



# AGENDA

## San Francisco County Transportation Authority Meeting Notice

**Date:** Tuesday, September 24, 2019; 10:00 a.m.  
**Location:** Legislative Chamber, Room 250, City Hall  
**Commissioners:** Peskin (Chair), Mandelman (Vice Chair), Brown, Fewer, Haney, Mar, Ronen, Safai, Stefani, Walton and Yee  
**Clerk:** Alberto Quintanilla

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<p><b>Projects:</b> (SFMTA) Muni Subway Expansion Project Development (\$965,948), New Flyer Midlife Overhaul - Phase 1 (\$17,937,483), Speed Radar Sign Installation Program (\$179,000), Application-Based Traffic Calming Program - FY18/19 (Construction) (\$1,253,103), Application-Based Traffic Calming Program - FY19/20 (Planning) (\$203,192), Taylor Street (\$2,047,958), Safe Streets Evaluation Program (\$200,000), Alemany Corridor Safety [NTIP Planning] (\$100,000); (SFPW) Street Repair and Cleaning Equipment (\$1,300,000), Public Sidewalk and Curb Repair (\$552,659), Tree Planting and Establishment (\$1,408,424); (SFCTA) District 4 Mobility Improvements Study [NTIP Planning] (\$100,000)</p>	
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<p>On June 24, 2019 Mayor London N. Breed announced the creation of the Muni Transit Performance Working Group to review the performance of the City's current bus and rail</p>	



system and to recommend actionable steps that the City can take to improve service for riders. The working group is convened together with Supervisor Rafael Mandelman and Supervisor Aaron Peskin. Peg Stevenson, City Performance Director at the Controller's Office, and Julie Kirschbaum, Director of Transit at the San Francisco Municipal Transportation Agency (SFMTA), will provide an update at the September 24, 2019 Transportation Authority Board meeting.

### Other Items

#### 10. Introduction of New Items - **INFORMATION**

During this segment of the meeting, Commissioners may make comments on items not specifically listed above or may introduce or request items for future consideration.

#### 11. Public Comment

#### 12. Adjournment

### \*Additional Materials

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Items considered for final approval by the Board shall be noticed as such with **[Final Approval]** preceding the item title.

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# DRAFT MINUTES

## **San Francisco County Transportation Authority**

Tuesday, September 10, 2019

### **1. Roll Call**

Chair Peskin called the meeting to order at 10:02 a.m.

**Present at Roll Call:** Commissioners Brown, Mar, Mandelman, Peskin, Stefani and Walton (6)

**Absent at Roll Call:** Commissioners Fewer (entered during Item 2), Yee (entered during Item 2), Ronen (entered during Item 5), Haney (entered during Item 7) and Safai (entered during Item 7) (5)

**Commissioner Mandelman moved to excuse Commissioner Safai, seconded by Commissioner Mar. Commissioner Safai was excused without objection.**

### **2. Citizens Advisory Committee Report - INFORMATION**

John Larson, Chair of the Citizens Advisory Committee, reported the CAC adopted a motion of support for the Prop K allocation, Item 5 on the agenda, and had questions regarding the Muni Subway Expansion Project Development. He noted that the project harkened back to an M Line feasibility study in 2014 for less extensive undergrounding that was originally supposed to proceed to pre environmental conceptual design in 2015, but later expanded in scope in 2016. Mr. Larson said SFMTA staff explained that the M Line improvements still needed to be prioritized against other major transit projects as part of the overall ConnectSF effort. The SFMTA added that it would be premature to engage in any environmental review for the Muni Subway Expansion Project until the Transit Corridor and Streets and Freeway Studies recommendations were evaluated. He stated that with the ongoing congestion issues on 19th Avenue and the commencement of redevelopment of Park Merced, the need for grade separation on the M Line was vital.

Mr. Larson said regarding the Speed Radar Installation program Prop K request, the CAC asked if it was possible to pair the radar signs with technology, such as road sensors, that could capture speed data in real time, gauge effectiveness and provide before and after studies. He reported that for Item 7 in the agenda, Vision Zero Communications and Education Update, the CAC observed that the recent uptick in fatalities seemed to coincide with an increase in Transportation Network Company (TNC) vehicles on the road. SFMTA staff noted while there had not been any TNCs involved in a fatal collision this year, regulation of TNCs was included as part of the Vision Zero transformative policy agenda. Mr. Larson stated that the CAC highlighted communities of concern and the need to provide safe environments in which to children could bike to school and receive bike education. He said the SFMTA affirmed bike training classes were part of Vision Zero's strategic actions and that the Safe Routes to School program was a specific initiative to achieve safe transit for children and foster Vision Zero goals.



Mr. Larson reported that as part of the CAC's monthly Van Ness Bus Rapid Transit (BRT) update, the CAC inquired about business outreach efforts and asked for additional metrics of the effectiveness of the outreach in terms of the responses from the business community, e-mails and text messages sent and meetings attended. In response the SFMTA said to date no businesses had taken advantage of the free advertisement opportunity for bus cards on the Van Ness corridor buses. Mr. Larson reported that during public comment concern was again raised with regard to the BRT bus platforms in the center of Van Ness and the time it may take some seniors and disabled individuals to get across the traffic lanes to get to the platform.

There was no public comment.

### **Consent Agenda**

- 3. Approve the Minutes of the July 23, 2019 Meeting - ACTION**
- 4. [Final Approval] Adopt the Lombard Crooked Street Reservations & Pricing System Study Final Report and Authorize the Executive Director to Advance the Recommendations of the Study, Including Seeking Necessary Legislation and Funding Identification - INFORMATION**

There was no public comment.

Commissioner Yee moved to approve the Consent Agenda, seconded by Commissioner Mandelman.

The Consent Agenda was approved without objection by the following vote:

Ayes: Commissioners Brown, Fewer, Mandelman, Mar, Peskin, Stefani, Walton and Yee (8)

Absent: Commissioners Haney, Ronen and Safai (3)

### **End of Consent Agenda**

- 5. State and Federal Legislation Update - INFORMATION**

Mark Watts, State Legislative Advocate, and Amber Crabbe, Public Policy Manager, presented the item per the staff memorandum.

Commissioner Stefani thanked Transportation Authority staff for their work on Assembly Bill 1605 and for getting Assemblymember Phil Ting to sponsor the bill and Senator Scott Weiner to carry it in the senate. She said the bill was now on the Governor's desk and was the result of years of trying to solve problems on Lombard and its surrounding streets. She hoped that the bill would relieve traffic congestion in the area.

There was no public comment.

- 6. Allocate \$26,147,587, with Conditions, and Appropriate \$100,000 in Prop K Sales Tax Funds for Twelve Requests - ACTION**

Anna LaForte, Deputy Director for Policy and Programming, and Julie Kirshbaum, Director of Transit at the San Francisco Municipal Transportation Agency (SFMTA), presented the item per the staff memorandum.





Commissioner Brown requested that funding from the Speed Radar Sign Installation program be directed to Fell and Oak streets.

Ms. LaForte stated that the request had been noted and that those locations would be taken into consideration as the SFMTA was evaluating potential implementation sites. She said she would follow up to ensure that the SFMTA provided updates to Commissioner Brown's office as it evaluated potential locations.

Commissioner Mar thanked the Transportation Authority for working with his office on the District 4 Mobility Improvement Study project and said he was excited about coming up with new ideas to expand mobility options for Sunset residents, who were the most car-dependent in the city. He added that District 4 residents were interested in getting out of their cars and offering up transportation improvement ideas.

Commissioner Haney asked if the Speed Radar Sign Installation program was related to automated speed enforcement or would help prepare the city for it. He also asked if there had been an analysis of the effectiveness of speed radar signs and if the City provided warning notices when people were driving at high speeds.

Ms. LaForte said the staff recommendations for the Speed Radar Sign project included a special condition that SFMTA would provide before/after studies analyzing the effectiveness of the signs at reducing speeds. She clarified that automated speed enforcement was not tied to the speed radar signs, adding that the speed radar signs were intended to make drivers aware of their speed and had been shown to be effective. Ms. LaForte said that enforcement was the main difference between speed radar signs and automated speed enforcement.

Philip Louie, Project Manager at the SFMTA, said the speed radar signs were solely informational and did not have enforcement capability. He said they could potentially record speed information but could not be used for enforcement.

Commissioner Haney asked if there had been any changes made to the scope of the Safer Taylor Street project as a result of the Safe Taylor Street project analysis.

Ms. LaForte said she would work with SFMTA staff to get a response.

Commissioner Yee stated that speed radar signs were affective in District 7, with more speed-conscious drivers slowing down. He also spoke in support of the undergrounding of Muni's M-line, and said it was important to conduct outreach early and inform communities of future disruptions. He noted that outreach would be needed in the West Portal area, were many businesses would be affected by construction of the project. Commissioner Yee said he hoped the SFMTA had a business mitigation plan that would identify the impact that construction would have on businesses along the West Portal corridor.

Sarah Jones, Planning Director at the SFMTA, said Commissioner Yee's suggestions regarding outreach were well founded and agreed that undergrounding through West Portal would pose a big outreach challenge. She said it was important that the SFMTA balanced the needs of the riding public with the needs of individual neighborhoods. Regarding Commissioner Yee's concerns about construction mitigation, Ms. Jones said it was early in the study for a focus on construction mitigation. She noted that the SFMTA recognized the importance of construction mitigation but said the conditions and needs for mitigation were difficult to determine



for a project that was several years away.

Commissioner Yee said it was important to be conscious of construction mitigation along every step of the process and said the final report should state that business mitigation would be studied carefully. He said that would help the community feel confident and demonstrate that the city was paying attention.

Ms. Jones said SFMTA would address business mitigation in their report and stated that SFMTA was asking questions and talking about business mitigation as the project progressed.

Commissioner Yee asked how many locations were participating in the Speed Radar Sign Installation program and how the locations were determined.

Ms. LaForte said she believed that there would be five or six locations where speed radar signs would be installed and said that potential locations were identified by community and staff requests. She said the Prop K packet enclosure included a description of the qualitative and quantitative guidelines that SFMTA used to prioritize locations for the speed radar signs.

Commissioner Yee asked what before/after data was being collected for the Safe Streets Evaluation program.

Ms. LaForte stated she would get back to Commissioner Yee with a more robust response from the SFMTA but said the program would apply consistent metrics across the all the projects to be evaluated, including speed and collision rates.

Commissioner Ronen requested that a speed radar sign be placed on Cortland Avenue. She said she was not sure which Cortland Avenue intersection would be best but noted that there had been a pedestrian fatality at one intersection and a pedestrian/ vehicle collision at another. She said it was an incredibly busy street, with children going to and from the library and a bus line that made it difficult to install effective speed bumps or humps.

Ms. LaForte stated that she would ensure that the SFMTA follow up with Commissioner Ronen's office.

Commissioner Safai said he was glad to see the Alemany Corridor Safety project on the Prop K list but was hoping the report could be finalized before the scheduled September 2020 completion date. He requested a robust community outreach process and stated that he was receiving many emails from Alemany residents reporting car collisions on the street. Commissioner Safai said he was willing to apply \$100,000 of District 11's Neighborhood Transportation Improvement Project (NTIP) funds toward the project. He said he wanted a quick resolution to the planning phase so that SFMTA could begin determining the cost of the recommended scope and ultimately cut the project timeline in half.

Commissioner Fewer requested that the Fulton corridor be placed on the prioritization list of potential speed radar sign locations.

Ms. LaForte replied that staff would communicate the request to SFMTA.

During public comment Francisco Da Costa said the recommended allocations were good but would take a long time to be implemented. He said some traffic signals had taken 16 years from request to implementation. He asked that union bus drivers be



invited to share their thoughts on Prop K requests and noted that there were issues with the same bus lines running concurrently.

Dwayne Gains asked that the Muni 9-line provide more frequent bus service on weekends and said that on weekends passengers who relied on the 9-line had to wait 15 to 20 minutes for a bus to arrive.

Commissioner Yee moved to approve the item, seconded by Commissioner Fewer.

The item was approved without objection by the following vote:

Ayes: Commissioners Brown, Fewer, Haney, Mar, Peskin, Ronen, Safai, Stefani, Walton and Yee (10)

Absent: Commissioner Mandelman (1)

**Chair Peskin called Item 7 before Item 6**

**7. Vision Zero Communications and Education Update: Multilingual and Senior Campaigns - INFORMATION**

Uyen Ngo, Vision Zero Education and Outreach Coordinator at the San Francisco Municipal Transportation Agency (SFMTA) and Dongmei Tan, Assistant Health Educator at the San Francisco Department of Public Health (DPH), presented the item.

Commissioner Yee asked if there was an update on the Board's request for crossing guards close to senior centers.

Ms. Tan said that the SFMTA would need to follow up with an update.

Commissioner Yee asked if there would be an analysis to identify which educational materials or mechanisms were most effective at reaching target audiences.

Ms. Tan said that DPH had not done a comprehensive evaluation but was collecting feedback after each community presentation. She noted that seniors were appreciative of 311 as a way to report community concerns to city agencies.

Commissioner Yee said there were two levels of outreach and education. One was direct outreach and education done in a setting such as a workshop, and the other being educational materials posted on the streets and on social media. He asked what type of analysis would be conducted to identify what messaging or mechanisms were most effective and would reach the most people.

Ms. Ngo said the SFMTA's educational campaigns would track metrics like the number of people reached. She said the goal of the educational campaigns was to generate awareness of Vision Zero. SFMTA would track these metrics and, every couple years, conduct an awareness survey to see if the public was retaining the messaging. Ms. Ngo said that the SFMTA included an extensive evaluation component when they received funding for each specific campaign and that they also had the Safe Streets Evaluation program to measure the effectiveness of engineering treatments.

Commissioner Yee asked when the SFMTA would have the results of the analysis.

Ms. Ngo said the SFMTA would share that analysis soon.

Commissioner Yee said that would be great and asked Ms. Ngo to explain the social media strategy.



Ms. Ngo said the SFMTA used paid social media on Facebook and YouTube Pre-Roll and would setup target audiences to collect data for specific age ranges and parts of the city. The metrics would track audiences' interests like people who ride motorcycles. She added that the "Driving in Today's SF" YouTube videos tracked how many people watched the videos and how many people completed the whole video.

Commissioner Yee asked if outreach was also being done through WeChat.

Ms. Ngo replied that SFMTA was not yet using WeChat but was thinking about using the social media platform for Chinese specific campaigns.

Commissioner Yee stated that the Chinese speaking audience was more likely to be reached through WeChat as opposed to Facebook.

Ms. Ngo agreed.

Commissioner Fewer stated that she had previously suggested that the city offer free driver refresher courses to educate drivers about changes in transportation infrastructure. Drivers would benefit from courses that covered how to park near bike lanes and how to navigate through traffic circles. She seconded Commissioner Yee's suggestion that the SFMTA also conduct social media outreach on WeChat and suggested having focus groups to provide feedback on the effectiveness of marketing materials. Commissioner Fewer said that there had been two recent pedestrian fatalities in District 1, both Chinese seniors, and noted that District 1 had a lot of seniors who had never driven before. She said these seniors, mostly Chinese and Russian, did not have the mindset of what a driver's view was when driving. She asked if the SFMTA was giving basic strategies that could save pedestrian lives. She added that practical strategies, like waiting a few seconds after the light changes to enter the crosswalk, could help the Chinese and Russian communities in District 1 when crossing high injury corridors.

Commissioner Fewer said District 1 had many seniors who gathered on a regular basis which provided the SFMTA an opportunity to engage with seniors, many of whom are monolingual. She asked that the SFMTA and San Francisco Public Works (SFPW) work together to fill potholes at intersections where seniors walked. She said intersections with potholes were difficult for seniors who relied on walking apparatuses and noted that the public could report potholes to 311. Commissioner Fewer requested that the SFMTA ensure that its programs also offer in-language materials to Russian seniors in District 1 and noted that many of them depend on public transportation and do not drive.

Commissioner Haney said he agreed with Commissioners Fewer's and Yee's comments. He said there were a lot of changes being made rapidly to intersections and bike lanes in the Tenderloin and SoMa, but that the signage was not adequate to educate the public on how to use the new engineering treatments. Commissioner Haney stated that there was new pedestrian scramble systems in the Tenderloin and wanted to make sure that signage on how to use the new crossing system would be visible and well-maintained for a significant amount of time. He noted there was a scramble system on Golden Gate and Hyde streets, but he was not sure if pedestrians knew how the system worked.

Commissioner Haney asked if the SFMTA was working with airports, rental car companies and parking garages to inform drivers on the city's Vision Zero traffic



enforcement. He suggested putting up signage in places where there were red light cameras and near high injury corridors to act as a deterrent. He said it was important to educate drivers who were coming to San Francisco and not connected to the current outreach. Commissioner Haney shared feedback from his constituents asking that outreach materials targeted towards drivers be placed where they are clearly visible to people who drive, so drivers are informed about enforcement.

Ms. Ngo said the SFMTA was aware of the rapidly changing infrastructure in the Tenderloin and noted that seven new scramble systems would be installed by the end of the year. She said the SFMTA was working with the Tenderloin Task Force to pass out information cards to residents that better explained what the new feature was and how to interact with it. In terms of using innovative ways to do outreach to drivers, she said in addition to the safe speeds' campaigns the SFMTA was reaching out to rental car companies and had provided materials to be made available to people renting cars. Ms. Ngo said that outreach was also done at the Department of Motor Vehicles, which aired a safe speed public service announcement video at all 170 field offices in California. She said the Police Department recently piloted a traffic citation task force group and was adding more officers around the city.

Commissioner Haney asked that the public messages and videos let drivers know about the increased enforcement and red light cameras in certain areas. He asked that signage be visible to ensure that it serves as a real deterrent.

Commissioner Mar said multilingual and senior outreach was important to ensure everyone in the city understood Vision Zero priorities and was engaged in the Vision Zero campaign. He said raising awareness was important to build more understanding of and support for the different policy and program initiatives, especially those that were contentious in certain neighborhoods. He said an example was daylighting which might result in removal of parking spaces in commercial areas but would increase pedestrian visibility and safety. Commissioner Mar stated that his office had been working with the SFMTA on expanding daylighting in District 4 and specifically the Sunset neighborhood. He said that his office and the SFMTA were identifying the 100 priority intersections for daylighting in District 4 and that they needed to ensure residents understood the importance of daylighting in the Sunset.

Commissioner Mar said he liked the comprehensive approach in the multilingual and senior outreach, both broad-based education through radio ads, bus advertisement, social media and the deeper education and engagement that would happen through outreach events and presentations to community groups. He said it looked like there were some partnership with community-based organizations as well as funding provided to do deeper and more extensive outreach to constituents and social service providers, and asked if that was only happening in the Safe Streets for Seniors program or if the funding and partnerships with community organizations also happened through the broader multilingual Vision Zero outreach.

Ms. Tan said the Safe Streets for Seniors program provided funding every year to community based organizations that had the language and cultural capacity to reach out to seniors and service providers from different neighborhoods and different cultural backgrounds.

Commissioner Mar said that was very important but wanted to know if there was a similar partnership to outreach to families and children with organizations that served



those populations.

Ms. Ngo said the SFMTA would have partnerships when they developed the Chinese focus campaign. She also said that they would work with community-based organizations to test messaging when developing specific language materials. She added that the Chinese comic cards were an example of material created as a result of working with a community-based organization.

Commissioner Mar said some neighborhoods like the Sunset had large Chinese and non-English speaking populations but not as many service providers when compared to other neighborhoods. He suggested that the SFMTA look at other ways to reach these communities and noted that churches were a good way to reach the Chinese community in the Sunset.

During public comment Francisco Da Costa said there was an intersection on San Bruno Avenue that did not have crosswalk lines repainted two months after being paved. He highlighted the need for outreach and signage in the vicinity of the project.

### **Other Items**

#### **8. Introduction of New Items - INFORMATION**

Commissioner Haney stated that the city was on track to have one its most deadly years for pedestrians and cyclists and said a huge part of the city's effort to reverse that trend was enforcement. He said the mayor has issued a directive to focus on the five most deadly behaviors on the roads and to have those be 50% of the city's traffic citations. He requested an update to the Board on that directive and that the update report how the city was doing along the high injury network, what additional resources had been invested, how the city accessed additional funding to support it, and what the city is doing to prevent violations and keep people safe. He added that he would also like an update on the red light camera strategy and the broader enforcement component of Vision Zero.

Chair Peskin said he would work with Commissioner Haney's office to find an appropriate venue for the hearing, either at Board or the Vision Zero Committee.

#### **9. Public Comment**

During public comment Francisco Da Costa reported that all the tram-cars on Market Street stalled one week and asked why that was happening. He asked that the Board look into the tram-cars congestion and asked if someone could follow up with him offline.

Chair Peskin said relative to Commissioner Haney's hearing request, that staff also have a representative of the mayor's office in attendance in addition to SFMTA and SFPD staff.

#### **10. Adjournment**

The meeting was adjourned at 11:42 a.m.



RESOLUTION ALLOCATING \$26,147,587 AND APPROPRIATING \$100,000 IN PROP K SALES TAX FUNDS FOR TWELVE REQUESTS, WITH CONDITIONS

WHEREAS, The Transportation Authority received twelve requests for a total of \$26,247,587 in Prop K local transportation sales tax funds, as summarized in Attachments 1 and 2 and detailed in the enclosed allocation request forms; and

WHEREAS, The requests seek funds from the following Prop K Expenditure Plan categories: Other Transit Enhancements, Vehicles - Muni, Street Repair and Cleaning Equipment, Pedestrian and Bicycle Facility Maintenance, Street Resurfacing, Traffic Calming, Tree Planting and Maintenance, and Transportation/ Land Use Coordination; and

WHEREAS, As required by the voter-approved Expenditure Plans, the Transportation Authority Board has adopted a Prop K 5-Year Prioritization Program (5YPP) for each of the aforementioned Expenditure Plan programmatic categories; and

WHEREAS, Eight of the twelve requests are consistent with the relevant Prop K Strategic plan and the 5YPPs for their respective categories; and

WHEREAS, The San Francisco Municipal Transportation Agency's (SFMTA's) request for Muni Subway Expansion Project Development requires a concurrent Prop K Strategic Plan amendment to advance \$965,948 from Fiscal Year 2020/21 to Fiscal Year 2019/20, and a corresponding amendment to the Other Transit Enhancements 5YPP; and

WHEREAS, The requested Strategic Plan amendment would result in a negligible increase (0.0014%) to the assumed level of financing costs for the Prop K program; and

WHEREAS, The SFMTA's requests for New Flyer Midlife Overhaul - Phase 1, Application-Based Traffic Calming Program - FY18/19 Cycle Implementation, and Application-Based Traffic Calming Program - FY19/20 Cycle Planning require 5YPP amendments as summarized in Attachment 2 and detailed in the enclosed allocation request forms; and

WHEREAS, After reviewing the requests, Transportation Authority staff recommended allocating \$26,147,587 and appropriating \$100,000 in Prop K funds, with conditions, for twelve projects, as described in Attachment 3 and detailed in the enclosed allocation request



forms, which include staff recommendations for Prop K allocation amounts, required deliverables, timely use of funds requirements, special conditions, and Fiscal Year Cash Flow Distribution Schedules; and

WHEREAS, There are sufficient funds in the Capital Expenditures line item of the Transportation Authority's approved Fiscal Year 2019/20 budget to cover the proposed actions; and

WHEREAS, At its September 4, 2019 meeting, the Citizens Advisory Committee was briefed on the subject request and unanimously adopted a motion of support for the staff recommendation; and

RESOLVED, That the Transportation Authority hereby amends the 2019 Prop K Strategic Plan to advance \$965,948 from Fiscal Year 2020/21 to Fiscal Year 2019/20 in the Other Transit Enhancements category as detailed in the enclosed allocation request form; and be it further

RESOLVED, That the Transportation Authority hereby amends the Prop K Other Transit Enhancements, Vehicles - Muni, and Traffic Calming 5YPPs, as detailed in the enclosed allocation request forms; and be it further

RESOLVED, That the Transportation Authority hereby allocates \$26,147,587 and appropriates \$100,000 in Prop K Sales Tax Funds for twelve requests, with conditions, as summarized in Attachment 3 and detailed in the enclosed allocation request forms; and be it further

RESOLVED, That the Transportation Authority finds the allocation of these funds to be in conformance with the priorities, policies, funding levels, and prioritization methodologies established in the Prop K Expenditure Plan, the Prop K Strategic Plan and the relevant 5YPPs; and be it further

RESOLVED, That the Transportation Authority hereby authorizes the actual expenditure (cash reimbursement) of funds for these activities to take place subject to the Fiscal Year Cash Flow Distribution Schedules detailed in the enclosed allocation request forms; and be it further





RESOLVED, That the Capital Expenditures line item for subsequent fiscal year annual budgets shall reflect the maximum reimbursement schedule amounts adopted and the Transportation Authority does not guarantee reimbursement levels higher than those adopted; and be it further

RESOLVED, That as a condition of this authorization for expenditure, the Executive Director shall impose such terms and conditions as are necessary for the project sponsors to comply with applicable law and adopted Transportation Authority policies and execute Standard Grant Agreements to that effect; and be it further

RESOLVED, That as a condition of this authorization for expenditure, the project sponsors shall provide the Transportation Authority with any other information it may request regarding the use of the funds hereby authorized; and be it further

RESOLVED, That the Capital Improvement Program of the Congestion Management Program, the Prop K Strategic Plan and the relevant 5YPPs are hereby amended, as appropriate.

Attachments:

1. Summary of Requests Received
2. Brief Project Descriptions
3. Staff Recommendations
4. Prop K Allocation Summary - FY 2019/20

Enclosure:

Prop K/Prop AA Allocation Request Forms (12)

Attachment 1: Summary of Requests Received

Source	EP Line No./ Category <sup>1</sup>	Project Sponsor <sup>2</sup>	Project Name	Current Prop K Request	Total Cost for Requested Phase(s)	Expected Leveraging by EP Line <sup>3</sup>	Leveraging		Phase(s) Requested	District(s)
							Actual Leveraging by Project Phase(s) <sup>4</sup>			
Prop K	16	SFMTA	Muni Subway Expansion Project Development	\$ 965,948	\$ 965,948	74%	0%; significant leveraging expected in future phases		Planning	7
Prop K	17M	SFMTA	New Flyer Midlife Overhaul - Phase 1	\$ 17,937,483	\$ 172,169,772	84%	90%		Construction	Citywide
Prop K	35	SFPW	Street Repair and Cleaning Equipment	\$ 1,300,000	\$ 1,300,000	29%	0%		Construction	Citywide
Prop K	37	SFPW	Public Sidewalk and Curb Repair	\$ 552,659	\$ 795,743	79%	31%		Construction	Citywide
Prop K	38	SFMTA	Speed Radar Sign Installation Program	\$ 178,820	\$ 213,820	51%	16%		Planning, Construction	Citywide
Prop K	38	SFMTA	Application-Based Traffic Calming Program - FY18/19 Cycle Implementation	\$ 1,253,103	\$ 1,253,103	51%	0%		Design, Construction	Citywide
Prop K	38	SFMTA	Application-Based Traffic Calming Program - FY19/20 Cycle Planning	\$ 203,192	\$ 203,192	51%	0%		Planning	Citywide
Prop K	38	SFMTA	Safer Taylor Street	\$ 2,047,958	\$ 2,047,958	51%	0%; significant constructure phase leveraging expected		Design	3, 6
Prop K	38, 39	SFMTA	Safe Streets Evaluation Program	\$ 200,000	\$ 200,000	41%	0%		Planning	Citywide
Prop K	42	SFPW	Tree Planting and Establishment	\$ 1,408,424	\$ 1,408,424	57%	0%		Construction	Citywide
Prop K	44	SFCTA	District 4 Mobility Improvements Study [NTIP Planning]	\$ 100,000	\$ 130,000	40%	23%		Planning	4
Prop K	44	SFMTA	Alemany Corridor Safety [NTIP Planning]	\$ 100,000	\$ 100,000	40%	0%		Planning	11
<b>TOTAL</b>				<b>\$ 26,247,587</b>	<b>\$ 180,787,960</b>	<b>82%</b>	<b>85%</b>			

## Attachment 1: Summary of Requests Received

### Footnotes

- <sup>1</sup> "EP Line No./Category" is either the Prop K Expenditure Plan line number referenced in the 2019 Prop K Strategic Plan or the Prop AA Expenditure Plan category referenced in the 2017 Prop AA Strategic Plan, including: Street Repair and Reconstruction (Street), Pedestrian Safety (Ped), and Transit Reliability and Mobility Improvements (Transit).
- <sup>2</sup> Acronyms: SFCTA (San Francisco County Transportation Authority); SFMTA (San Francisco Municipal Transportation Agency); SFPW (San Francisco Public Works)
- <sup>3</sup> "Expected Leveraging By EP Line" is calculated by dividing the total non-Prop K funds expected to be available for a given Prop K Expenditure Plan line item (e.g. Pedestrian Circulation and Safety) by the total expected funding for that Prop K Expenditure Plan line item over the 30-year Expenditure Plan period. For example, expected leveraging of 90% indicates that on average non-Prop K funds should cover 90% of the total costs for all projects in that category, and Prop K should cover only 10%.
- <sup>4</sup> "Actual Leveraging by Project Phase" is calculated by dividing the total non-Prop K or non-Prop AA funds in the funding plan by the total cost for the requested phase or phases. If the percentage in the "Actual Leveraging" column is lower than in the "Expected Leveraging" column, the request (indicated by yellow highlighting) is leveraging fewer non-Prop K dollars than assumed in the Expenditure Plan. A project that is well leveraged overall may have lower-than-expected leveraging for an individual or partial phase.

Attachment 2: Brief Project Descriptions <sup>1</sup>

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Requested	Project Description
16	SFMTA	Muni Subway Expansion Project Development	\$965,948	<p>The Muni Subway Expansion Project would construct a new light rail tunnel between West Portal and Parkmerced to improve the Muni Metro's speed, reliability and capacity. It would also re-design 19th Avenue between Eucalyptus and Brotherhood Way with wider sidewalks, a bike path separated from traffic, and new trees and landscaping. Requested funds would fund the development of conceptual alignments and planning level cost estimates for undergrounding the K- and M-lines within the Twin Peaks tunnel such that these lines can proceed underground under West Portal Avenue. SFMTA expects to complete the final report by March 2021.</p> <p>The SFMTA-led SF Transit Corridors Study (TCS), which is part of the multi-agency ConnectSF long range transportation planning program, is in the process of identifying and prioritizing the next generation of major transit capital projects. The work funded by this request will produce planning level information to evaluate investment options for the TCS. The Muni Subway Expansion Project would await clarification on prioritization via the TCS prior to its next major phase of work: environmental review.</p>
17M	SFMTA	New Flyer Midlife Overhaul - Phase 1	\$17,937,483	<p>Perform scheduled midlife overhauls, in accordance with manufacturer recommendations, on a portion of the New Flyer fleet (813 40-foot and 60-foot motor coaches and trolley coaches). Midlife overhauls significantly improve vehicle reliability, reduce the incidence of breakdowns, and prevent service interruptions with additional costly repairs. Phase 1 of the overhaul program will address the oldest vehicles in the fleet and include substantial work to 271 motor coaches and 60 trolley coaches procured between 2013 and 2016. Work will also include cosmetic improvements like repainting exteriors, updating seating configurations, and improving wheelchair passenger securements. SFMTA expects to complete Phase 1 by September 2024.</p>

Attachment 2: Brief Project Descriptions <sup>1</sup>

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Requested	Project Description
35	SFPW	Street Repair and Cleaning Equipment	\$1,300,000	Funds will be used to purchase 13 pieces of street repair and cleaning equipment that have reached the end of their useful lives, including 2 mechanical street sweepers, 6 one-ton pickup trucks with dump beds, and 5 half-ton pickup trucks. SFPW expects all 13 pieces of equipment to be in service by December 2021.
37	SFPW	Public Sidewalk and Curb Repair	\$552,659	SFPW is responsible for repairing sidewalks around City-maintained trees, adjacent to City properties, and at the angular returns of all intersections. Requested funds will be used to repair non tree-related damage to public sidewalks, curb and gutters, and angular returns at approximately 633 locations. A portion of the Tree Maintenance Fund established by Prop E (2016) will be used to repair sidewalks damaged by City-maintained trees. SFPW expects all repairs funded by this request to be done by September 2020. Members of the public can request sidewalk repairs by calling 311.
38	SFMTA	Speed Radar Sign Installation Program	\$178,820	Identify locations and then install four or five speed radar signs, based on community and SFMTA staff requests. Speed radar signs are electronic signs that have a built-in radar gun pointing at oncoming cars. The sign displays the speed of the oncoming car and can be effective at reducing vehicle travel speeds when installed in an appropriate location, per SFMTA Speed Radar Sign Guidelines. Locations will be ranked by criteria including traffic speeds, average daily traffic level, proximity to schools or senior centers, number of travel lanes, no other planned improvements at the location, and collision history. SFMTA expects that all of the signs will be open for use by March 2021.
38	SFMTA	Application-Based Traffic Calming Program - FY18/19 Cycle Implementation	\$1,253,103	Design and construct 54 traffic calming projects on residential streets as identified, evaluated and ranked through the program's Fiscal Year 2018/19 cycle (applications were due in June 2018). See pg. 110 of enclosure for lists of requested and approved locations. The projects involve approximately 108 individual traffic calming measures, including speed humps, speed cushions, traffic islands and raised crosswalks. SFMTA expects all traffic calming measures to be open for use by December 2021.

Attachment 2: Brief Project Descriptions <sup>1</sup>

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Requested	Project Description
38	SFMTA	Application-Based Traffic Calming Program - FY19/20 Cycle Planning	\$203,192	Citywide program outreach, evaluation and prioritization of all eligible applications received by June 30, 2019 for traffic calming on residential streets. See pgs. 136-137 of enclosure for lists of requested locations. Scope includes recommendations for traffic calming measures, balloting and targeted community outreach where needed, and conceptual engineering of traffic calming measures at approximately 50 locations. SFMTA expects selection and preliminary engineering to be done by September 2020. SFMTA will request future Prop K funds for the design and construction phases, with projects open for use by September 2022.
38	SFMTA	Safer Taylor Street	\$2,047,958	The requested funds will be used for the design phase for transportation safety and livability improvements on Taylor Street between Market Street and Sutter Street. Project scope includes widening sidewalks from Turk to Ellis, reducing travel lanes from Market to Sutter, upgrading signals, and other pedestrian safety improvements. SFMTA expects to complete design by June 2020, and anticipates that the project will be open for use by September 2022.
38, 39	SFMTA	Safe Streets Evaluation Program	\$200,000	Requested funds will be used to support pre- and post-implementation data collection efforts and analysis of 15 to 20 bicycle, pedestrian, and traffic calming projects over the next 18 months in support of Vision Zero. The evaluation program provides evidence-based recommendations to inform future projects by analyzing how upgraded street designs impact safety and comfort for all road users. SFMTA will continue to provide regular evaluation updates to the Vision Zero Committee. See page 154 of the enclosure for the list of projects to be evaluated. SFMTA expects to complete the final report by Spring 2021.
42	SFPW	Tree Planting and Establishment	\$1,408,424	SFPW and its community partners will plant approximately 691 trees and water them regularly for three years to ensure successful establishment. Once established, these trees will be maintained with funds from an annual General Fund setaside (Prop E, 2016). To identify priority planting sites, SFPW will use data from the comprehensive street tree census, which identified all street trees in the public right-of-way as well as existing empty basins and potential new planting sites, and will focus on areas with the greatest number of existing empty tree wells and the lowest canopy coverage. Plantings will be complete by June 2020. Members of the public can request a tree planting by calling 311.

Attachment 2: Brief Project Descriptions <sup>1</sup>

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Requested	Project Description
44	SFCTA	District 4 Mobility Improvements Study [NTIP Planning]	\$100,000	At the request of Commissioner Mar, the Transportation Authority, in partnership with SFMTA, will conduct a study to understand the travel profile and patterns of District 4 residents, identify travel markets with high shares of single-occupancy vehicle (SOVs) trips, and explore short and medium-term strategies to reduce trips by SOVs. We expect to complete the final report by September 2020.
44	SFMTA	Alemany Corridor Safety [NTIP Planning]	\$100,000	At the request of Commissioner Safai, SFMTA has requested Prop K funds to develop recommendations and conceptual designs for safety and accessibility improvements for Alemany Boulevard between Sickles Avenue to the south and Mission Street to the north, segments of which are located on the High Injury Network. The focus of the project is to identify collision hot spots and recommend near- and medium-term collision countermeasures. The project includes community outreach to inform and confirm the needs assessment and to collect feedback on design proposals. The SFMTA expects to present the final report - including key findings, recommendations, next steps, and a funding strategy to the Transportation Authority Board for adoption by September 2020.
<b>TOTAL</b>			<b>\$26,247,587</b>	

<sup>1</sup> See Attachment 1 for footnotes.

Attachment 3: Staff Recommendations <sup>1</sup>

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Recommended	Recommendations
16	SFMTA	Muni Subway Expansion Project Development	\$ 965,948	<b>Prop K Strategic Plan and 5-Year Prioritization Program (5YPP) Amendments:</b> The recommended allocation is contingent on concurrent amendments to the Prop K Strategic Plan and the Other Transit Enhancements 5YPP to advance \$965,948 of the \$2,744,300 programmed to the project in FY20/21 for allocation in FY19/20. See enclosed Strategic Plan and 5YPP amendments for details.
17M	SFMTA	New Flyer Midlife Overhaul - Phase 1	\$ 17,937,483	<b>5YPP Amendment:</b> The recommended allocation is contingent on an amendment to the Vehicles-Muni 5YPP to reprogram \$13,446,287 from the Replace 30 30-foot Hybrid Diesel Motor Coaches to the subject project. The replacement project has been deferred by at least two years. See enclosed 5YPP amendment for details.
35	SFPW	Street Repair and Cleaning Equipment	\$ 1,300,000	
37	SFPW	Public Sidewalk and Curb Repair	\$ 552,659	
38	SFMTA	Speed Radar Sign Installation Program	\$ 178,820	<b>Multi-phase Allocation:</b> Recommendation is for a multi-phase allocation given the straightforward nature of the scope and the short duration of each phase. Upon project completion, SFMTA will <b>provide an evaluation of the effectiveness</b> of these speed radar signs at reducing vehicle speeds based on before and after data.
38	SFMTA	Application-Based Traffic Calming Program - FY18/19 Cycle Implementation	\$ 1,253,103	<b>5YPP Amendment:</b> The recommended allocation is contingent on a concurrent amendment of the Traffic Calming 5YPP to reprogram \$53,103 in deobligated funds from projects completed under budget. See attached 5YPP amendment for details. <b>Multi-phase allocation:</b> Recommendation includes a multi-phase allocation given the straightforward nature of the scope and short duration of design and construction at each location.
38	SFMTA	Application-Based Traffic Calming Program - FY19/20 Cycle Planning	\$ 203,192	<b>5YPP Amendment:</b> The recommended allocation is contingent on a concurrent amendment of the Traffic Calming 5YPP to reprogram \$203,192 in deobligated funds from projects completed under budget. See attached 5YPP amendment for details.
38	SFMTA	Safer Taylor Street	\$ 2,047,958	



Attachment 3: Staff Recommendations <sup>1</sup>

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Recommended	Recommendations
38, 39	SFMTA	Safe Streets Evaluation Program	\$ 200,000	
42	SFPW	Tree Planting and Establishment	\$ 1,408,424	
44	SFCTA	District 4 Mobility Improvements Study [NTIP Planning]	\$ 100,000	
44	SFMTA	Alemany Corridor Safety [NTIP Planning]	\$ 100,000	
<b>TOTAL</b>			<b>\$26,247,587</b>	

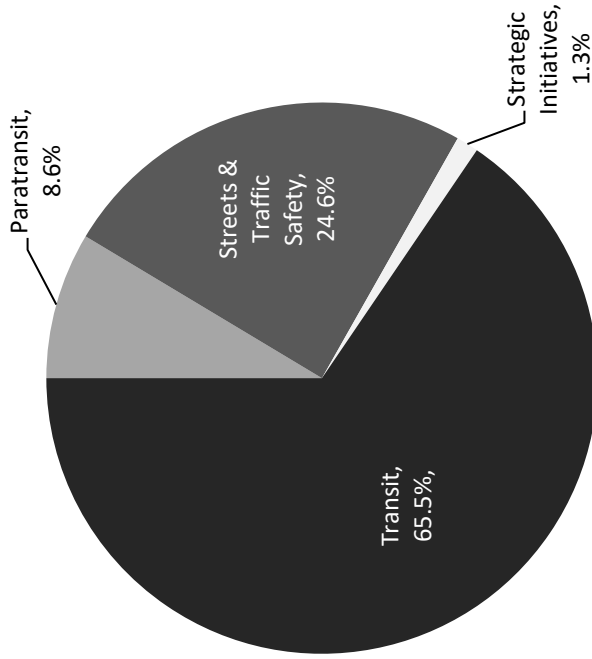
<sup>1</sup> See Attachment 1 for footnotes.

Attachment 4.  
Prop K and Prop AA Allocation Summaries - FY 2019/20

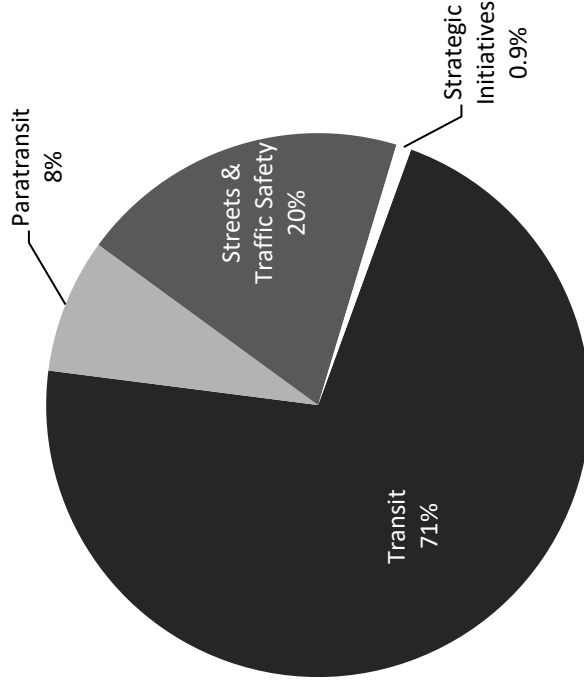
PROP K SALES TAX										
	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26			
Prior Allocations	\$ 17,663,374	\$ 7,919,536	\$ 730,000	\$ -	\$ -	\$ -	\$ -			
Current Request(s)	\$ 25,530,087	\$ 6,413,201	\$ 3,995,724	\$ 2,690,622	\$ 2,690,622	\$ 2,690,622	\$ 717,500			
New Total Allocations	\$ 43,193,461	\$ 14,968,832	\$ 4,725,724	\$ 2,690,622	\$ 2,690,622	\$ 2,690,622	\$ 717,500			

The above table shows maximum annual cash flow for all FY 2019/20 allocations and appropriations approved to date, along with the current recommended allocation(s).

**Investment Commitments,  
per Prop K Expenditure Plan**



**Prop K Investments To Date**





## Memorandum

### AGENDA ITEM 5

**DATE:** September 5, 2019  
**TO:** Transportation Authority Board  
**FROM:** Anna LaForte - Deputy Director for Policy and Programming  
**SUBJECT:** 9/10/2019 Board Meeting: Allocate \$26,147,587, with Conditions, and Appropriate \$100,000 in Prop K Sales Tax Funds for Twelve Requests

**RECOMMENDATION**    Information    Action

Allocate \$22,886,504 in Prop K funds to the San Francisco Municipal Transportation Agency (SFMTA) for eight requests:

1. Muni Subway Expansion Project Development (\$965,948)
2. New Flyer Midlife Overhaul - Phase 1 (\$17,937,483)
3. Speed Radar Sign Installation Program (\$178,820)
4. Application-Based Traffic Calming Program - FY18/19 Cycle Implementation (\$1,253,103)
5. Application-Based Traffic Calming Program - FY19/20 Cycle Planning (\$203,192)
6. Safer Taylor Street (\$2,047,958)
7. Safe Streets Evaluation Program (\$200,000)
8. Alemany Corridor Safety [NTIP Planning] (\$100,000)

Allocate \$3,261,083 in Prop K funds to San Francisco Public Works (SFPW) for three requests:

9. Street Repair and Cleaning Equipment (\$1,300,000)
10. Public Sidewalk and Curb Repair (\$552,659)
11. Tree Planting and Establishment (\$1,408,424)

Appropriate \$100,000 in Prop K funds for one request:

12. District 4 Mobility Improvements Study [NTIP Planning]

### SUMMARY

Attachment 1 lists the requests, including requested phase(s) and supervisorial district(s) for each project. Attachment 2 provides a brief description of each project. Attachment 3 contains the staff recommendations.

- Fund Allocation
- Fund Programming
- Policy/Legislation
- Plan/Study
- Capital Project Oversight/Delivery
- Budget/Finance
- Contract/Agreement
- Other: \_\_\_\_\_



## **DISCUSSION**

Attachment 1 summarizes the subject allocation requests, including information on proposed leveraging (i.e. stretching Prop K sales tax dollars further by matching them with other fund sources) compared with the leveraging assumptions in the Prop K Expenditure Plan. Attachment 2 includes a brief description of each project. Attachment 3 summarizes the staff recommendations for the requests, highlighting special conditions and other items of interest. An Allocation Request Form for each project is enclosed, with more detailed information on scope, schedule, budget, funding, deliverables and special conditions.

## **FINANCIAL IMPACT**

The recommended action would allocate and appropriate \$26,247,587 in Prop K funds. The allocations and appropriation would be subject to the Fiscal Year Cash Flow Distribution Schedules contained in the enclosed Allocation Request Forms.

Attachment 4 shows the approved Fiscal Year 2019/20 allocations and appropriations to date, with associated annual cash flow commitments as well as the recommended allocations, appropriations, and cash flow amounts that are the subject of this memorandum.

Fully funding the SFMTA's request for Muni Subway Expansion Project Development requires a Prop K Strategic Plan amendment to advance \$965,948 in the Other Transit Enhancements category from Fiscal Year 2020/21 to Fiscal Year 2019/20. The amendment would result in a negligible increase of 0.0014% (\$38,047) in anticipated financing costs for the Prop K program as a whole over its 30-year life. See the enclosed allocation request form for the amendment details.

Sufficient funds are included in the Fiscal Year 2019/20 budget to accommodate the recommended actions. Furthermore, sufficient funds will be included in future budgets to cover the recommended cash flow distribution for those respective fiscal years.

## **CAC POSITION**

The CAC was briefed on the subject requests at its September 4, 2019 meeting and unanimously approved a motion of support for the recommended allocations and appropriation. Based on CAC feedback, we have added a deliverable for a before/after evaluation of the effectiveness of speed radar signs proposed for installation as part of the SFMTA's Speed Radar Sign Installation Program.

## **SUPPLEMENTAL MATERIALS**

- Attachment 1 - Summary of Requests Received
- Attachment 2 - Project Descriptions
- Attachment 3 - Staff Recommendations
- Attachment 4 - Prop K Allocation Summary - FY 2019/20



**San Francisco  
County Transportation  
Authority**

Agenda Item 5

Page 3 of 3

- Attachment 5 - SFMTA Mid-Life Overhaul Program Presentation
- Enclosure 1 - Allocation Request Forms (12)



SFMTA

# Rubber Tire Mid-Life Overhaul Program

26



Transit | Fleet Engineering

SFCTA Board

September 10, 2019

# Guiding Principles

- Maintain low average fleet age
- Improve reliability
- Adopt performance-based procurements
- Develop robust maintenance standards
- Align with City's sustainability goals
- Anticipate and accommodate growth
- Maintain 20% spare ratios



## SFMTA Bus Fleet Management Plan

2017-2030



March 2017

# Fleet Program Overview



## Reliable Buses





# Major fleet transition

*Between 2013-2019 the SFMTA has successfully replaced 800+ motor coach and trolley coaches*



- Increased number of articulated buses to relieve crowding on high-ridership lines
- Lowered fleet age to improve reliability
- Deployed new technology to reduce GHG emissions

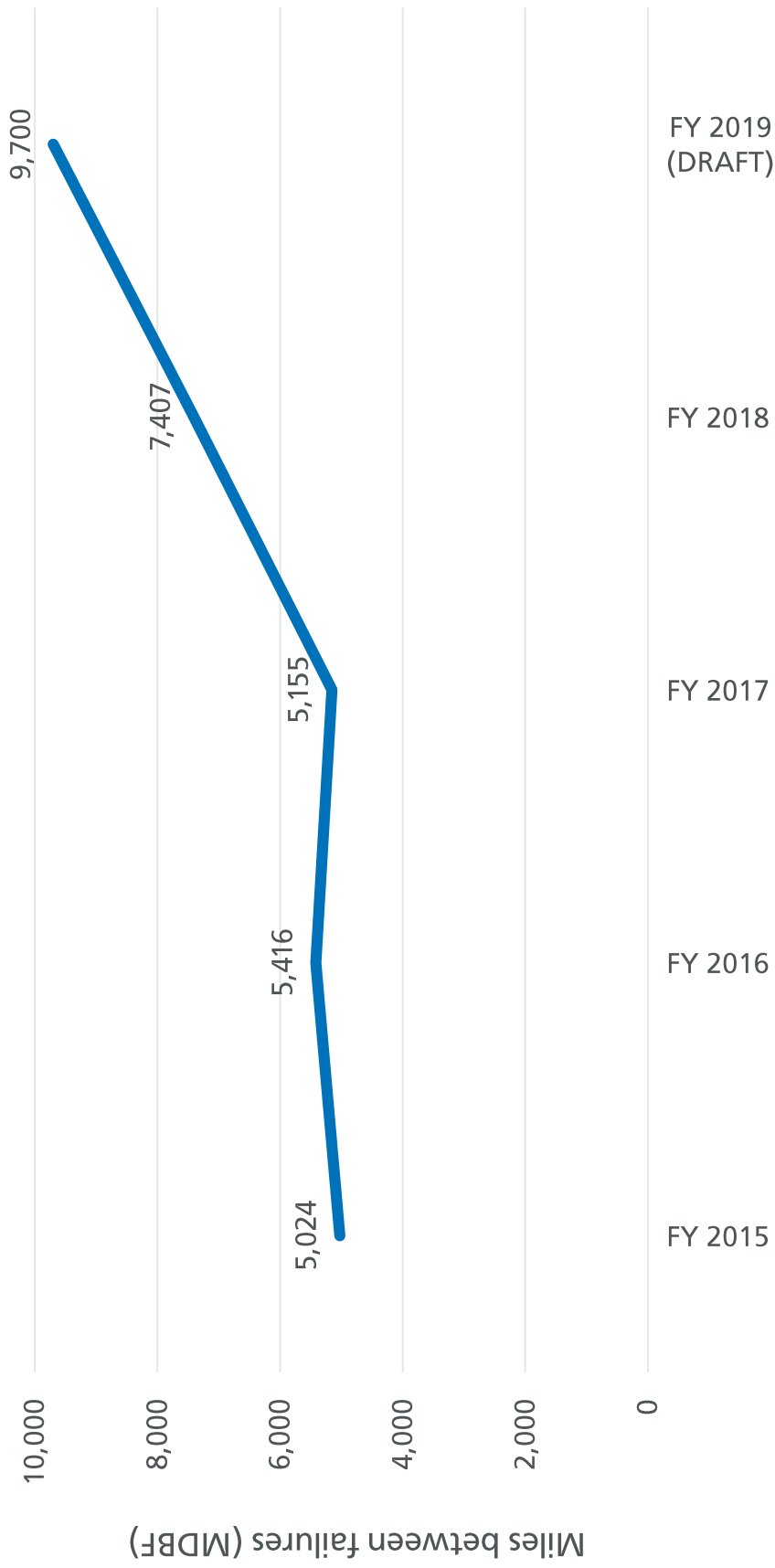
# Improved reliability means better service

*Over the past 30 years, our expectations of the fleet's reliability have dramatically increased*

1980s	2000s	Today
<b>2,000-3,000</b> miles	<b>4,000-6,000</b> miles	<b>10,000-12,000</b> miles

Mean Distance Between Failures (MDBF) is the industry-standard measurement of vehicle reliability. It tracks how long a vehicle travels before a mechanical failure that results in lost service.

# Fewer In-Service Bus Breakdowns



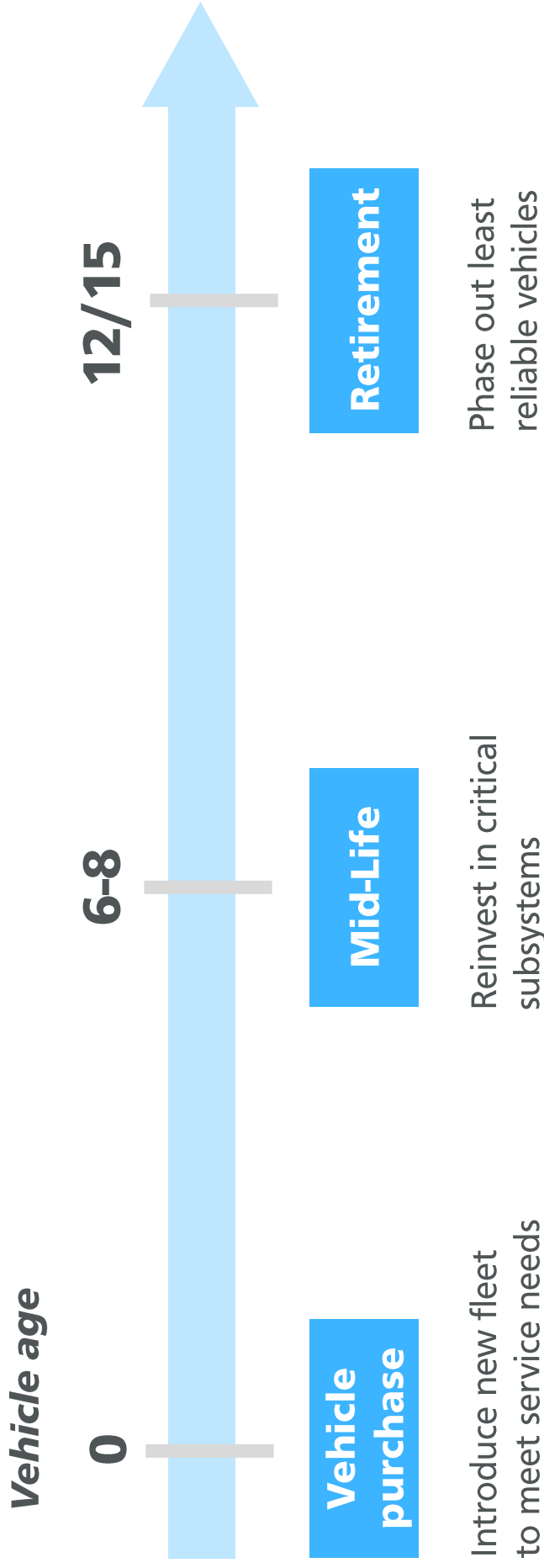
# Continuous improvement

Over time we took in feedback from riders and staff to improve the vehicles:

- Added “three-point securements” at request of disability community to improve safety of wheelchair passengers
- Incorporated new rear-view mirror turn signals for safer operations around bicycles
- Increased capacity on bicycle racks from two to three bikes
- Updated interior design to include stroller standing area
- Deployed new digital radios with route and on-time performance data for operators
- Redesigned seating to improve comfort and reduce noise



# Rubber Tire Vehicle Lifecycle



# Mid Life Overhaul Program

- **Propulsion system overhaul** Increase reliability
- **ADA Equipment** Easy operation for wheelchair passengers, improved visibility for operators
- **Safety** Deploy collision warning indicators to the vehicles
- **Standardization** Update onboard technology to latest Agency standards
- **Technology Upgrade** Take advantage of technological progress
- **Comfort** Reduce noise, add ergonomic seats, improve seating layout

# Previous Mid-Life: Neoplans



- Dramatically improved reliability: improved MDBF from 3,500 to 6,000
- Extended the life of the fleet, improve the comfort for passengers



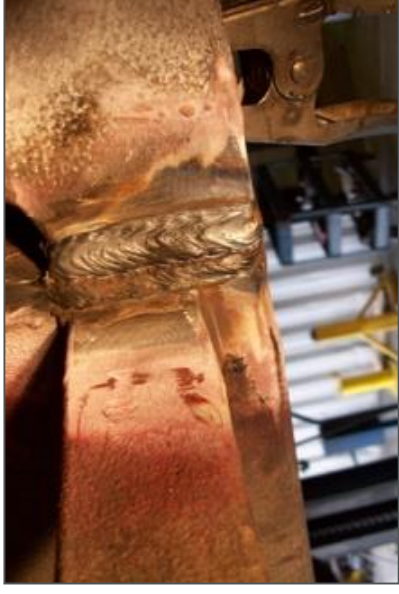
# Previous Mid-Life: Neoplans



Cosmetic

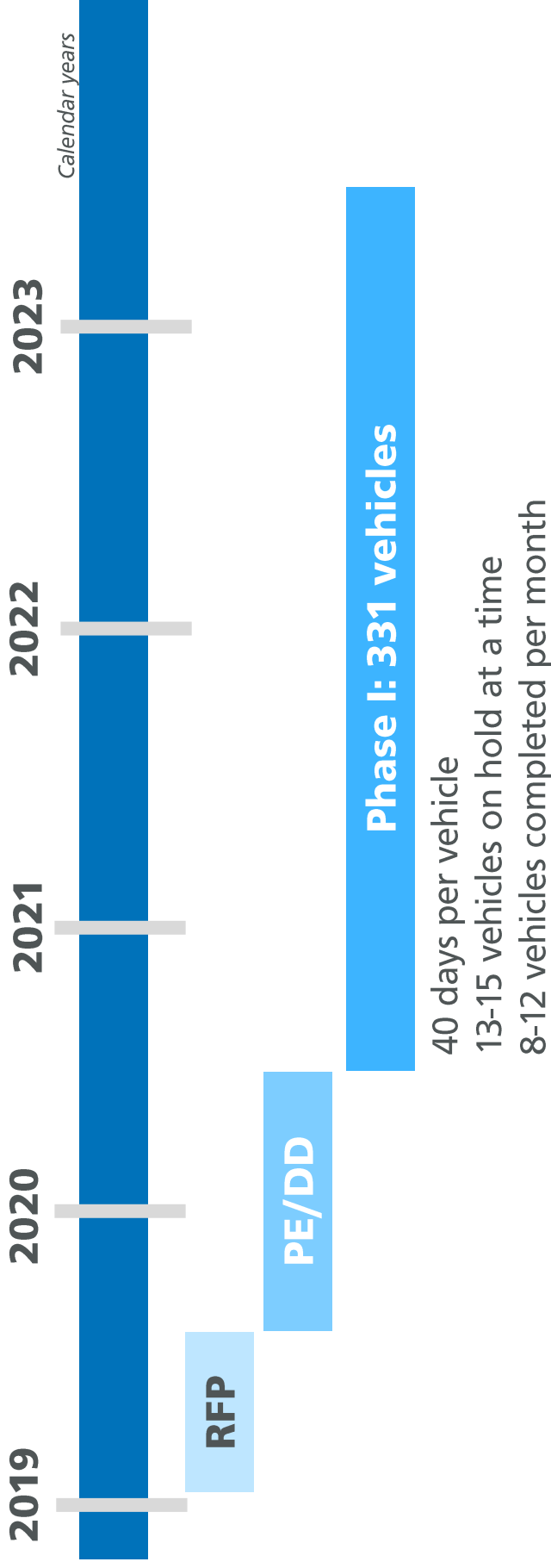


Repaired structural wear





# Program Delivery: New Flyer Mid-Life

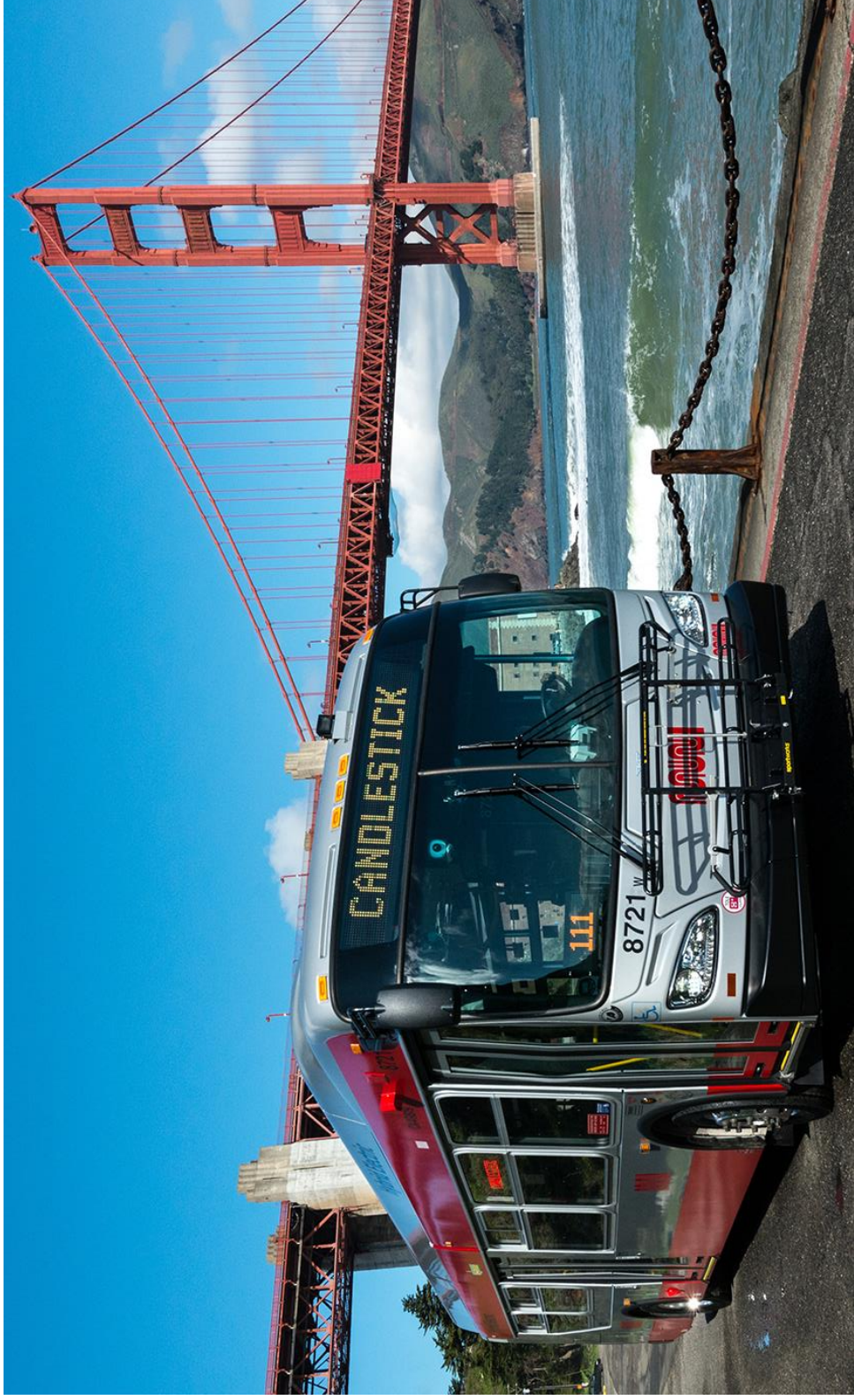


# Program Overview

The FTA requires a mid-life program for all federally-funded fleets and they provide funds for this work.

<b>Phase I</b>	<b>Phase II</b>	<b>Phase III</b>
331 vehicles	266 vehicles	218 vehicles
2020-2023	2022-2027	2025-2029
\$182,000,000	\$126,000,000	\$133,500,000

# Ensuring fleet reliability, safety and comfort



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## Memorandum

### AGENDA ITEM 6

**DATE:** September 18, 2019

**TO:** Transportation Authority Board

**FROM:** Eric Cordoba - Deputy Director for Capital Projects

**SUBJECT:** 09/24/19 Board Meeting: Update on the Caltrain Modernization Program

**RECOMMENDATION**  Information  Action

None. This is an information item.

**SUMMARY**

As required by the Funding Partners Oversight Protocol for Caltrain's Modernization Program, known as CalMod, the Director of Caltrain will attend a Board of Supervisors meeting twice a year to provide an update on the CalMod Program and answer questions regarding its status. With the concurrence of President Yee and Transportation Authority Chair Peskin, the first of these updates was provided at the March 12 Transportation Authority Board meeting and the second update will take place at the September 24 Board meeting. Caltrain staff will also provide an update on Caltrain's Business Plan, which is currently under development. This memo is intended as a supplement to the attached presentation (Attachment 1).

- Fund Allocation
- Fund Programming
- Policy/Legislation
- Plan/Study
- Capital Project Oversight/Delivery
- Budget/Finance
- Contract/Agreement
- Other: \_\_\_\_\_

### BACKGROUND

**Caltrain Modernization Program (CalMod).** CalMod is a \$2.26 billion suite of projects that will electrify and upgrade the performance, operating efficiency, capacity, safety, and reliability of Caltrain commuter rail service, while improving air quality. The Electrification Project, which is scheduled to be operational by 2022, has two components: electrification of the Caltrain line between San Jose and San Francisco, and purchase of electric multiple-unit vehicles to operate on the electrified railroad. CalMod also includes the Positive Train Control (PTC) Project, which is scheduled to be operational by 2020.

The CalMod Program will improve system performance with faster, more reliable service while minimizing equipment and operating costs, and is critical to the long-term financial



sustainability of Caltrain. The improvements will extend for 52 miles from San Francisco to San Jose and will also prepare the alignment for the future High-Speed Rail blended system. With the signing of the Full Funding Grant Agreement by the Federal Transit Administration (FTA) in 2017, Caltrain issued notices to proceed to its contractors for corridor electrification and purchase of electric trains.

Like any large capital project, the CalMod funding plan relies on contributions from multiple funding partners such as the three Joint Powers Board member counties (San Francisco, San Mateo, and Santa Clara), the Transportation Authority, the Metropolitan Transportation Commission and the California High Speed Rail Authority. Funding contributions were codified in a series of memorandums of agreement, one of which included an oversight protocol. The three Joint Powers Board counties have a local contribution of \$80 million each to the \$2.26 billion CalMod program. The Transportation Authority has committed about \$41 million primarily from the Prop K and One Bay Area Grant programs, and all but \$4.9 million in Prop K funds have been allocated. The remaining Prop K funds will be brought to the Board for allocation in October. The SFMTA has committed the remaining \$39 million of San Francisco's local contribution from the Prop AA General Obligation Bond. Of this amount, SFMTA \$14,661,000 remains to be allocated, with timing dependent on the next bond issuance and considering the project's cash flow needs.

**Caltrain Business Plan.** With implementation of Positive Train Control and the Peninsula Corridor Electrification Program underway, Caltrain recognized the opportunity to articulate a long-term business strategy for the future of the system. The Caltrain Board discussed the initial concept for a Caltrain Business Plan in April 2017 and adopted a final Business Strategy and Scope of Work in February 2018. The Business Plan has been scoped to include long-range demand modeling, and service and infrastructure planning, as well as an organizational analysis and an assessment of Caltrain's interface with the communities it traverses. It is an extensive planning effort that includes outreach in multiple venues. Caltrain staff has completed the Long-Range Service Vision, which was presented to the Peninsula Corridor Joint Powers Board (PCJPB) for information at the August 1 meeting. The staff is recommending the Moderate Growth scenario under which peak service will consist of eight Caltrain and four High Speed trains per hour for a total of 12 trains per hour. It will require some passing tracks and station/platform modifications. It increases peak, off-peak and weekend service as well as service to Gilroy. The recommendation has the caveat that its implementation does not preclude the High Growth scenario of twelve Caltrain trains and four High Speed Rail trains per hour. We are supportive of the staff recommendation and have attached for reference the San Francisco Planning Department and our joint comment letter on the Long Range Service Vision and Organizational Assessment, two key deliverables from the Business Plan.

The Draft Organizational Assessment Report concludes that, while Caltrain is the most productive major US railroad as measured by the number of car-miles operated per employee and passenger-miles carried per employee, it is "significantly under resourced for



today's work output, let alone to address its upcoming transformation". The Business Plan will be completed in early 2020.

## **DISCUSSION**

The paragraphs below provide a brief status update on the CalMod program, including Positive Train Control and the Peninsula Corridor Electrification Project.

**Positive Train Control (PTC):** On March 1, 2018, Caltrain awarded a \$49.5 million contract to Wabtec Corporation for the completion of the PTC project, finalizing the transition from the contract with Parsons Transportation Group for Communications Based Overlay Signal System (CBOSS)/PTC, which was terminated on February 22, 2017 for non-performance. Caltrain staff determined that approximately 80% of the work product for CBOSS already performed would be able to be repurposed for the PTC. In December 2018, Caltrain completed FRA's required statutory substitute criteria and submitted an Alternative Schedule request for FRA approval, which was received in early January 2019. The Alternative Schedule calls for full system certification by December 2020.

The project is on track to meet the schedule. On September 7, 2019, Caltrain began operating PTC in revenue service on the mainline, and full interoperability to Gilroy is anticipated by December 2019. Caltrain anticipates submitting the final safety plan to FRA for final approval in the summer 2020.

As of July 31, 2019, expenditures and accruals reached \$238.52 million on the \$329.29 million project, with work estimated at 72.43% complete. Installations of onboard equipment on Caltrain locomotives and cab cars is complete, except for three locomotives that are off-property for overhauls. Acceptance Testing on all PTC-installed locomotives and cab have been completed on all the vehicles on-property. Only the three that are away for overhauls remain. Interoperability coordination with tenant railroads have begun, together with the implementation of the Key Exchange Server with hosted solution from ARINC. Wabtec also completed Test Procedure for Interoperability Lab and Field Testing with UPRR and commenced Interoperability Laboratory Testing with UPRR on August 12, 2019. The goal is to achieve Interoperability with UPRR by December of 2019. Subsequently, Caltrain will commence Interoperability Testing with all other tenants on Caltrain property to achieve interoperability requirements and commence PTC-governed operation by May 2020.

### **Peninsula Corridor Electrification Project (PCEP):**

**Electrification design-build contract:** In August 2016, Caltrain awarded the Design-Build Electrification contract to Balfour Beatty Infrastructure in the amount of \$697 million. The contract was issued with a \$108 million Limited Notice to Proceed, which was followed by full Notice to Proceed on June 19, 2017. As of July 31, 2019, expenditures on the PCEP reached \$743,894,528, 37.57% of the \$1.98 billion budget. Work is progressing on foundations, poles and cantilever arm installation for the overhead contact system. Work is also ongoing on the traction power substations and paralleling stations. The contractor for tunnel modifications is making good progress on the 100-year old San Francisco tunnels.

Overhead Contact System potholing, foundation, poles, and cantilever arm installation is



underway. Because of encountering multiple underground utilities, work is not proceeding linearly, causing production inefficiencies. Production over the previous month improved, indicating that the mitigation measures had been effective, but production was back down this month. We will continue to monitor this work closely. Work continues on the Traction Power Substations, Paralleling Stations and Signal System, as does fabrication and testing of signal houses. Design for Scott, Linden, 16th and Mission Bay grade crossings continues, together with coordination w/ Union Pacific Railroad (UPRR) for systemwide signal system design and utility relocations. The CPUC has approved the crossing designs for Auzerais, Virginia and two pedestrian crossings in Sunnyvale representing a good forward progress in advancing the consistent warning design. Design review coordination with local jurisdictions also continues.

Balfour Beatty Infrastructure is now forecasting substantial completion on April 16, 2022, a twenty-month delay, due to various reasons, but mainly delays in the design of the Consistent Warning Time aspect of the signals system at the at-grade crossings. However, the PCEP schedule shows a substantial completion date of December 31, 2021, four months earlier. This discrepancy between forecasts is a source of concern for the funding partners. The FTA will be hosting several schedule workshops between late September and October 2019 to review project status and to provide comments on the forecasted program schedule. We will be participating in those workshops.

**Vehicles:** On September 6, 2016 Caltrain gave a limited Notice to Proceed to Stadler Rail for the \$551 million Electric Multiple Units (EMUs) contract to design and fabricate 96 electric vehicles. After receipt of the Full Funding Grant Agreement, Caltrain issued the full NTP on June 1, 2017. In accordance with the Buy America provisions of the FTA funding, the vehicles are being manufactured in Salt Lake City. The EMUs are being manufactured by Stadler US at its new facility in Salt Lake City, Utah. Major systems designs have been completed except for passenger information systems, train monitoring and diagnostic systems, and passenger counting, which are scheduled for completion by fourth quarter of 2019. Final Design Review and First Article Inspection close-out continues. Prototype testing and series production is underway Subsystem components (HVAC, propulsion, brakes, passenger seats, doors) manufacturing continues. Carshell fabrication continues, with 21 of 133 shipped to date. Truck frame and passenger-side door systems are undergoing endurance testing. PTC onboard equipment is progressing on schedule.

Stadler has been slow in establishing its supply chain in the U.S. and the resulting shortage of parts has slowed car assembly. In particular, Seidenbacher, the supplier of numerous weldments and mounting frames that are on the critical path, has been overwhelmed with orders. Stadler is securing alternative suppliers to pick up shortfall.

Revenue service demonstration for the electrified railway is scheduled from January 2022 to May 2022.

Detailed CalMod monthly reports are provided to the Caltrain Board and are publicly available:





Peninsula Corridor Electrification Project reports:

[http://www.caltrain.com/projectsplans/CaltrainModernization/CalMod\\_Document\\_Library.html#electric](http://www.caltrain.com/projectsplans/CaltrainModernization/CalMod_Document_Library.html#electric)

Positive Train Control reports (part of the JPB monthly agenda packet):

[http://www.caltrain.com/about/bod/Board\\_of\\_Directors\\_Meeting\\_Calendar.html](http://www.caltrain.com/about/bod/Board_of_Directors_Meeting_Calendar.html)

**Challenges and Opportunities:** There are some challenges that may impact Caltrain's ability to deliver CalMod on time and on budget. The primary risk items that we are monitoring include:

- 1) Design and construction of grade crossing modifications that meets stakeholder and regulatory requirements, which may cost more than was budgeted and delay the revenue service date;
- 2) the extent of encountering multiple underground utilities and delays in resolving them may result in delays to the completion of the electrification contract and increases in program costs; and
- 3) track access for both the PCEP and PTC, which is also a factor for many other capital projects that Caltrain is advancing.

The funding partners held a workshop with Caltrain to address these and other issues. A follow-up meeting is scheduled for September 25.

## **FINANCIAL IMPACT**

None. This is an information item.

## **CAC POSITION**

There is no position as this is an information item. The CAC was briefed on the Caltrain Business Plan update at its September 4 meeting and the CAC will be briefed on the CalMod update at its September 25 meeting.

## **SUPPLEMENTAL MATERIALS**

- Attachment 1 - Caltrain Business Plan and Caltrain Modernization update (presentation)
- Attachment 2 - Caltrain Long Range Service Vision and Organizational Assessment - San Francisco comment letter

# Choosing a Long Range Vision

Caltrain Business Plan

Summer 2019



# What is the Caltrain Business Plan?

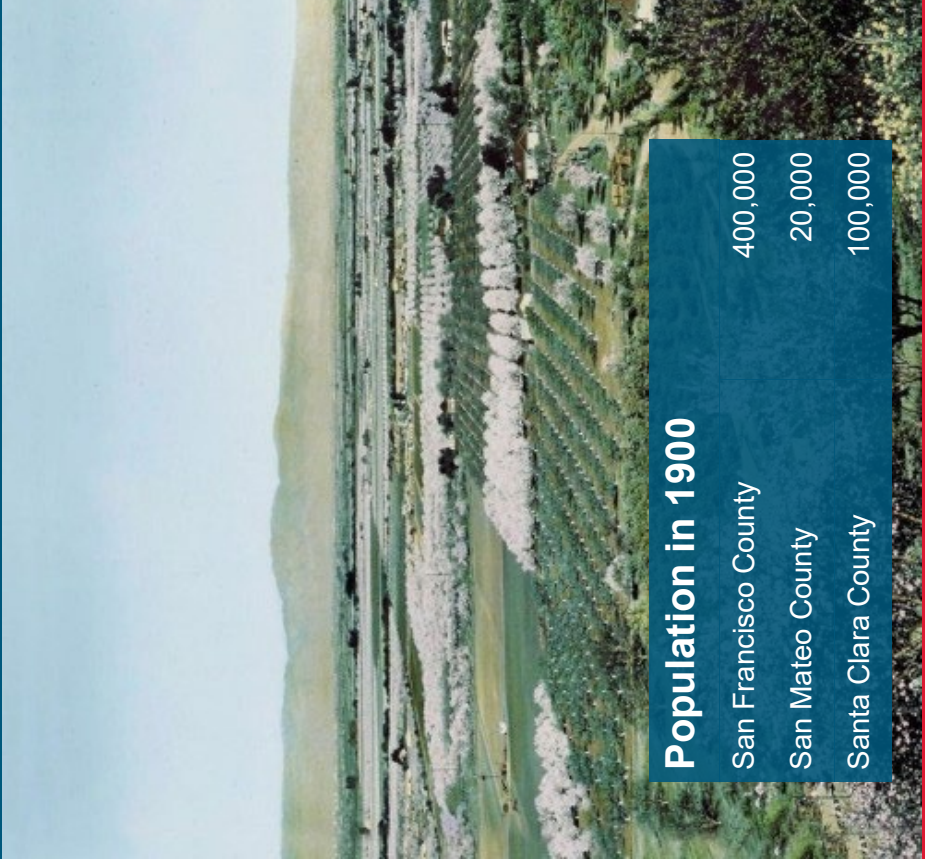
**What** Addresses the future potential of the railroad over the next 20-30 years. It will assess the benefits, impacts, and costs of different service visions, building the case for investment and a plan for implementation.

**Why** Allows the community and stakeholders to engage in developing a more certain, achievable, financially feasible future for the railroad based on local, regional, and statewide needs.



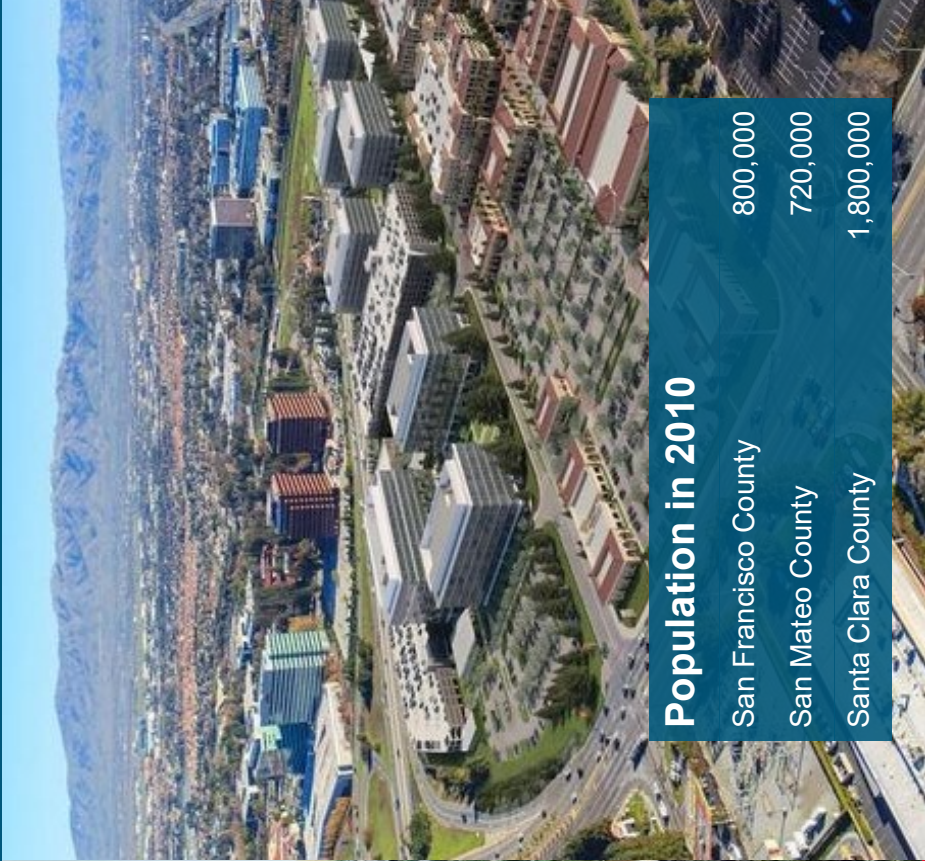


# Caltrain is part of a dynamic corridor



**Population in 1900**

San Francisco County	400,000
San Mateo County	20,000
Santa Clara County	100,000



**Population in 2010**

San Francisco County	800,000
San Mateo County	720,000
Santa Clara County	1,800,000

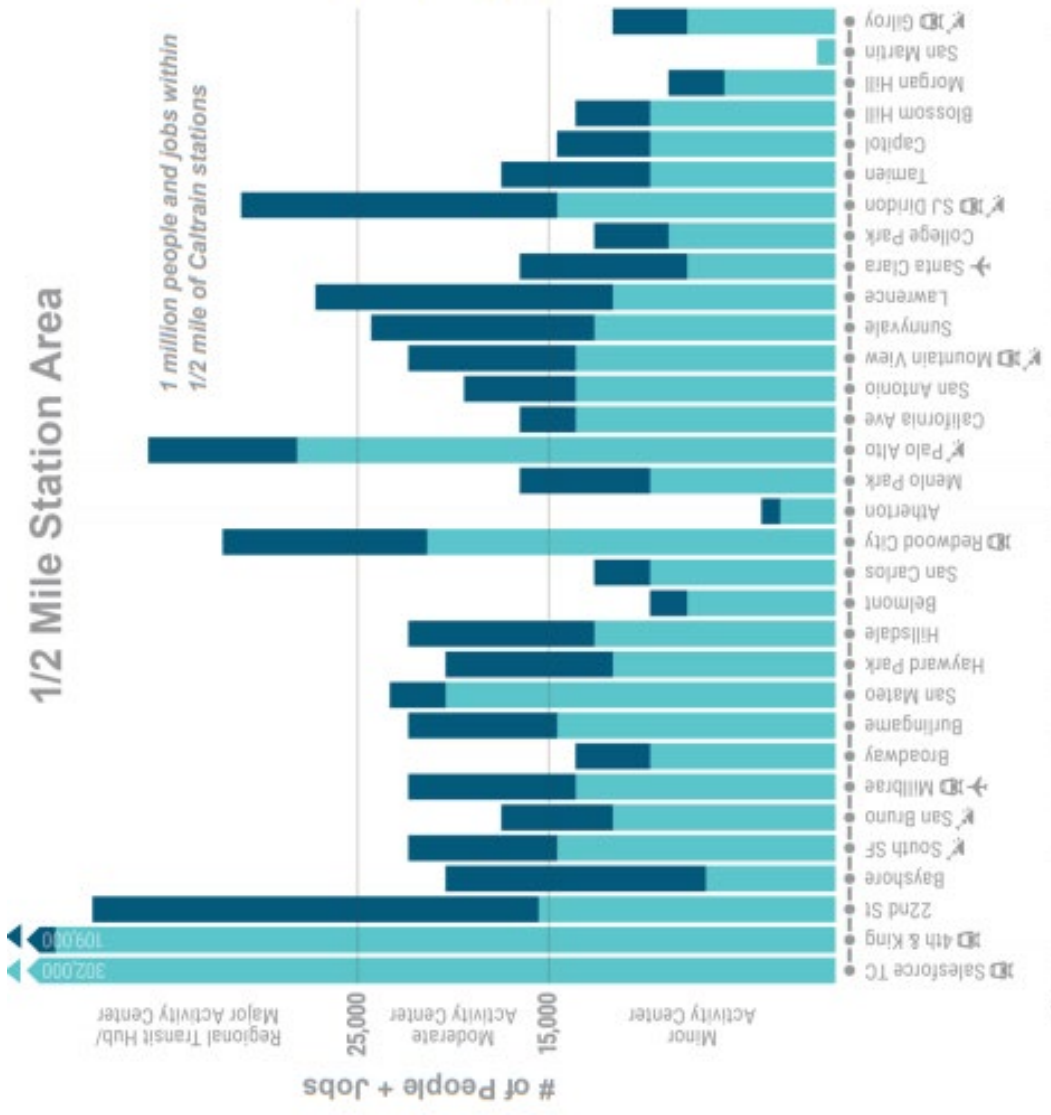


**Population in 2040**

San Francisco County	1,170,000
San Mateo County	920,000
Santa Clara County	2,530,000

# 2040 Demand

- **The Caltrain corridor is growing**
- By 2040 the corridor expected to add 1.2 million people and jobs within 2 miles of Caltrain (+40%)<sup>1</sup>
- 80% growth expected in San Francisco and Santa Clara Counties
- **Major transit investments are opening new travel markets to Caltrain**
- Downtown Extension and Central Subway
- Dumbarton Rail, BART to San Jose, and improvements to Capitol Corridor and ACE
- HSR and Salinas rail



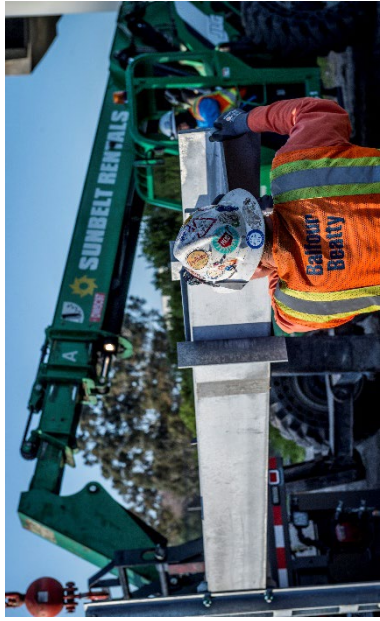


# The future of rail in the Bay Area is still coming together, with many different plans and projects underway.





# Caltrain will be the first, modern electrified railroad in California. The Vision we choose will shape the future of rail in the region and the state.



# What does it mean for Caltrain to Choose a Long Range Vision?

## Caltrain's 2040 Service Vision needs to be a "Big Tent"

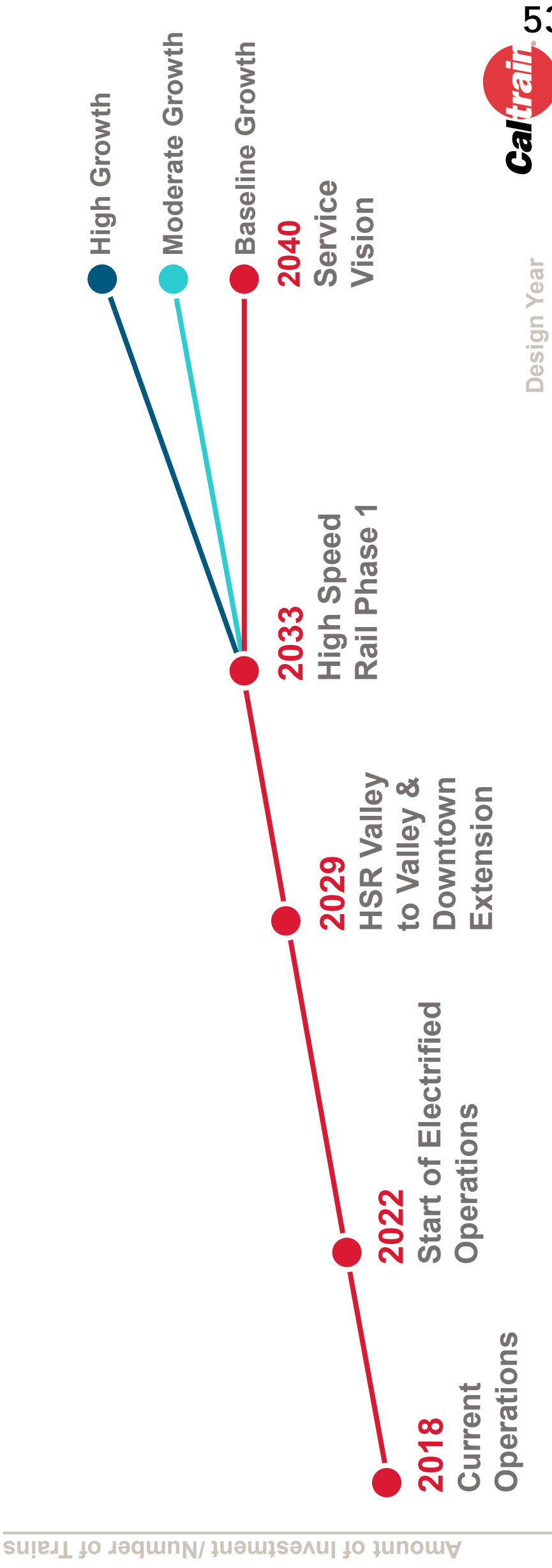
- The Caltrain corridor is a key regional transportation asset and many of our partner cities and agencies have major commitments or planned investments (Projects) in the corridor. The vast majority of these are substantially unfunded.
- The "Baseline Vision" incorporates these investments, as well as the basic improvements that Caltrain will need by 2040 to operate a fully modernized blended system at "baseline" levels of frequency.
- Building from this "baseline," Caltrain has assessed options for incremental expansion of service

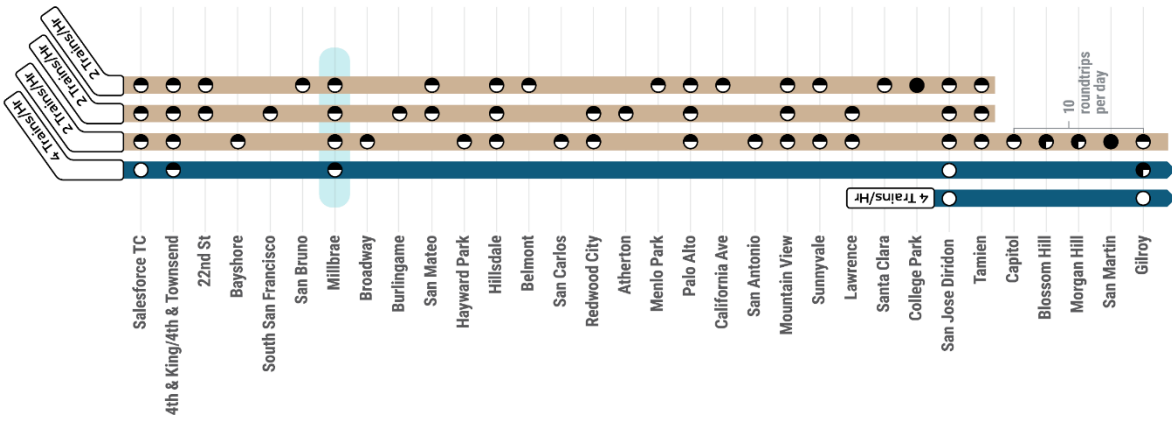
**Caltrain's core question as it considers a Long Range Service Vision:**

**How Much Service Should We Provide?**



# 2040 Service Scenarios: Different Ways to Grow





## Trains per Hour, per Direction

Peak: 6 Caltrain + 4 HSR  
Off-Peak: 3 Caltrain + 3 HSR

## Stopping Pattern

Skip stop

## Travel Time, STC-Diridon

69-73 Min

## New Passing Tracks

Millbrae

## Service Plan Description

- Bunched service results in irregular Caltrain headways; each pattern arrives over span of 10 minutes, then a 20-minute gap between trains
- Three half-hourly skip stop patterns each with similar travel times
- South of Tamien, peak-direction skip stop service with 10 round trips per day

Service Type



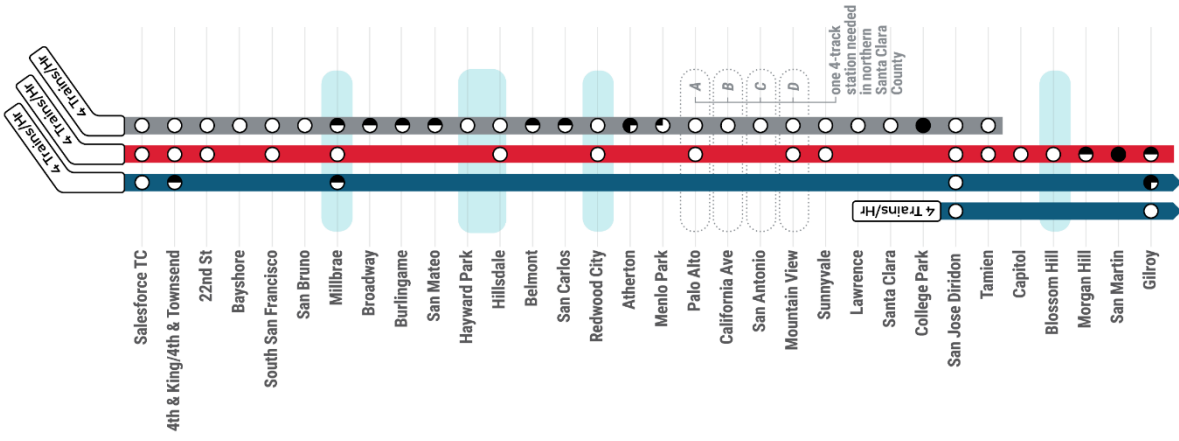
Service Level (Trains per Hour)



Peak Direction Trains/Hour

Conceptual 4 Track Segment or Station to be refined through further analysis and community engagement.

# Moderate Growth Scenario



## Trains per Hour, per Direction

Peak: 8 Caltrain + 4 HSR  
Off-Peak: 6 Caltrain + 3 HSR

## Stopping Pattern

Local / Express with timed transfer at Redwood City

## Travel Time, STC-Diridon

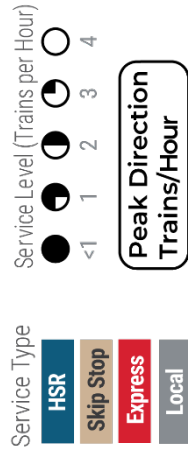
61 Min (Express)  
85 Min (Local)

## New Passing Tracks

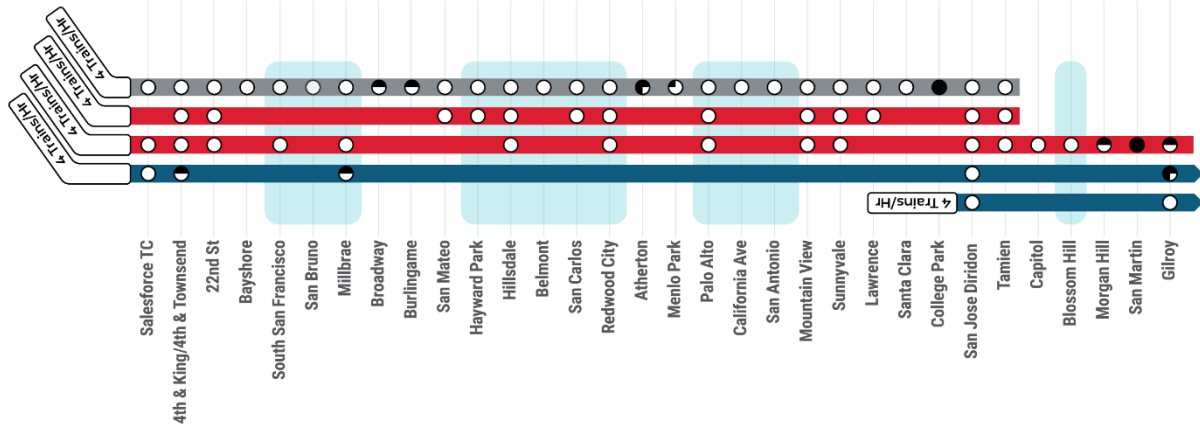
Millbrae, Hayward Park-Hillsdale, Redwood City, Northern Santa Clara County, Blossom Hill

## Service Plan Description

- Local and Express trains each operating at 15-minute frequencies with timed cross-platform transfer at Redwood City
- Skip stop pattern for some mid-Peninsula stations; some origin-destination pairs not served at all
- Trains serve Capitol and Blossom Hill every 15 minutes and Morgan Hill and Gilroy every 30 minutes



Conceptual 4 Track Segment or Station to be refined through further analysis and community engagement.



## Trains per Hour, per Direction

Peak: 12 Caltrain + 4 HSR  
Off-Peak: 6 Caltrain + 3 HSR

## Stopping Pattern

Local / Express A / Express B with timed transfer at Redwood City

## Travel Time, STC-Diridon

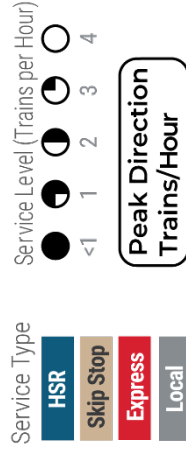
61 Min (Express A)  
82 Min (Local)

## New Passing Tracks

South San Francisco-Millbrae, Hayward Park-Redwood City, northern Santa Clara County, Blossom Hill

## Service Plan Description

- Local and Express A trains each operating at 15-minute frequencies with timed cross-platform transfer at Redwood City
- Express B trains operate every 15 minutes between 4th & King and Tamien
- Local trains make nearly all stops
- Trains serve Capitol and Blossom Hill every 15 minutes and Morgan Hill and Gilroy every 30 mins



Conceptual 4 Track Segment or Station to be refined through further analysis and community engagement.

# Weighing Caltrain's Choices

# Components of the Business Case Analysis

We have adapted a traditional Business Case Analysis to the specific, and complicated circumstances of the Caltrain corridor.

Collectively, this analysis helps provide guidance as to whether we should remain on the “baseline” course or if there is value in choosing a Long Range Service Vision for Caltrain that aims higher.

The following slides present and weigh analyses in each of the following areas.

Service  
Comparison

Financial  
Analysis

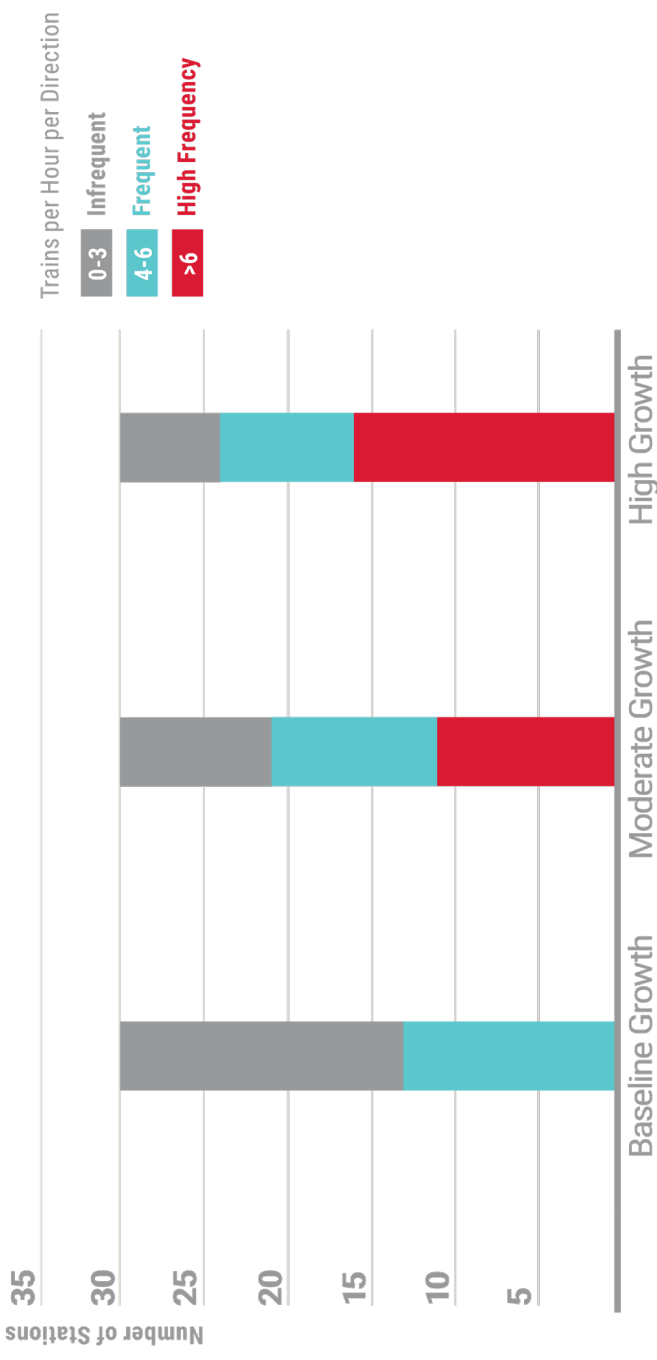
Caltrain  
Economic  
Analysis

Regional  
Analysis

Flexibility and  
Uncertainty

# Peak Period Frequency

The **number of stations** receiving frequent or high frequency service increases substantially in the Moderate and High Growth Scenarios due to higher train volumes in the peak period.



## Metric



Number of Stations Served by Frequent Service (>4 TPHPD)

24 Stations

Longest wait times at major stations served by all trains

12 minutes

8 minutes

## Baseline Growth

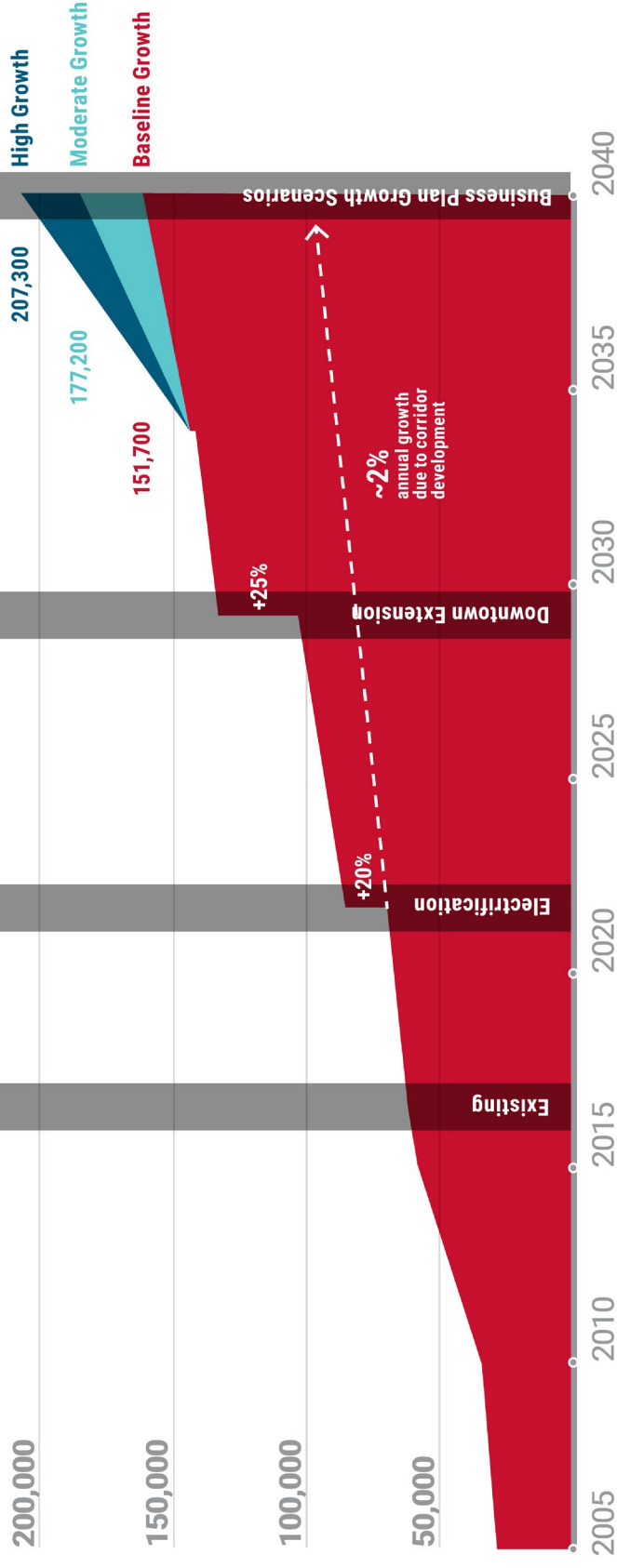
## Moderate Growth

## High Growth

# Ridership

On its current **Baseline** path, Caltrain would experience a *demand* of 161,000 daily riders by 2040.

The **Moderate and High Growth** scenarios would increase *demand* to 185,000 and 207,000 riders, respectively, leading to ridership and VMT saving increases.



## Metric



### Ridership

Daily Ridership\*

151,700 Riders

177,200 Riders

207,300 Riders

Comfortable Peak Hour Train Loads?\*

No

Crowding on some trains

Yes

\*Crowd Constrained Ridership (135%)



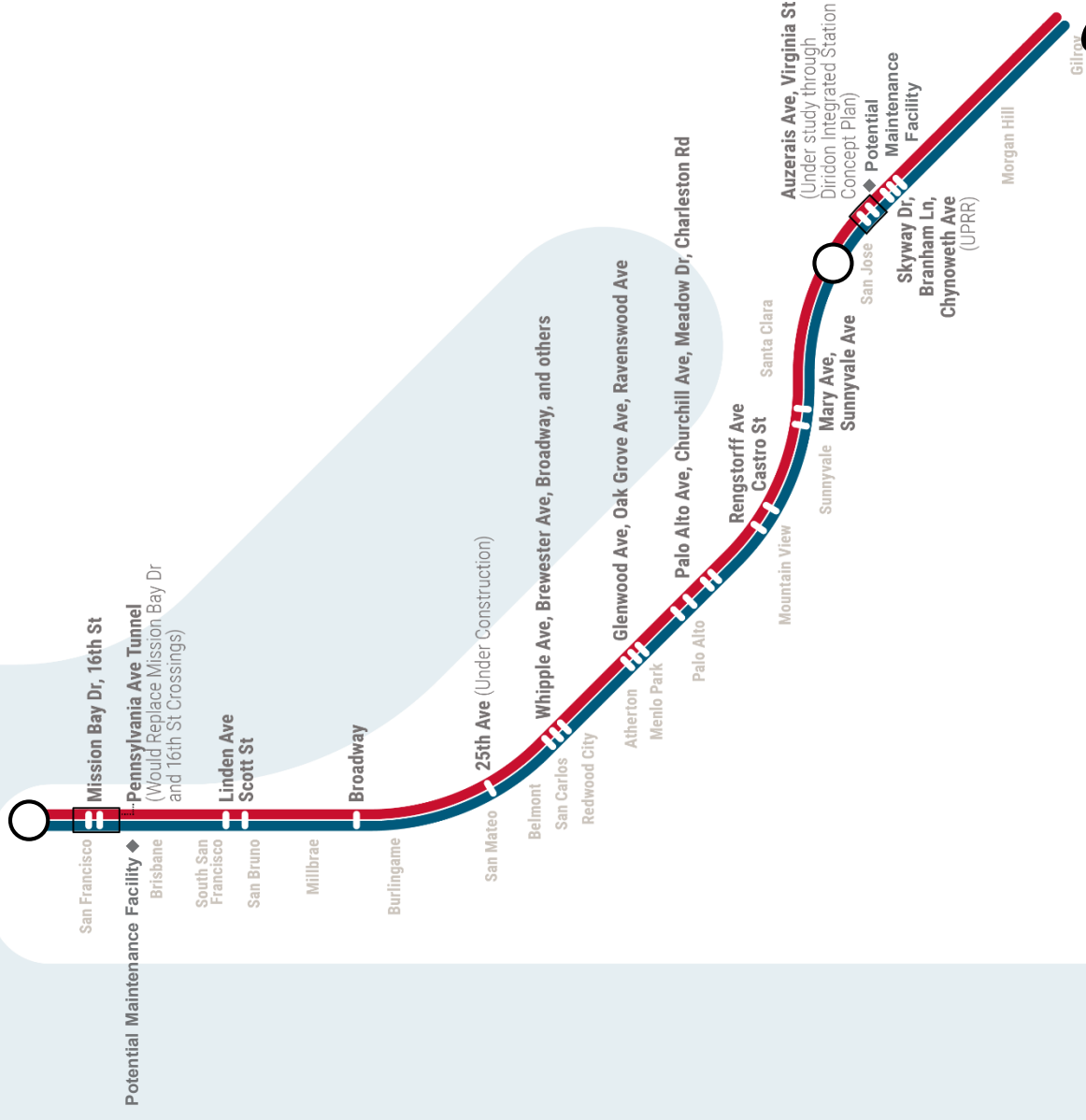
# Baseline Investments

While the “Baseline” for the 2040 Service Vision contemplates only modest increases in Caltrain service beyond electrification, there are many other investments planned for the Caltrain corridor before 2040.

Some of these projects are directly required to enable the baseline level of service while others reflect the goals and commitments of Caltrain’s local, regional and state partners.

## Baseline investments include:

1. Caltrain projects already underway
2. Local, Regional & State partner projects that directly influence Caltrain
3. Additional Caltrain investments needed to fill out the baseline and support blended operations



# The Baseline Costs \$22.1 Billion

**\$2.3B**  
Caltrain Work  
Underway



**\$16.2B**  
Investments Planned and  
Proposed by Caltrain Partners



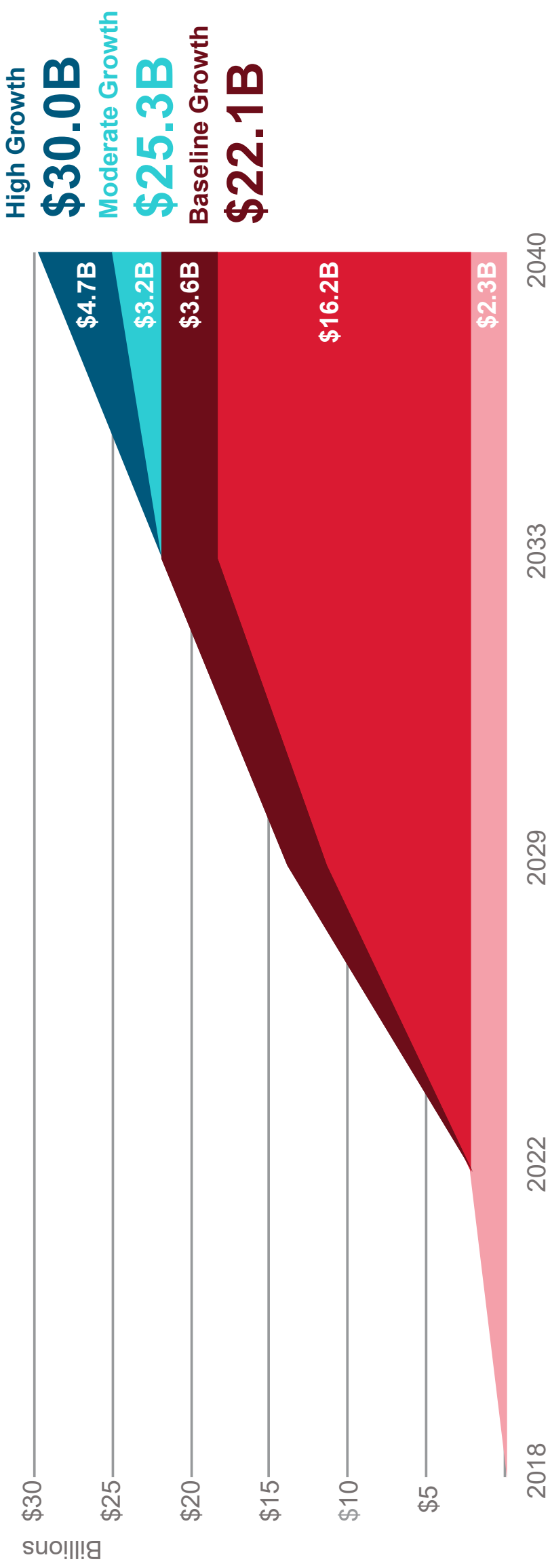
**\$3.6B**  
New Caltrain Investments to  
Support Baseline Growth  
Scenario



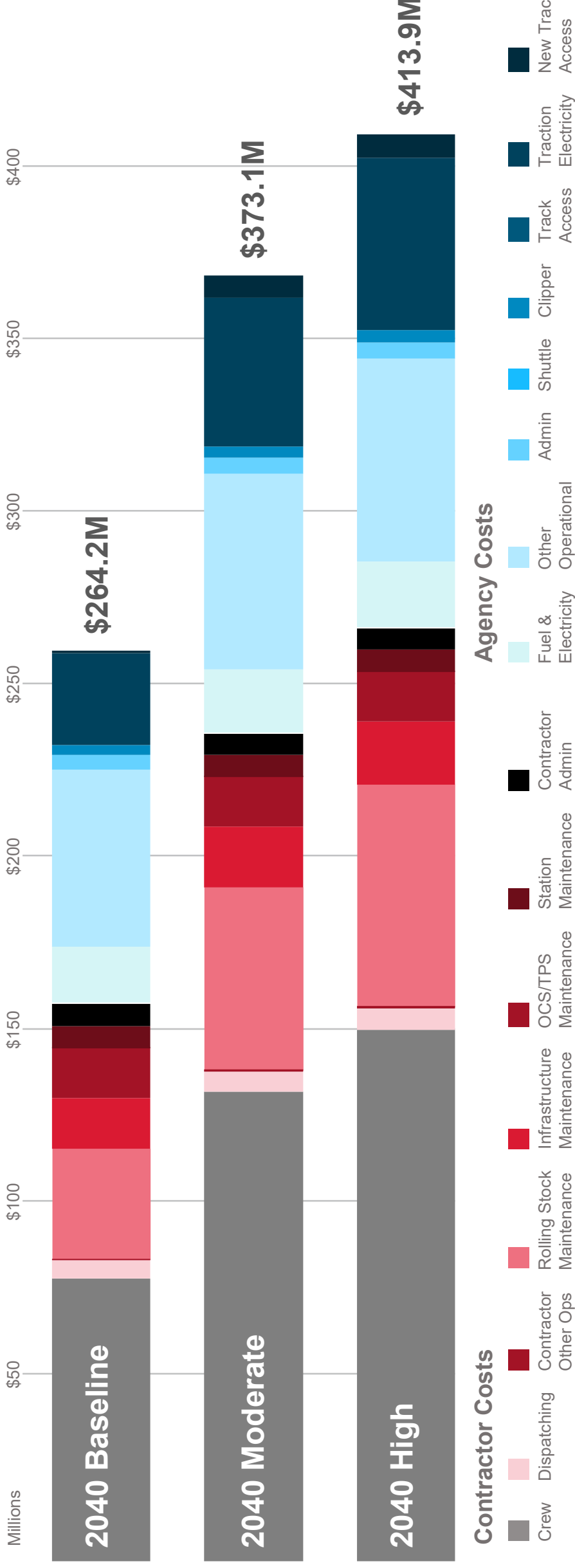
\* Placeholder cost pending detailed cost estimate to be developed through Diridon Integrated Station Concept Plan

# Investing for Growth

## Total Corridor Investment Over Time by Growth Scenario



# Year 2040 Operating Costs



# Caltrain User Benefits over Baseline

Total Benefits 2018 to 2070, Average Annual Benefits 2040 to 2070

Benefit	Unit	Moderate Growth		High Growth	
		Total*	Per Year Average	Total*	Per Year Average
Existing Transit User Travel Time Savings	hours	12.9M	0.43M	20.9M	0.70M
New Transit User Travel Time Savings	hours	27.7M	0.92M	40.4M	1.35M
Avoided Auto Trips (VMT Savings from New Transit Users)	vehicle miles	9,000M	300M	16,100M	540M
Roadway Network Safety Improvements	reduced fatal/injury accidents	7,300	240	13,000	430
Public Health Benefits (from Active Transportation Mode Access)	lives saved	70	2	150	5
	reduced absent days at work	30,000	1,000	67,000	2,200

\*Values rounded for presentation purposes

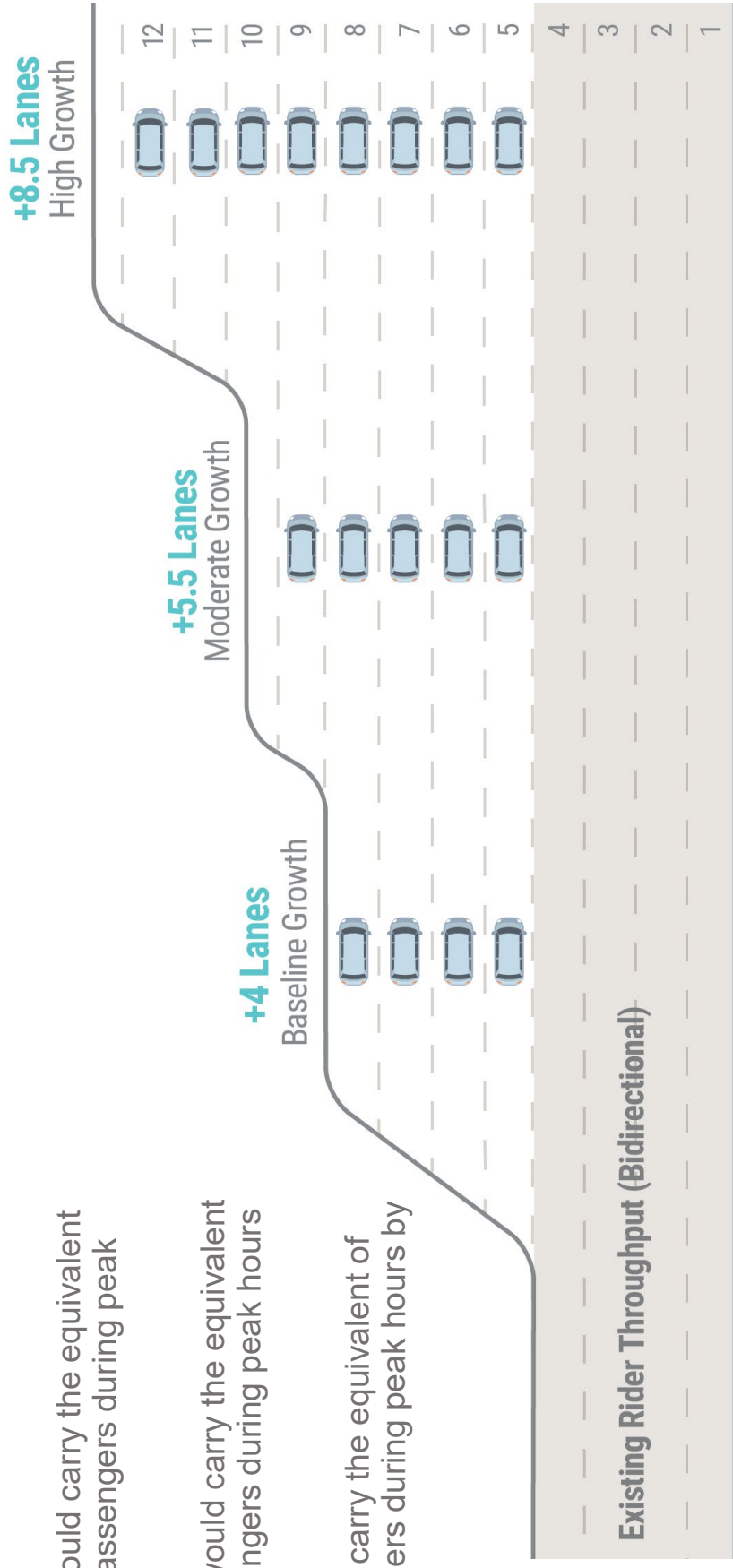
# Freeway Throughput

Today, Caltrain carries 4 freeway lanes worth of people during peak hours. By 2040, the proposed growth scenarios will carry an additional 4 to 8.5 freeway lanes worth of passengers.

The **Baseline Growth** scenario would carry the equivalent of 4 new freeway lanes worth of passengers during peak hours by 2040.

The **Moderate Growth** scenario would carry the equivalent of 5.5 new freeway lanes of passengers during peak hours by 2040.

The **High Growth** scenario would carry the equivalent of 8.5 new freeway lanes of passengers during peak hours by 2040.



\*Assumes vehicle occupancy of 1.1 persons/vehicle and lane capacity of 1,500 vehicles/hour.

# Regional Rail Integration

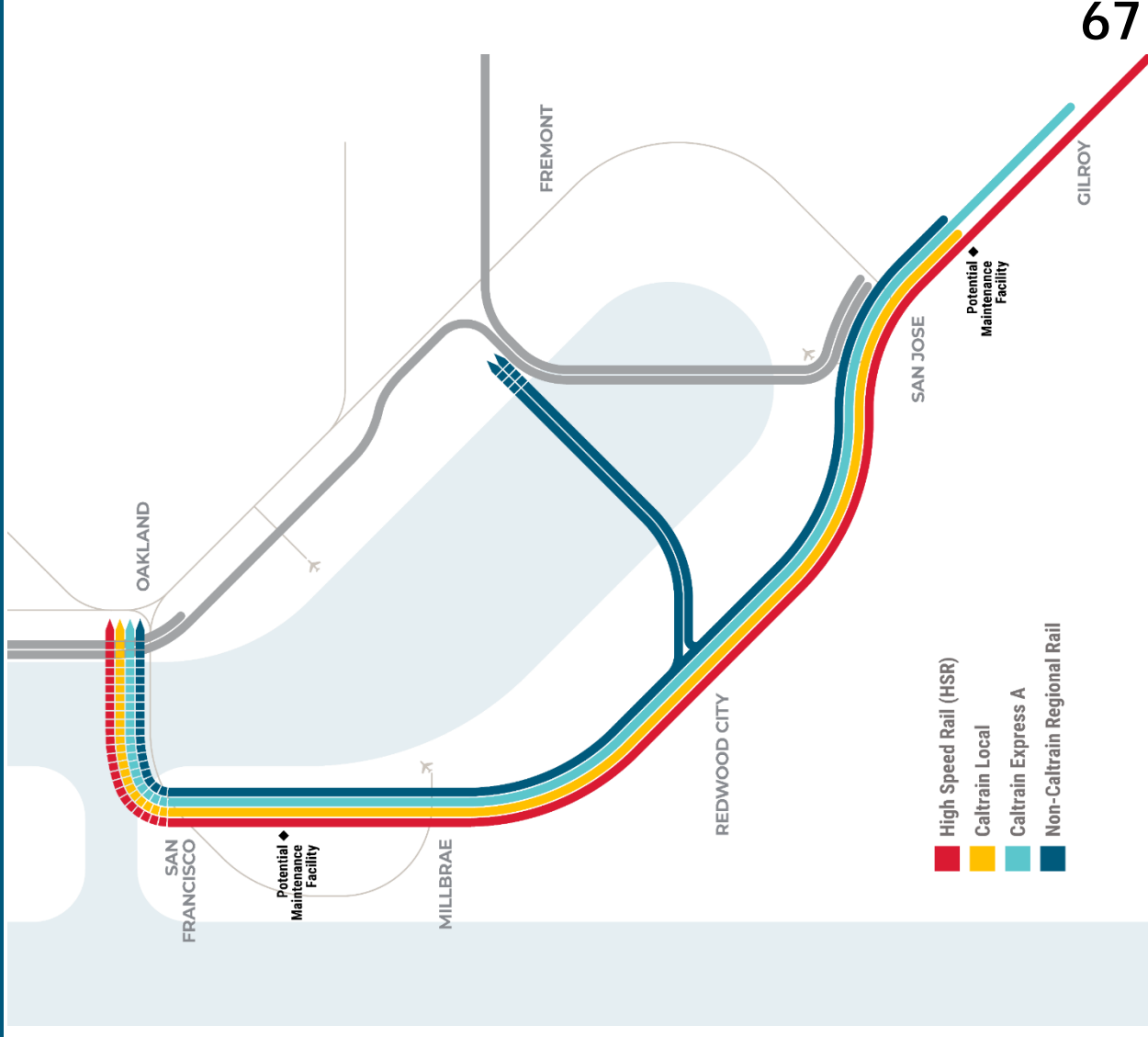
**All service scenarios are compatible with regional rail needs.**

**High Growth** anticipates large-scale corridor sharing, or “interlining” through investments in 4-track segments.

**Baseline & Moderate Growth** preserve the ability to scale up to large-scale corridor sharing but hold off on proactive investments until regional needs are better defined.

Examples of active studies and plans ongoing in the region that could advance the potential need for significant interlining onto Caltrain’s corridor include:







- A standard gauge transbay crossing connecting San Francisco and the East Bay
- The reactivation of the Dumbarton rail bridge
- The development of expanded, “visionary” levels of service by ACE or Capital Corridor into San Jose



# Summary

Service

68

Metric	Baseline Growth	Moderate Growth	High Growth
 <b>Frequency</b>	Number of Stations Served by Frequent Service (>4 TPHPD)		
	13 Stations	21 Stations	24 Stations
	22 minutes	12 minutes	8 minutes
 <b>Connectivity</b>	Percentage of Station Pairs Connected Without/(With) a Transfer		
	84% (91%)	96% (98%)	99% (99%)
	Number of Station Pairs Not Connected at All		
	95	17	2
 <b>Network Integration</b>	Timed Connections at Regular Intervals		
	No	Yes	Yes
 <b>Ridership</b>	Daily Ridership (capacity constrained)		
	151,700 Riders	177,200 Riders	207,300 Riders
	Comfortable Peak Hour Train Loads?		
	No	Some Crowding	Yes
 <b>Travel Time</b>	Travel Time, San Francisco (STC) to San Jose (Diridon)		
	69-73 Minutes	61 Minutes	60 Minutes
	Average Travel Time per Rider, All Origin-Destination Pairs		
	33 Minutes	32 Minutes	31 Minutes
 <b>Infrastructure</b>	Passing Tracks Needed		
	<1 Mile	<5 Miles	15-20 Miles



# Summary



## Metric

## Baseline Growth    Moderate Growth    High Growth

Total Capital Costs	(\$22.1B)	(\$25.3B)	(\$30.0B)
Caltrain Allocated Capital Costs	(\$6.6B)	(\$7.6B)	(\$9.4B)
Total Operating Costs	(\$5.1B)	(\$6.0B)	(\$6.3B)
Year 2040 Operating Costs	(\$0.26B)	(\$0.37B)	(\$0.41B)
Farebox Recovery Ratio	82%	75%	77%
Net Investment	(\$7.1B)	(\$8.6B)	(\$10.3B)



## Financial Metrics



## Caltrain Economic Metrics






Net Present Value	-	\$0.58B	\$0.15B
Benefit Cost Ratio	-	1.33	1.04

Except for Total Capital Costs, values are shown as a present (Year 2018) value using a discount rate of 4.0% and cover the period from 2018-2070.

# Summary



## Metric Baseline Growth Moderate Growth High Growth

 <b>Freeway Throughput</b>	Additional Freeway Lanes	+4 lanes	+5.5 lanes	+8.5 lanes
 <b>Regional Rail Integration</b>	Accommodation of Large-Scale Corridor-Sharing Beyond HSR	could be scaled to accommodate	could be scaled to accommodate	can accommodate
 <b>Environmental Benefits</b>	GHG (MTCO2e)	1,108,045	1,898,330	3,006,028
 <b>Land Value Benefits</b>	Property Value Premiums Generated by 2040 Service Growth within 1 Mile of a Station	\$10B	\$10 - \$22B	\$22B
 <b>Economic Productivity</b>	Economic Output	\$32.8B	\$40.8B	\$47.7B
	Full and Part-time Jobs	44K job-years	51K job-years	69K job-years

# Summary



Flexibility  
and  
Uncertainty

## Uncertainties to consider in selecting a Service Vision for Caltrain include:

- Ultimate design and timing of key regional projects impacting the corridor is still in flux and may change
- All scenarios have a degree of flexibility; detailed service and infrastructure planning will be an ongoing process
- Scale and location of passing tracks needed are sensitive to state and regional rail plans, particularly in the high growth scenario
- Key business metrics may shift as fundamental assumptions change

## The Moderate Growth Scenario:

- Does not directly accommodate large-scale corridor sharing but has the potential to scale up
- Has a high level of confidence that the Benefit-Cost Ratio to Caltrain is over 1.0 even if key assumptions change

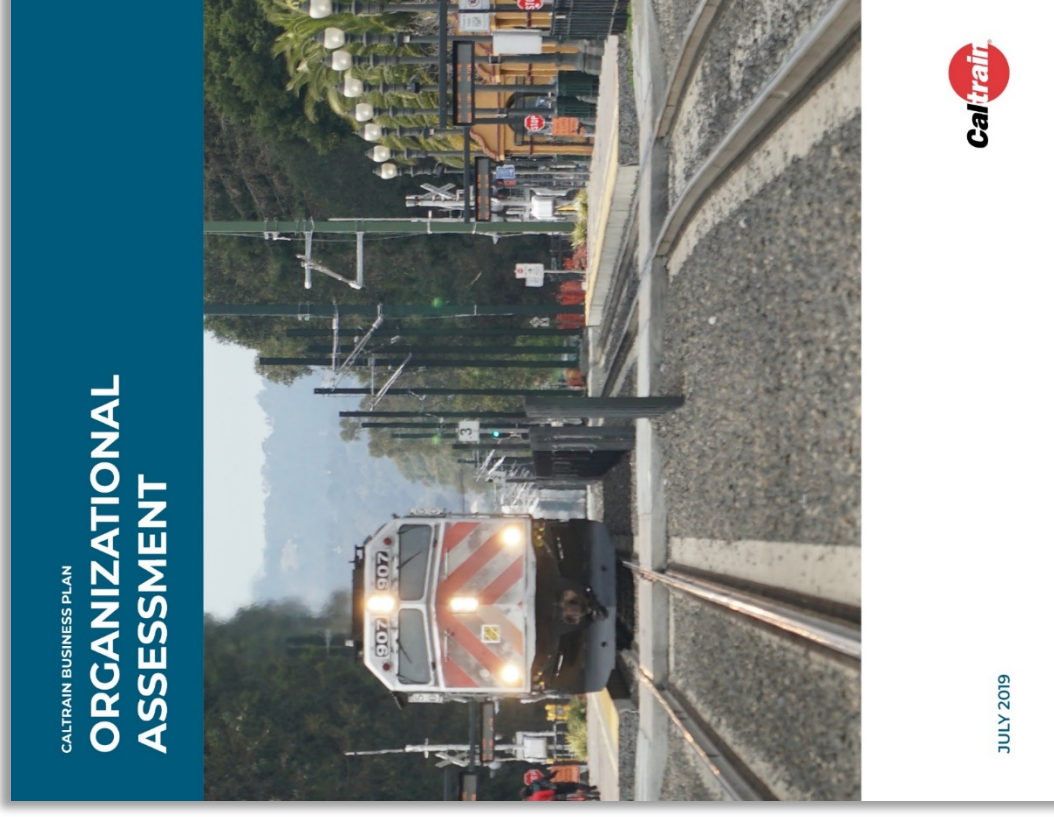
## The High Growth Scenario:

- Most directly accommodates large-scale corridor sharing and interlining but infrastructure is sensitive to changes in regional and state assumptions
- Has less certainty that Benefit-Cost Ratio to Caltrain is solidly over 1.0 should key assumptions change

# Organizational Assessment Report

The Organizational Assessment was developed by Howard Permut of Permut Consulting LLC and former President of Metro-North.

Key areas of Howard's work have been supported by the Stanford Global Projects Center and a team of outside experts



Read the full report at [www.caltrain2040.org](http://www.caltrain2040.org)

# Staff Recommendation

# Caltrain Long Range Service Vision: Staff Recommendation

Website where full draft staff recommendation can be reviewed:

<https://www.caltrain2040.org/long-range-service-vision/>

## Summary and Basis for Recommendation

Caltrain staff have developed a draft recommendation for the Long Range Service Vision. This recommended Vision is:

**Caltrain adopt and pursue a Vision compatible with the “moderate growth” scenario while also taking a series of steps to plan for and not preclude the potential realization of the “high growth” scenario**

The extensive analysis conducted during the Business Plan process has shown that there is a strong demand for expanded Caltrain service. Additionally, the business case analysis conducted as part of the plan has shown that there is a clear case, based on economic and regional benefits, for pursuing a Vision that goes beyond the baseline levels of service previously contemplated.

While the high growth option generates the greatest ridership and expanded regional benefits, it also comes at a higher cost and carries significantly higher levels of uncertainty and potential for community impacts. Therefore, based on the assembled evidence, staff has developed a recommendation that would direct Caltrain to pursue a service vision consistent with the “moderate growth” scenario while retaining the ability to expand to a level consistent with the “high growth” scenario at such time as demand warrants or the region has made the policy and funding commitments to pursue a larger, integrated rail system.



# Caltrain Long Range Service Vision: Staff Recommendation

Website where full draft staff recommendation can be reviewed:

<https://www.caltrain2040.org/long-range-service-vision/>

## The features of the Service Vision include:

### Fast and frequent all day (every day) service

- Total peak hour frequencies of 8 Caltrain trains per direction
- Faster, all day baby bullet service with express service every 15 minutes
- Significantly increased off-peak and weekend service levels
- User friendly, show up and go service with easy to understand schedules

### Increased Capacity

- Provides the capacity to triple today's ridership, serving nearly 180,000 people a day
- Adding more than 5 freeway lanes worth of regional capacity

### Regional Connectivity

- End to end service - connecting Gilroy to downtown San Francisco (all day, both ways)
- Comprehensive local service providing coverage to every community
- Regular service making transfers and connections easier and more predictable

# Caltrain Long Range Service Vision: Staff Recommendation

Website where full draft staff recommendation can be reviewed:

<https://www.caltrain2040.org/long-range-service-vision/>

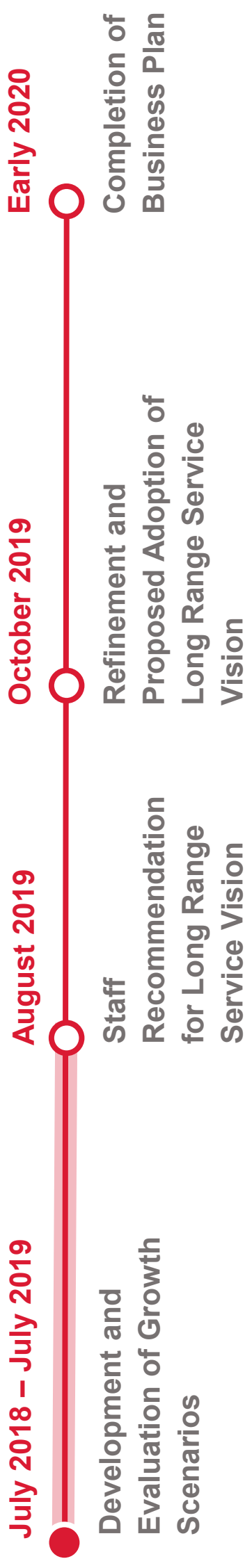
## Major Additional Benefits

The Vision will bring huge benefits beyond direct improvements to service. Once complete, the Vision will deliver;

- **Reduced Travel Time** - 1.3 million hours of travel time savings for existing and new Caltrain riders every year as compared to the baseline scenario
- **Reduced Auto Travel** - 300 million vehicle miles not traveled every year as compared to the baseline scenario
- **Economic Productivity** - \$40.8 billion in regional economic output created by ongoing capital and operating investments
- **Land Value Benefits** - By 2040 Caltrain service will add between \$25 and \$37 billion in property value premiums to residential and office properties within 1 mile of stations. (This analysis is conservative and excludes San Francisco as well as commercial, non-office properties for which estimates could not be reliably developed)
- **Environmental Benefits** - The Vision will result in a reduction of nearly 2 million metric tons of CO2 as well as other air quality improvements



# Where are We in the Process



# Outreach Activities to Date

July 2018 – July 2019 by the Numbers

## Stakeholders Engaged

**21**  
Jurisdictions

**26**  
Public Agencies

**93**  
Organizations in Stakeholder  
Advisory Group

**156**  
Stakeholder  
Meetings

## Public Outreach

**51**  
Public Meetings  
and Presentations

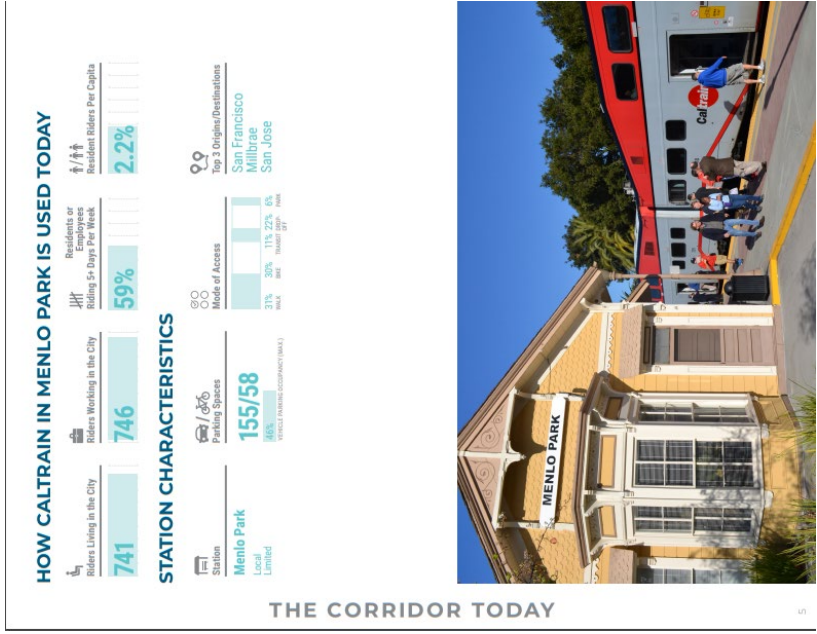
**1,000+**  
Survey Responses

**14,300+**  
Website Views

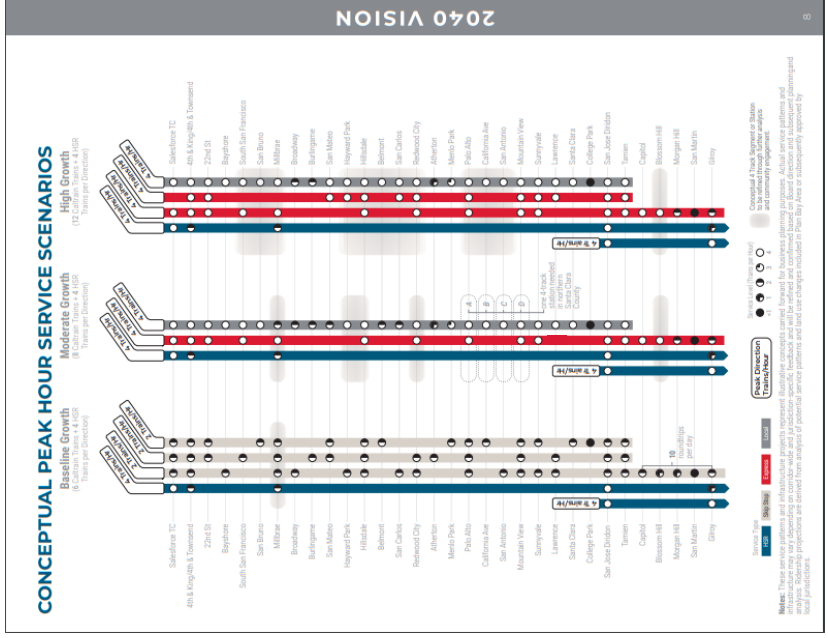
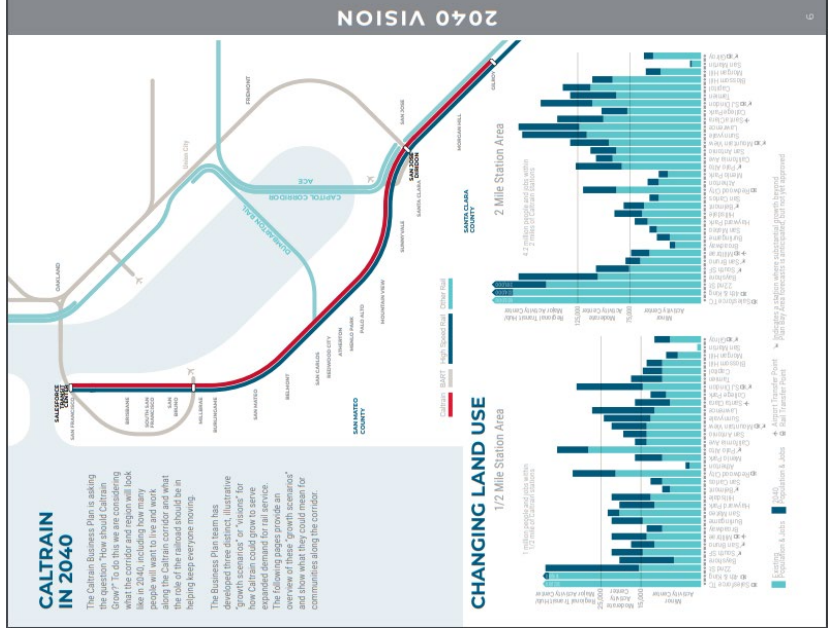
**258,200+**  
Social Media Engagements

# Individual Jurisdiction Outreach

# City Booklets



THE CORRIDOR TODAY



# How to Get Involved

- **Visit our website:**  
[www.Caltrain2040.org](http://www.Caltrain2040.org)
- **Watch the staff recommendation presentation:**  
<https://www.youtube.com/watch?v=BCc3tlkEMYA&feature=youtu.be>
- **Attend an in-person meeting (over 20 meetings planned before potential Board action):**  
<https://www.caltrain2040.org/get-involved/>
- **Send us a note via email or phone:**
  - Email: [BusinessPlan@Caltrain.com](mailto:BusinessPlan@Caltrain.com)
  - Phone: 650-508-6499

**FOR MORE INFORMATION**  
**WWW.CALTRAIN2040.ORG**  
**BUSINESSPLAN@CALTRAIN.COM**  
**650-508-6499**



**CalMod**

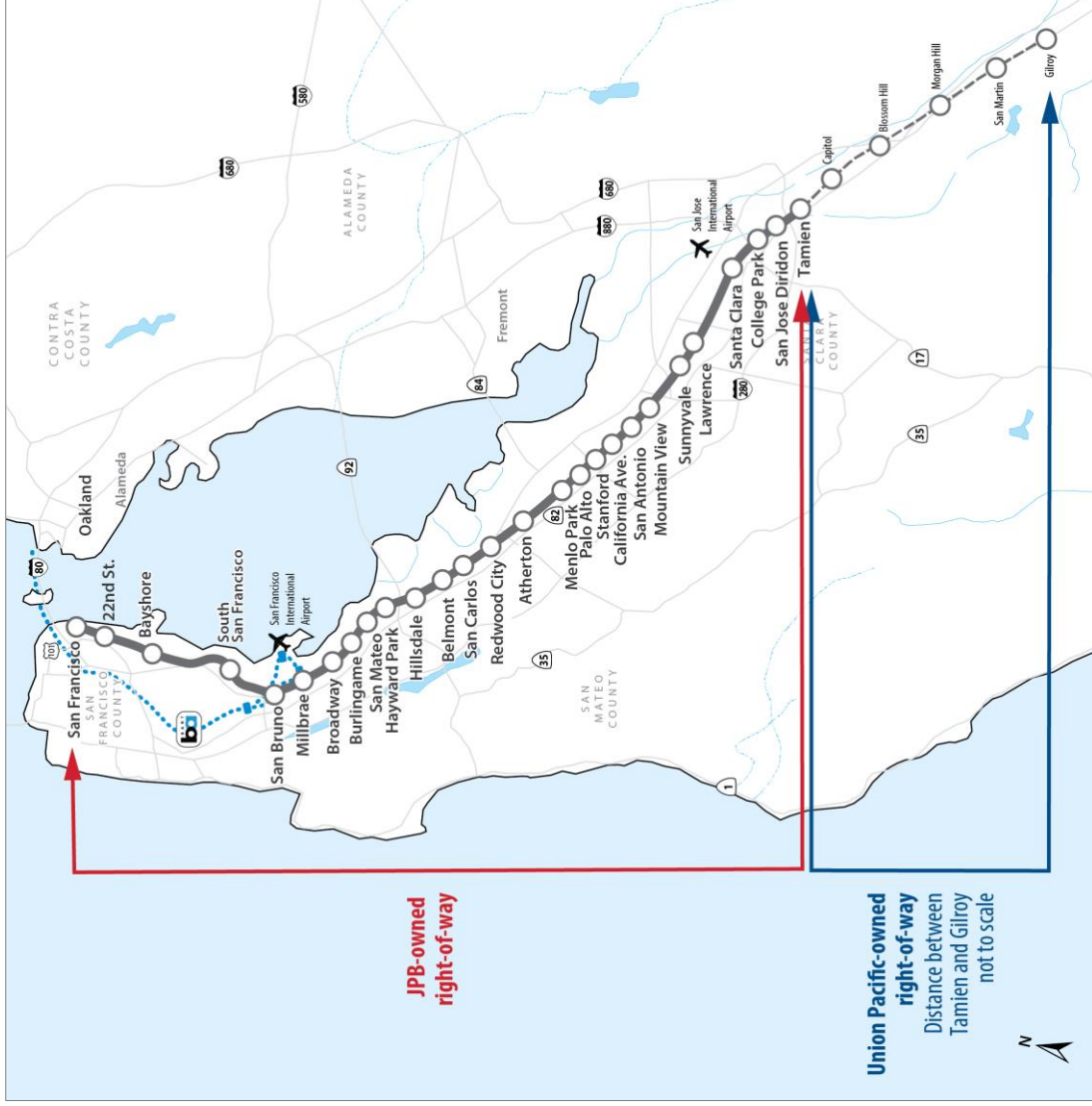


# SFCTA

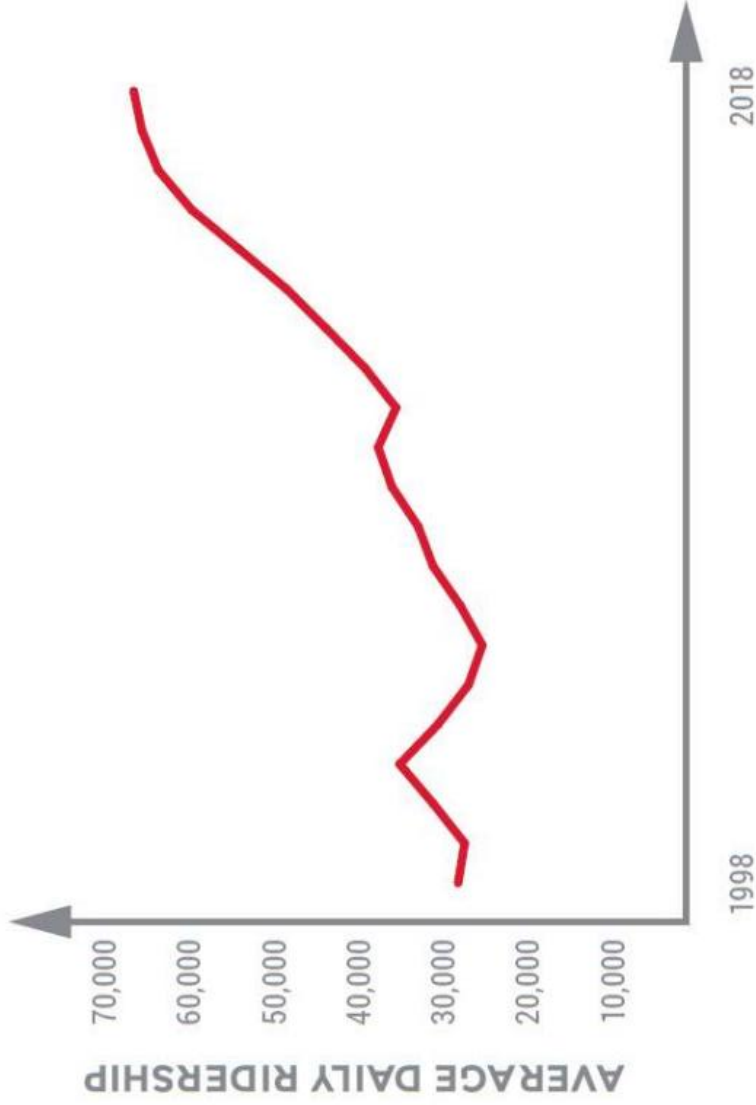
September 2019



- 32 Stations Gilroy to San Francisco
- 92 Weekday Trains
- At-Grade Crossings, Viaducts, and Bridges
- Intermodal Connections
- Bike Commuters

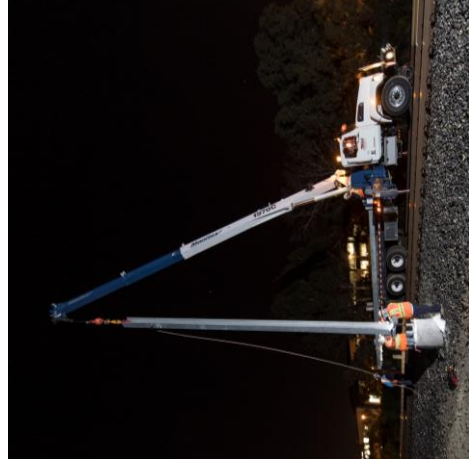
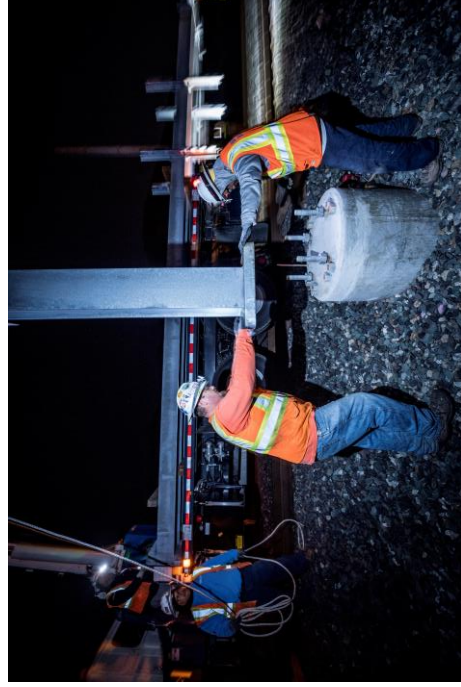












- Potholing
- Foundations
- Poles
- Wires
- Tunnel work
- Traction
- Power
- Facilities







**BENEFITS****CONVENIENCE**

Increased frequency and reduced travel time

**COMFORT**

Amenities like destination signs and electrical plugs, more room, and reduced engine noise

**CAPACITY**

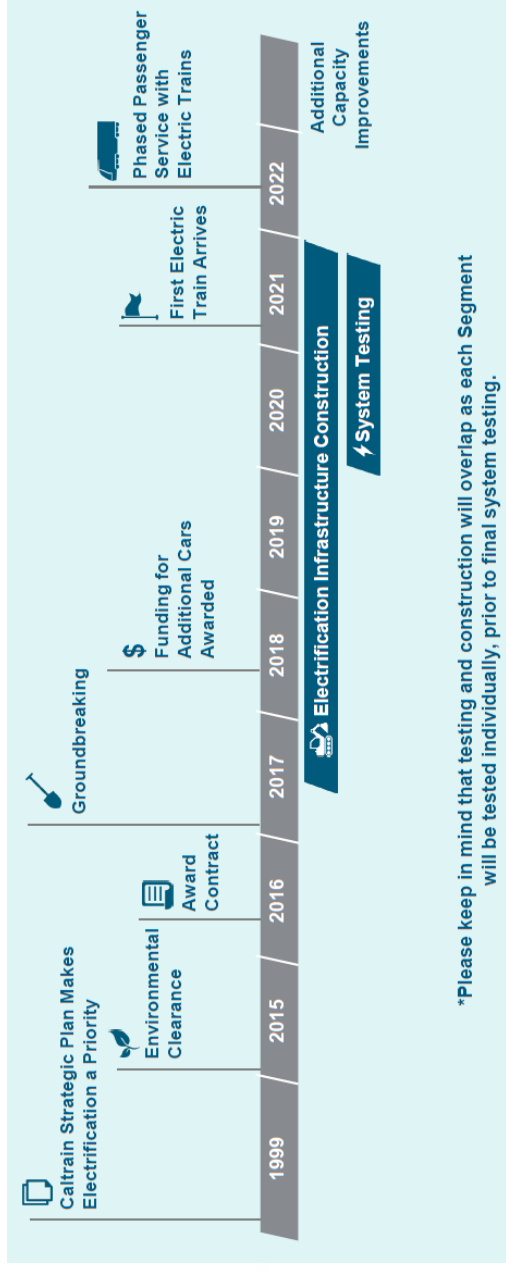
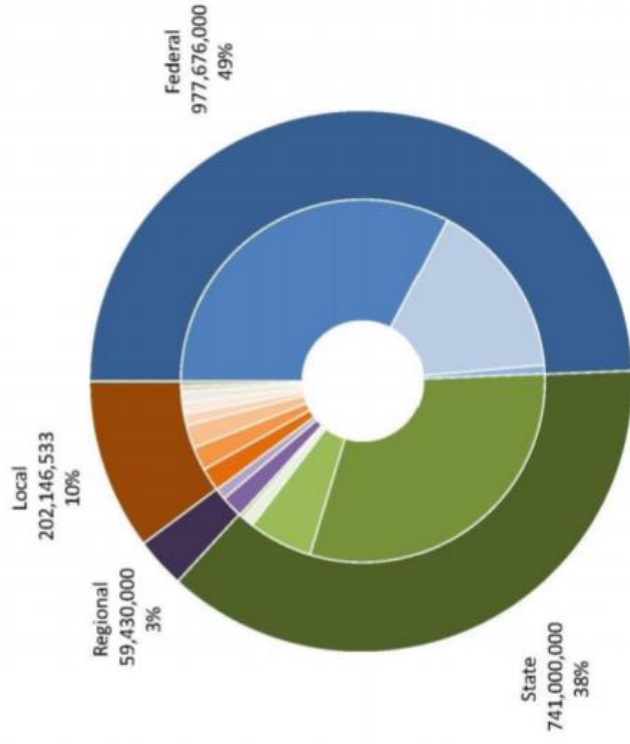
Short and long-term capacity growth potential, without degrading service

**SUSTAINABILITY**

Replacing old diesel trains with new electric trains will reduce GHG and improve air quality



- Public involved in design process
- Virtual Reality 360 Tour planned early 2020



\*Please keep in mind that testing and construction will overlap as each Segment will be tested individually, prior to final system testing.

- SF Contribution, ~\$60M
- Joint Caltrain / FTA schedule workshops schedule late September - October



## PROJECT OVERVIEW

- PTC is a complex signaling and communications technology that is designed to make commuter rail even safer.
- It is a federal mandate for railroads across the country to adopt PTC by December 2020
- Caltrain’s PTC system:
  - September 7, 2019: Revenue Service mainline
  - December 2019: Full Interoperability
  - Summer 2020: Safety Plan to be submitted for final approval
  - December 2020: Full System Certification



**KEY BENEFITS: IMPROVING SAFETY**

- Eliminates risk of train-to-train collisions
- Reduces risk of over-speed derailments
- Provides additional safety for railroad workers

## BUDGET

Prop 1A - State	\$105,445
Prop 1B - State	\$28,753
Federal	\$90,446
Local	\$55,609
<b>Total</b>	<b>\$280,253</b>






## CALMOD CONTACT INFORMATION

**WEBSITE**  CalMod.org

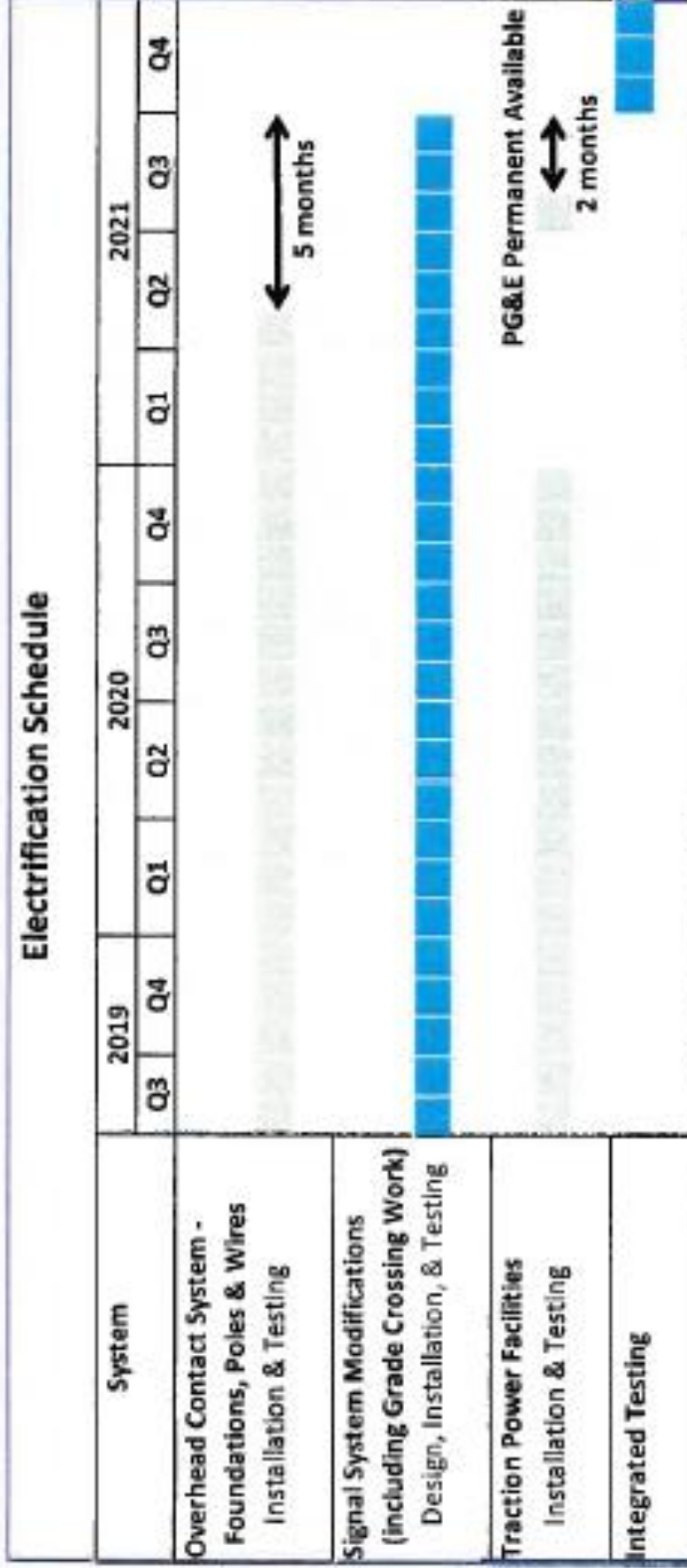
**EMAIL**  CalMod@caltrain.com

**PHONE**  650-399-9659  
**800-660-4287 (Toll Free)**

**OFFICE**  2121 S. El Camino, Suite A-100  
San Mateo, CA 94403  
9 a.m. - 5 p.m. Monday - Friday

**FACEBOOK**  [www.facebook.com/caltrain](http://www.facebook.com/caltrain)  
**TWITTER**  @caltrain





August 30, 2019

Jim Hartnett  
Caltrain Executive Director  
1250 San Carlos Ave.  
San Carlos, CA 94070-1306

Dear Mr. Hartnett,

The City of San Francisco and Transportation Authority are pleased to participate in the development of Caltrain's Business Plan 2040, and appreciate the opportunity to provide our comments on the draft Long Range Service Vision and Organizational Assessment, the two recently provided major study deliverables. We are broadly supportive of the Service Vision recommendations so far and look forward to supporting the remaining tasks of this critical study.

As a transit first city, San Francisco supports greatly increased rail capacity along the corridor to meet the current and future needs of the city and region in a customer-oriented and cost-effective way. The proposed Service Vision of at least twelve total trains-per-hour (eight Caltrain and four High Speed Rail) offers levels of service necessary to support the corridor and state's needs. As the Business Plan's analysis shows, San Francisco's three stations will have the most housing and jobs on the corridor and reliable and frequent rail service connecting these stations to San Mateo and Santa Clara counties is essential. Furthermore, the investments outlined will make possible far more mid-day, evening, and weekend trips on the corridor. However, as noted in the Service Vision, there may be demand for even more throughput on the corridor. We urge staff to include in the final Service Vision the specific conditions that would lead to the high growth scenario (e.g. transbay conventional rail crossing).

The Business Plan process has done an excellent job of compiling information from the corridor to assess the long-term local, Caltrain, and state projects that are expected to support the implementation of the Service Vision. This work makes it clear that it will be a major funding and institutional challenge just to deliver the Baseline service scenario, in addition to the recommended medium scenario. In order to emphasize this point, and to support the funding and prioritization discussions to come, we suggest providing more detailed descriptions and cost assumptions of the projects that comprise the Baseline. This would be a foundation on which the Service Vision could then be presented, as far as the incremental organizational, operational, and capital needs to achieve that goal. We urge Caltrain to include the long-term operating funding needed, and options for providing this level of funding, into the final Service Vision which the board will adopt this fall.

In addition, the Service Vision must speak to the need for organizational change in the coming years in order to reach the proposed Service Vision. As noted in the Organizational Assessment report (July 2019), "the status quo is no longer viable." We urge Caltrain to incorporate the need for institutional change and capacity building into the final Service Vision and lay out a public process to resolve the issues raised in the report.

More specifically, we suggest the following steps be adopted to help implement the Organizational Assessment recommendations outlined on pages 95-99 of the report. We recognize the critical



need to address 1) service delivery, 2) the internal organization, and 3) governance for Caltrain to succeed with electrification in the short term, delivery of major "baseline" investments in the medium-term, and achievement of the Service Vision in the medium to long-term.

1. Service Delivery: we recommend a report be prepared for the Finance Committee in winter 2020; follow up reports would be issued quarterly until the issue is addressed.
2. Internal Organization: we support the recommendation this work be complete in time to inform the 2020/2021 budget. We suggest quarterly updates at the Finance committee starting in winter 2020. Caltrain has a large number of vacancies in the rail division and has been having difficulties with recruiting for some time. Considering that the cost of living and salary act as a barrier (but by no means the only barrier) to recruitment, Caltrain should consider engaging a recruitment firm to conduct a study to explore what it would take to make the agency more competitive in the national market and use it to develop recruitment plan for current and future vacancies.
3. Governance: a detailed process, including JPA and Board members, and a staffing/consulting plan to implement the consultant's recommendation should be prepared by November 2019 and presented to the Board; quarterly reports on the process should be presented to the Board.

We look forward to seeing the remaining Business Plan financial and policy findings and how these will inform current and future planning, policy, and funding initiatives such as potential revenue measures, the Rail Corridor Use Plan (RCUP) and development of fare, TOD and expansion policies. We are eager to partner with Caltrain and other key stakeholders on key implementation studies regarding revenue service at Salesforce Transit Center for both the baseline and medium growth scenarios, as well as storage, maintenance, and other infrastructure needs across the corridor and the means to address those needs. Beyond these objectives, we also share the Organizational Assessment recommendations to consider the path to creating a Bay Area rail system development and delivery capacity, through regional conversations and consideration of alternative models for achieving this.

Overall, we thank you for a thorough and inclusive process to date. These preliminary analyses will serve the corridor's residents and employers in the years ahead. Staff, in particular Sebastian Petty and Casey Fromson, should be applauded for their efforts given the scope and scale of the undertaking.

We stand ready to continue to assist Caltrain in making this vision a reality.

Sincerely,



Tilly Chang, Executive Director  
San Francisco County Transportation Authority




John Rahaim, Director  
San Francisco Planning Department

**San Francisco**  
**Planning**



RESOLUTION APPOINTING UP TO ONE MEMBER TO THE CITIZENS ADVISORY COMMITTEE  
OF THE SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY

WHEREAS, Section 131265(d) of the California Public Utilities Code, as implemented by Section 5.2(a) of the Administrative Code of the San Francisco County Transportation Authority, requires the appointment of a Citizens Advisory Committee (CAC) consisting of eleven members; and

WHEREAS, There is one open seat on the CAC resulting from a member's suspension due to excessive absences per the CAC's By-Laws; and

WHEREAS, At its September 24, 2019 meeting, the Board will review and consider all applicants' qualifications and experience and will consider appointing one member to serve on the CAC for a period of two years, with final approval to be considered at the October 8, 2019 Board meeting; now therefore, be it

RESOLVED, That the Board hereby appoints one member to serve on the CAC of the San Francisco County Transportation Authority for a two-year term; and be it further

RESOLVED, That the Executive Director is authorized to communicate this information to all interested parties.



## Memorandum

### AGENDA ITEM 7

**DATE:** September 16, 2019  
**TO:** Transportation Authority Board  
**FROM:** Maria Lombardo - Chief Deputy Director  
**SUBJECT:** 09/24/19 Board Meeting: Appointment of One Member to the Citizens Advisory Committee

<p><b>RECOMMENDATION</b>   <input type="checkbox"/> Information   <input checked="" type="checkbox"/> Action</p> <p>Neither staff nor CAC members make recommendations regarding CAC appointments.</p> <p><b>SUMMARY</b></p> <p>There is one open seat on the CAC requiring Board action. The vacancy is the result of the automatic membership termination of Becky Hogue (District 6 resident) due to four absences over twelve regularly scheduled consecutive meetings, pursuant to the CAC's By-Laws. There are currently 55 applicants to consider for the open seat. Ms. Hogue is not seeking reappointment.</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Fund Allocation</li> <li><input type="checkbox"/> Fund Programming</li> <li><input type="checkbox"/> Policy/Legislation</li> <li><input type="checkbox"/> Plan/Study</li> <li><input type="checkbox"/> Capital Project Oversight/Delivery</li> <li><input type="checkbox"/> Budget/Finance</li> <li><input type="checkbox"/> Contract/Agreement</li> <li><input checked="" type="checkbox"/> Other: CAC Appointment</li> </ul>
---	--

### DISCUSSION

#### BACKGROUND.

The Transportation Authority has an eleven-member CAC and members serve two-year terms. Per the Transportation Authority's Administrative Code, the Board appoints individuals to fill open CAC seats. Neither staff nor the CAC make recommendations on CAC appointments, but we maintain a database of applications for CAC membership. Attachment 1 is a tabular summary of the current CAC composition, showing ethnicity, gender, neighborhood of residence, and affiliation. Attachment 2 provides similar information on current applicants, sorted by last name.

#### PROCEDURES.



The selection of each member is approved at-large by the Board; however traditionally the Board has had a practice of ensuring that there is one resident of each supervisorial district on the CAC. Per Section 5.2(a) of the Administrative Code, the CAC:

“...shall include representatives from various segments of the community, such as public policy organizations, labor, business, senior citizens, the disabled, environmentalists, and the neighborhoods; and reflect broad transportation interests.”

An applicant must be a San Francisco resident to be considered eligible for appointment. Applicants are asked to provide residential location and areas of interest but provide ethnicity and gender information on a voluntary basis. CAC applications are distributed and accepted on a continuous basis. CAC applications were solicited through the Transportation Authority's website, Commissioners' offices, and email blasts to community-based organizations, advocacy groups, business organizations, as well as at public meetings attended by Transportation Authority staff or hosted by the Transportation Authority. Applications can be submitted through the Transportation Authority's website at [www.sfcta.org/cac](http://www.sfcta.org/cac).

All applicants have been advised that they need to appear in person before the Board in order to be appointed, unless they have previously appeared. If a candidate is unable to appear before the Board on the first appearance, they may appear at the following Board meeting in order to be eligible for appointment. An asterisk following the candidate's name in Attachment 2 indicates that the applicant has not previously appeared before the Committee.

## **FINANCIAL IMPACT**

The requested action would not have an impact on the adopted Fiscal Year 2019/20 budget.

## **CAC POSITION**

None. The CAC does not make recommendations on the appointment of CAC members.

## **SUPPLEMENTAL MATERIALS**

- Attachment 1 - Matrix of CAC Members
- Attachment 2 - Matrix of CAC Applicants
- Enclosure 1 - CAC Applications



**Attachment 1 (Updated 9.17.19)**  
**CITIZENS ADVISORY COMMITTEE <sup>1</sup>**

<b>Name</b>	<b>Gender</b>	<b>Ethnicity</b>	<b>District</b>	<b>Neighborhood</b>	<b>Affiliation</b>	<b>First Appointed</b>	<b>Term Expiration</b>
Becky Hogue	F	C	6	Treasure Island	Disabled, Neighborhood	Dec 19	Dec 21
Kian Alavi	M	NP	9	Mission	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen	Dec 17	Dec 19
Peter Tannen	M	C	8	Inner Mission	Environmental, Neighborhood, Public Policy	Feb 08	Feb 20
John Larson, Chair	M	NP	7	Miraloma Park	Environment, Neighborhood, Public Policy	Mar 14	Mar 20
Rachel Zack	F	C	3	Union Square/Nob Hill	Environmental, Labor, Neighborhood, Public Policy	June 18	June 20
Robert Gower	M	C	11	Mission Terrace	Disabled, Environment, Neighborhood, Public Policy, Senior Citizen	Sept 18	Sept 20
David Klein, Vice-Chair	M	C	1	Outer Richmond	Environment, Labor, Neighborhood, Public Policy, Senior Citizens	Sept 18	Sept 20
Jerry Levine	M	C	2	Cow Hollow	Business, Neighborhood, Public Policy	Nov 18	Nov 20
Myla Ablog	F	Filipina	5	Japantown/Western Addition	Disabled, Environmental, Neighborhood, Public Policy, Senior Citizen	Sep 13	Mar 21
Sophia Tupuola	F	NH	10	Bayview Hunters Point	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen	Mar 19	Mar 21
Ranyee Chiang	F	A	4	Central Sunset	Environment, Neighborhood, Public Policy	Mar 19	Mar 21
A - Asian	AA - African American	NH - Native Hawaiian or Other Pacific Islander	AI - American Indian or Alaska Native	C - Caucasian	H/L - Hispanic or Latino		
					NP - Not Provided (Voluntary Information)		

<sup>1</sup> Shading denotes open seats on the CAC.

<sup>2</sup> Member was automatically suspended due to excessive absences per CAC by-laws as of October 31, 2018.

Attachment 2 (Updated 9.17.19)

APPLICANTS

**Name      Gender      Ethnicity      District      Neighborhood      Affiliation/Interest**

1	Nancy Arms Simon*	NP	NP	10	Bayview	Disabled, Environmental, Labor, Neighborhood, Public Policy, Senior Citizen
2	Philip Bailey*	M	C	5	Cole Valley	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
3	Max Barnes*	M	NH	9	Mission	Business, Disabled, Environment, Labor, Neighborhood, Public Policy
4	Joe Blubaugh*	NP	NP	9	Bernal Heights / Market Street	Environment, Neighborhood, Public Policy
5	Natalie Chyba*	F	C	5	Bernal Heights	NP
6	Chris Coghlan*	M	NP	7	Sunnyside	Business, Disabled, Environment, Neighborhood, Public Policy, Senior Citizen
7	Will Conkling*	M	C	9	Bernal Heights	Business, Environment, Neighborhood, Public Policy
8	Leticia Contreras*	F	H/L	4	Sunset District	Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
9	Gordon Crespo*	M	NP	7	Midtown Terrace	Environment, Public Policy
10	Nicholas Fohs*	M	C	9	Bernal Heights	Business, Environment, Labor, Neighborhood, Public Policy
11	Erin Handsfield*	F	NP	10	Potrero Hill	Business, Public Policy,
12	Jack Harman*	NP	NP	6	Rincon Hill	Environment, Neighborhood, Public Policy
13	Calvin Ho*	M	A	4	Outer Sunset/Parkside	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
14	KE Hones*	F	AI	9	Mission / Potrero Hill & Civic Center	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
15	Virginia Jaramillo*	F	NP	9	Bernal Heights	Business, Disabled, Neighborhood, Senior Citizen
16	Amanda Jimenez*	F	H/L	4	Outer Sunset	Disabled, Environment, Neighborhood, Public Policy

**Name**      **Gender**      **Ethnicity**      **District**      **Neighborhood**      **Affiliation/Interest**

<b>17</b>	Jeremy Kazzaz*	M	NP	9	Mission	Business, Environment, Labor, Neighborhood, Public Policy
<b>18</b>	John Hyung-Jun Kim*	M	A	9	Mission	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
<b>19</b>	Stephen Kubick*	M	C	10	Potrero Hill	Business, Neighborhood, Public Policy
<b>20</b>	Robin Kutner*	F	NP	8	Buena Vista	Environment, Neighborhood
<b>21</b>	Matthew Laroche*	M	C	4	Outer Sunset	NP
<b>22</b>	John Lisovsky*	M	C	5	Panhandle	Environment, Labor, Neighborhood, Public Policy
<b>23</b>	John Loeber*	NP	NP	3	Nob Hill	Business, Environment, Neighborhood, Public Policy,
<b>24</b>	Dale Low*	M	A	9	Bernal Heights	Environment, Neighborhood, Public Policy
<b>25</b>	Patrick Mailey*	M	NP	1	Richmond	Environment, Labor, Neighborhood, Public Policy
<b>26</b>	Gail Mallimson*	F	C	9	Bernal Heights	Business, Environment, Neighborhood, Public Policy
<b>27</b>	Michael McDougall*	NP	NP	8	Glen Park	Disabled, Environment, Public Policy
<b>28</b>	Kary McElroy*	F	C	5	Alamo Square	Business, Disabled, Environment, Neighborhood, Public Policy, Senior Citizen
<b>29</b>	Marlo McGriff*	M	AA	8	Mission/Dolores	Environment, Labor, Neighborhood, Public Policy, Senior Citizen
<b>30</b>	Maer Melo*	M	AA	9	Mission	Business, Disabled, Environment, Neighborhood, Public Policy
<b>31</b>	Laura Milivy*	NP	NP	9	Portola	Labor, Neighborhood
<b>32</b>	Meaghan Mitchell*	F	AA	10	Bayview	Business, Labor, Neighborhood, Public Policy
<b>33</b>	Antoinette Mobley*	NP	AA	10	Bayview	Business, Environment, Neighborhood
<b>34</b>	Tyler Morris*	M	C	9	Bernal Heights	Business, Disabled, Environment, Neighborhood, Public Policy

**Name Gender Ethnicity District Neighborhood Affiliation/Interest**

35	Vi Nguyen*	F	NP	9	Bernal Heights	Business, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
36	Wayne Norton*	M	AA	10	Bayview/Hunter's Point	Business, Environment, Neighborhood, Public Policy
37	Edward Parillon*	M	AA	8	Mission	Business, Environment, Labor, Neighborhood, Public Policy
38	Ian Poirier*	M	NP	10	Dogpatch	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
39	John Powell*	M	H/L	1	Outer Richmond	Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
40	Jacqueline Sachs	F	C	2	Western Addition	Disabled, Neighborhood
41	Ramy Shweiky*	M	NP	10	Bayview	Business, Environment, Labor, Neighborhood, Public Policy
42	Jeff Silver*	M	C	8	Buena Vista Park / Financial District	Business, Neighborhood
43	Gregory Smith*	M	C	1	Mid Richmond	Environment, Labor, Senior Citizens
44	Abraham Snyder*	M	C	9	Mission / SOMA	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
45	Stephanie Soler*	F	H/L	9	Noe Valley	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
46	Adrienne Steichen*	F	C	5	Lower Haight	Environment, Neighborhood, Public Policy
47	Bradley Tanzman	M	C	6	Treasure Island	Business, Disabled, Environment, Labor, Neighborhood, Public Policy, Senior Citizen
48	Danielle Thoe*	F	C	6	Tenderloin	Disabled, Environment, Neighborhood, Public Policy, Senior Citizen
49	Eric Tucker*	M	C	10	Visitacion Valley	Business, Environment, Neighborhood, Public Policy
50	Anne Widera*	F	NP	10	Potrero Hill	Business
51	Brian Wong*	NP	NP	5	Divisadero/NOPA	Business, Environment, Neighborhood, Public Policy
52	Stephen Woods*	M	C	4	Sunset	Environment, Labor, Neighborhood, Public Policy

**Name Gender Ethnicity District Neighborhood Affiliation/Interest**

<b>53</b>	David Young	NP	NP	6	SOMA	Business, Environment, Neighborhood, Public Policy
<b>54</b>	Bozhao Yu*	M	A	1	Lone Mountain	Business, Environment, Neighborhood, Public Policy
<b>55</b>	Yan Zhu*	NP	NP	6	Western SOMA / SOMA	Disabled, Environment, Neighborhood, Public Policy, Senior Citizen

A - Asian AA - African American AI - American Indian or Alaska Native C - Caucasian H/L - Hispanic or Latino

NH - Native Hawaiian or Other Pacific Islander NP - Not Provided (Voluntary Information)

\*Applicant has not appeared before the Board.



SFMTA



# LRV4 Project Update

Julie Kirschbaum  
Director of Transit  
September 24, 2019

# Status Update

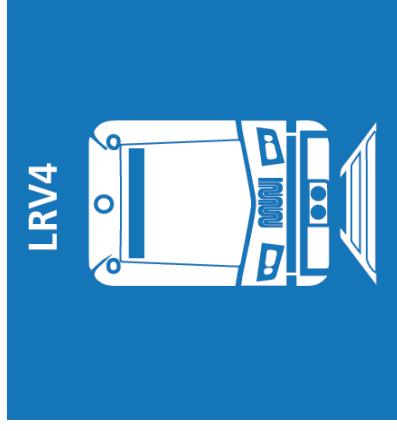
- 67 vehicles delivered, 61 in revenue service
  - Deliveries continuing on schedule
  - Final vehicle arriving in October
- Preparing Mod. 6 to begin work on track brakes, seating, and lay groundwork schedule change to permit early Breda retirement
- Performance improved steadily between June and September
  - Continuing work on HPU to address reliability










# 90-Day Plan

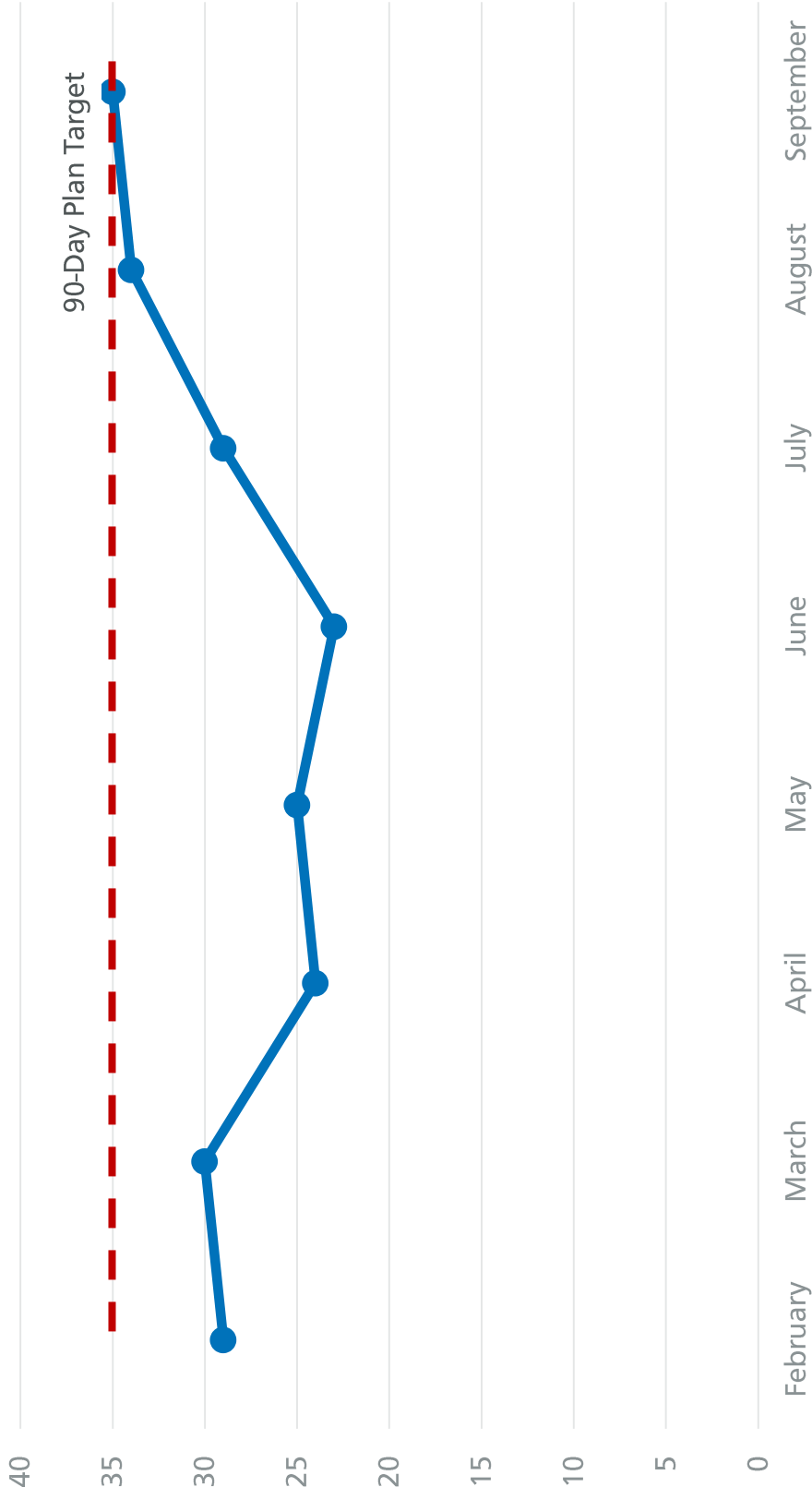
LRV4 initiatives in the current 90-Day Plan include the following targets:



Availability	Delivery	Doors	Reliability	Track Brakes
Increase vehicle availability to 35 vehicles per day 	Complete delivery of the first phase of 68 vehicles 	Correct issues with doors and couplers, remove all restrictions 	Increase reliability to 8,000 miles MDBF or greater 	Submit new design for track brakes to CPUC 
Averaging 35+	Arriving first week of Oct.	Completed	August at 7,793 miles	Completed

# Fleet Availability

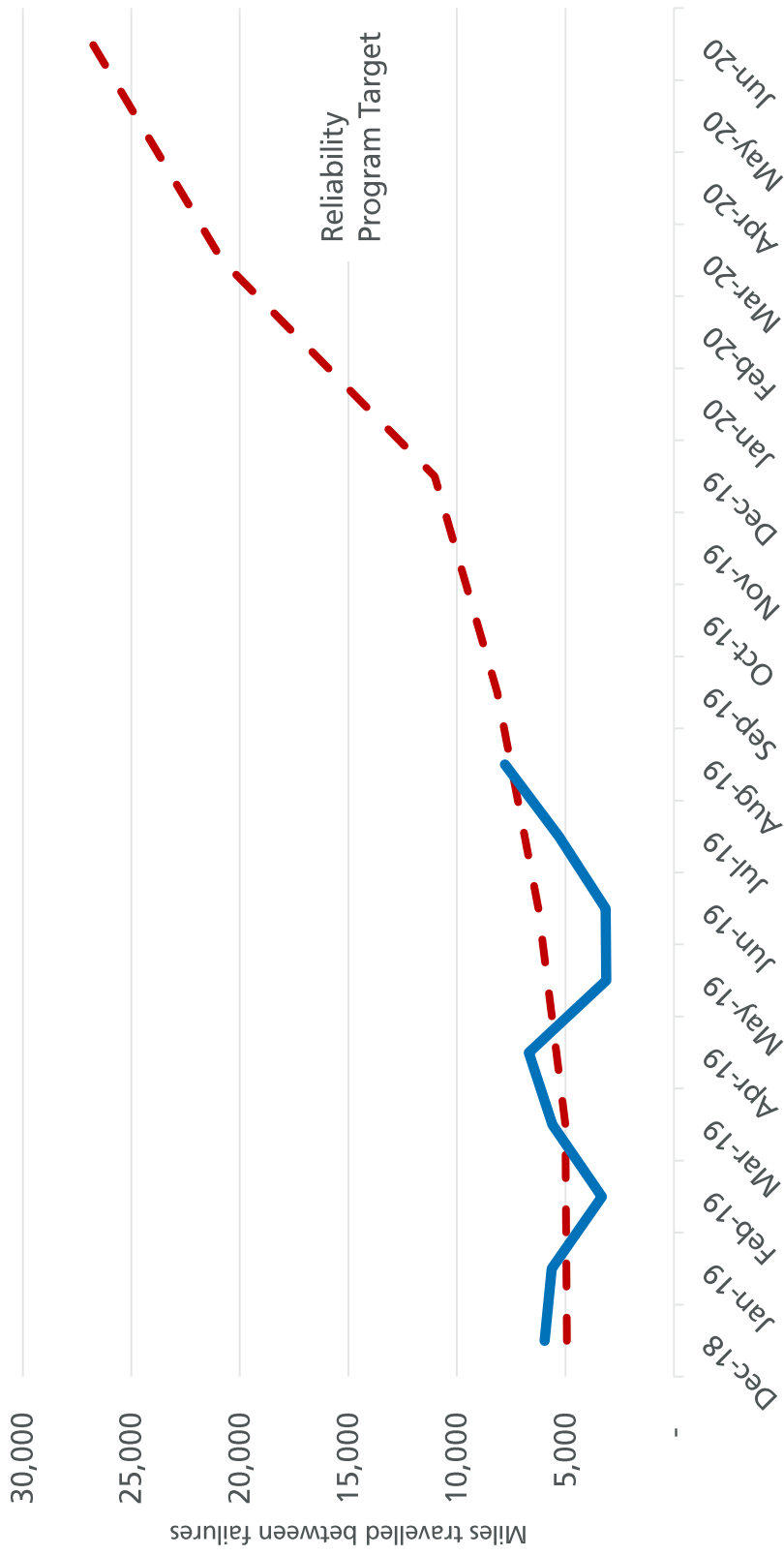
## Vehicles Available for Service by Month



September figures are preliminary and subject to change

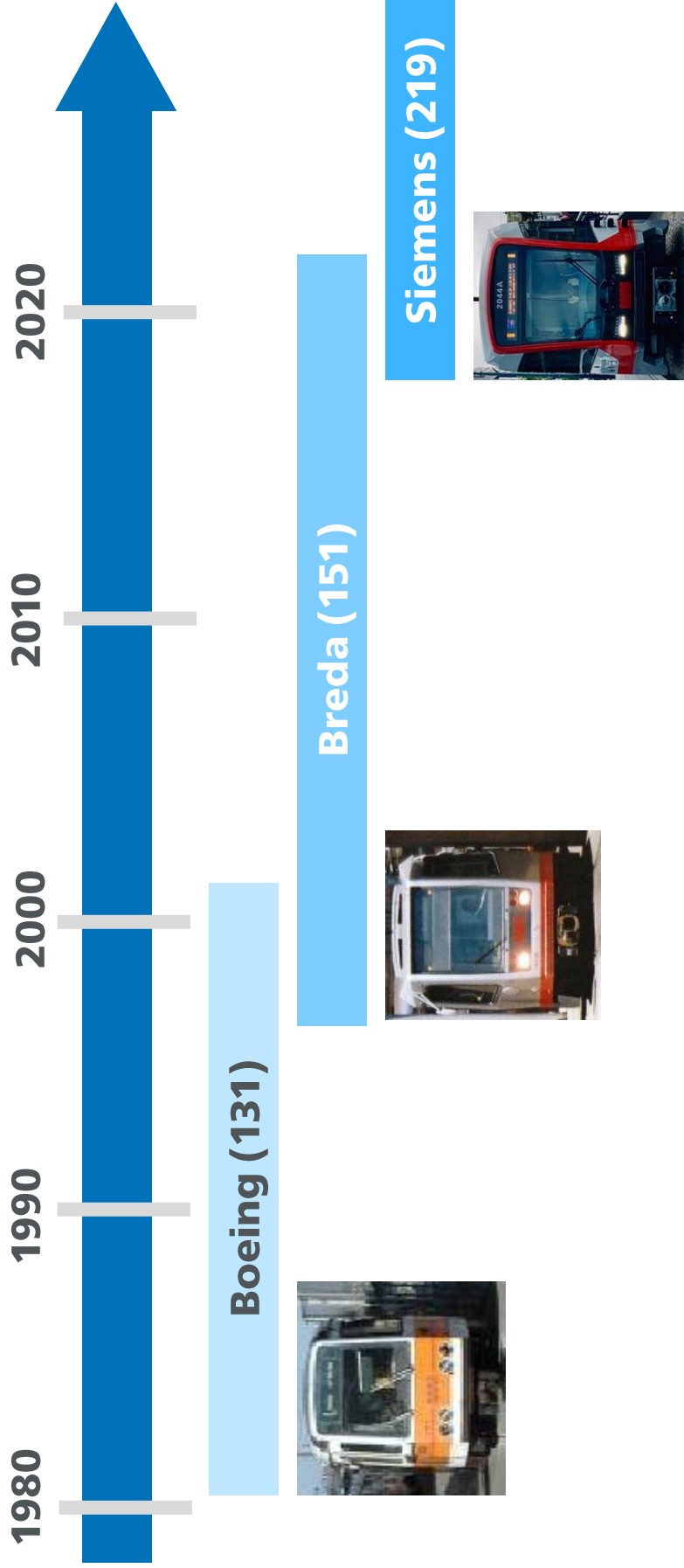
# Reliability Program

## Reliability



August figures are preliminary and subject to change

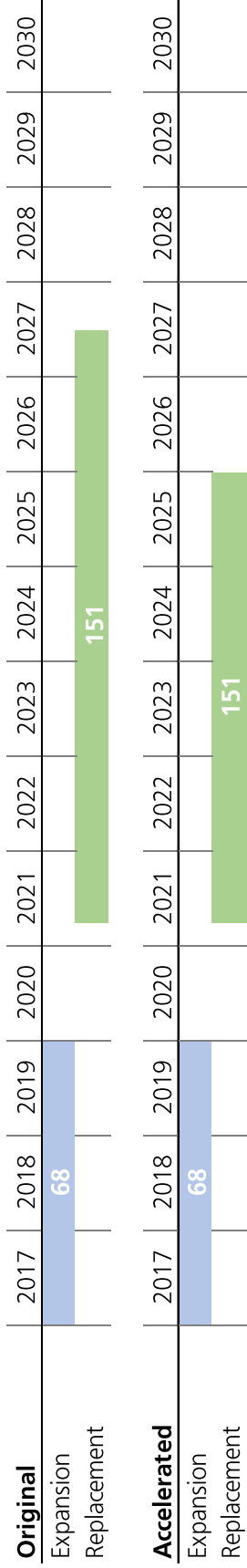
# SFMTA Light Rail Fleet



# Project schedule

We have the opportunity to compress delivery of vehicles to retire the Breda fleet ahead of schedule:

- Increase production rate with delivery of final LRV 14-16 months early
- Federal Transit Administration has approved early retirement of the Breda fleet



# Next Steps

- Continue to resolve outstanding technical issues (e.g. HPU)
- Authorize Siemens to address priority retrofits on Phase I expansion
  - Track brakes
  - Passenger emergency stop button redesign
- Authorize long lead items for Phase II replacement
  - Seating design and engineering
  - Preliminary production acceleration activities
- Anticipate returning to SFCTA Board for full Phase II replacement funding authorization in Spring 2020



SFMTA



# State of Muni

Meeting One: Muni Performance Overview

July 26, 2019



# Agenda: State of Transit

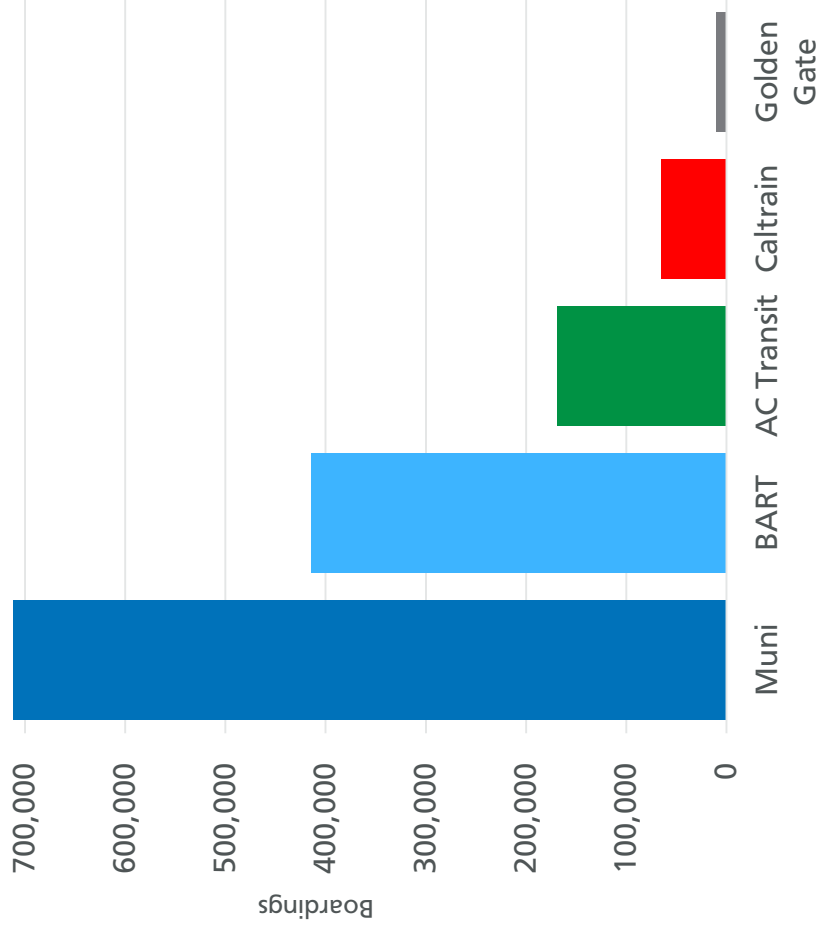
1. Introduction
2. Muni's Challenges
3. Current Initiatives



# Did You Know?

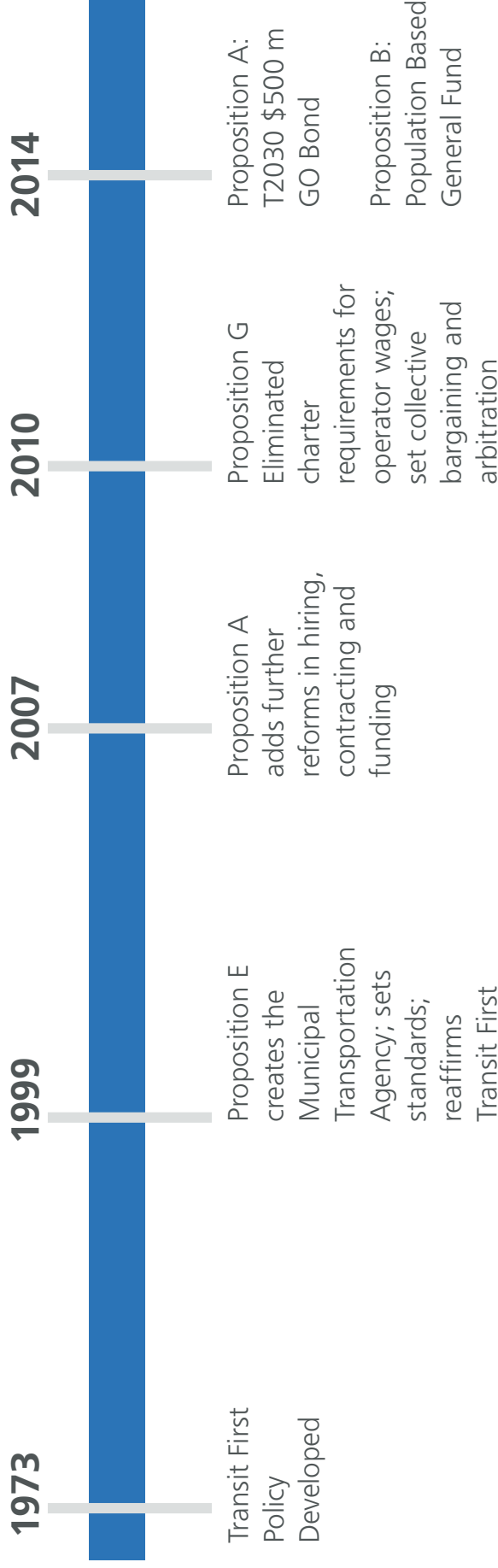
- Muni has the highest ridership in the Bay Area
- 80% of boardings occur on the street
- 70% of LRV service is in mixed traffic
- Greenest fleet in North America

**Average Weekday Ridership Comparison**



# Transit First City

History of passed initiatives.



**Transit First**

**SFMTA Created**

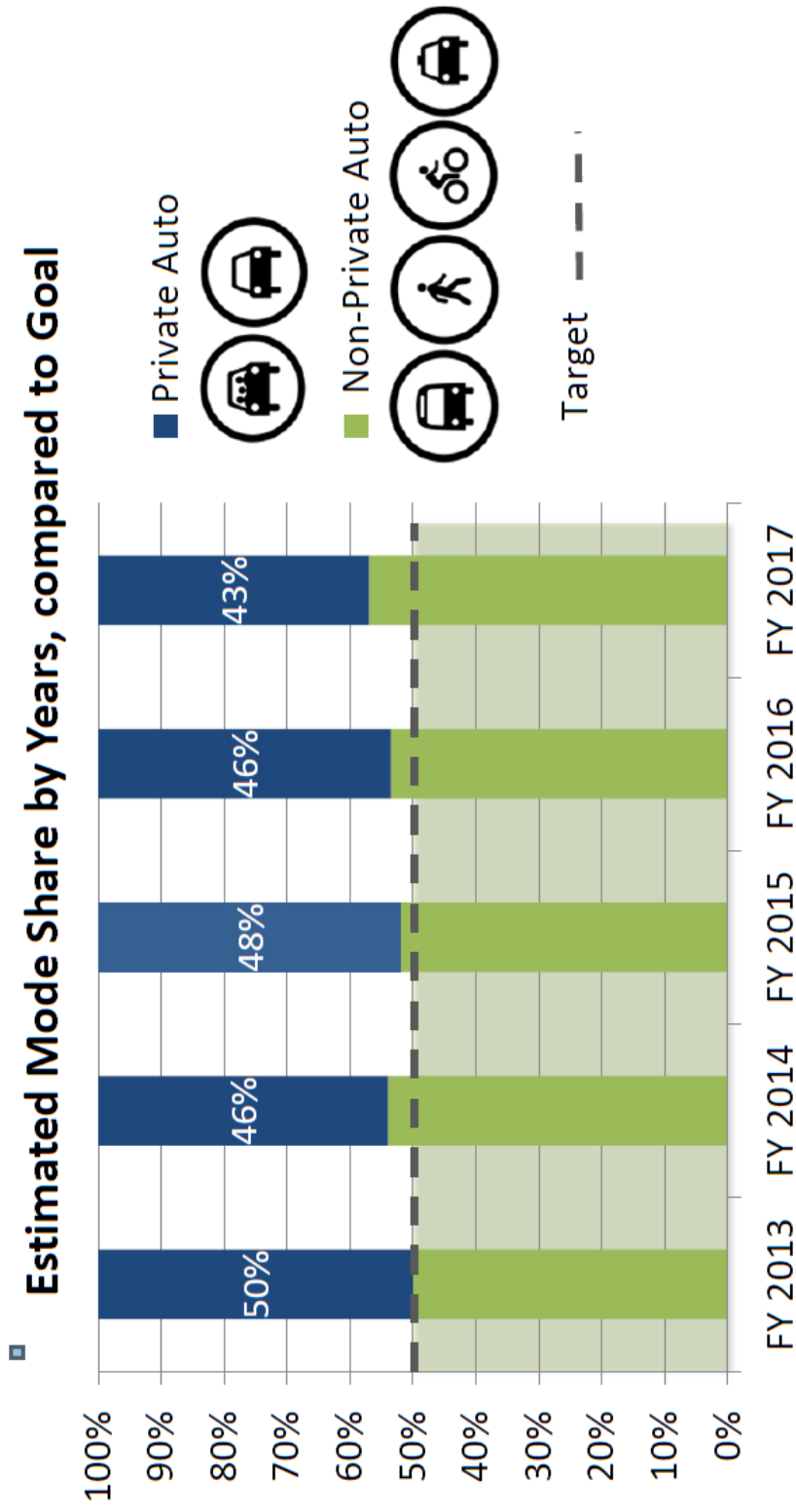
**Reforms**

**Labor**

**Funding**

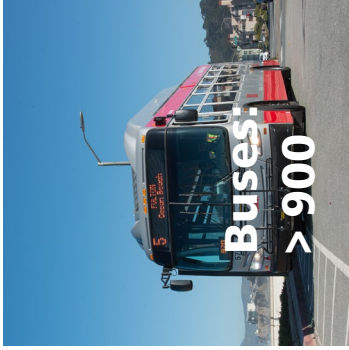
# Alternatives to the Private Auto

57% Percent of Total Daily Trips by Sustainable Modes in 2017... Goal: 80% by 2030



\*Note: Variation from 50% goal is within the 3.5% margin for error

# Muni: Workhorse of the System



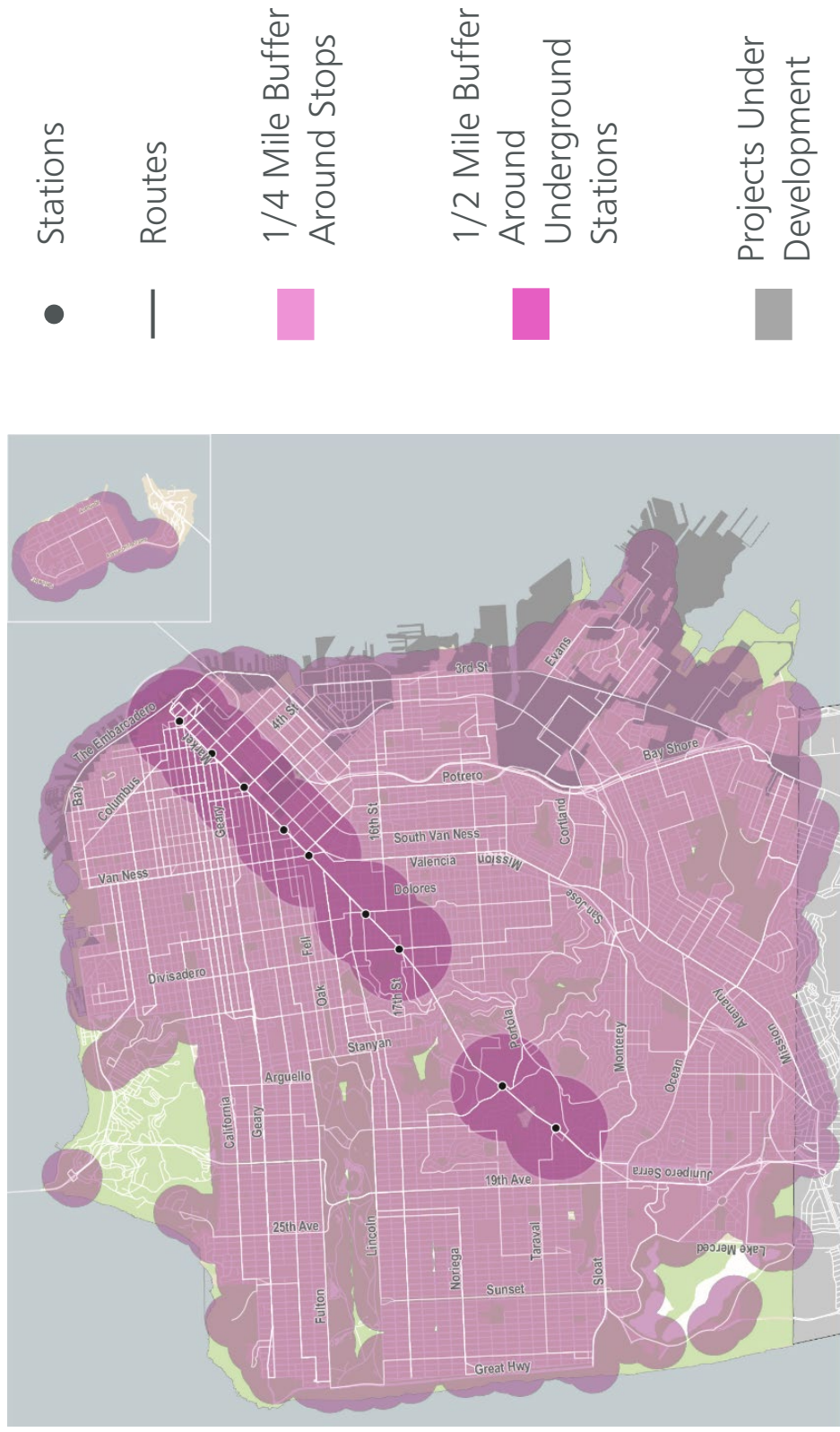
- 24-hour network
- Five unique vehicle types
- 3.6M hours of revenue service
- 260 route miles





# Muni: Serving ALL of San Francisco

In San Francisco you are never more than  $\frac{1}{4}$  of a mile from a public transit stop





# Muni's Challenges



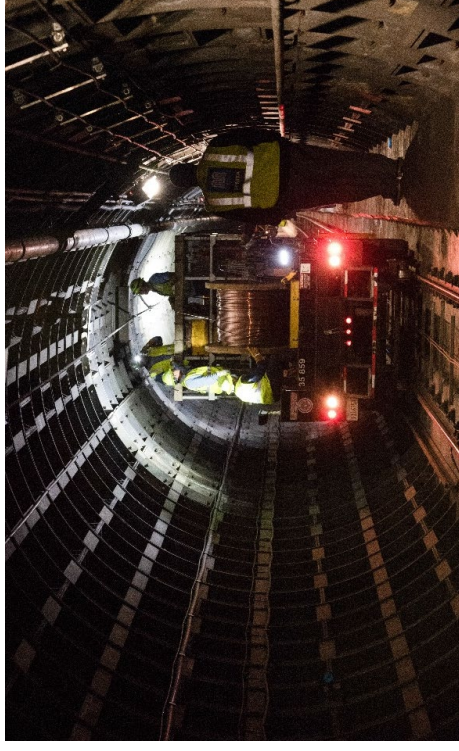
# Common Customer Frustrations

- Long/ unpredictable wait times
- Major subway delays
- Crowding
- Inaccurate predictions
- Lack of customer information updates



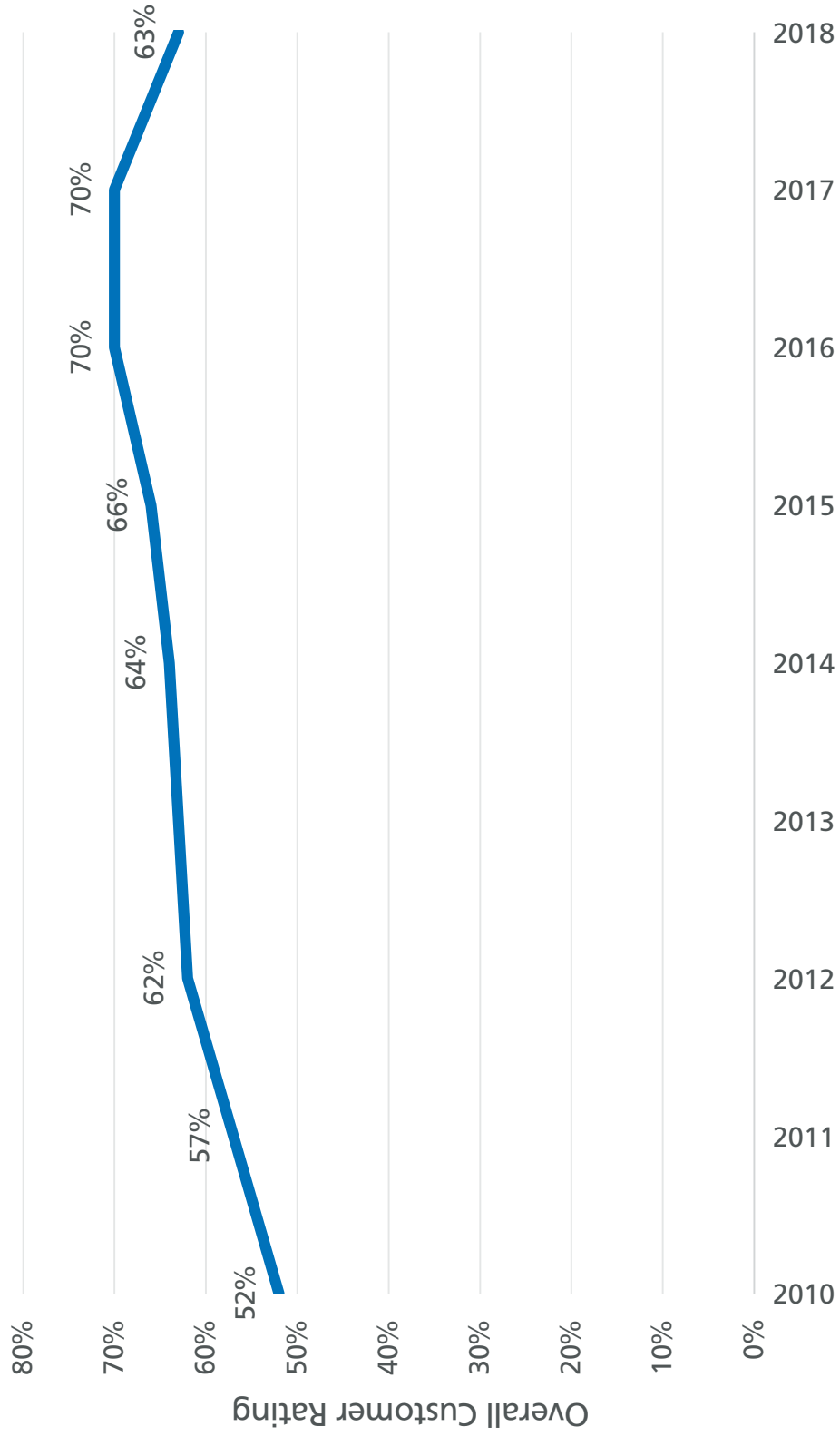
# Service Challenges

- Operator shortage, as well as specialized maintenance trades
- Aging infrastructure, especially train control system
- Growing traffic congestion and citywide construction
- Staffing and training to maximize service management technology investments
- Growing service demands and equity needs
- Accurate real time customer information



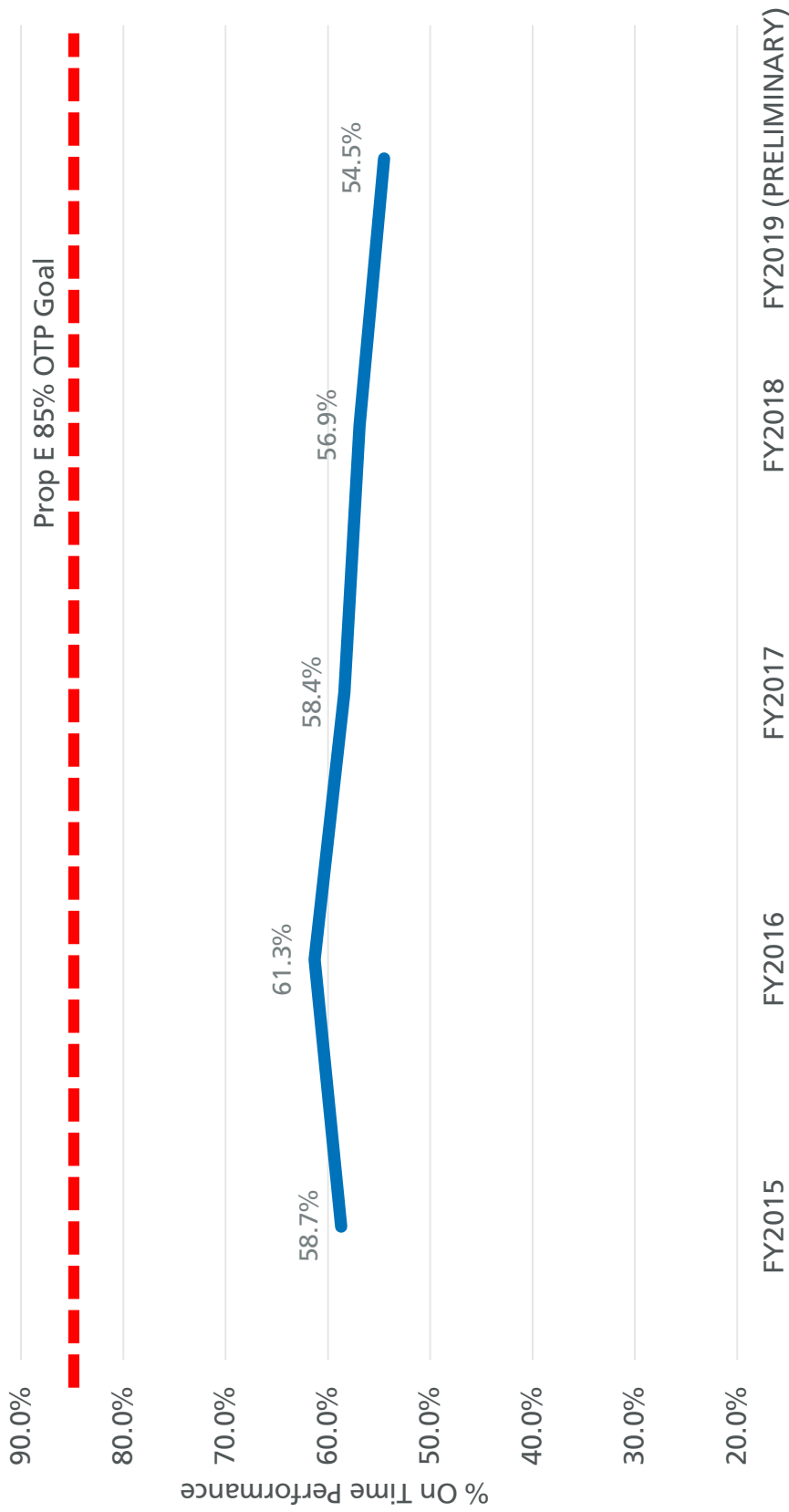
# Customer Feedback

## Rating of Muni Service



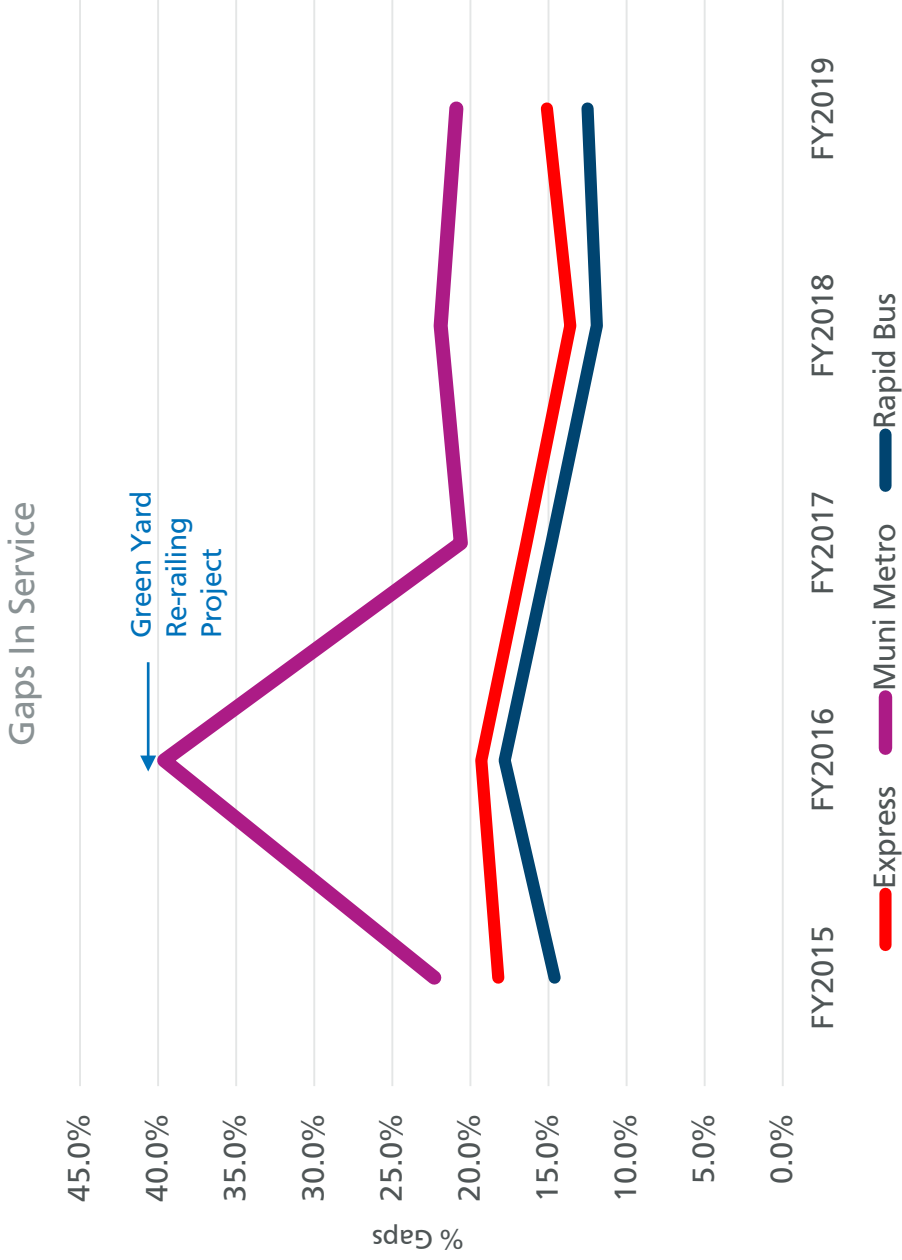
# Systemwide On-Time Performance

## On Time Performance



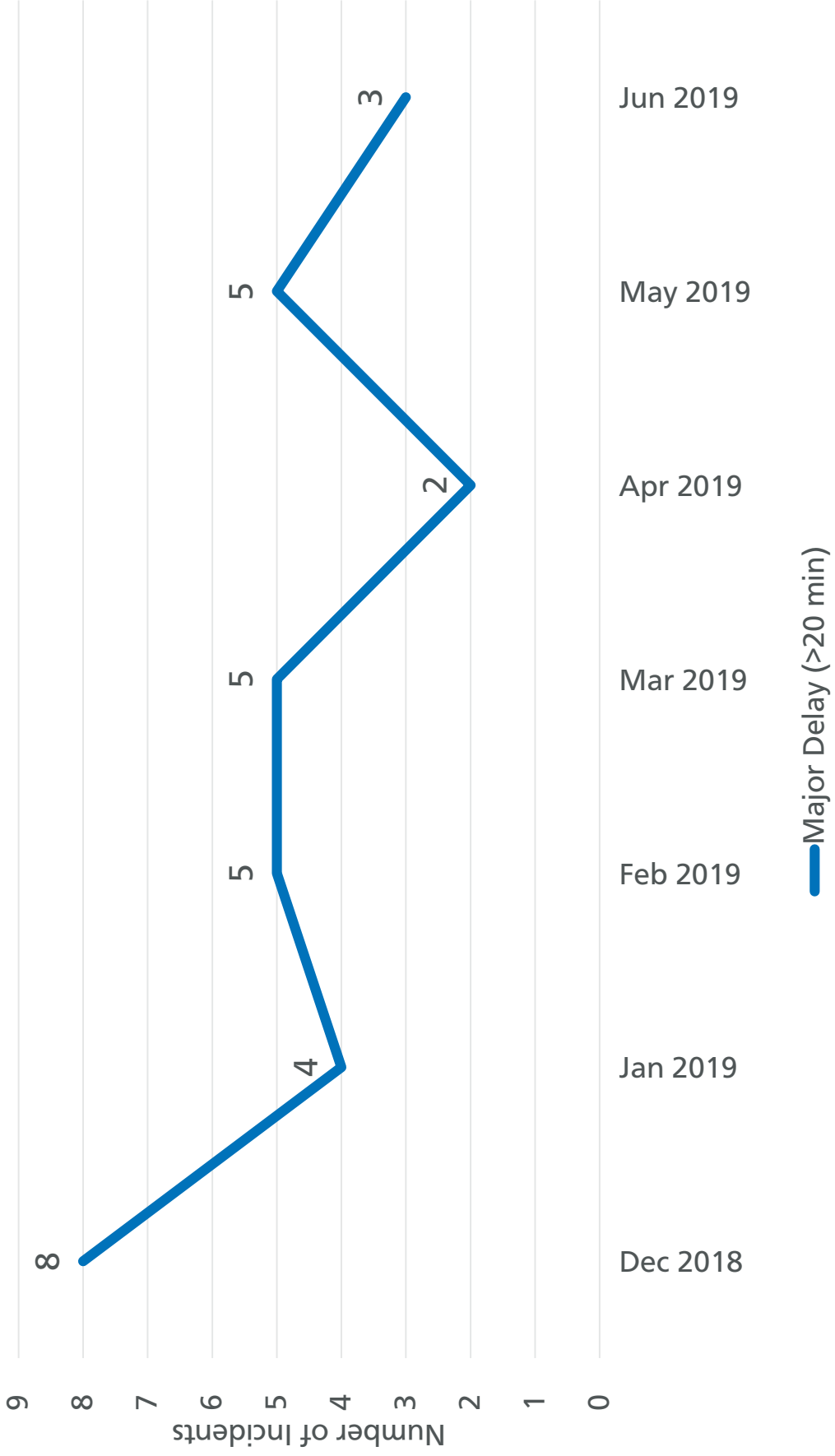
# Service Gaps

To better meet customer expectations and reduce gaps and long wait times, we are moving toward managing service on headways especially on Rapid bus, Express and LRV routes



\* Gap defined as the scheduled headway plus five minutes

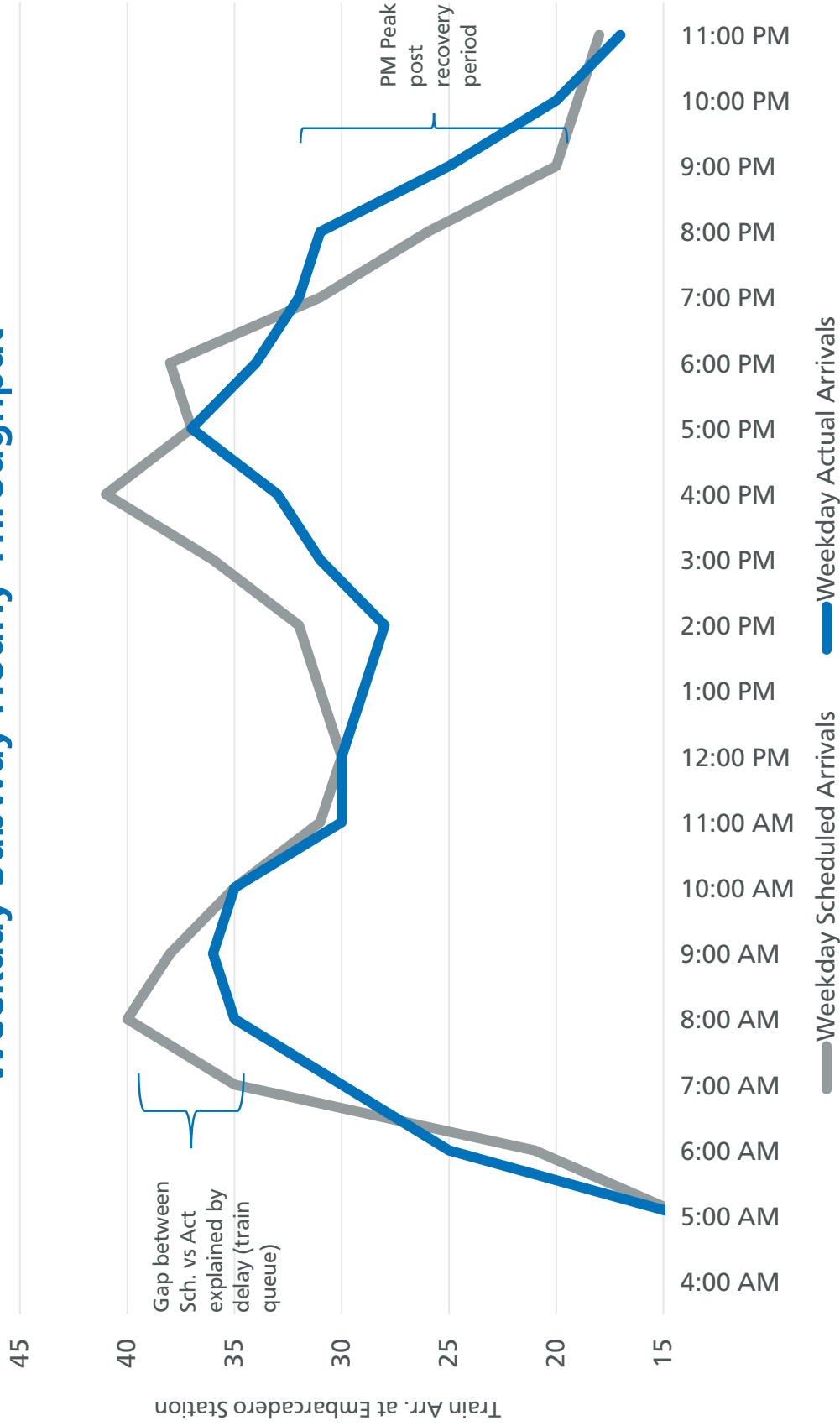
# Major Subway Delays





# Daily Subway Congestion

## Weekday Subway Hourly Throughput



# Increasing Downtown Congestion

2010



2018



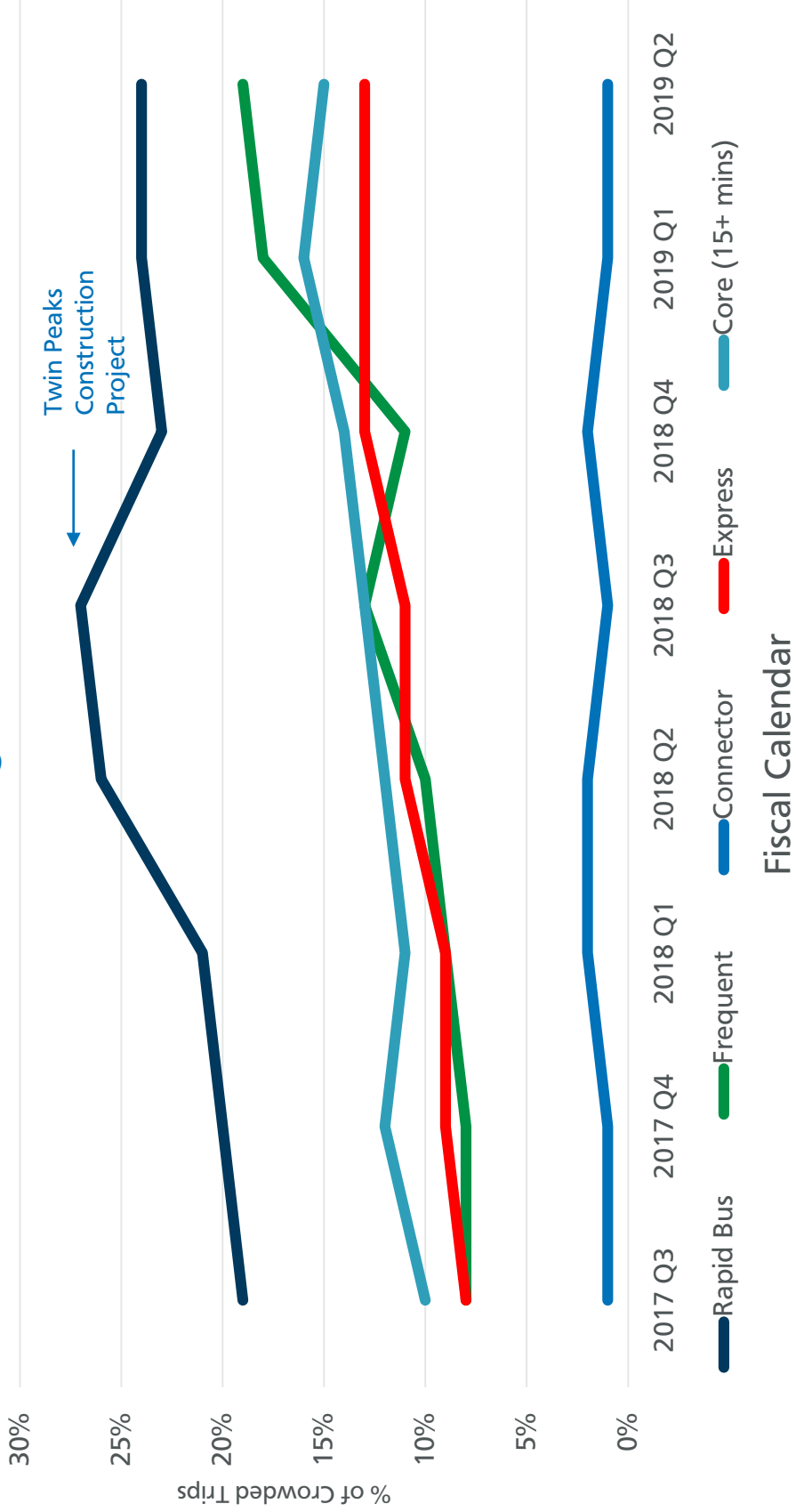
Average Auto Speed (mph)

5.0

55.0

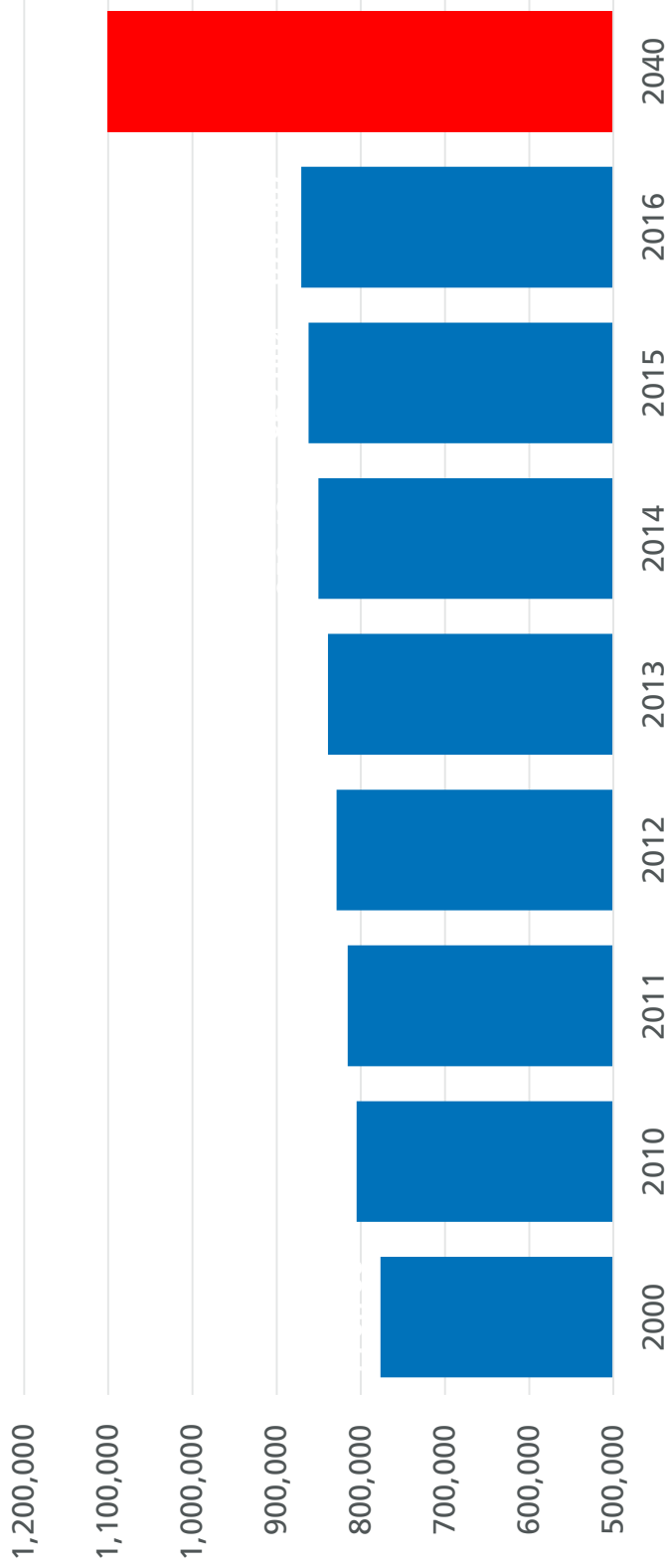
# Crowding Snapshot

Service Category  
Crowding Statistics



# San Francisco Continues to Grow

## One of 20 Fastest-Growing Cities in the United States



- Population expected to reach 1.1 million by 2040 (~26% increase over current conditions)
- 80% of growth expected to occur in 20% of the City
- Transit alone accounts for 26% of all trips in SF, and that we are going to have to raise that number to meet the new sustainable mode share strategic goal of 80% by 2035.

# We're Listening...

**dhbearguy** @dhbearguy Follow

**@sfmta\_muni** what the heck. Disappearing buses at 4:45 in the am. Showing on prediction then not showing up.

5:09 AM - 9 Jul 2019 from San Francisco, CA

🔍 🔄 ❤️ 📧

🗣️ Tweet your reply



**Chema Hernández Gil** @elsanfranciscan · 19 Aug 2016

Making transit impractical is a guaranteed way to get people in the Bayview to drive @sfmta\_muni. #TrainSlowTrain

🔍 🔄 5 ❤️ 9

Route: KTHingleide/Third Street  
 Stop: 3rd St & Van Dyke Ave (No 17345)  
 Direction: Outbound to Balboa Park Station via City College  
 Arrivals: 34\*, 43\*, 57\*  
\*Arrival times are estimates and are subject to change. Vehicle has not yet departed terminal.

**AntiAntergy** @downpitchfork Follow

Replying to @sfmta\_muni

Does NextBus accurately display this? I'm sitting at sunset with nextbus saying 3 and 4 mins, but saw train leave 2 mins ago when Nextbus said 3 mins ago then.

7:28 AM - 15 Jul 2019

🔍 1 🔄 ❤️ 📧





# Current Initiatives



# Current Initiatives

- Muni Forward
- Service Increase
- Fleet Enhancements
- Equity Strategy
- Accessibility
- Transportation Mgmt. Center (TMC)
- Customer Information Systems



# Delivering Muni Forward



- **Improved reliability:** Over 50 miles of reliability improvements, including transit-only lanes, bus bulbs and traffic signals that stay green for transit
- **Rapid Network:** More Rapid lines and expanded frequency
- **More service:** 10% service increase since 2015; 20% since 2010
- **Equity:** A focus on improving service in Equity Strategy neighborhoods
- **New fleet:** All-new bus and rail vehicles



# Muni Forward Targeted Successes



## 9 Rapid Improvements

- Transit priority on nearly the entire route
- Expanded Rapid service
- Larger, more spacious vehicles
- Pedestrian safety features and accessibility enhancements

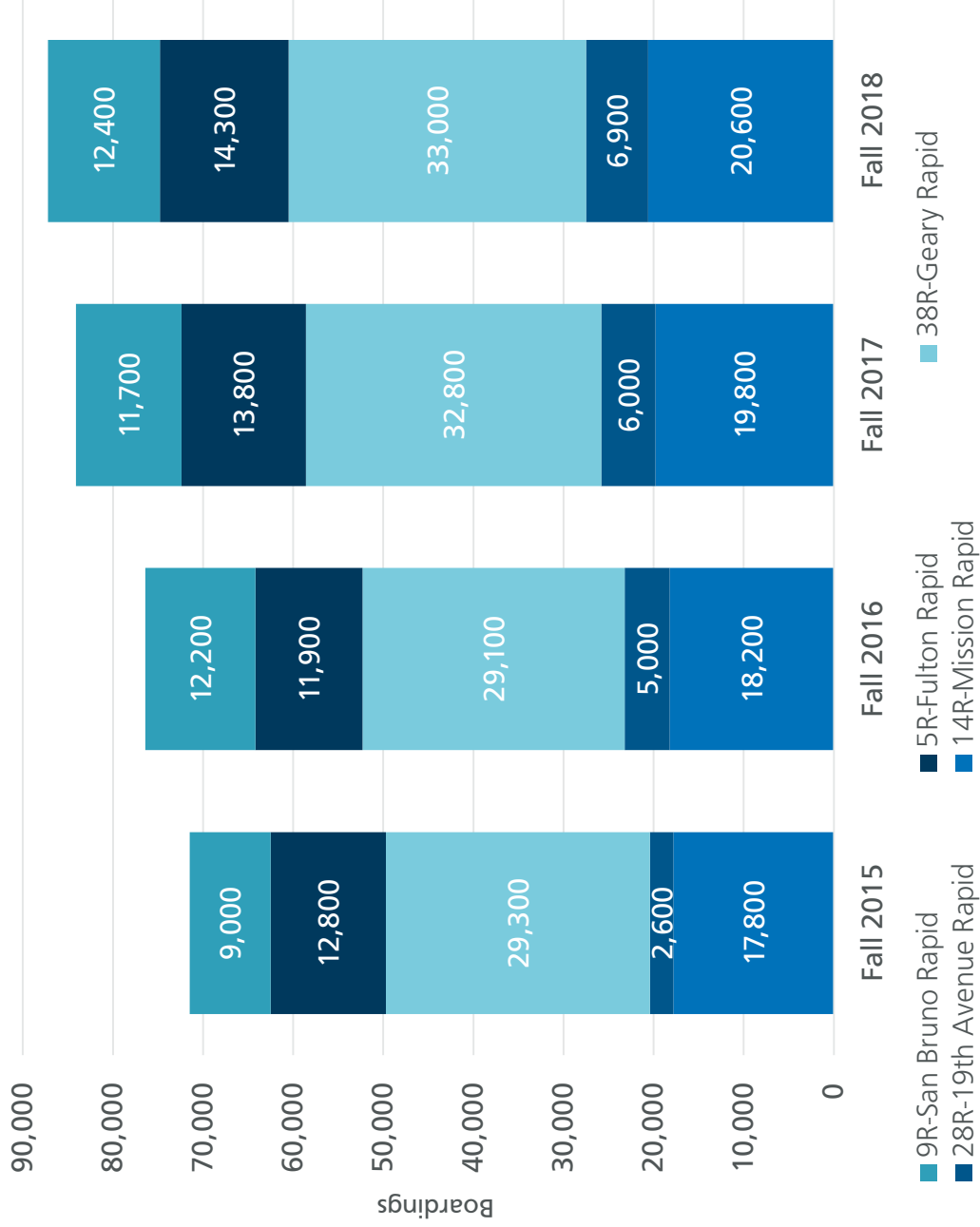
## Highlights

- Ridership increased 8% over two years on Rapid bus
  - 8 Bayshore: 11% ridership increase
  - Mission/Van Ness corridor: 11% ridership increase
  - Geary corridor: 6% ridership increase
- Route changes made connections more direct
  - 35 Eureka to Glen Park BART: ridership increased 38%
  - 29 Sunset realignment: saved 4,000 riders 3-4 minutes
  - 18 48th Ave. and 57 Parkmerced realignment: ridership increased 14%
  - 28/28R: ridership increased 28%

# Rapid Ridership Growing

Since 2015, ridership on the Rapid Network has increased **22%.**

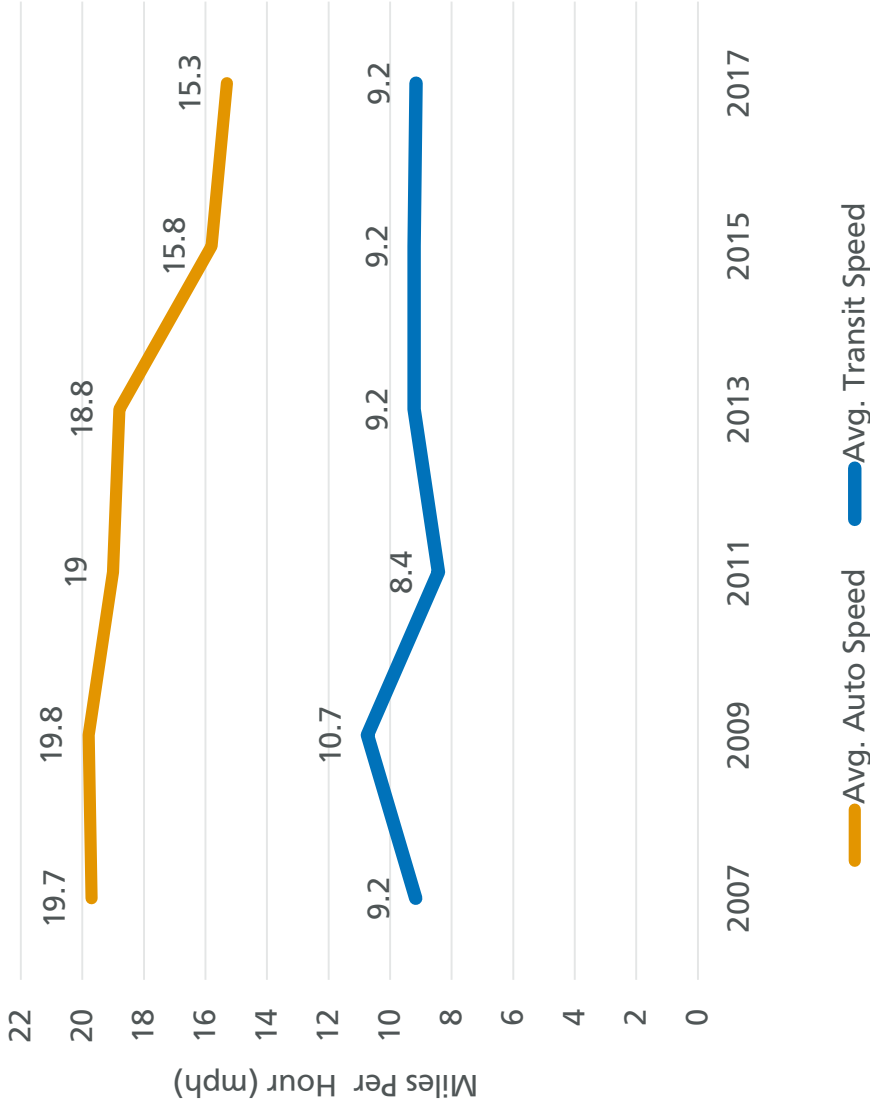
We've added capacity and increased frequencies on rapid routes which has not only brought new riders but also shifted demand from Local to Rapid service.



# BUT: Growing Congestion Dilutes Success

- Average Auto speeds have declined by more than 20% across the City
- While Transit has observed a slight downward trend, we remained relatively flat since 2013
- Expanded route level efforts should be complemented with systemwide approaches
- Interventions are often costly, politically challenged, and may conflict with other policy initiatives

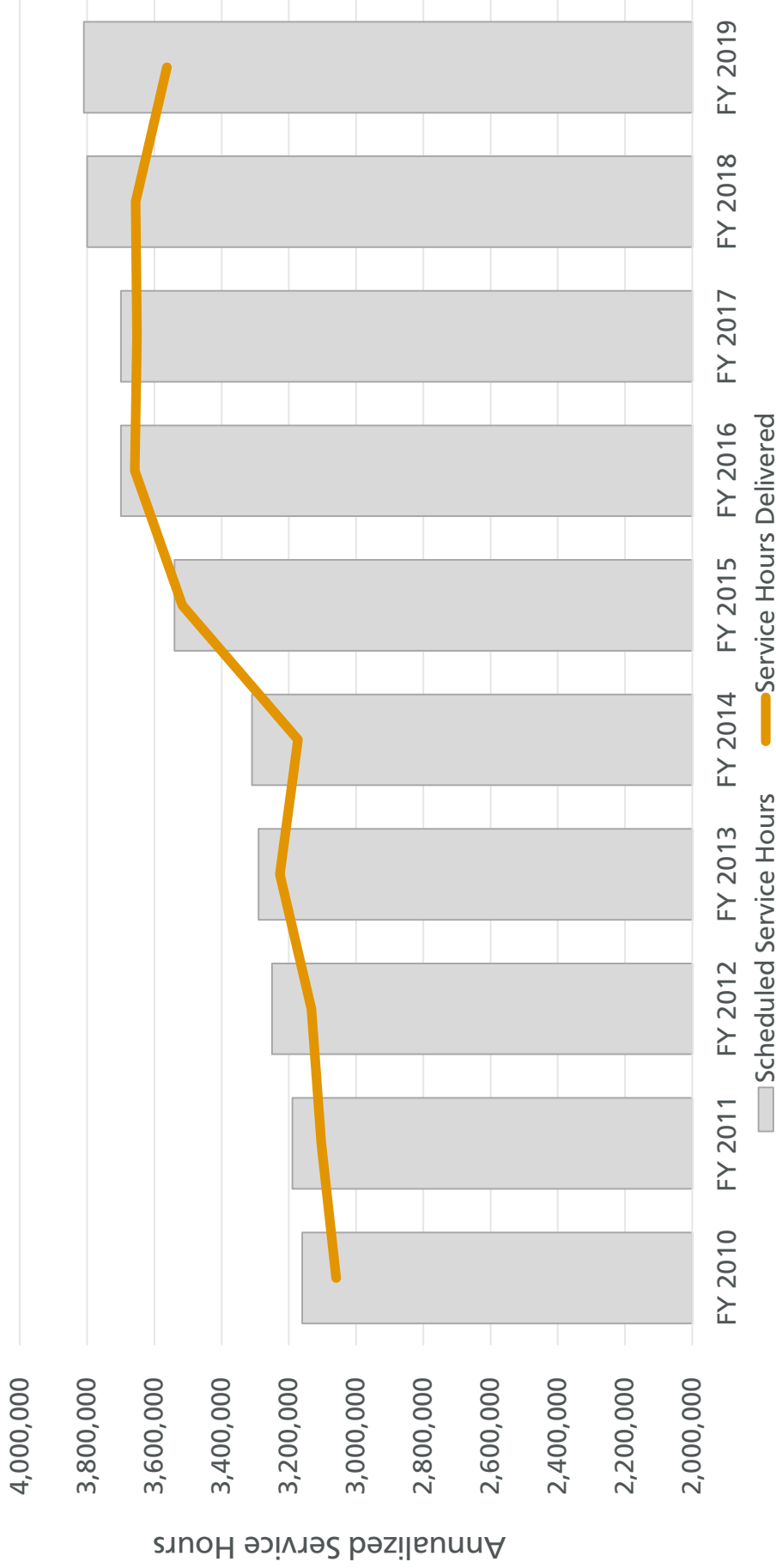
**Avg. Auto vs Transit Speed**



# Invested In More Transit Service

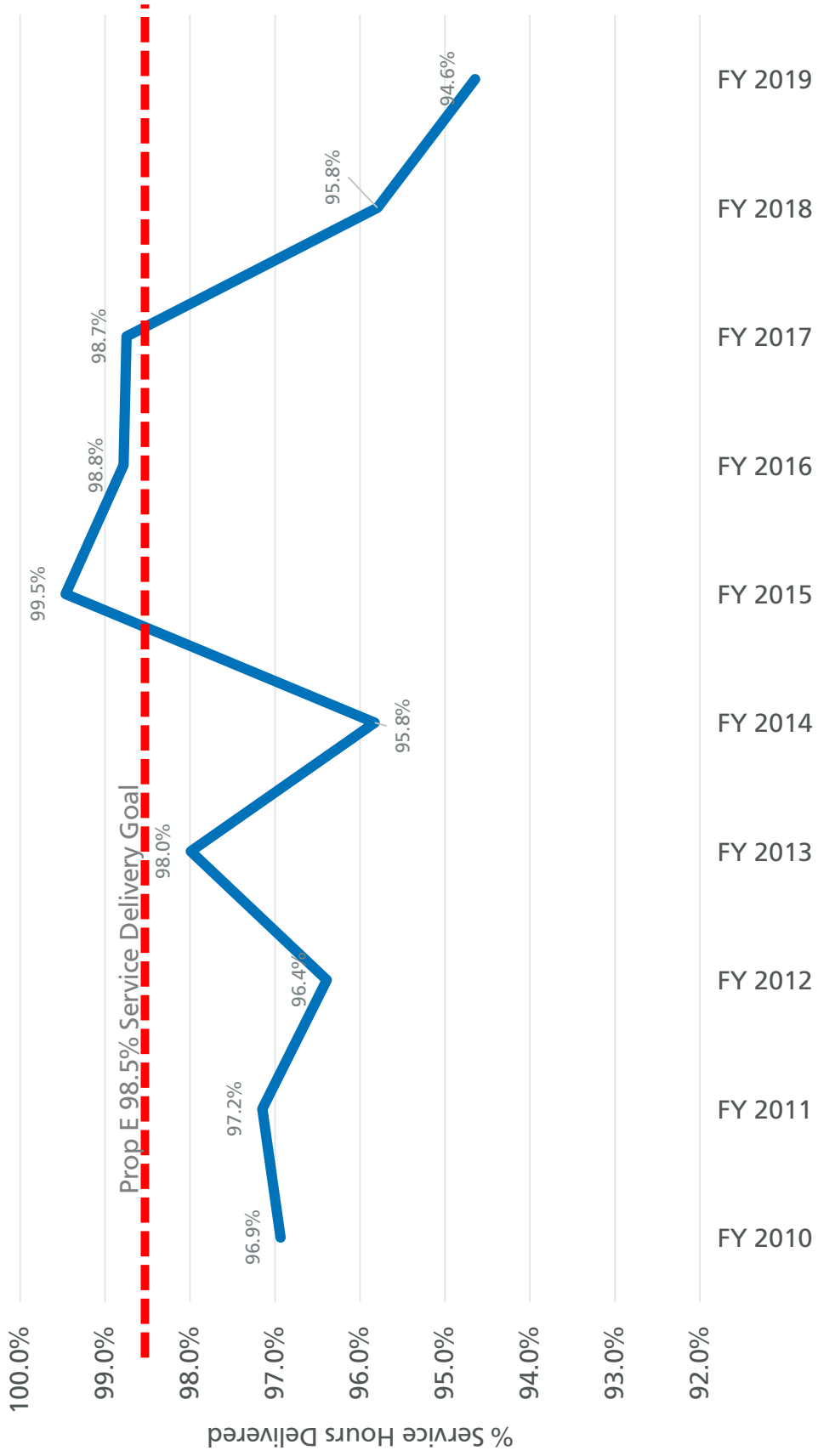
Muni Increased Service by More Than 20% from 2010 Levels

Service Hours Delivered





# BUT: Impacted by Operator Shortage



# Muni Equity: Affordability and Access

- Identified lines that are most critical to connecting neighborhoods with high percentage of low-income residents and residents of color to economic, educational, and recreational opportunities.
- Under the Equity Strategy, identified neighborhood lines are monitored to make sure those lines perform as good or better than the average line in their service category.
- All San Francisco residents within 1/4 mile of a transit stop
- Muni Equity Strategy informs planning and budget process
- Affordable service
  - 123,000 using Free Muni for Youth, Seniors and People with Disabilities
  - 17,000 using discounted Lifeline monthly pass



## MUNI SERVICE EQUITY STRATEGY REPORT

San Francisco Municipal Transportation Agency  
Fiscal Year 2016-17 and 2017-18



April 2016

# Expanding Access for People with Disabilities

Through community collaboration, we've created an accessible system that is designed to be user friendly and innovative. Our efforts have:

## Created a Fully Accessible Fleet

- Procured low floor buses for easy boarding with ramps & kneelers
- Installed stroller seating along the rear of the bus
- Added priority seating with pictorial decals on seats
- Automated audible and digital announcements including accessible stop indicators on LRV fleet
- Mounted yellow stanchions - easy to see



## Adding and Retrofitting Stops

- All new stops/stations designed to be universally accessible
- Many existing stops are being retrofitted

## Introduced Real Time Elevator Status

- Passengers can access the Agency website or 311 to get current information on all elevators

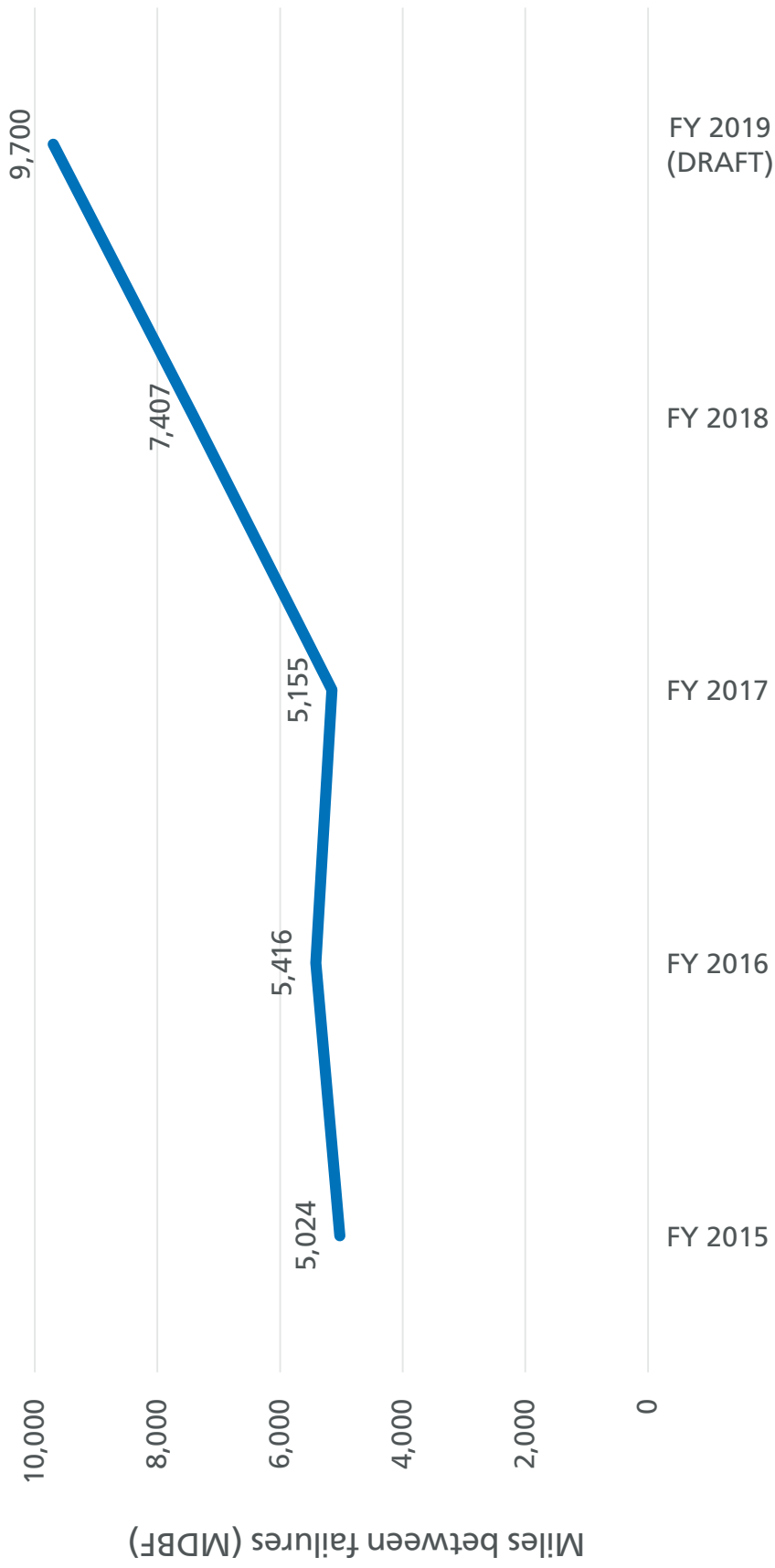


# Bus Performance Trending Up

- Overhauled the motor and trolley coach fleet!
- Rubber tire fleet is the greenest in North America
- Compared to FY 2015, mileage between bus failures has nearly doubled in FY 2019.
- Our buses are having fewer breakdowns in service



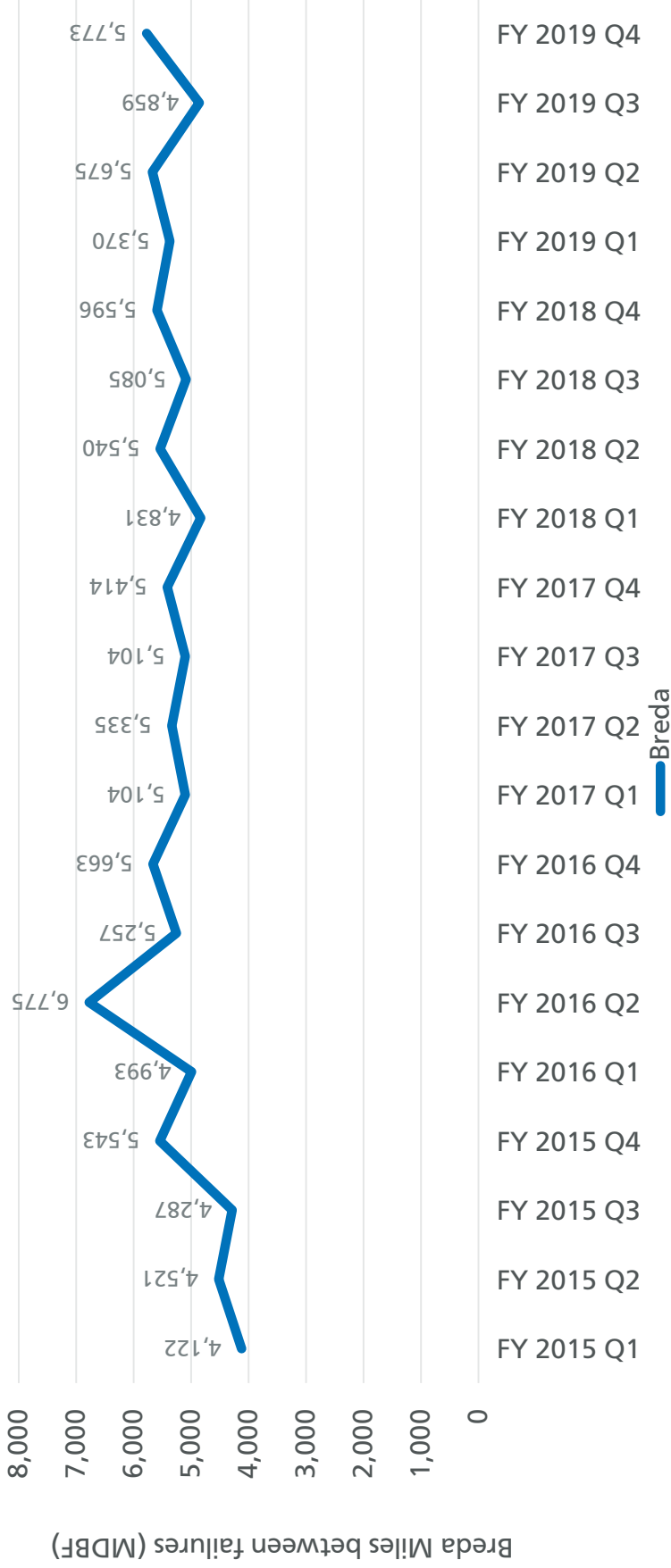
# Fewer In-Service Bus Breakdowns







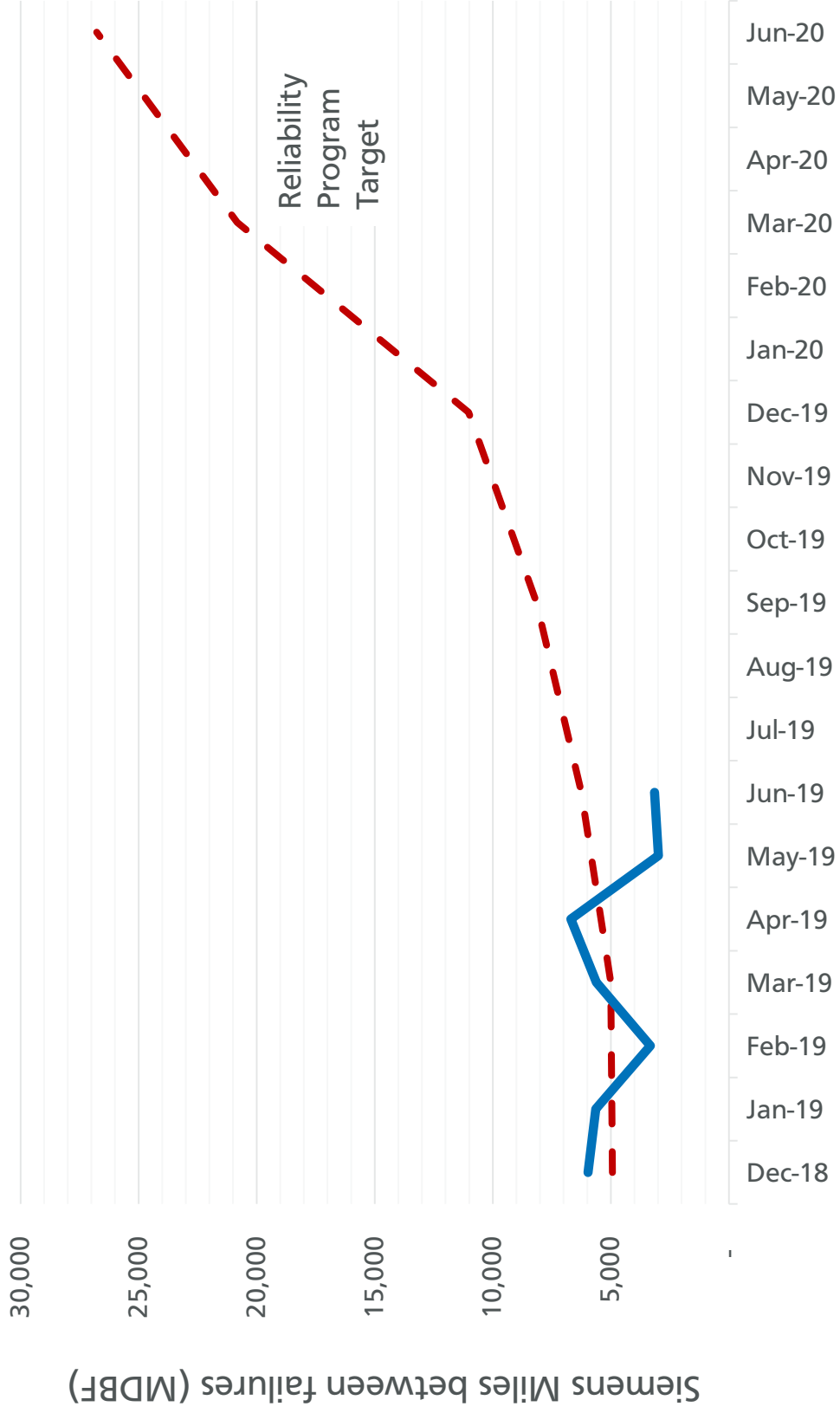
# Breda Trains Approaching End of Lifecycle



## Reliability Issues

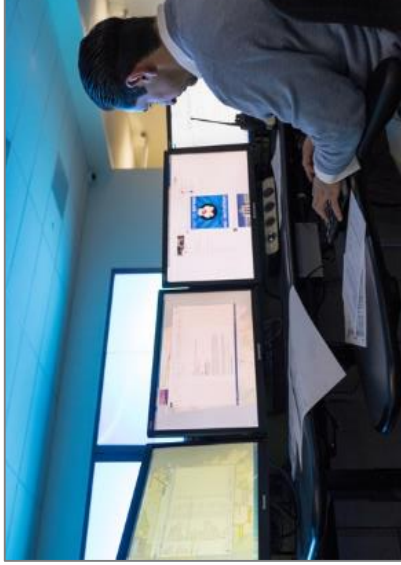
To keep up with growing demand we need to expand rail service. Increasing the rail car count is an integral piece. We are currently working through the following issues on the rail fleet: flat wheels, propulsions, steps, doors, couplers, and track brakes

# New Trains Still Unproven, But Hold Promise



# Investing in Service Management

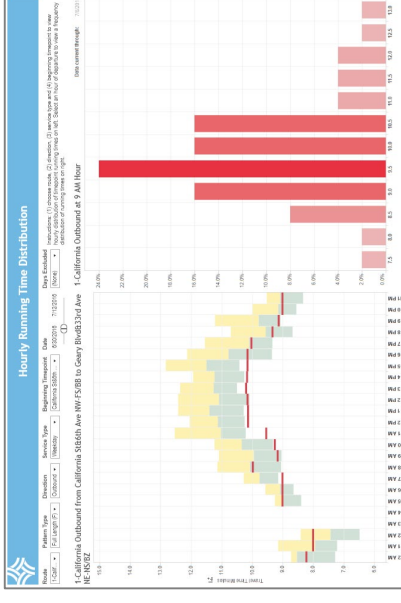
Technology has great potential to enhance service management, but more staff resources, training and practical experience are needed to fully realize potential



Dedicated  
Customer Information  
Officers



New Transportation  
Management Center (TMC)  
and Radio System

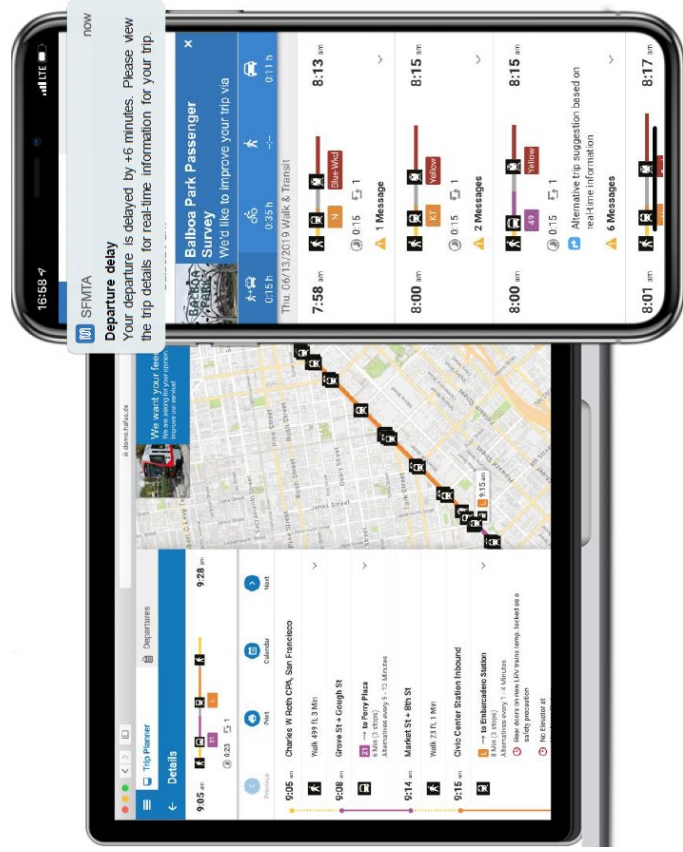


Data driven schedules to  
right-size service and keep  
up with congestion

# Improving Customer Information

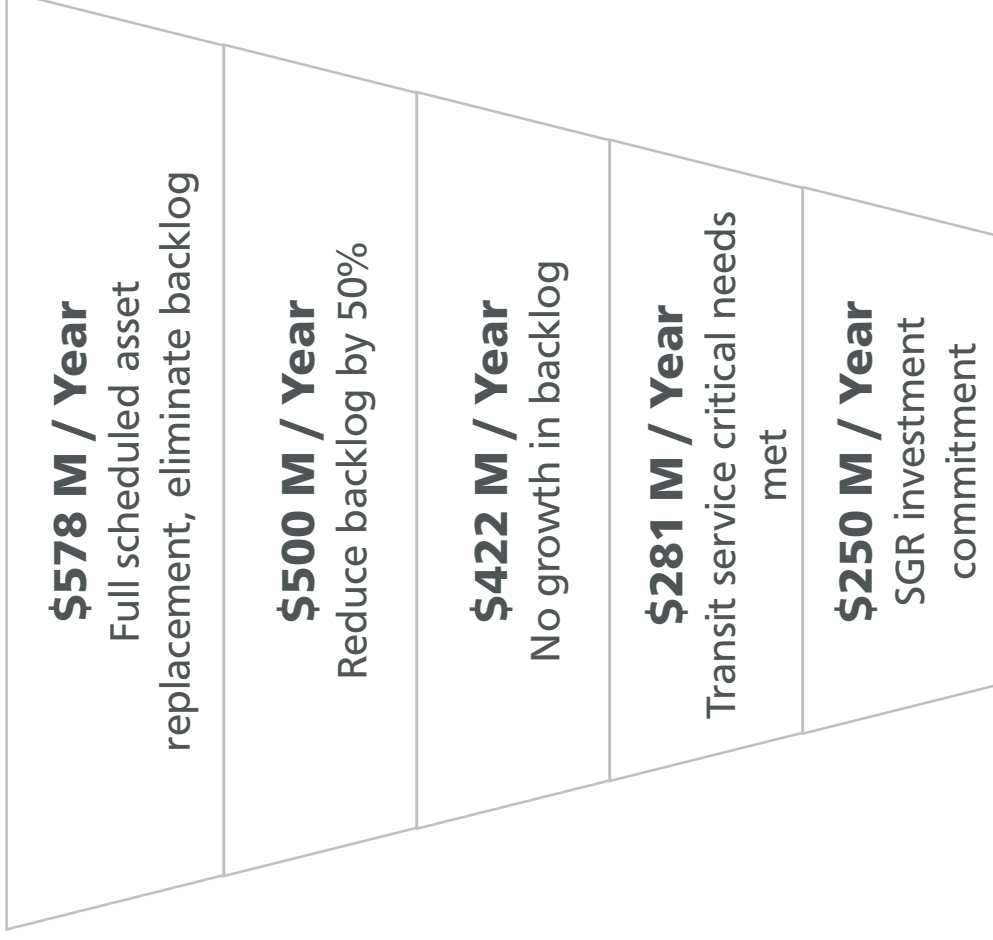
## Next Generation Customer Information System Procurement Underway

- Delivering more accurate predictions
- More signs in more locations
- Improved capability to display messages on signs



# Investing in Assets Backlog

## Annual State of Good Repair Need (\$2018)



# Tactical Actions: 90-Day Plan

Continue Breaking Strategic Plan goals Into Quarterly “Bite-Sized Pieces” with Concrete Actions and Interim Goals



Safety

Reduce preventable collisions and enhance passenger and operator security



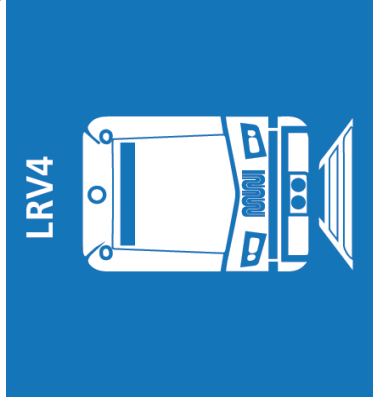
Service Reliability

Improve reliability of transit service to ensure passengers are provided with the service they expect



Subway Performance

Reduce delays in the subway and improve the customer experience during delays



LRV4

Ensure that benefits of the new fleet are realized, and project delivery is on track



Chase Center

Operationalize service plan and implement for Chase Center opening





Thank you