SFMTA

Transit Performance Update

Julie Kirschbaum, Acting Director, Transit

Citizen's Advisory Council, March 7, 2019

Agenda

I. Introduction – New Acting Director
II. Subway Performance
III. Current 90 Day Plan
IV. LRV4 Phase II

Accountability

On January 15, 2019 we made a commitment to the SFMTA Board of Directors to improve subway performance.

As part of our efforts we are:

- Implementing targeted actions to address key issues attributing to poor service reliability
- Measuring key metrics to track our progress and ensure our actions result in improvements
- Communicating our progress monthly to the Board

Subway Actions Underway

Daily Subway Management

- ✓ **West Portal:** Upgraded train signal software, introduced PCOs to manage traffic, and training staff to manually expedite congested trains in/out of subway
- ✓ **Construction Management:** Successfully prepared for Muni Metro East (MME) maintenance facility closure and T line bus substitution during Mission Bay platform construction; ***Hardest phase completed!***
- **Terminal Management:** Reduce turnaround time at Embarcadero and focus on timely departures at outer terminals (AM and PM shifts)
- **Closing Gaps:** Introduce use of gap train to cut long headways, especially after major delays

West Portal Bottleneck

- ✓ Addressed issue with train signal software
- ✓ Dedicated PCOs to control movement of pedestrians and vehicles at West Portal
- ✓ Training Operators and Inspectors to manually control signal when subway is congested
- ✓ Week one results promising – 40% reduction in delays approaching WP
- Will continue to make adjustments – Tuesday-Thursday delay worse than Friday through Monday
- Considering possible turn restrictions in AM Peak (outreach needed)

Actions Underway

Delay Reduction and Response

- ✓ **Vehicle Maintenance:** Used MME shutdown from platform work to adjust couplers and inspect master controllers
- ✓ **Quicker Response to Breakdowns:** Positioned maintenance staff at additional strategic locations in the subway during AM/PM peak – **two signal crews in place, rail maintenance added Van Ness** and working toward staffing Castro
- **Infrastructure Maintenance:** Increase maintenance window at the Muni Metro Turnback (MMT) for personnel to conduct inspections; proactively replace switch motors
- **Customer Information:** Enhance platform audio-visual signs; in-train announcements (linked to new radio installation underway)

Proposed Subway Metrics

Metric	Target
Subway Delay: Sum of all delay for all trains traveling in the subway. Captures time wasted between stations and at platforms (when train is stopped for more than 30 seconds)	10% reduction in minutes of peak period delay
Major Delays: Total number of delays that last more than 20 minutes	4 or fewer 20+ minute delays each month
Subway Travel Time and Travel Time Variability: End to end subway travel time, peak period, peak direction	Reduce variability by 5%
Embarcadero Turnaround Times: Captures the time and variability associated with turning trains at Embarcadero Station	5 min or less average turnaround time for near and far pocket

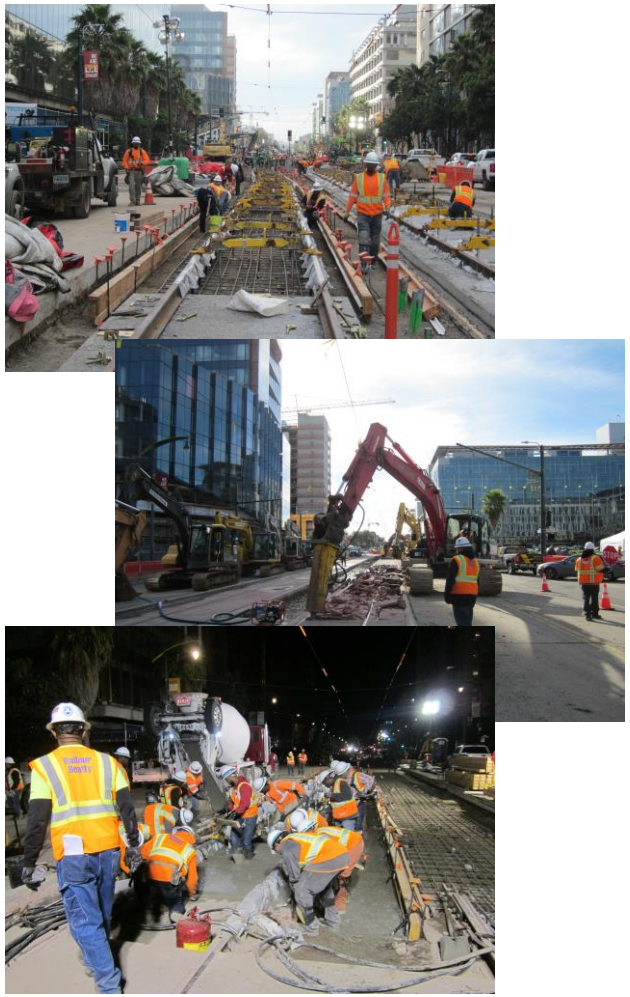

45 UNION/STOCKTON
Lyon + Greenwich
728
CA40819
5728
Clean Air Vehicle
45 STOCKTON
139
5728
USFCA.EDU
USFCA.EDU

Current Transit Focus Areas

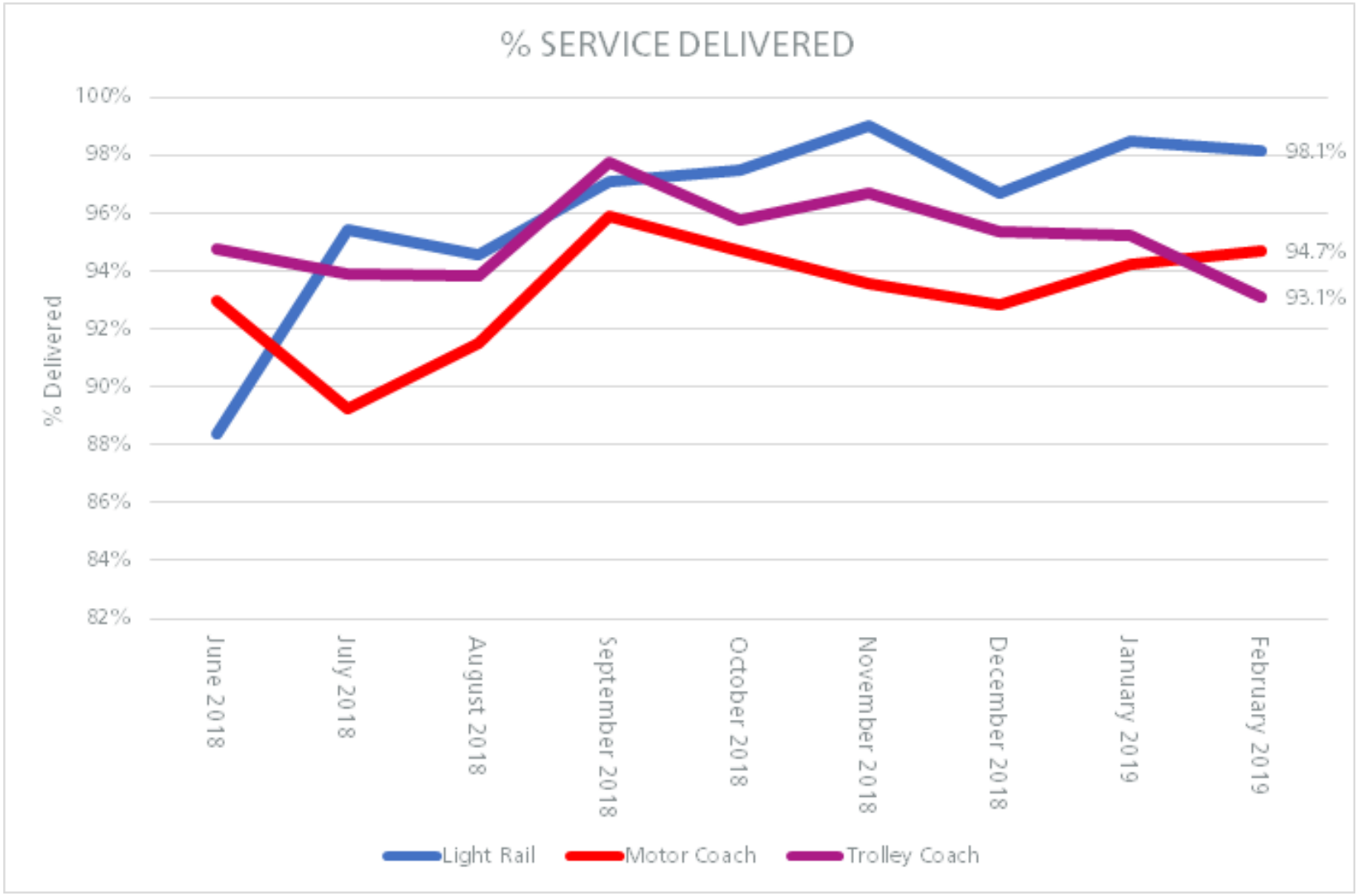
- Subway Performance
- Safety
- Rapid Network
- Mission Bay Platform
- Customer Information
- Missed Service
- Staff Engagement/Morale

Mission Bay Platform

- Regained access to MME on Sunday!
- Agency-wide collaboration to manage complex service plan, train storage and customer information campaign
- Tracking complaints for service and construction issues
  - 311 complaints declined over 50% after week one (65 to 29)
  - Top issues were signage and noise; signage complaints dropped to 3 in week two after starting signage audits
- Managing T bus gaps with TMC and Inspector support



Reducing Missed Service



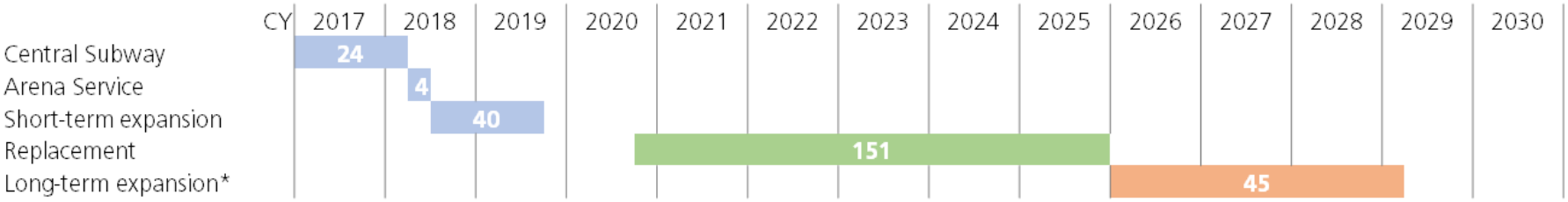
Current 90-Day Action Plan Targets

Action	Target
Reduce preventable collisions	68 per month or fewer
Reduce subway delay	10% reduction
Increase service delivery	96% or above
Reduce gaps on Rapid bus lines	12% or below
Reduce gaps on Muni Metro rail lines	20% or below
Improve On-time Performance on low ffrequency routes	5% increase

LIGHT RAIL VEHICLE PROCUREMENT PHASE 2

Background

Summer 2014	SFMTA awarded a contract to Siemens
January 2017	First vehicle delivered to SFMTA property
Fall 2017	First vehicle in revenue service
Fall 2018	Operator familiarization complete, systemwide deployment of LRVs
Spring 2019	Initiate replacement phase (Phase II)
Summer 2019	Complete expansion phase (Phase I)
Fall 2025	Complete procurement of replacement phase (Phase II)



Current Status

The first Phase of the LRV4 Procurement provides 68 expansion vehicles:

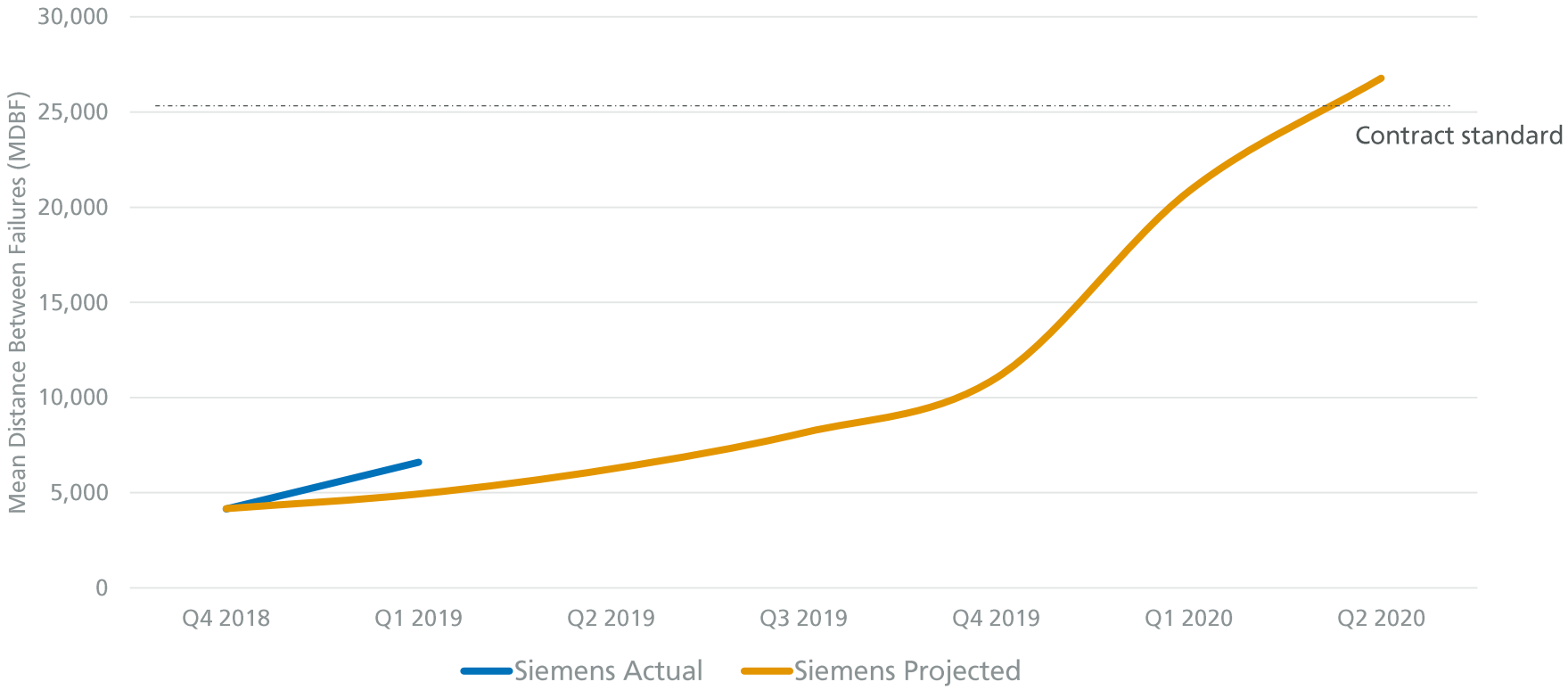
- The 68 expansion vehicles comprise 24 vehicles for Central Subway start up, 4 vehicles to support the Chase Center development, and 40 to address system wide ridership growth
- Currently we have 58 vehicles on property;
- 48 of the 58 vehicles are approved to run in revenue service;
- 10 of the 58 are going through the commissioning and certification process;
- The remaining vehicles will be delivered and in service by this summer.

Performance and reliability

Reliability Demonstration Program launched August 2018, runs for 2 years

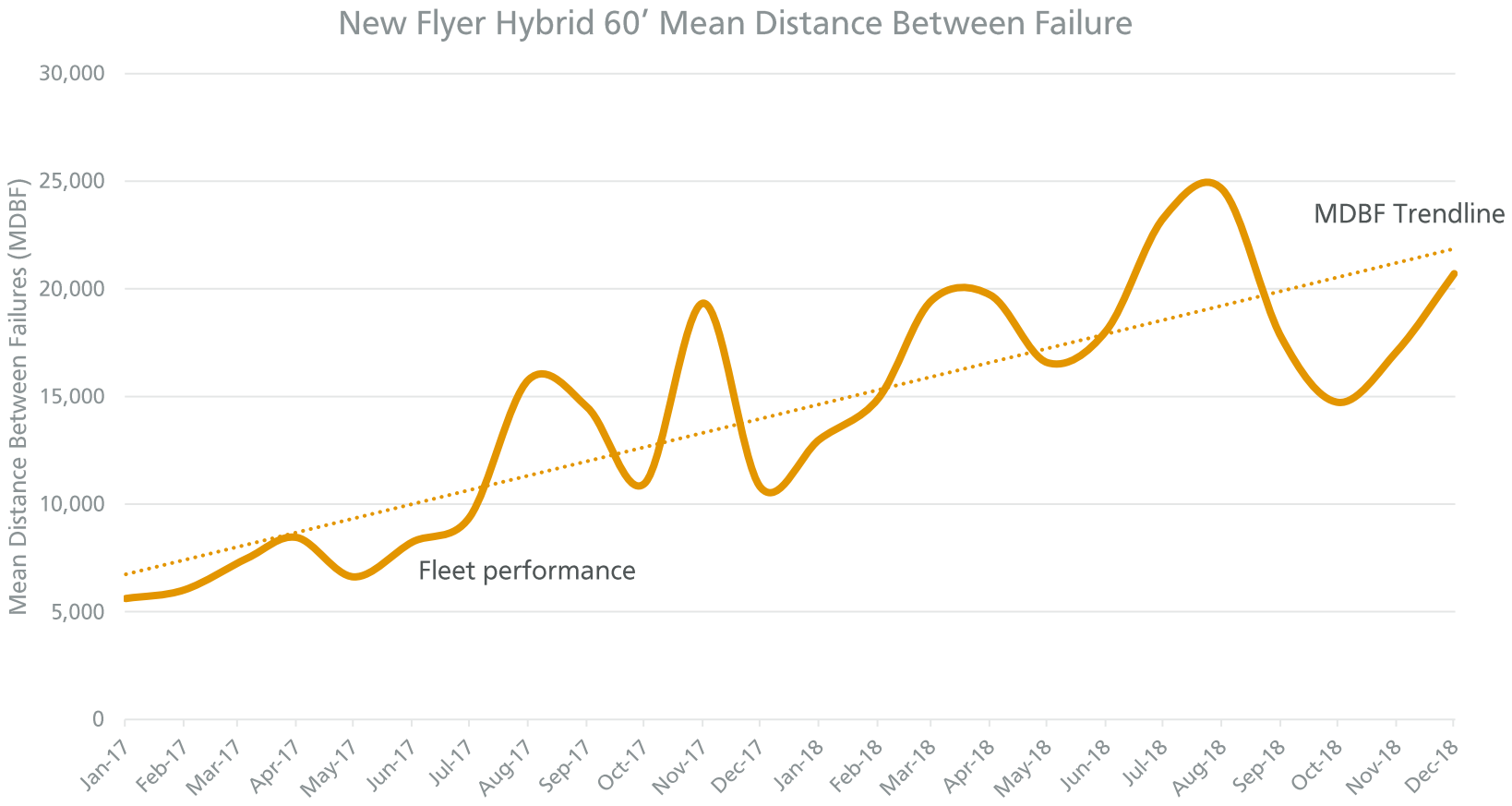
Program validates progress to reliability standard of 25k miles between failure

Fleet currently performing at 6,600, on track to meet target



New Flyer Procurement Reliability

Reliability ramp up and performance fluctuations during wear-in are common in any custom fleet procurement



Planning for LRV4 Phase 2

Replace 151 Bredas on expedited schedule

Incorporate design enhancements based on:

- System Performance
- Operator and Mechanic Feedback
- Customer Feedback Sources
  - 311, Twitter, Letters, etc.
  - Intercept survey
  - Focus groups

Operations and maintenance enhancements

We've been collecting feedback from operators, maintenance, engineering and the public about all aspects of these vehicles since they first arrived

Operations: *20 enhancements*

- Improved sunshades for enhanced Operator visibility
- Updated operator panel switches to more easily distinguish functionality (e.g., front door versus all door button)
- Updates to passenger information system to clarify messaging

Maintenance: *22 enhancements*

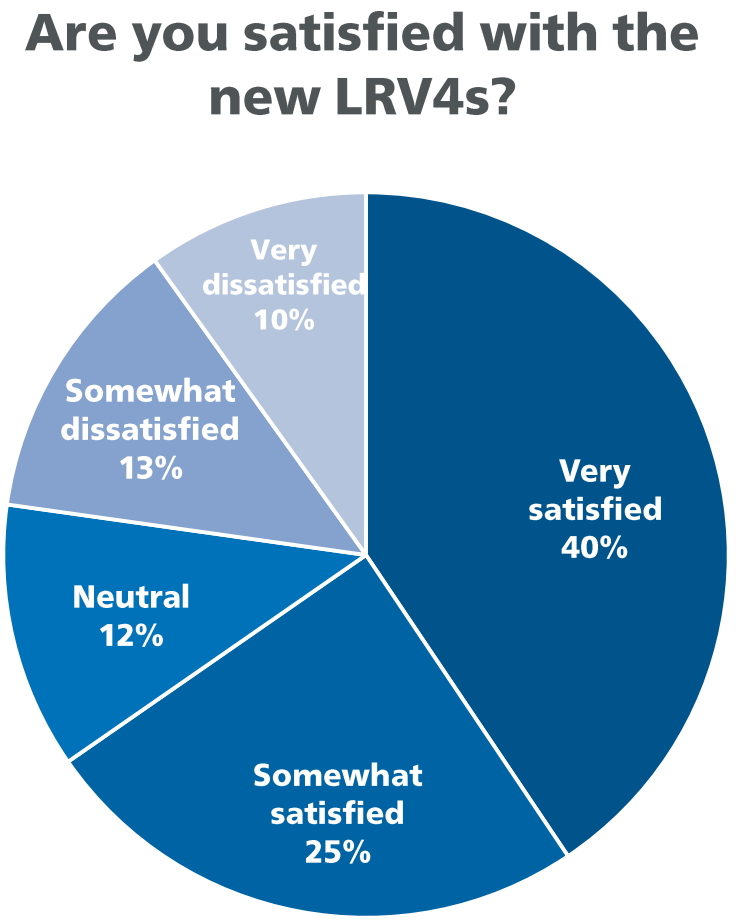
- Updates to wheel design to make wheel-truing easier
- Modify brakes to better distribute force during quick stops
- Changes to panel securements for easier access

Customer Feedback for Phase 2 Survey Results

Riders are overwhelmingly satisfied with the new vehicles

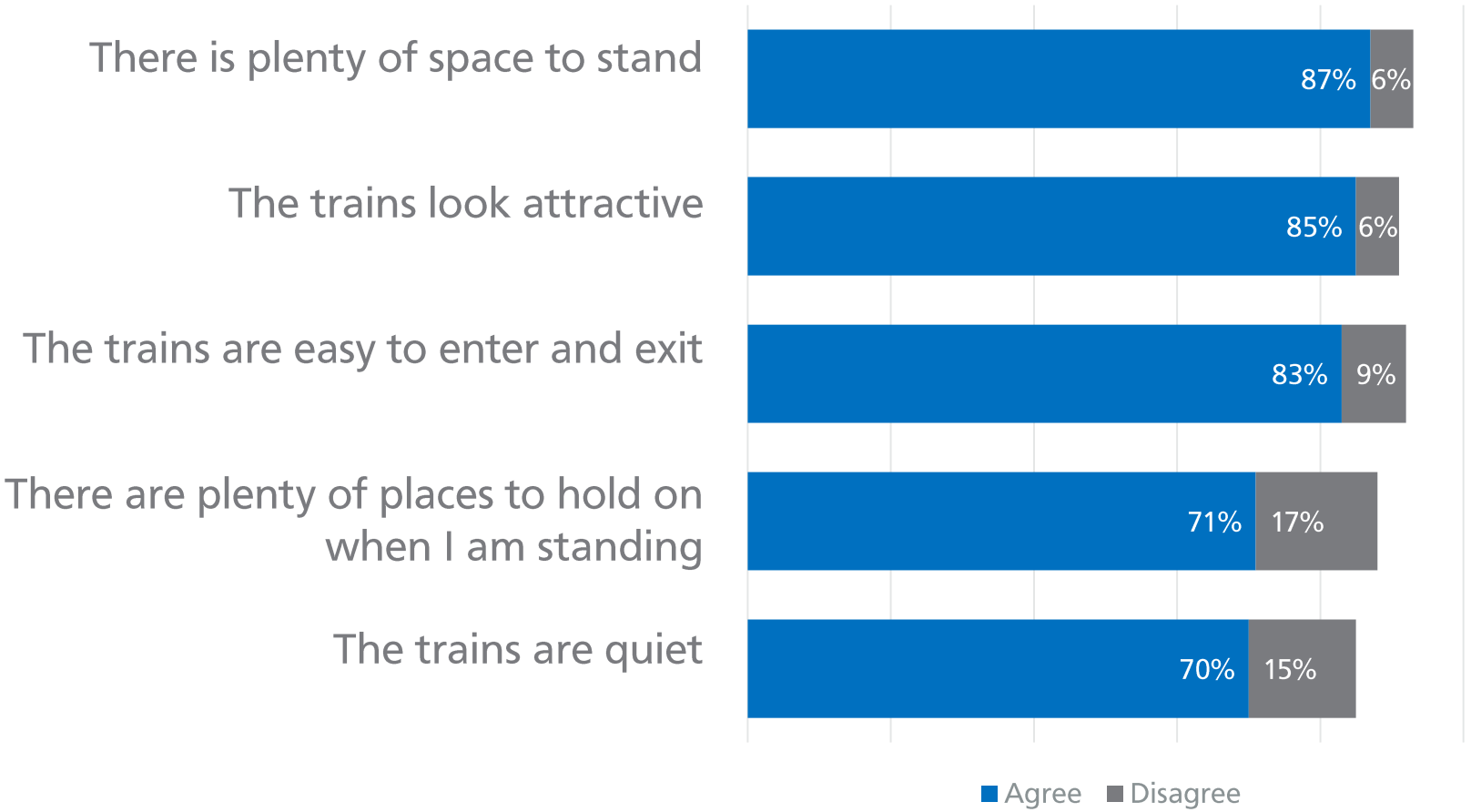
Majority of those surveyed are regular riders, all had first hand experience onboard the new Siemens trains

In all categories we surveyed, people are more satisfied than dissatisfied



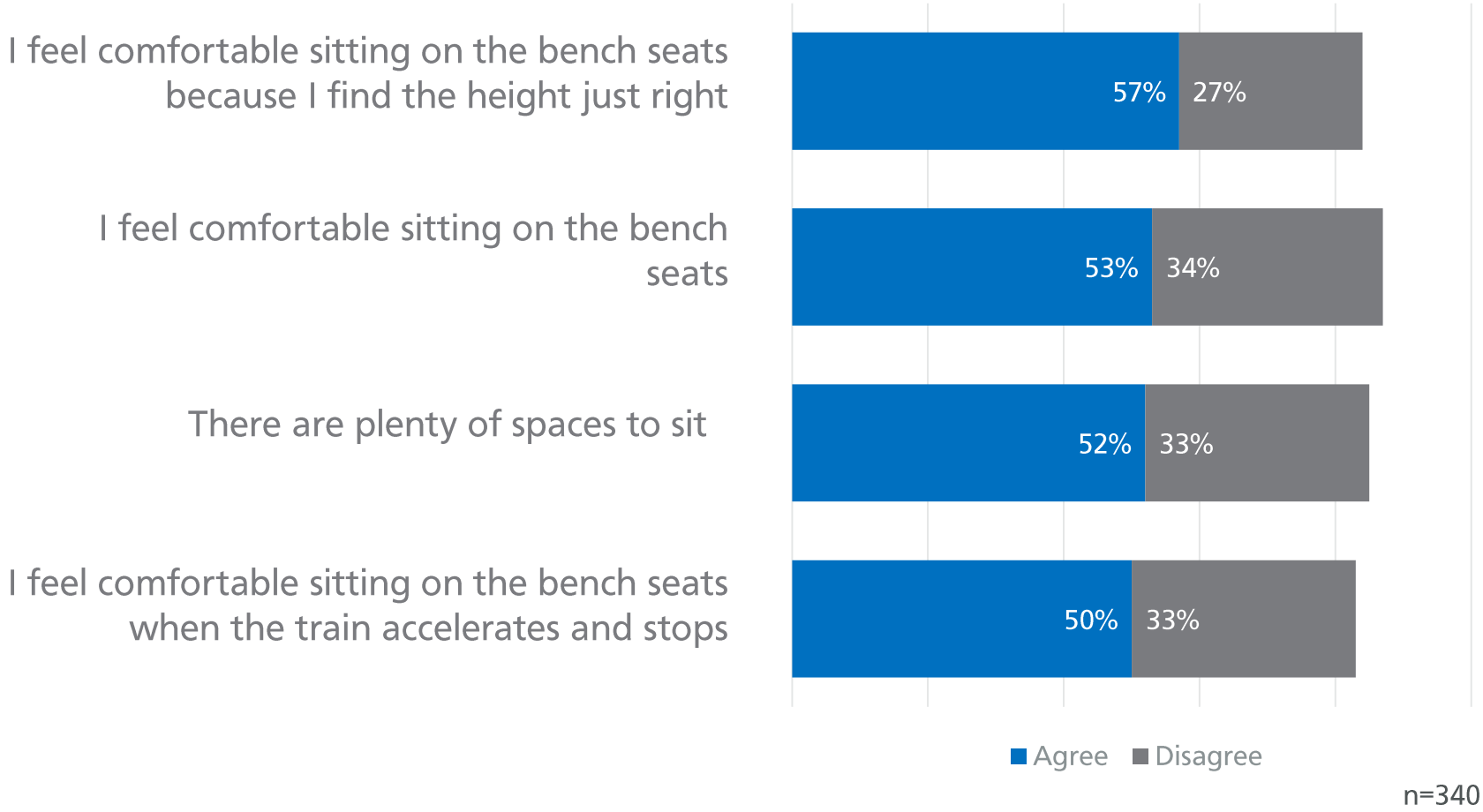
n=340

Where we've got it right



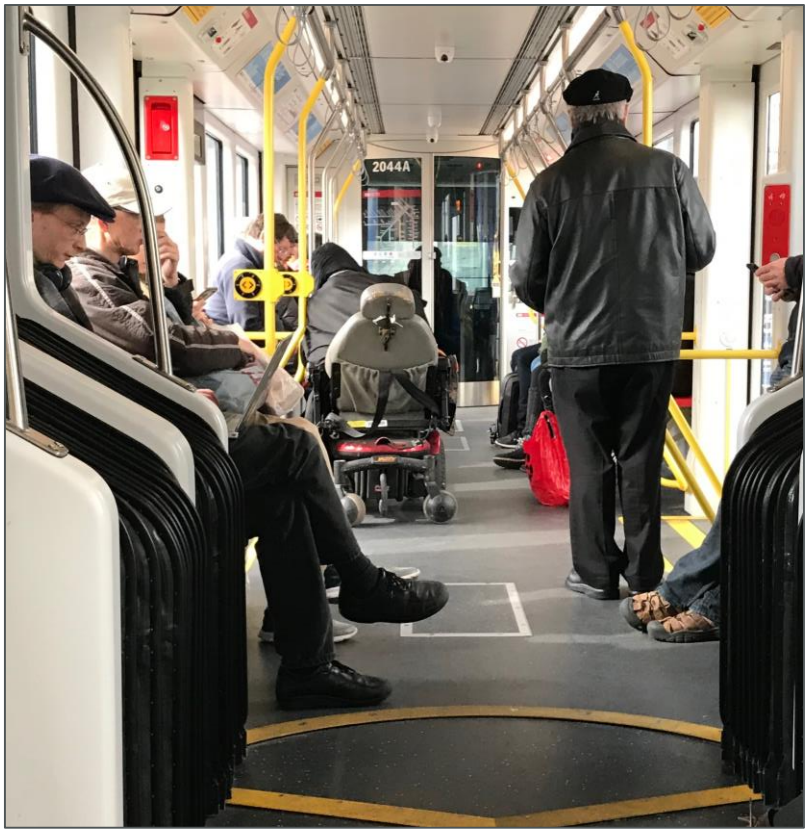
n=340

What we heard: Room for improvement



Focus group feedback

- The **seats are very uncomfortable**, they are slippery and need seat definition.
- Most participants **like the handholds** and want **one to three more** of them per vertical pole; also received requests for hand straps that accommodate different rider heights.
- Participants **liked the wider aisle** created by the sideways-facing seats for people to **travel through more easily.**



Focus Groups Special considerations

Customers with disabilities

- Similar overall satisfaction levels as all respondents
- High levels of approval for ease of access and egress
- Much higher levels of dissatisfaction with the seats

Shorter riders: 5’4” or less

- Similar overall satisfaction levels as all respondents
- Lower levels of satisfaction with the height of seats

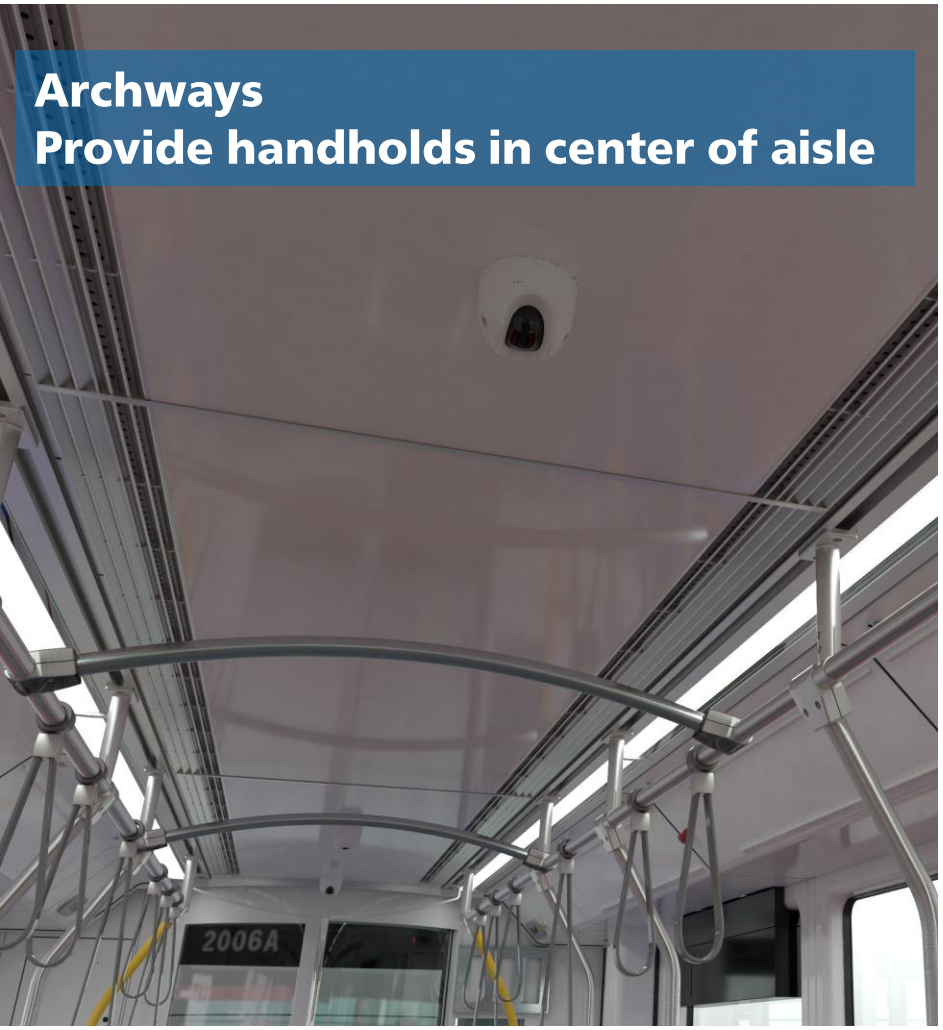
PASSENGER ENHANCEMENTS

Passenger comfort updates

Options for changes were developed to address customer feedback in the following categories:

- Additional handholds
- Seating type
- Interior seating layout

Additional Handholds



Archways
Provide handholds in center of aisle

Hand Straps
Provide multi-length hand straps

Seating type

Seat type can be updated to provide more definition of seats and to increase passenger comfort

Seat Options B & C reduce seating capacity

Seating layout

Base Change	Modest alteration	Lower bench seating 2 inches, except where train control equipment box is stored (applies to all options)
Option 1	Modest alteration	Convert area across from leaning bar to single transverse seats
Option 2	Intermediate alteration	Convert most longitudinal seats to single transverse seats
Option 3	Significant alteration	Convert one side of seating to double transverse seats

Base Change: Lower bench seating

Base Change: Lower bench seating

- ✓ Retains aisle width
- ✗ Provides more seating variety
- ✓ Preserves current number of seats
- ✓ Meets accelerated schedule
- ✗ Increases hand holds

Option 1: Convert area across from leaning bar to single transverse seats

Option 1: Convert area across from leaning bar to single transverse seats

- ✓ Retains aisle width
- ✓ Provides more seating variety
- ✗ Preserves current number of seats (4 seats fewer)
- ✓ Meets accelerated schedule
- ✓ Increases hand holds

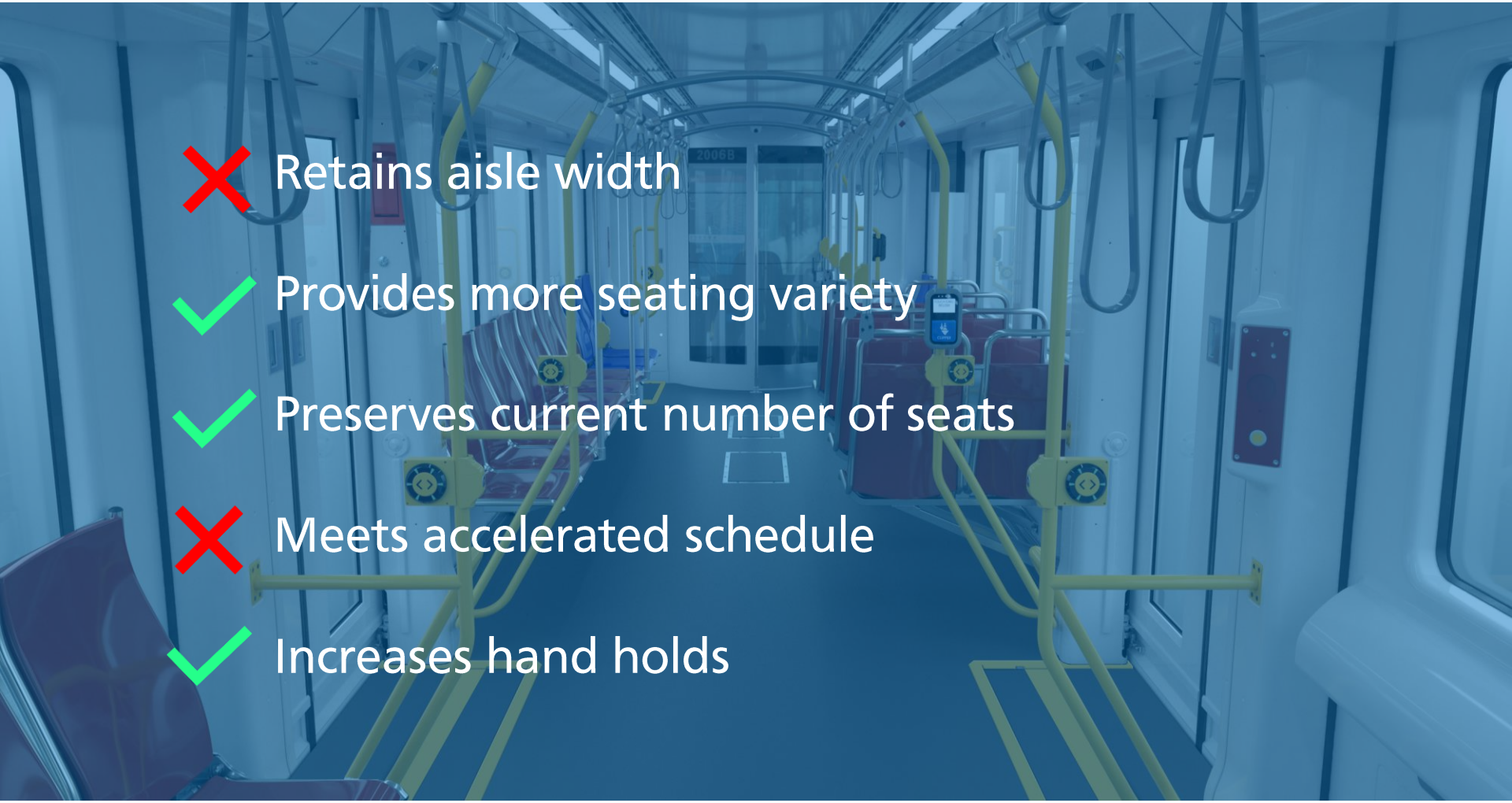
Option 2: Convert most longitudinal seats to single transverse seats

Option 2: Convert most longitudinal seats to single transverse seats

- ✓ Retains aisle width
- ✓ Provides more seating variety
- ✗ Preserves current number of seats (12 seats fewer)
- ✓ Meets accelerated schedule
- ✓ Increases hand holds

Option 3: Convert one side of seating to double transverse seats

Option 3: Convert one side of seating to double transverse seats



- ✗ Retains aisle width
- ✓ Provides more seating variety
- ✓ Preserves current number of seats
- ✗ Meets accelerated schedule
- ✓ Increases hand holds

Seat Layout Summary

	Base Change: All Bench Seating but Lowered	Option 1: Convert area across from leaning bar to single transverse seats	Option 2: Convert One Side to Single Transverse Seats	Option 3: Convert One Side to Double Transverse Seats
Retains Aisle Width	✓	✓	✓	✗
Provides More Seating Variety	✗	✓	✓	✓
Preserves Number of Seats	✓	✗	✗	✓
Meets Accelerated Schedule	✓	✓	✓	✗
Increases Hand Holds	✗	✓	✓	✓

NEXT STEPS

Timeline

March 2019	Present Options to CAC and Board for Feedback
March - April 2019	Negotiate change order and pricing with Siemens
May 2019	SFMTA Board reviews/approves change order
Summer 2019	Final expansion vehicle in service
December 2020	First replacement LRV delivered
October 2025	Last replacement LRV delivered