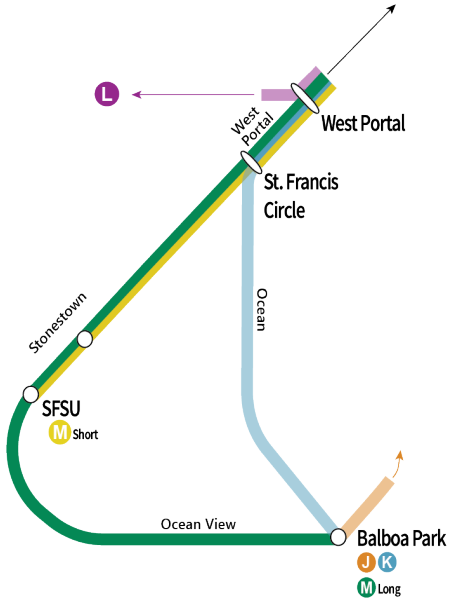


*If the Parkmerced Development Agreement proceeds as approved, these facilities would be provided within Parkmerced. Otherwise, they could be provided within the 19th Avenue median south of SF State

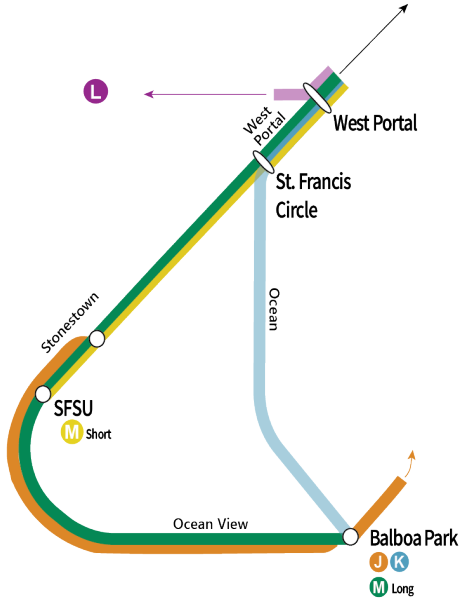
3. 3-car trains: infrastructure to provide operational flexibility

- 3 potential options that imply different frequencies of service and present tradeoffs between which trips can be made without needing to transfer
- Options that may be needed vary among the different scenarios considered
- Future community planning process needed to confirm preferred service plan priorities

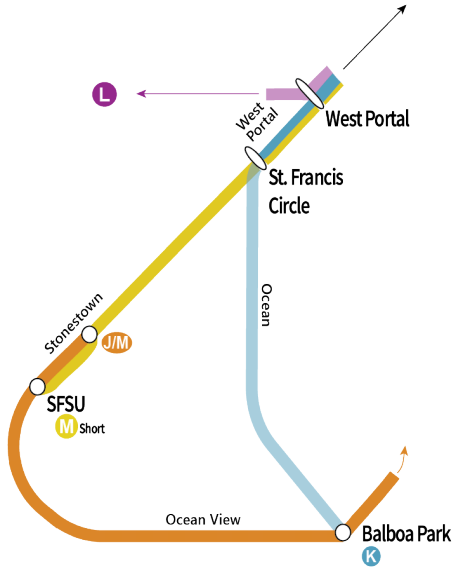
Future Baseline: 3-car M Short to SF State and reduced frequency M Oceanview



3-car M Short to SF State and J extension to Stonestown



3-car M Short to SF State and combine J Church/M Oceanview



Long-term recommendations

25+ Year Recommendations

- All the 10-15 Year Recommendations +
- Potentially, more longer trains (e.g. via upgrading another line for longer trains or restructuring service to prioritize more subway slots for 3-car trains)

Given how significant the increase in ridership would need to be to required, no decision about doing this is required right now. We can keep exploring these strategies as we monitor ridership increases and subway performance and consult more with the community before we take any action.

What's not recommended

Systemwide Level Boarding:

- **Why not?** Expensive, disruptive, and tradeoffs to fitting in a boarding platform in some portions of the system (e.g. inner N Judah) are significant. Accessibility can be achieved via mini-high ramps where systemwide level boarding is not a good fit.

Systemwide Low Floor Fleet:

- **Why not?** Does not make achieving systemwide level boarding significantly easier, while creating significant cost, construction and service disruption, and new rail vehicle maintenance needs

Example of high-floor level boarding on T Third in San Francisco

Example of low-floor station platform in San Jose, VTA

Outreach next steps

- Team plans to collect public feedback on draft recommendations early this fall via:
    - Online interactive website (StoryMap)
    - Presenting to interested groups
    - Sending email alerts to Study subscribers

We plan to share a draft of the interactive website with the CWG soon for feedback prior to official launch.

Discussion

- **Feedback on draft recommendations**
  - **10-15 year recommendations**
    1. Capacity-enhancing upgrades to old infrastructure
    2. Expanded transit priority infrastructure
    3. 3-car trains*
       - Boarding infrastructure for 3-car trains, including upgrades to station accessibility
       - Infrastructure to provide operational flexibility to operate different service patterns in the future (enable 3-car service between Downtown and SF State and J Church extension to Stonestown)
  - **25+ year recommendations**
    4. Potentially, more longer trains (e.g. via upgrading another line for longer trains or restructuring service to prioritize more subway slots for 3-car trains)

*We recommend continuing to advance this strategy, although implementation could be deferred if ridership growth is in the low range of our future forecasts

Thank you!

Study funded by Caltrans Planning Grant (MTC Partnership), SFCTA sales tax, and TIRCP