



# Muni Metro Capacity Study

Community Working Group Meeting #6

March 20, 2025



# Agenda

1. Ice breaker
2. Recap of Study progress
3. Updated forecasting progress update
4. Initial Study findings
5. Muni Metro rider focus groups
6. Observer comment time

# Study Team and Study Funders

Name	Agency/Firm	Role
Liz Brisson	SFMTA	Project Manager
Mariana Maguire	SFMTA	Outreach/Comms Lead
David Sindel	SFMTA	Deputy Project Manager
Michael Randolph	SFMTA	Planning Support
Erin McMillan	SFMTA	Outreach/Comms Manager
Chester Fung	HNTB	Consultant Project Manager
Dan Tischler	SFCTA	Study Funding Partner
Krute Singa	MTC	Study Funding Partner
Tyler Brown	Caltrans	Study Funding Partner
Stephen Conteh	Caltrans	Study Funding Partner

# Ice Breaker

- **In one sentence:** What's your **favorite** thing so far about the Muni Metro Capacity Study?

# 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

## Tentative future meetings

**Meeting #7** (TBD June 2025?): additional Study findings and preliminary recommendations

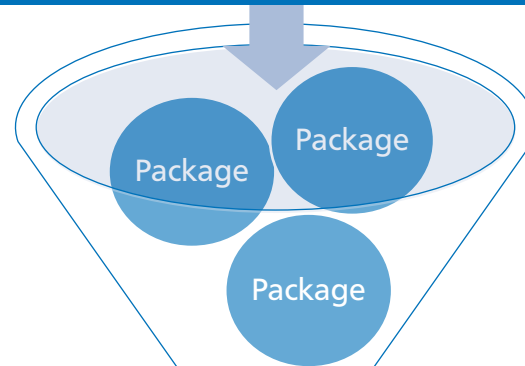
**Meeting #8** (TBD July/August 2025?): refinements to recommendations based on feedback, funding/implementation strategy, Study wrap-up

# Study Process

## Outreach:

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

## Assessment of capacity solutions



**Evaluation**

**We are here**

**Recommendations**

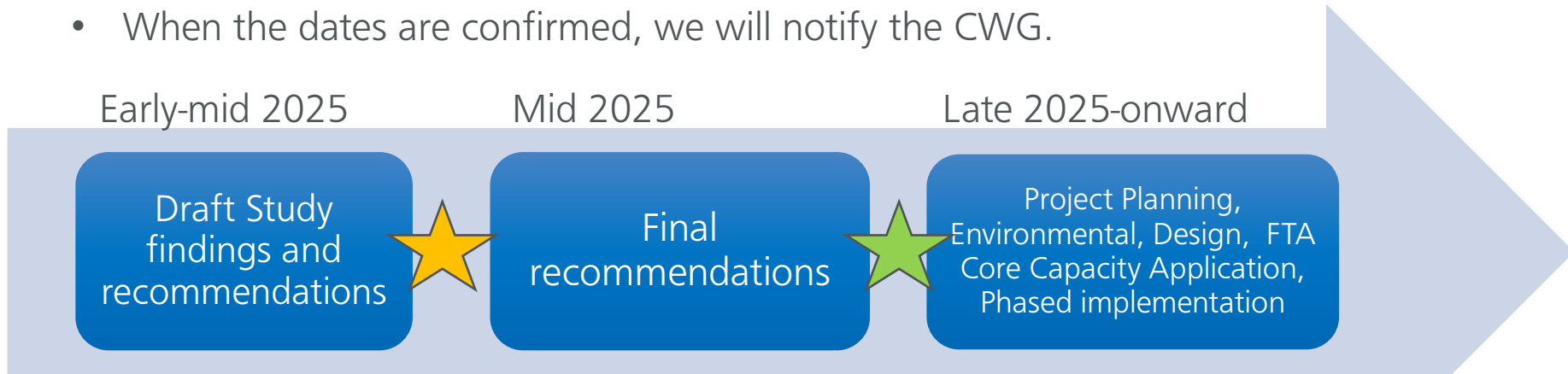
**Funding and Implementation Strategy**

**Core Capacity Grant Program (10-15 years)**

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

# Study Timeline

- This spring, presentations overviewing the Study and work to date will be given as informational items to:
  - SFMTA CAC, SFMTA Board
  - SFCTA CAC, SFCTA Board
- When the dates are confirmed, we will notify the CWG.



Circulate draft Study findings and recommendations for public feedback



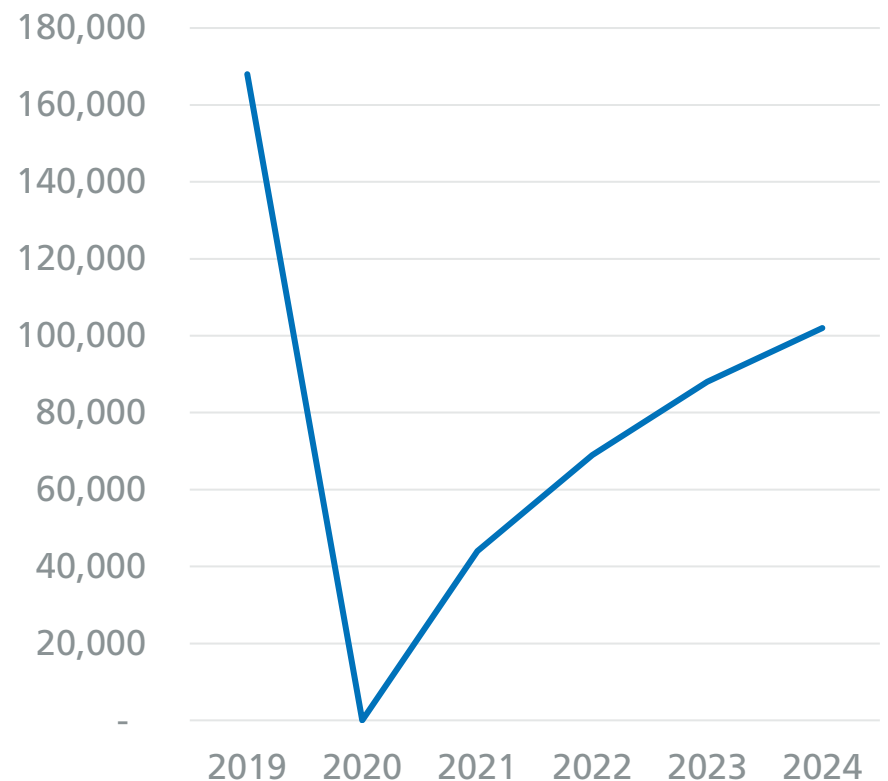
Final report presented to SFMTA Board for acceptance

# Updated Forecasting

## Why new forecasting?

- Community feedback expressing concern that the “original forecast” was too optimistic
- Significant uncertainty about a 25+ year future:
  - San Francisco has ambitious housing plans, but recent development has been low
  - Ridership continues to recover but is still significantly less than pre-pandemic levels

**Average October weekday Muni Metro ridership by year**





# Forecasting scenarios vary on two dimensions

**Ridership Ratio:** Ratio of Muni Metro ridership to population + jobs.

	Ridership ratio does not exceed pre-pandemic levels	Ridership ratio increases to reflect densification, increasing transit mode share
Full Recovery	Ratio rises from 2024 levels to <b>pre-pandemic levels in 2035</b>	Ratio rises from 2024 levels above pre-pandemic levels as forecast in Housing Element modeling
Half Recovery	Ratio rises from 2024 levels to <b>half of pre-pandemic levels in 2035</b>	Ratio rises from 2024 levels to <b>half</b> the level forecast in Housing Element modeling

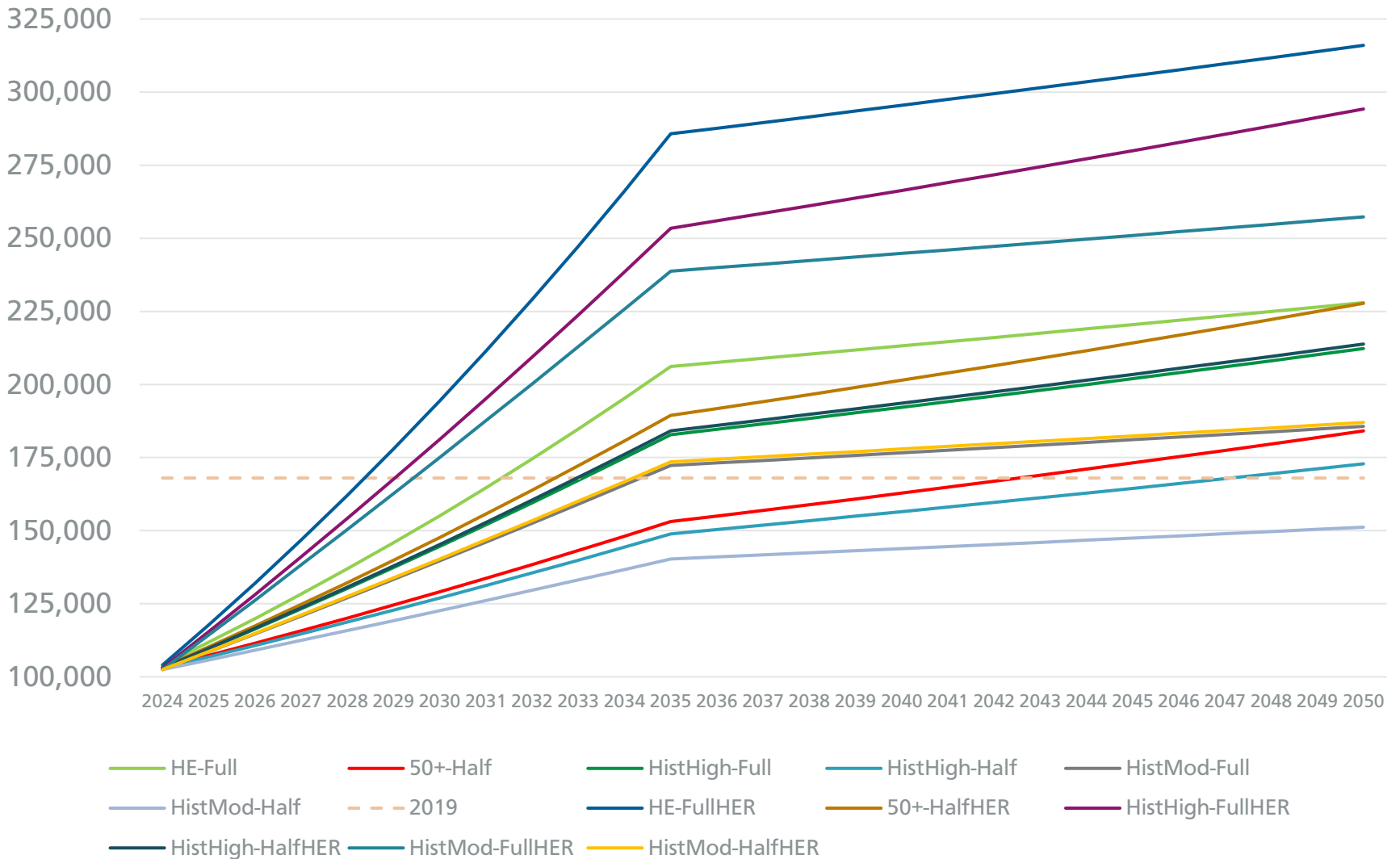
**Land Use:** Future growth in population + jobs, starting from a 2023 baseline of 1.553 million

<b>Housing Element</b>	Population + jobs rises to the levels projected by the San Francisco Housing Element. As this forecast has both a 2035 and 2050 forecast, the trend is split at 2035, with faster growth to 2035 and then slower growth to 2050
<b>Current Regional Plan</b>	Population + jobs rises smoothly to the levels projected by the new Plan Bay Area 2050+ land use forecast
<b>Historic High</b>	Population + jobs rises smoothly at approximately the rate of growth between 2000 and 2019
<b>Historic Moderate</b>	Population + jobs rises smoothly at approximately half the rate of growth between 2000 and 2019

# 12 scenarios have been developed among 16 possible combinations

Scenario	Land Use Growth	Ridership Ratio
<b>HE-Full</b> <b>HE-FullHER</b>	Housing Element	Full Recovery Rising to HE Ratio
<b>50+-Half</b> <b>50+-HalfHER</b>	Current Regional Plan	Half Recovery Rising to 50% HE Ratio
<b>HistHigh-Full</b> <b>HistHigh-FullHER</b>	Historic High	Full Recovery Rising to HE Ratio
<b>HistHigh-Half</b> <b>HistHigh-HalfHER</b>	Historic High	Half Recovery Rising to 50% HE Ratio
<b>HistMod-Full</b> <b>HistMod-FullHER</b>	Historic Moderate	Full Recovery Rising to HE Ratio
<b>HistMod-Half</b> <b>HistMod-HalfHER</b>	Historic Moderate	Half Recovery Rising to 50% HE Ratio

# DRAFT Ridership scenarios vary significantly: ~150,000-316,000



# Next Steps

- Choosing a subset of scenarios to focus on
- Translating average weekday ridership to peak hour ridership for each line/segment and comparing to existing and potential future capacity for each line/segment
- Understanding which capacity strategies provide enough capacity to serve future demand
- Selecting capacity strategies to recommend for:
  - 10-15 years: future Core Capacity Grant program
  - 15+ years: long-term vision

# Approach to Sharing Findings and Recommendations

## Tonight's CWG meeting

- Findings, Part 1: focuses on what we've learned from engineering feasibility assessments

## Next CWG meeting

- Findings, Part 2: focuses on what we've learned from analytical assessments, including new forecasting scenarios
- Tentative recommendations based on findings, for further stakeholder feedback

# Organizing Findings by Strategy

1. Capacity-enhancing strategy
2. Why consider
3. Feasibility findings
4. Downsides
5. Other notes (if relevant)

# Preliminary Findings: 3-car N Judah and inner M Ocean View

**Why consider:** could increase capacity by up to 50% on these lines

## Feasibility findings:

- Engineering analysis demonstrated general feasibility among assessed stops
  - A consolidated Ocean/Eucalyptus M Ocean View 3-car stop may require exceptions from the California Public Utilities Commission (that regulates rail safety) or additional right-of-way

## Downsides:

- For some stops, longer platforms might extend into adjacent intersections, creating need for bulb-outs and possibly restricted vehicle movements



# Preliminary Findings: Level Boarding

**Why consider:** could improve accessibility and decrease dwell time at stations



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



*Example of high-floor station platform on T Third in San Francisco*



# Preliminary Findings: Level Boarding

## Feasibility findings:

- General assumption for evaluation is that creating level boarding on the surface would require center platforms, although side platforms are also feasible in some locations.
- Largest cost driver in packages, given cost needed to re-align track to serve center platforms.

## Downsides:

- Whether low or high, new center or side platforms might conflict with car movements into driveways adjacent to the platforms, if there is insufficient vehicle lane width to provide needed clearances.
- Platforms may also (especially if going to 3-car trains) eliminate through-access across intersections or turn movements, whether low or high.
- In narrower rights-of-way, the tradeoffs to fitting in a boarding platform are significant (e.g., inner N Judah).

# Preliminary Findings: Systemwide low-floor fleet and low-floor subfleet

**Why consider:** Understand if low-floor fleet makes it easier to achieve fully level or near level boarding, which could improve accessibility + decrease station dwell time.

## Feasibility findings:

- **Low-floor subway platforms:** Initial engineering analysis indicates it is possible, but there are significant engineering, construction, and cost downsides.
- **Low-floor surface platforms:** Feasible, but does not significantly decrease engineering challenges, community impacts, or cost as compared to high floor boarding platforms.

*Top right: Seattle Sound Transit low-floor subway platform.  
Bottom right: San Jose VTA low-floor surface platform*



# Preliminary Findings: Systemwide low floor fleet, implications for subway

## Downsides:

- **Design challenges:**
  - Items that would need to be included in design that were not explored in this feasibility assessment: expansion of station envelope, anything needed to mitigate impacts to BART structure, changes to emergency access, fire/life/safety, ventilation.
  - Elevators and escalators would need to be significantly adjusted/ replaced and/or in some cases stairs/ramps could be used.
  - Station power and communications infrastructure located under existing platforms would need to be re-located/replaced.
- **Construction challenges:** significant service disruptions, such as station or platform closures.
- **Expense: >\$230 M more expensive (>30% more expensive) than other full modernization packages** and is thought to be an underestimate of the costs because of what was excluded from this feasibility assessment.

# Preliminary Findings: Both system-wide or low-floor subfleet, implications for surface

## Downsides:

- If pursued alongside all-door level boarding, engineering challenges, community impacts and costs of new platforms are significant (highest cost driver in packages) and similar for low and high-level platforms.

## Other notes:

- High-floor vs. low-floor has identical performance for capacity/speed/reliability/accessibility/equity in “full modernization” packages that pursue fully level boarding.
- Additional analysis underway to consider the pros/cons of a low-floor subfleet along with mini-lows for accessible boarding instead of fully level boarding, given the significant engineering, cost, and construction challenges with new platforms identified.
- Need to further consider the maintenance implications of a mixed fleet. i.e., one of Muni’s rail maintenance divisions would need to be modified so it could maintain a mix of low- and high-floor vehicles.

# Preliminary Findings: Crossing gates

**Why consider:** as a potential complement to transit signal pre-emption as a safety feature to block vehicular access to the trackway when a train is coming.



# Preliminary Findings: Crossing gates

## Feasibility findings:

- Do not appear to improve travel time or capacity
- Gates might be helpful for improving safety where transit signal pre-emption is implemented
- Conceptual design has been developed for future consideration that could include crossing gates for the M Ocean View at Ocean, Eucalyptus, and Rossmoor. Locations explored for crossing gates in M Ocean View conceptual design segment also included St. Francis Circle and Winston but not recommended at these locations.

## Downsides:

- Increased delay for other road users
- Introduces a new thing for SFMTA to operate and maintain
- Gates require significant lane shifts and capital construction in some locations

# Muni Metro Rider Focus Groups

- Goal to understand what a cross-section of regular Muni Metro riders think about some of the capacity strategies under study
- Conducted via professional public opinion research firm FM3
- Four focus groups conducted over October 8 and 9, 2024
  - 2: general Muni riders
  - 1: Spanish-speaking Muni riders
  - 1: Chinese-speaking Muni riders
- Each focus group consisted of a two-hour moderated conversation with 7-10 Muni Metro riders, including riders of each line
- Focus groups are a qualitative research method that provides insights into language, core values, and the “why” behind riders’ opinions.
  - Suggestive of Muni rider attitudes but do not provide statistical precision of how all riders feel

# Focus Group Highlights

## Mixed opinions about the need to expand capacity, questions about forecasting

- Some participants, particularly those familiar with international cities, were supportive of continued capacity improvements and tended to make more comparisons to global cities' transit systems.
- Some reacted with skepticism and did not tend to see the need for capacity improvements – especially those who lived on the west side.
- Some expected lower capacity in the future as more people work remotely and move out of the city.
- Some questioned how Muni could predict capacity issues so far into future.

*I don't think any of us came in here thinking man, we got to increase capacity on Muni Metro.*

*Make [trains] longer and they can take more people. Because the one car, two cars is very short.*



# Focus Group Highlights

Vast majority of participants were supportive of expanding transit priority, a few concerns on tradeoffs for people driving

## Support

*That allows [trains] to be on time more. It gives them a visible presence so ... you are out with the family ... let's jump on the J, it's convenient to go downtown.*

*The train or bus it must be faster than a car. So, you have to create a lane only for buses.*

*Ideally, I would love to see streets that are just for Muni and bikes and just get away from cars as much as possible.*

## Concerns

*Very unacceptable because it makes driving difficult.*

*I take my mom to UCSF appointments—she's too old and it's difficult for her to ride public transportation. There's so many cars, there's already issues with parking and trying to fight along with a Metro car.*

# Focus Group Highlights

Most participants recognized the value of “mini-high” boarding ramps

## Support

*[Mini highs] are very useful. Because I have a two-year-old and I travel a lot with a stroller, it comes in handy. Definitely. More of them would be a lot better.*

*I don't want people in the street and if it's not cute, okay, oh well.*

## Concerns

*I don't think I ever saw anybody ever use [a mini high]. So I gotta know if people in that area just didn't need it or it wasn't usable.*

*[Mini high-ramps] are definitely an eyesore.*

*It feels like that's not where [trains] should stop. I feel like there's something better.*

# Focus Group Highlights

Most participants supported all-door level boarding and understood the benefits to people with disabilities, luggage, strollers, etc. Some disliked the potential impact to parking spaces.

## Support

*I like the accessibility for everybody. Wheelchairs, luggage ... [it] gets hard for them to be able to step up and for [others] to get you up with the wheelchair, so it makes a lot of sense to be able to board with no problem.*

*I feel like I would be willing to give up the parking spots for better accessibility for others.*

*It would be very helpful to seniors.*

*You need to look at the number of people that use public transportation compared to the number parking spaces.*

## Concerns

*This is like during the pandemic they cut a lot of parking spaces to build those parquets for restaurants. It is a lot of inconvenient and it will affect a lot of people.*

*It's hard parking here in the city as it is. Very hard.*

# Focus Group Highlights

## Opinions were divided on route restructuring

*Reminder: Updated forecasting shows we likely do not need route restructuring except in the most aggressive future scenarios*

### Support

*If there is less people [on a line] I should not be prioritized over those that have more riders.*

*I see [transfers] working. It works in other places like Tokyo.*

*All the cities in the world have transfers to make the routes more effective.*

*I just feel like not every [train] needs to go through downtown because that's basically where we are right now and BART doesn't go to every station, you have to transfer, and it works, and nobody ever complains about that.*

### Concerns

*The train moves too slow, so you are going to kick me off an already slow beast and make me jump on something else.*

*It depends how seamless the transfer could be, and the wait times.*

*What we need is to move the people not limit them with long waits.*

*Do I want to be late because the train is overcrowded, or do I want to be late because I have to transfer? I don't like transferring, and I don't like it for tourists, and I don't like it for young kids.*

# Key feedback we're incorporating into Study's recommendations

There will be additional opportunities to provide feedback after we publish draft recommendations, but the following are key themes we've heard from CWG meetings, and other stakeholder and focus group feedback

- **Be visionary** → It's important for Muni Metro to continue to serve San Franciscans' mobility needs. The Study should be bold in defining what it will need to ensure Muni Metro's ongoing success.
- **Focus on rider needs** → While more Muni Metro capacity may not seem necessary to riders now, a core capacity program can help fund our State of Good Repair backlog, so we can keep providing reliable Muni Metro service for all riders.
- **Plan for multiple future scenarios** → We're preparing multiple growth scenarios to inform recommendations and defer more difficult capacity-enhancing strategies.
- **Set future corridor-based outreach up for success** → Encourage collaboration and consensus-building among communities focused on positive-sum outcomes for the system as a whole.
- **Route restructuring should be left as "last resort"** → We'll calculate thresholds when capacity constraints become large enough to necessitate route restructuring, given different possible growth trajectories.

# Questions and Discussion

1. Do the revised forecasting scenarios resonate with you better than the original forecast? Why/why not?
2. Which scenarios seem most or least plausible to you? Why?
3. Given the findings shared tonight, do you have feedback on what the Study should recommend for any of the strategies discussed tonight?
  - 3-car trains
  - System-wide low floor fleet
  - Low-floor subfleet
  - Level boarding
  - Crossing gates
4. What reactions do you have to the Muni rider focus group key findings? Does anything surprise you?

# Comments from Observers

**Observers:** please raise your hand if you would like to provide comment. SFMTA staff will call on you when it is your turn to provide comment.

Following observer comment time, CWG members may respond to observers or request staff to address any observer questions/comments.

## Guidelines:

1. Keep comments **constructive** (e.g. responding to the discussion, not repeating comments already provided in writing).
2. Focus comments on **topics**, not individuals.
3. Frame comments **positively** (to support a collaborative meeting environment).
4. Keep comments **future-focused** aligning with the Study's focus.
5. **Consider different points of view.**

**Thank you!**