

Caltrain Business Plan

JULY 2019

LPMG

6/27/2019



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.

What Will the Business Plan Cover?

Technical Tracks



Service

- Number of trains
- Frequency of service
- Number of people riding the trains
- Infrastructure needs to support different service levels



Business Case

- Value from investments (past, present, and future)
- Infrastructure and operating costs
- Potential sources of revenue



Community Interface

- Benefits and impacts to surrounding communities
- Corridor management strategies and consensus building
- Equity considerations



Organization

- Organizational structure of Caltrain including governance and delivery approaches
- Funding mechanisms to support future service

Where Are We in the Process?





Flexibility and Integration

Understanding the 2040 “Growth Scenarios” as illustrative frameworks

What Service planning work to date has been focused on the development of detailed, illustrative growth scenarios for the Caltrain corridor. The following analysis generalizes these detailed scenarios, emphasizing opportunities for both variation and larger regional integration within the service frameworks that have been developed.

Why The “2040 Service Vision” that will be recommended to the Board will set a generalized framework for growth. There are still many unknowns regarding exactly how both the Caltrain corridor and the regional rail network may evolve. This analysis helps frame some of those unknowns and opportunities





Caltrain Service Flexibility



Caltrain
Service
Flexibility



Simulation

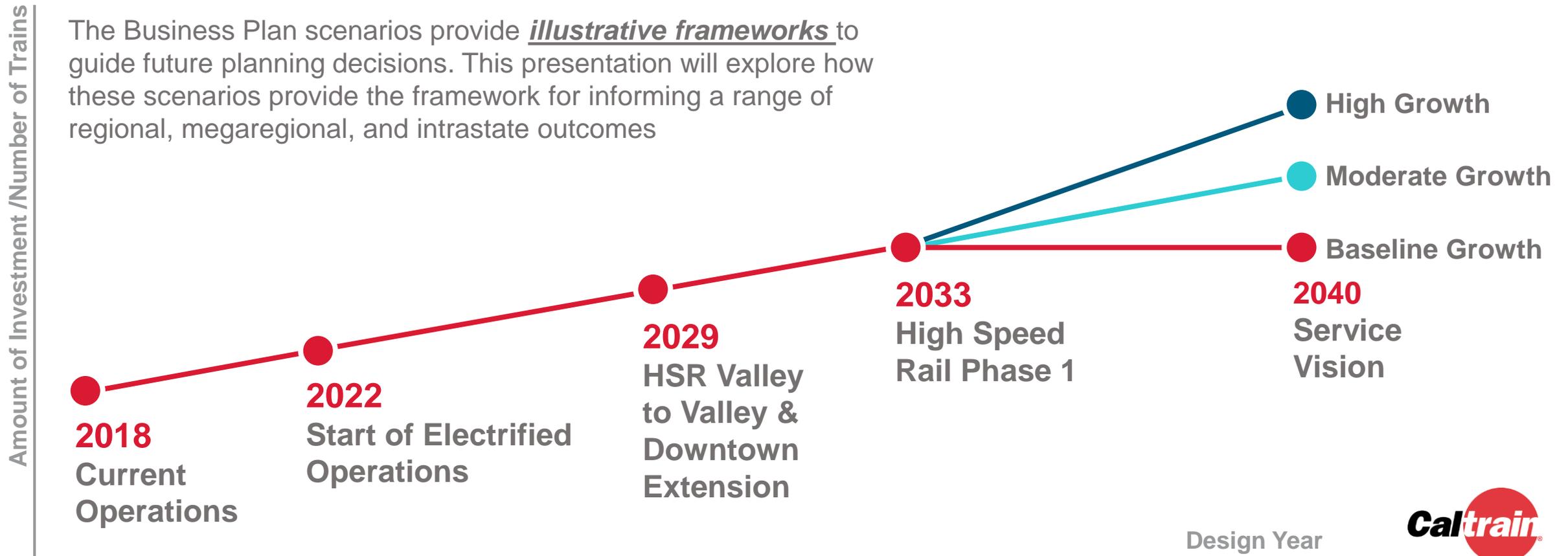


Network
Integration



2040 Service Scenarios: Different Ways to Grow

The Business Plan scenarios provide *illustrative frameworks* to guide future planning decisions. This presentation will explore how these scenarios provide the framework for informing a range of regional, megaregional, and intrastate outcomes



What is a Train Slot?

Fundamentally the Service Scenarios developed within the Business Plan illustrate how additional train “slots” or “paths” can be created on the Peninsula Corridor that accommodate different types and volumes of service

Train Slots

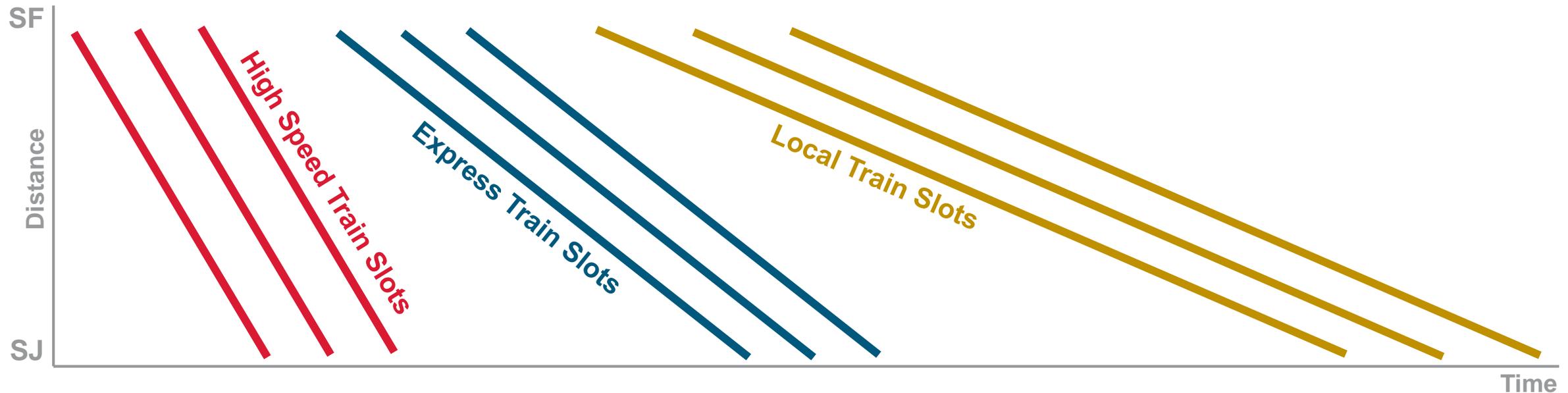
A train slot is an opportunity to operate a train between two endpoints over a defined path on the railroad with a specific stopping pattern and equipment performance

Service to Multiple Markets

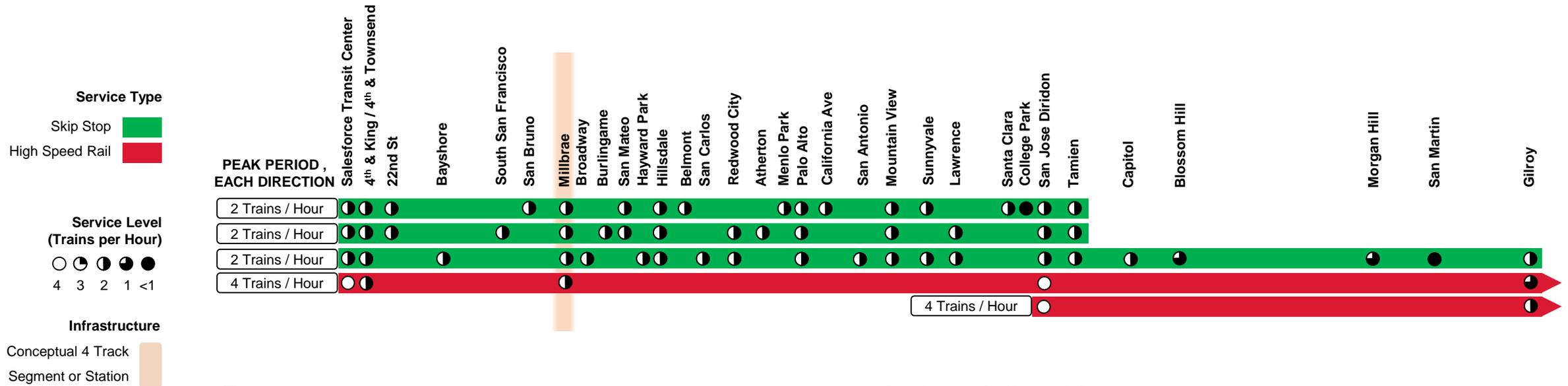
Each service plan (Baseline, Moderate, High) defines a set of train slots that operate without conflicts (i.e. using the same path at the same time) that together provide a specific level of service to markets. Each service plan differs in the quantity and type of service markets collectively receive

Train Slot Planning

The available infrastructure defines how many slots can be planned, and how much variation among the slots can be tolerated. In general, the greater the variability in stopping patterns and train speeds the fewer slots can coexist without conflicts on a railroad



2040 Baseline Growth Scenario (6 Caltrain + 4 HSR)



Features

- Blended service with up to 10 TPH north of Tamien (6 Caltrain + 4 HSR) and up to 10 TPH south of Tamien (2 Caltrain + 8 HSR)
- Three skip stop patterns with 2 TPH – most stations are served by 2 or 4 TPH, with a few receiving 6 TPH
- Some origin-destination pairs are not served at all

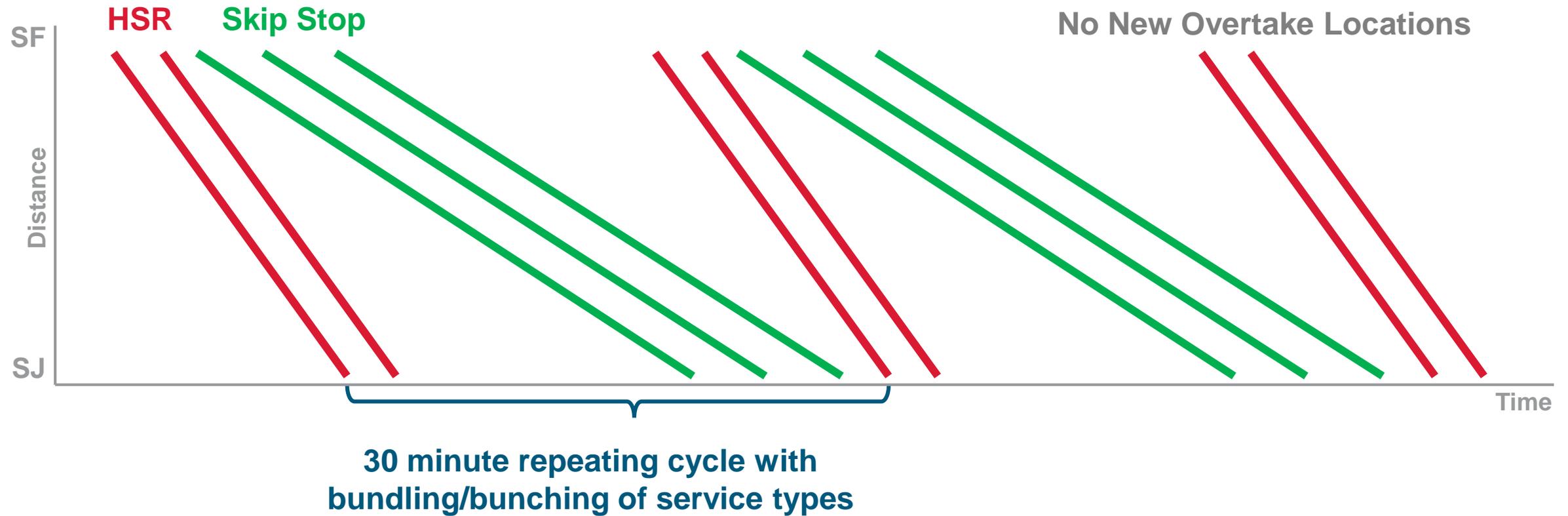
Passing Track Needs

- Less than 1 mile of new passing tracks at Millbrae associated with HSR station plus use of existing passing tracks at Bayshore and Lawrence

Options & Considerations

- Service approach is consistent with PCEP and HSR EIRs
- Opportunity to consider alternative service approaches later in Business Plan process

Baseline Growth Service Structure



Baseline

Generalized Infrastructure:

Service Concept Description:

Possible Variations within Framework:

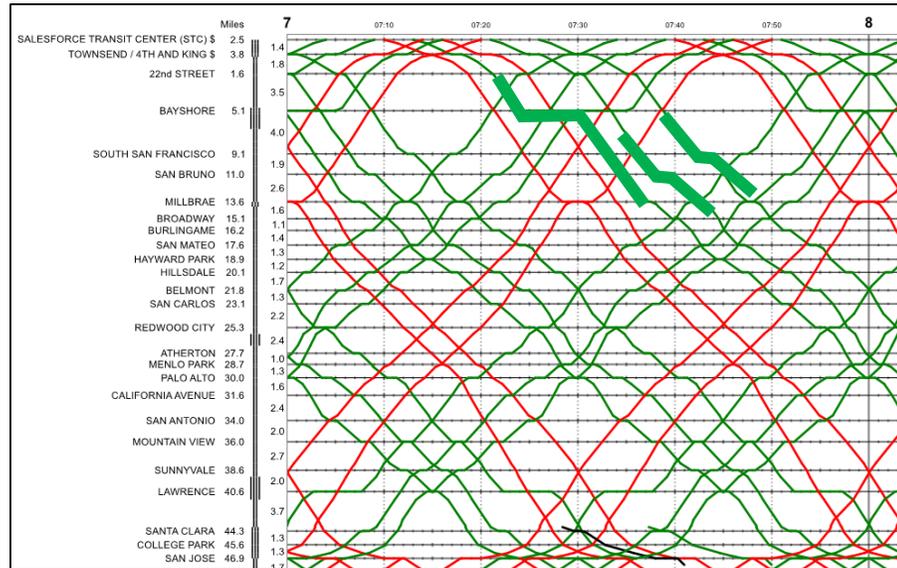
New Signal System, overtakes limited to existing locations (Bayshore, Lawrence)

Two Services – Caltrain Skip-Stop operate bunched service in between bunched HSR trains

Station service levels and stopping patterns

Service Flexibility within Baseline Growth

Baseline Scenario- Base Concept

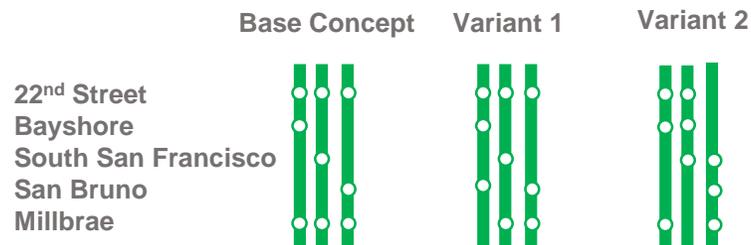


The Baseline Scenario has limited flexibility due to lack of passing tracks

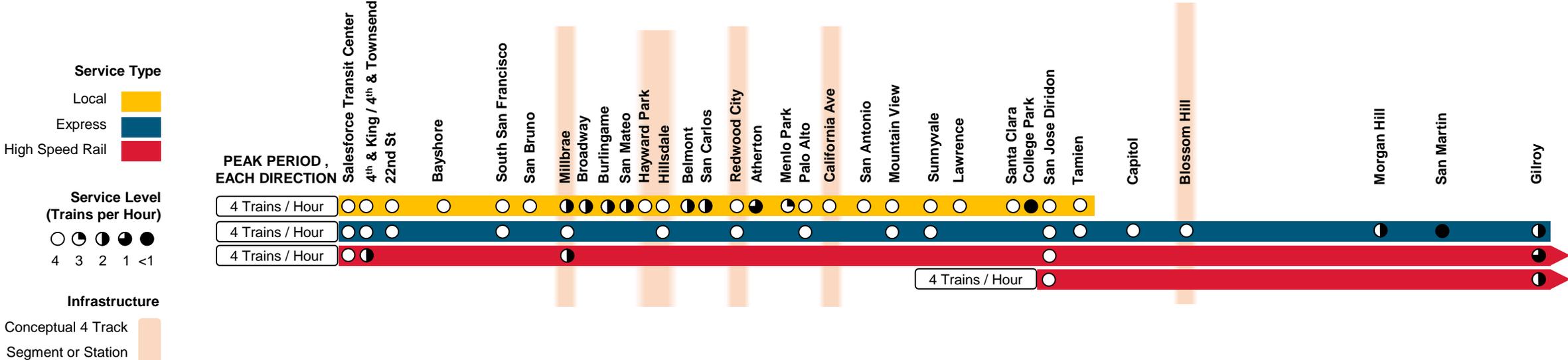
Stops can be “moved” or reallocated between individual stations and patterns but the overall pattern needs to stay the same for all the trains to fit

For example, the Baseline Scenario serves fast-growing stations at Bayshore, South San Francisco, and San Bruno with only two trains per hour. Within the construct of the “baseline” framework, Caltrain would need to reduce service at nearby stations or lengthen travel times to increase service to these stations

Example Variations



Moderate Growth Scenario (8 Caltrain + 4 HSR)



Features

- A majority of stations served by 4 TPH local stop line, but Mid-Peninsula stations are serviced with 2 TPH skip stop pattern
- Express line serving major markets – some stations receive 8 TPH
- Timed local/express transfer at Redwood City

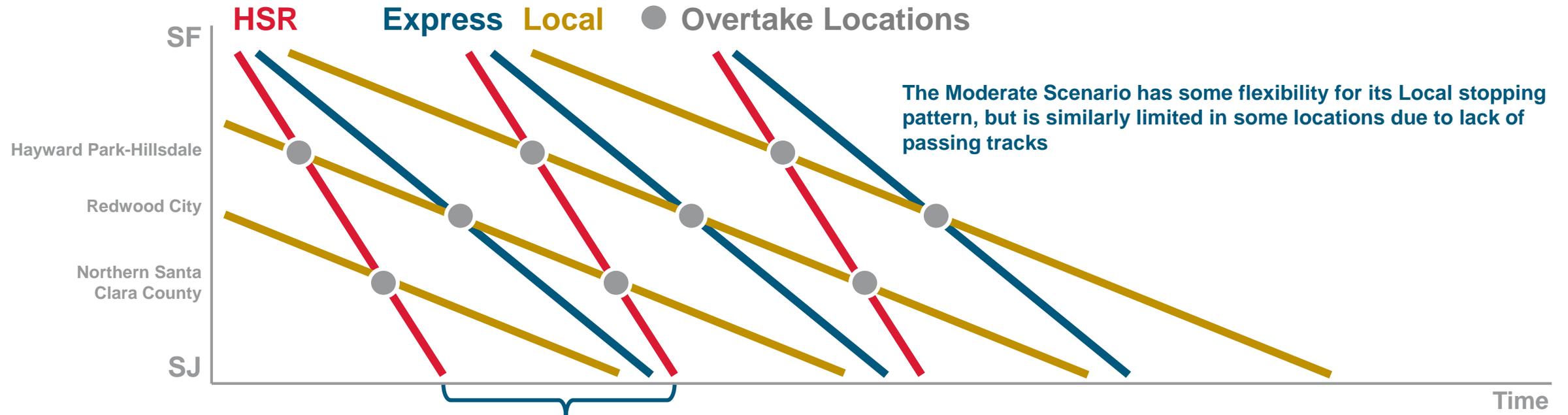
Passing Track Needs

- Up to 4 miles of new 4-track segments and stations: Hayward Park to Hillsdale, at Redwood City, and a 4-track station in northern Santa Clara county (Palo Alto, California Ave, San Antonio or Mountain View. California Ave Shown)

Options & Considerations

- To minimize passing track requirements, each local pattern can only stop twice between San Bruno and Hillsdale
- Each local pattern can only stop once between Hillsdale and Redwood City
- Atherton, College Park, and San Martin served on an hourly or exception basis

Moderate Growth Service Structure



15 minute repeating cycle with even, clock-face spacing of service types

Moderate Growth

Generalized Infrastructure:

New Signal System, Infrastructure to support overtakes at Hayward Park-Hillsdale, Redwood City, and a station in northern Santa Clara county

Service Concept Description:

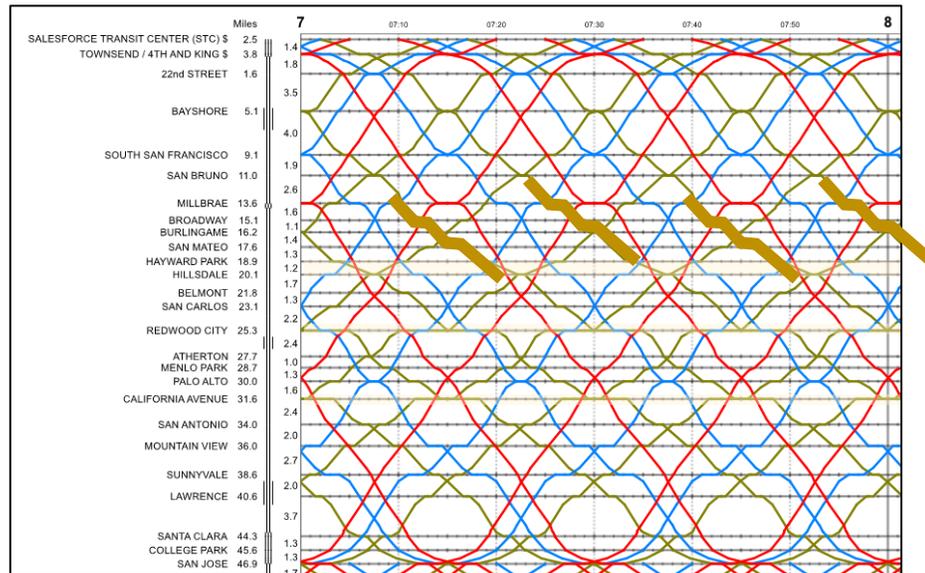
Three Services in spread 15 minute pattern – Four Caltrain Express and four Local – with connection in Redwood City with four HSR in even intervals

Possible Variations within Framework:

Local train stopping patterns

Service Flexibility within Moderate Growth

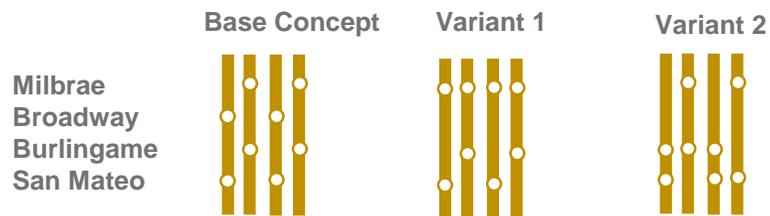
Moderate Scenario - Base Concept



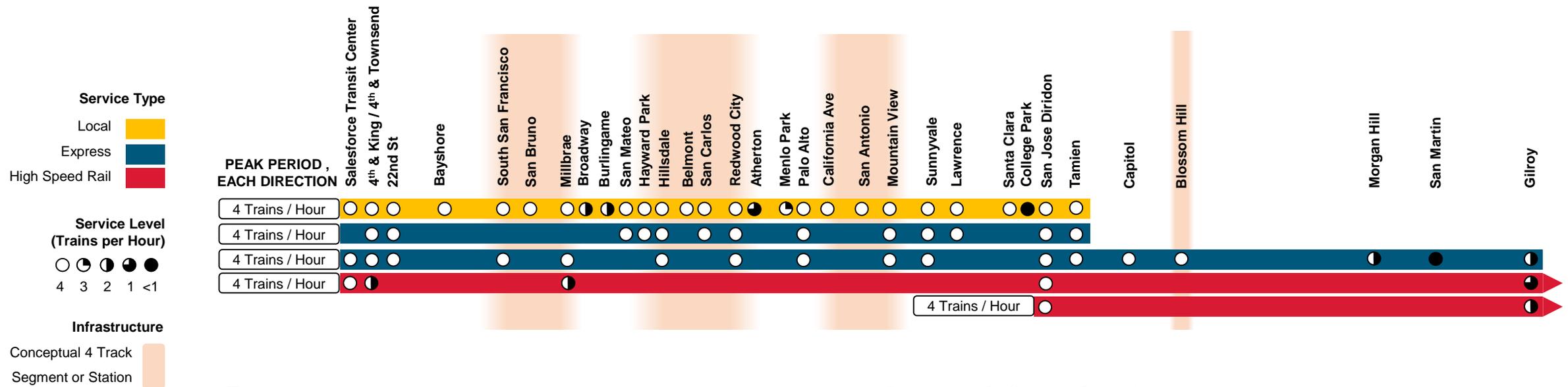
The Moderate Scenario has some flexibility for its Local stopping pattern, but is similarly limited in some locations due to lack of passing tracks and reintroduction of service to two stations

For example, the Moderate Scenario serves closely-spaced mid-Peninsula stations with a skip stop pattern, with Millbrae, Broadway, Burlingame, and San Mateo each receiving two trains per hour, per direction. If regular weekday service to Broadway was not reintroduced, service may be shifted to adjacent stations

Example Variations



High Growth Scenarios (12 Caltrain + 4 HSR)



Features

- Nearly complete local stop service – almost all stations receiving at least 4 TPH
- Two express lines serving major markets – many stations receive 8 or 12 TPH

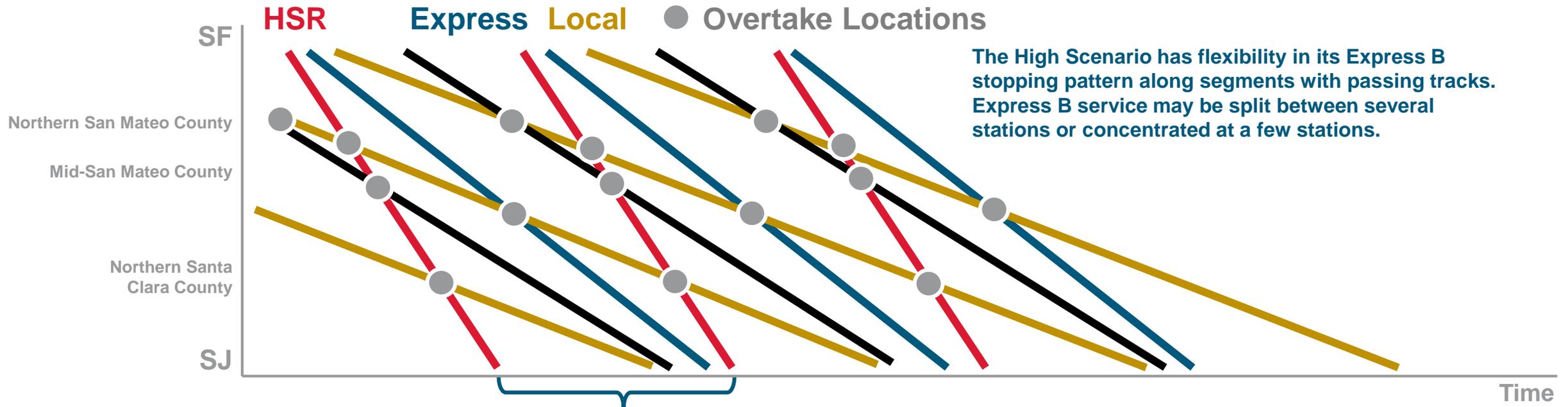
Passing Track Needs

- Requires up to 15 miles of new 4 track segments: South San Francisco to Millbrae, Hayward Park to Redwood City, and northern Santa Clara County between Palo Alto and Mountain View stations (shown: California Avenue to north of Mountain View)

Options & Considerations

- SSF-Millbrae passing track enables second express line; this line cannot stop north of Burlingame
- Tradeoff between infrastructure and service along Mid-Peninsula - some flexibility in length of passing tracks versus number and location of stops
- Flexible 5 mile passing track segment somewhere between Palo Alto and Mountain View
- Atherton, College Park, and San Martin served on an hourly or exception basis

High Growth Service Structure



15 minute repeating cycle with even, clock-face spacing of service types

High Growth

Generalized Infrastructure:

Service Concept Description:

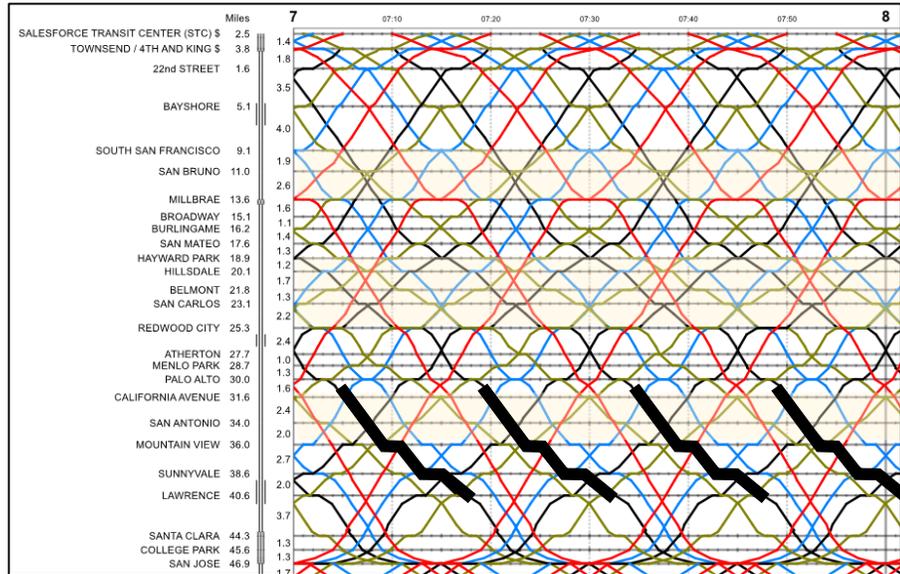
with

Possible Variations within Framework:

New Signal System, Infrastructure to support between South San Francisco and Millbrae, Hayward Park and Redwood City, and a five mile segment in northern Santa Clara County
 Four Services in spread 15 minute pattern – Eight Caltrain Express (A and B) four Local – connection in Redwood City with four HSR in even intervals
 Local train skip stop pattern and Express B stopping pattern.

Service Flexibility within High Growth

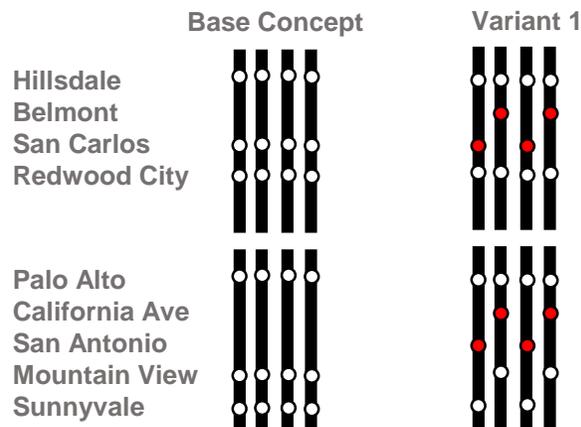
High Growth - Base Concept



The High Scenario has flexibility in its Express B stopping pattern along segments with passing tracks

Express B service may be split between several stations or concentrated at a few stations. There are also some opportunities to reduce passing track lengths but with potential impacts to service travel time and stopping patterns

Example Variations



Generalizing the 2040 Growth Scenarios

The different 2040 growth scenarios developed through the Business Plan can be generalized in the following way

	Baseline	Moderate	High
Total Train Slots	Up to 10 per hour per direction	Up to 12 per hour per direction	Up to 16 per hour per direction
Service Types	<ul style="list-style-type: none">• Skip-stop (up to 6)• High speed (up to 4)	<ul style="list-style-type: none">• Local (up to 4)• Express (up to 4)• High speed (up to 4)	<ul style="list-style-type: none">• Local (up to 4)• Express (up to 8 in two patterns)• High speed (up to 4)
Scheduling	Irregular/ bunched	Regular, pulsed at major hubs	Regular, pulsed at major hubs
New Overtakes	None	Limited, station-based	Extensive 4 track segments
Operating Environment	Electrified corridor with use by high performance EMU and HSR equipment; modern high-density signaling system		



Simulation



Caltrain
Service
Flexibility



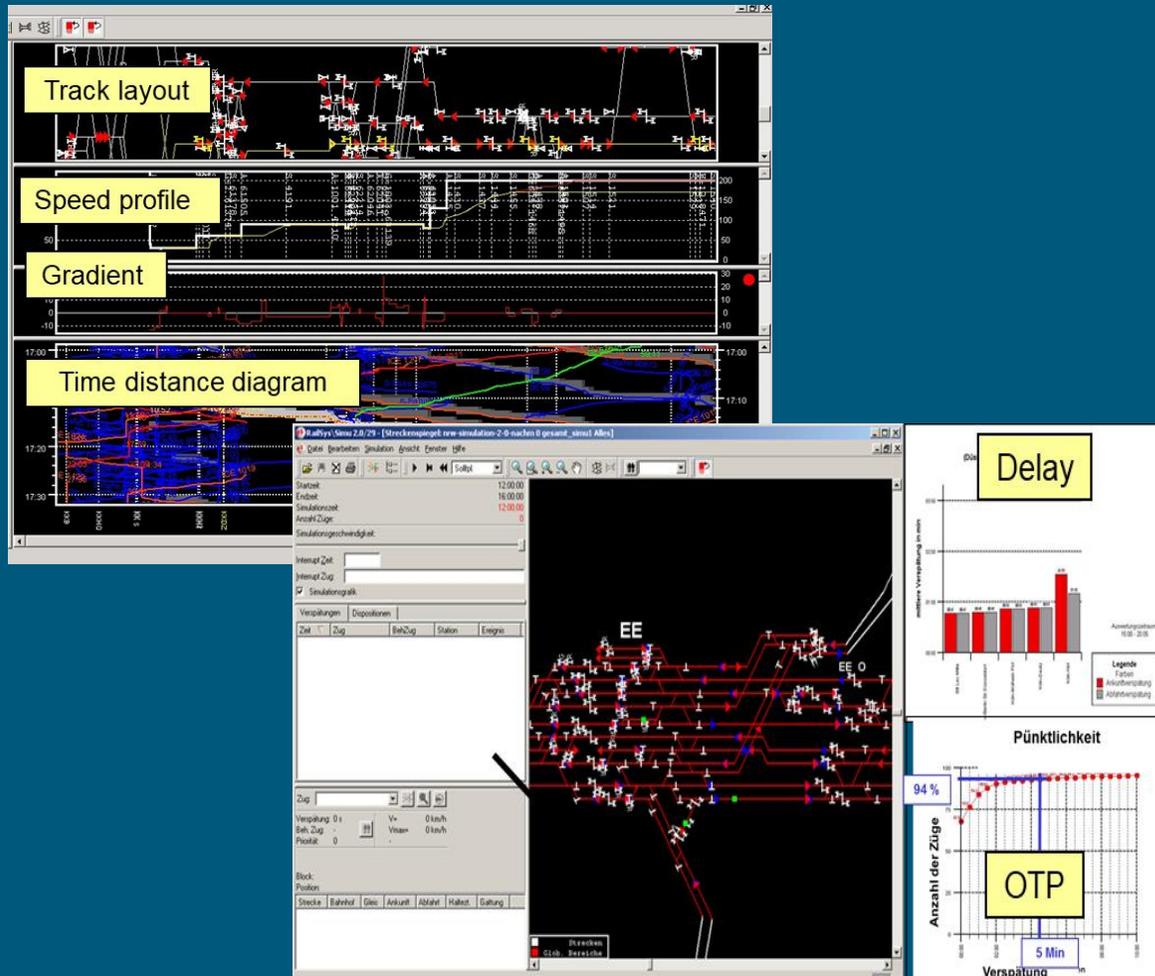
Simulation



Network
Integration



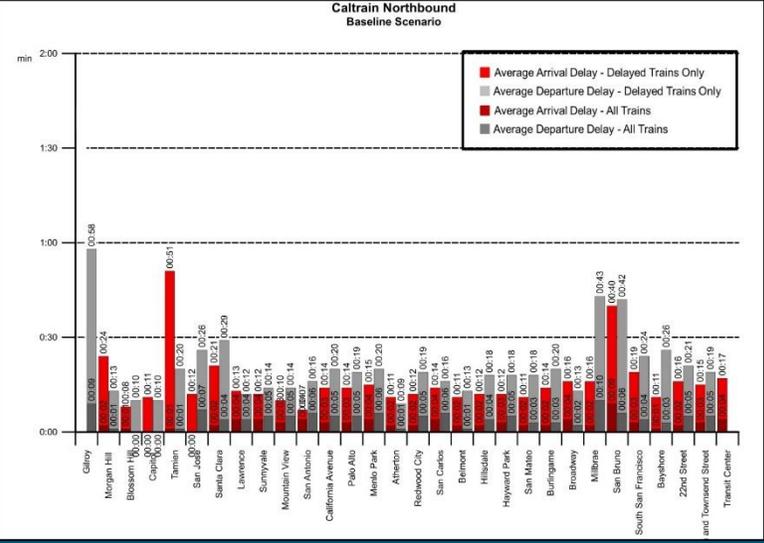
Simulation



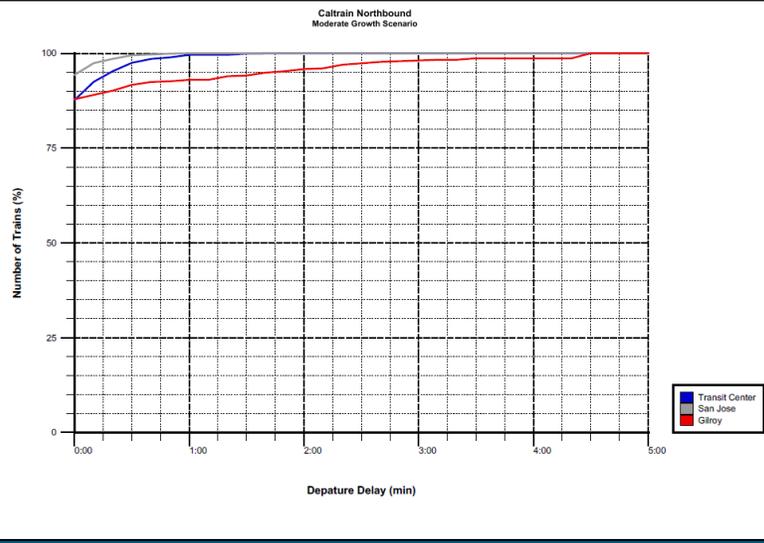
Initial Process

- The primary objective for the simulation analysis was to determine whether the simulation model indicates a stable rush-hour operation absent any major disruptions (e.g track outages or disabled trains) for the three growth scenarios subject to analysis.
- Of particular concern was the extent to which the variability of dwells at intermediate stations affected the ability to deliver the proposed timetables within reasonable on-time performance parameters.
- A baseline simulation was run with no perturbations to confirm the operational feasibility of the scheduled timetable as planned. Once confirmed, 100 simulations were run that introduce variability in dwell and other minor delay to test the robustness of the timetable. Summary statistics were then produced for all 100 cases that describe average delay at key locations along the corridor.

Example Results



Shows minimal delay for Northbound Caltrain service even under perturbed conditions in the **Baseline Scenario**



Shows, on average, northbound Caltrain trains arriving with less delay at STC than introduced at Gilroy showing ability to make up time enroute. Nearly all trains arrive with one minute of schedule to STC despite variations in dwell and added delay in the **Moderate Scenario**

Preliminary Results

- The simulated results show a stable rush hour for all three scenarios tested.
- The Moderate scenario shows the best simulated performance with the lowest cumulative delay across the range of perturbed model runs.
- Arrival times into STC for northbound Caltrain service showed average delays less than 10 seconds for all trains, and less than 30 seconds for delayed trains across all three scenarios tested.
- These results show the basic stability of the timetable for Caltrain, despite using pessimistic arrival times for HSR at Gilroy aimed at fully testing the resilience of the Caltrain schedules.





Network Integration



Caltrain
Service
Flexibility



Simulation



**Network
Integration**



Integrating with a State and Regional Network

How Does the Caltrain Corridor and Service Vision Integrate with a Broader Rail and Transit Network?

The previous slides described the flexibility and constraints within each growth scenario. The following slides explore how the different ways that these growth scenarios could interface with and support a larger regional, megaregional and state rail system.

Connections vs. Interlining

From a service standpoint the Caltrain service and corridor can integrate with the network through both timed connections and transfers as well as direct “interlining” or shared use of rail infrastructure. Both options are equally important from a customer and mobility perspective—but the technical opportunities and challenges associated with each are significantly different.



Types of Network Integration: Connections

Connections

Definition: Major designed *transfer* opportunities between different rail and transit systems at key stations. Interface should appear seamless to customers but major operating infrastructure and systems are not actually shared

Examples:

- Connections between BART, SamTrans, and Caltrain at Millbrae
- Future connections between Caltrain and BART at Diridon
- Future connections between Caltrain, BART, and Transbay buses at Salesforce Transit Center



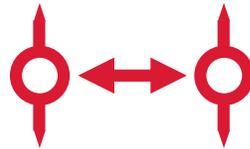
Connections: Caltrain Considerations

The regular, clockface service plans in the Moderate and High Growth scenarios enable coordinated connections with other transit operators, while the Baseline Scenario's bunched schedule presents major challenges to coordination



Schedule Coordination

- Measures to improve connections across agencies (e.g. timed transfers)



Transfer Volumes

- Amount of people making connections



Other Key Considerations

- Factors outside of core service design (e.g. station design and fare integration)

Types of Network Integration: Interlining

Interlining

Definition: *Shared use of common rail infrastructure by different train operators and services including any track, platforms and operating systems.*

In this presentation interlining may refer to both the introduction of other passenger rail operators into the Caltrain corridor or the extension of Caltrain services onto corridors not owned by the JPB

Examples:

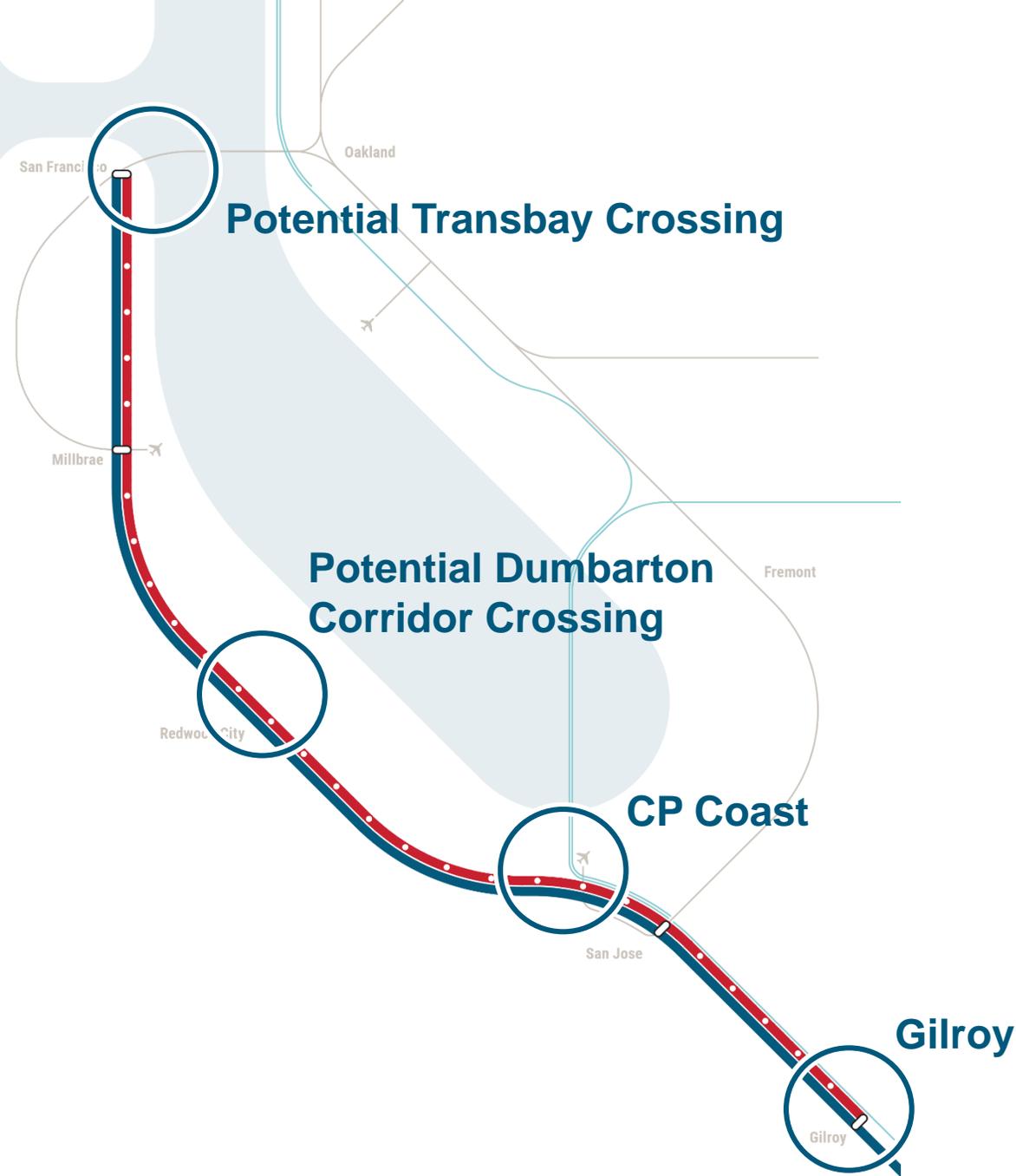
- CCJPA and ACE use of Caltrain corridor between Santa Clara and Diridon
- Future use of Caltrain corridor by High Speed Rail
- Potential Future use of UP corridor to Salinas by Caltrain



Interlining Opportunities

There are several existing or potential points where the Caltrain corridor interfaces (or could interface) with the regional and state rail network in a way that would support the interlining of services onto the Caltrain corridor (or the extension of services “off” the corridor)

More so than coordinated connections, interlining introduces a number of significant technical and policy considerations that must be addressed



Interlining: Caltrain Considerations

Balancing Limited Capacity Across Corridor and Regional Markets



Caltrain Corridor Market (8+ Slots)

- At least 8 TPHPD required to serve capacity and coverage needs
- Still may result in uncomfortable peak hour crowding along most of the corridor



HSR Market (4 Slots)

- Committed to 4 TPHPD to serve HSR needs between San Francisco and Los Angeles



Opportunities for 4 Additional Slots

- Additional Caltrain express service to help alleviate crowding conditions and realize full demand
- Additional regional service to provide connections to enhance connections to East Bay, Sacramento, and/or Central Valley

Interlining: Implications for Service Scenarios

- All Business Plan scenarios are interlined with HSR and include potential for expanded Caltrain interlining to Gilroy
- Beyond HSR major new interlining is generally not possible for Baseline and Moderate Growth Scenarios without slowing HSR and Caltrain travel times or *significantly* exacerbating Caltrain crowding by diverting slots
- **Additional major interlining is only possible with the type of additional passing track infrastructure and corridor upgrades identified in the High Growth Scenario**

2040 Network Interface

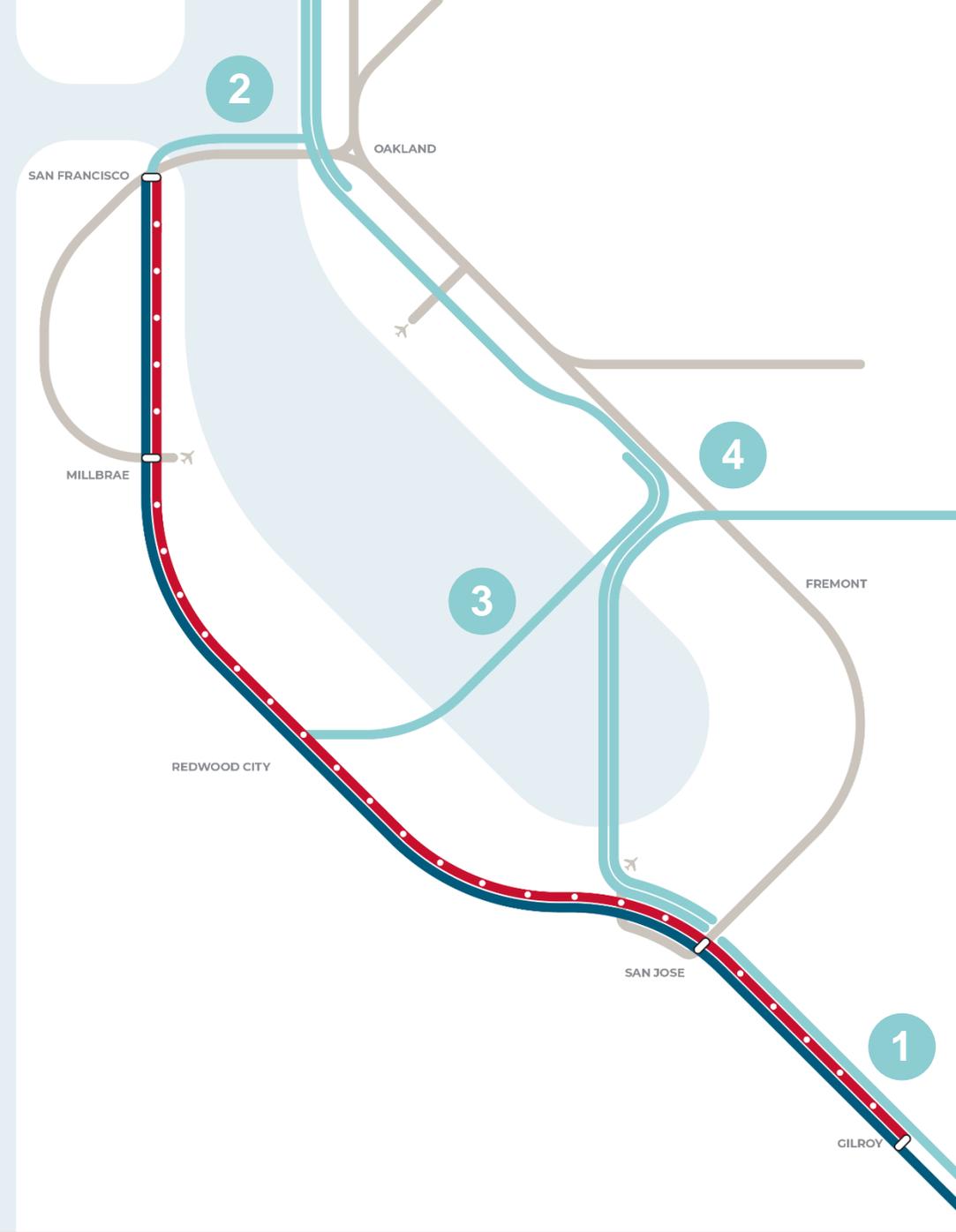
The 2040 regional transportation network includes several major new interfaces with the Caltrain corridor that are well defined and have been fully integrated into existing service planning and modeling:

- BART to San Jose (**connection**)
- DTX will offer new connections between Caltrain and the East Bay (**connection**)
- HSR service will be integrated with Caltrain via blended corridor operations (**interlining**)

A number of additional interfaces are being planned or considered that have significant implications for Caltrain:

1. Rail service to Central Coast/Monterey County
2. A Second Transbay Tube
3. Dumbarton Rail
4. ACE expansion & Capitol Corridor service expansions

Options and opportunities around these interfaces *from the perspective of the Caltrain Corridor* are explored in the following slides

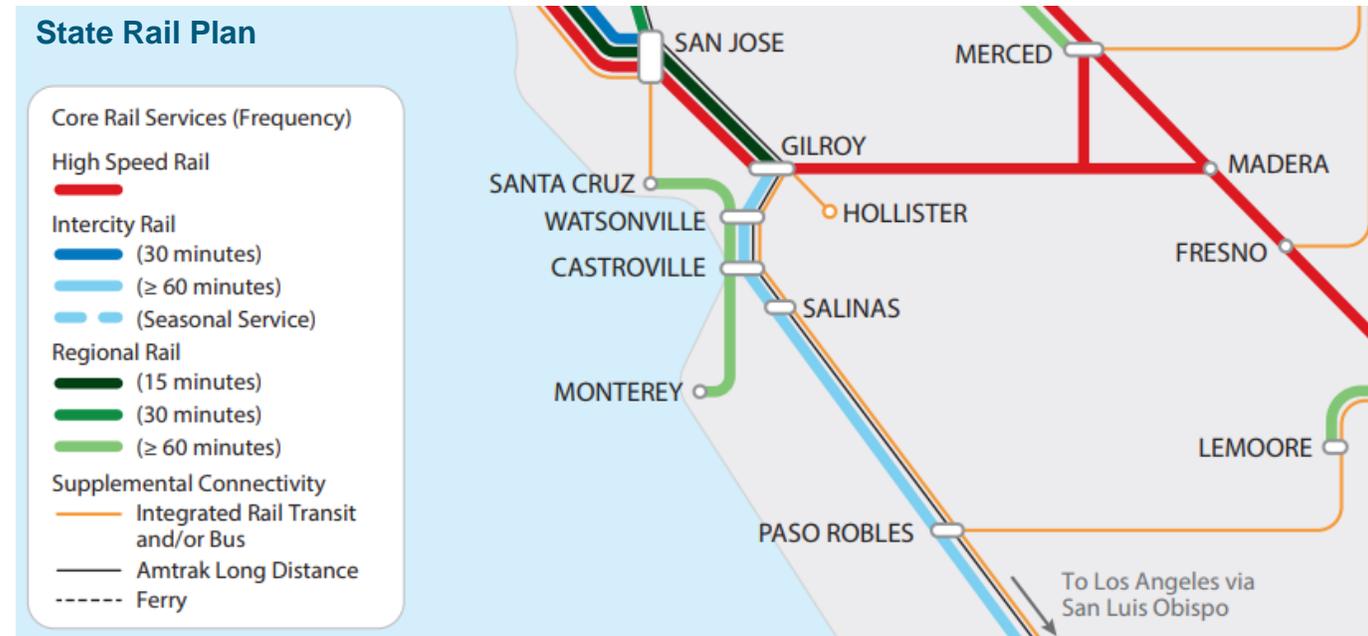


Rail Service to Central Coast / Monterey County

Description

The State Rail Plan calls for expanded intercity rail service to the Central Coast, terminating at Gilroy Station

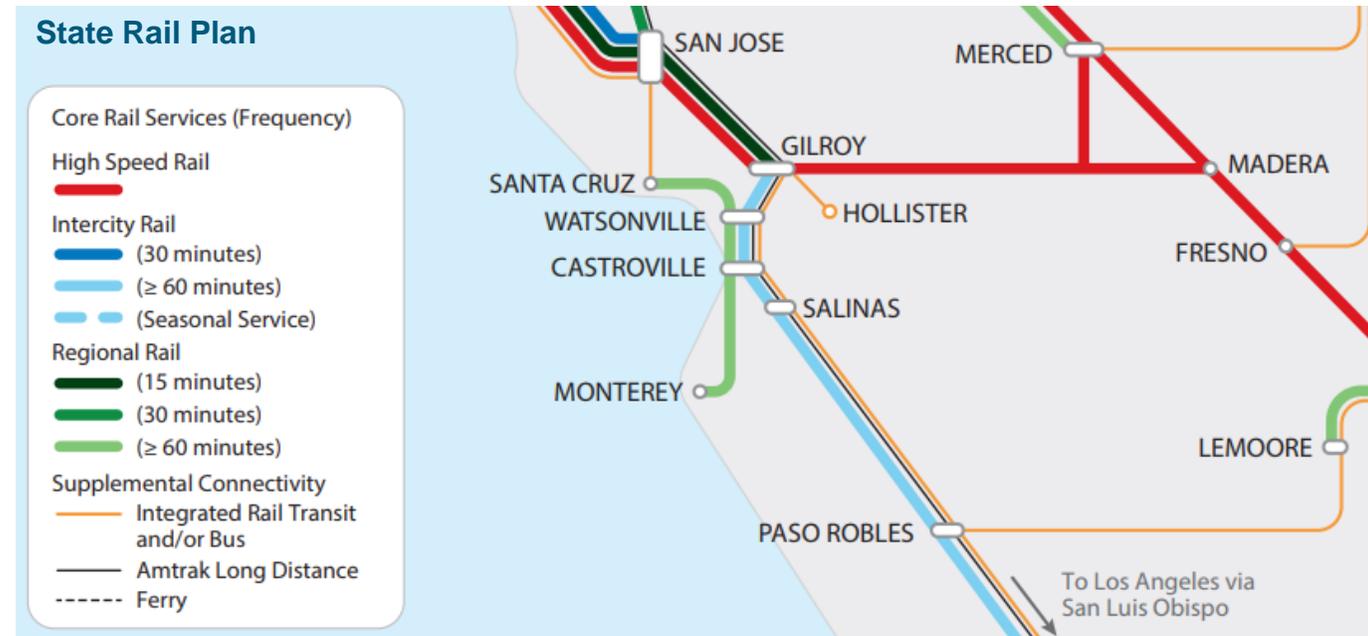
The Transportation Agency for Monterey County (TAMC) has proposed extending passenger rail service from San Jose to Salinas, with stations in Pajaro/Watsonville, Castroville, and Salinas



Rail Service to Central Coast / Monterey County

Options/Considerations

- In order to interline or extend passenger rail service south of Gilroy, the Monterey/Central Coast corridor would need to be electrified.
- For all scenarios, there are no additional peak-period slots available between San Jose and Gilroy to interline non-Caltrain, non-HSR services without adding passing tracks
- A well-coordinated connection to a diesel service may be considered at Gilroy in lieu of extending electrified Caltrain service or adding passing tracks (this approach would be consistent with the State Rail Plan). Some interlining / extension options may be possible however in the near- and medium term



Second Transbay Tube

Description

BART is evaluating the feasibility of a Second Transbay Tube to serve BART-gauge rail and/or conventional rail. The State Rail Plan also considers Caltrain and intercity rail service spanning the Transbay corridor

The Second Transbay Tube may serve as a connection between BART and Caltrain at STC or 4th & King, or an extension of rail service from the Caltrain corridor to the East Bay and beyond



Second Transbay Tube

Options/Considerations

- A Second Tube is likely to exacerbate crowding challenges for the Baseline and Moderate Growth Scenarios, regardless of whether Caltrain extends to the East Bay or connects to a BART Tube in San Francisco
- There is no good option for turning westbound trains back in San Francisco - services need to be interlined
- The High Growth Scenario presents the most flexibility to interline a range of services, including from the East Bay and from Sacramento and San Jose as envisioned by the State Rail Plan
- An extension of Caltrain through the Second Tube presents operational challenges if it does not occur at STC



Dumbarton Rail

Description

SamTrans and Cross-Bay Transit Partners are currently analyzing several project alternatives to introduce passenger rail service between the Caltrain Corridor and East Bay. The State Rail Plan considers extending Dumbarton Rail service across the Altamont Pass to the Central Valley

Previous ridership forecasts estimated demand around 15,000 daily riders for a Union City-Redwood City route, with about 2,000 transferring to or from Caltrain



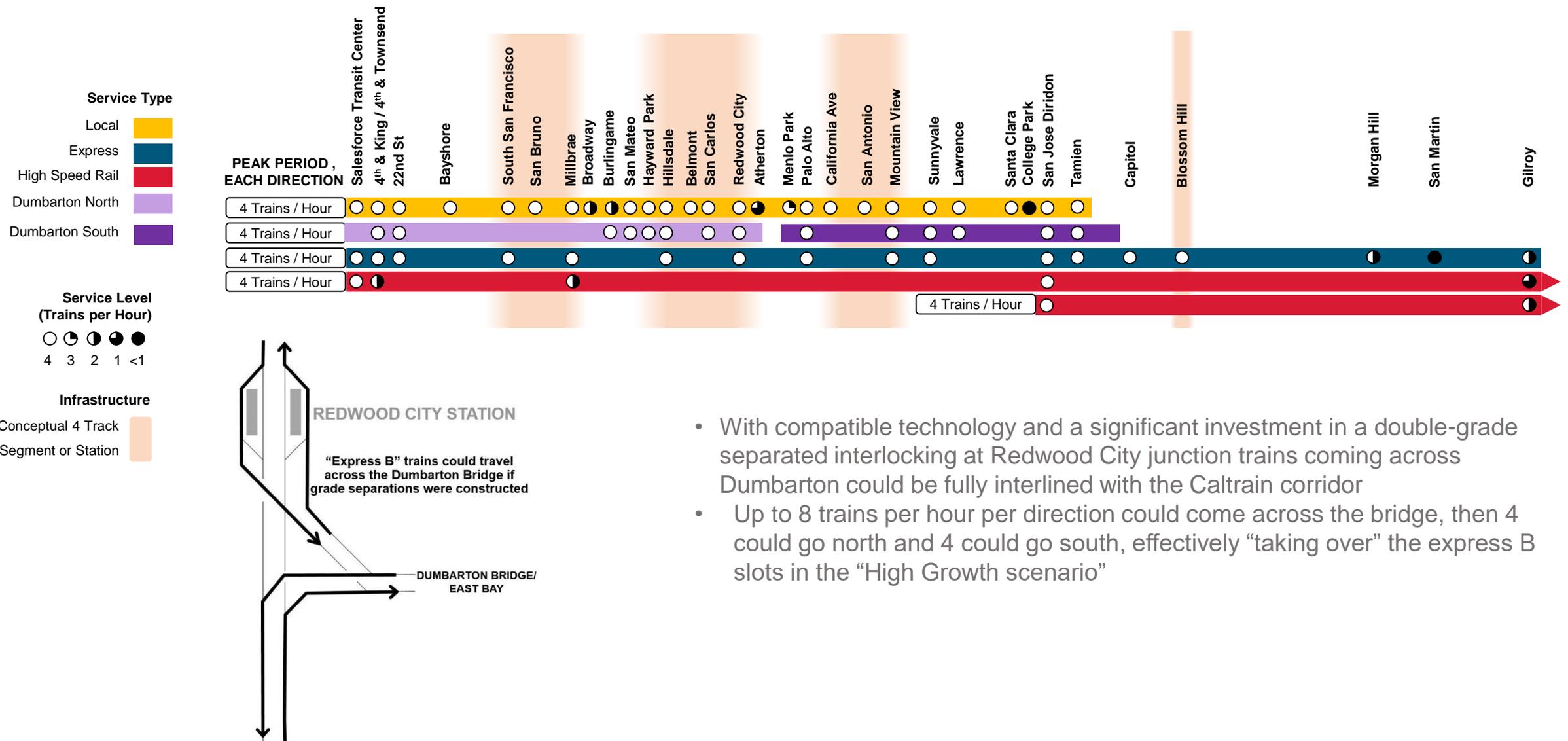
Dumbarton Rail

Options/Considerations

- For the Baseline and Moderate Scenarios, Dumbarton Rail would **connect** at Redwood City. Connections could be timed for Moderate, but not Baseline. Large-scale interlining is not possible in either scenario.
- A significant investment in Redwood City Station is needed to accommodate an additional platform for a Dumbarton Rail connection in addition to a four track Caltrain station in the Moderate and High Scenarios.
- For the High Growth Scenario, Dumbarton Rail may either **connect or interline**, assuming compatible technology. However, interlining may result in overall lower ridership unless service is extended beyond a Union City terminus in the east bay.



Dumbarton Rail Interface – Full Interlining



- With compatible technology and a significant investment in a double-grade separated interlocking at Redwood City junction trains coming across Dumbarton could be fully interlined with the Caltrain corridor
- Up to 8 trains per hour per direction could come across the bridge, then 4 could go north and 4 could go south, effectively “taking over” the express B slots in the “High Growth scenario”

Visionary Service Levels for ACE and Capitol Corridor

A range of significantly increased service levels for ACE and Capitol Corridor are contemplated in both the 2018 State Rail Plan as well as the plans and visions of both agencies

The Business Plan team evaluated opportunities and challenges associated with accommodating combined service levels for between 4 and 8 tphpd

State Rail Plan (2018)

- 30-minute bidirectional service connecting to San Jose

Capitol Corridor Vision Plan (2016)

- 15 Trains per Day between San Jose and Sacramento (hourly frequencies)
- Long-Term: Discussion of electrification with 4 TPHPD terminating in San Jose

ACE Forward (2017)

- 10 daily roundtrips (+4 from existing)

Altamont Vision Plan (ongoing)

- Consideration of 4 TPHPD across Altamont corridor terminating at San Jose

Options & Considerations

Routings

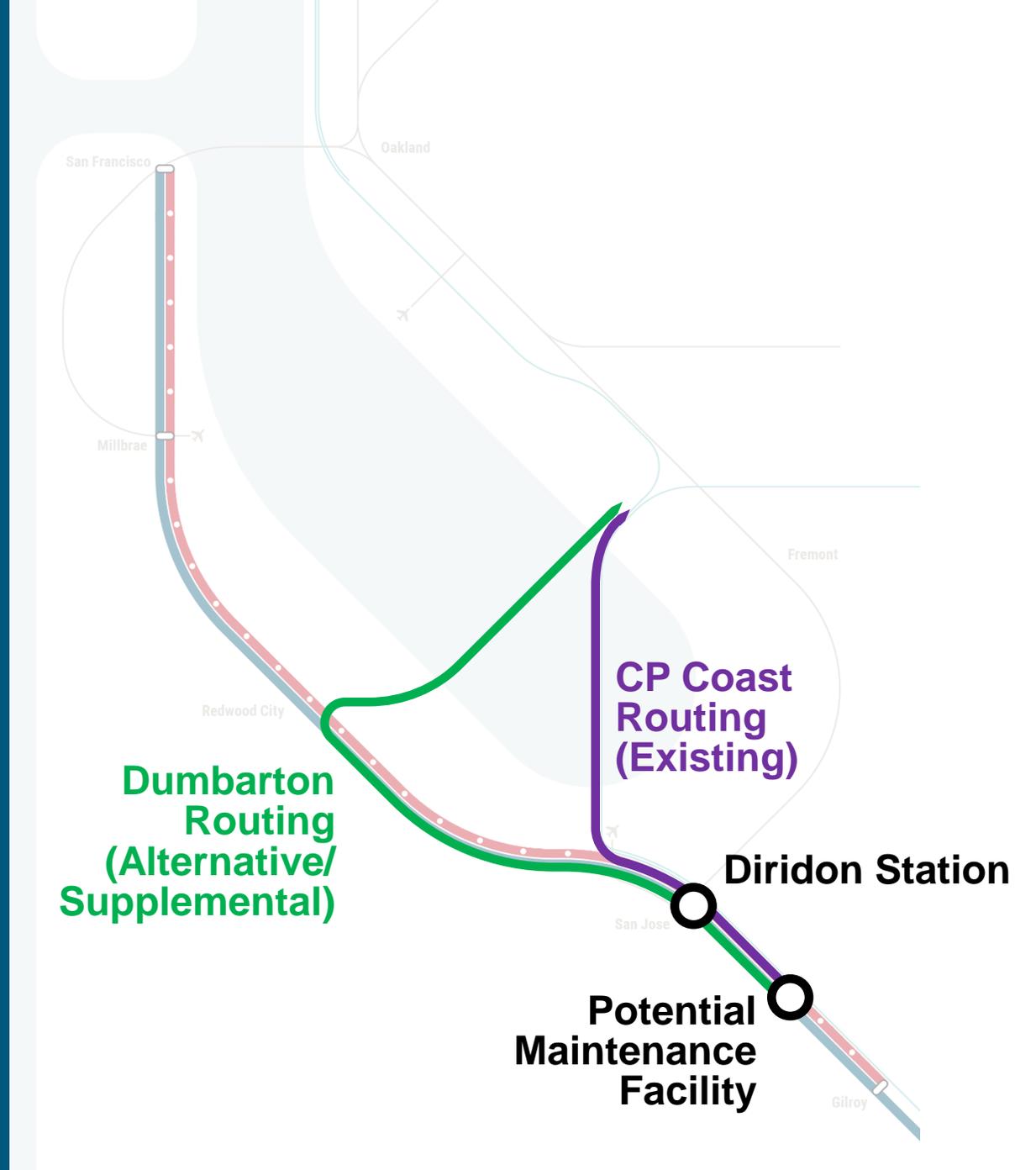
- Today, ACE and CCJPA services come on to the Caltrain Corridor at CP Coast
- An alternative future routing could have some or all services route across the Dumbarton Bridge. This option requires “high growth” infrastructure and the use of compatible rolling stock

Infrastructure at Diridon

- Infrastructure at and around the Diridon Station is constrained
- The different growth scenarios for Caltrain/ HSR all require the same set of platforms and tracks at Diridon.
- Significantly increasing ACE and/or CCJPA services to San Jose has the potential to drive an expanded infrastructure footprint

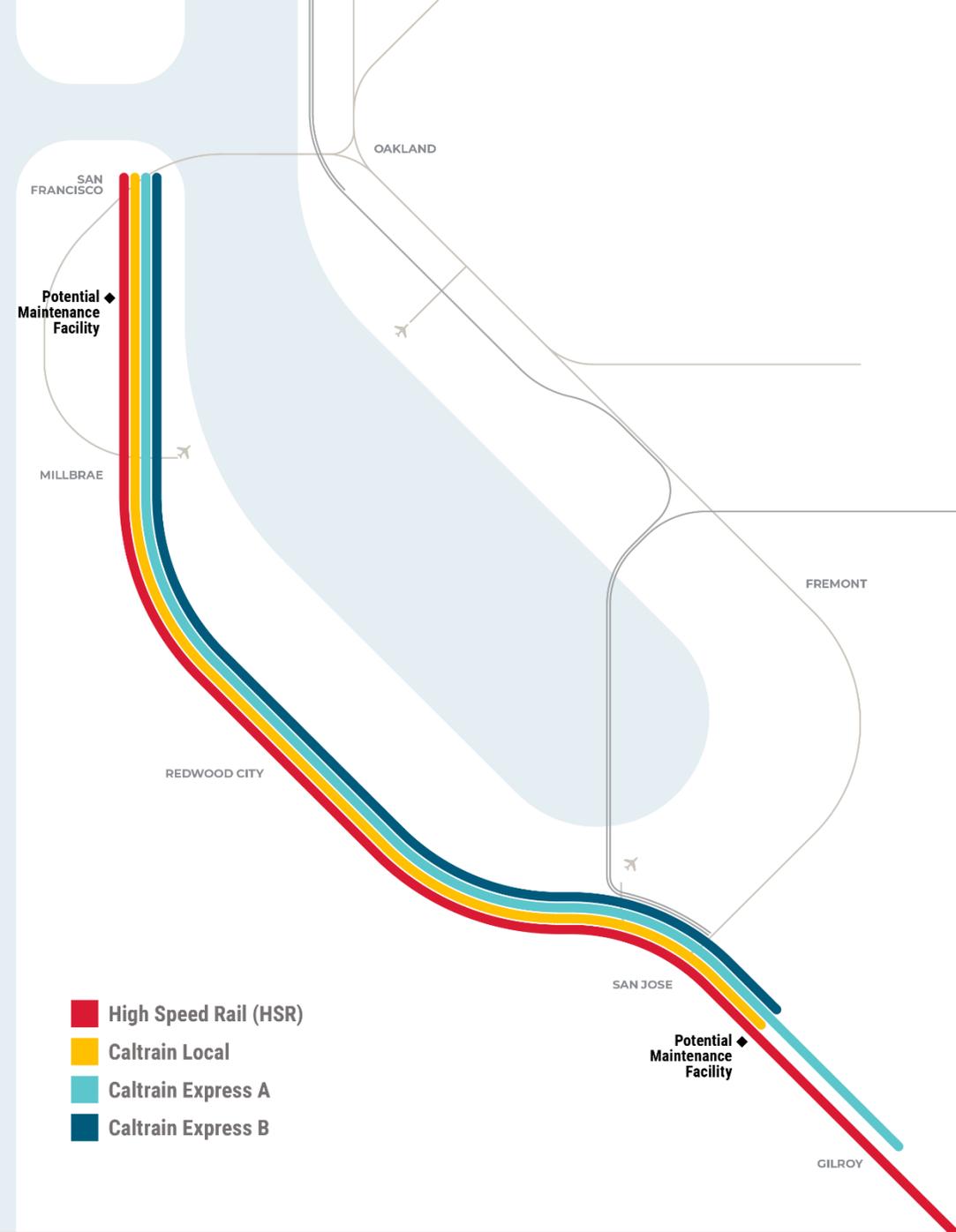
Turns and Storage

- Regardless of routing, accommodating “visionary” levels of ACE and CCJPA service (4 tphpd or more) will require that trains run through Diridon to a new storage and turn facility south of the station. This facility could be shared with a future Caltrain facility



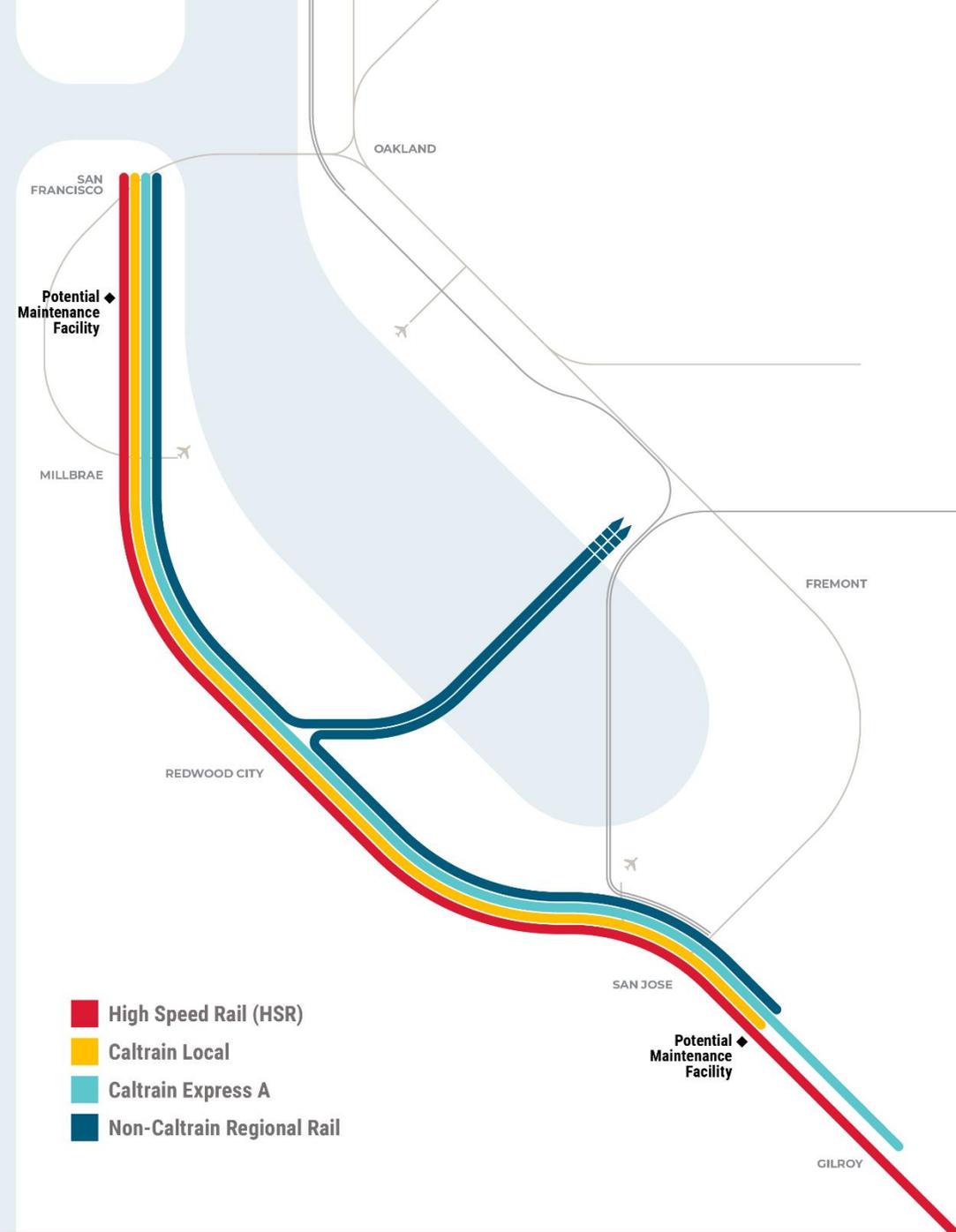
Options for a Regionalized Rail System

2040 High Growth Service



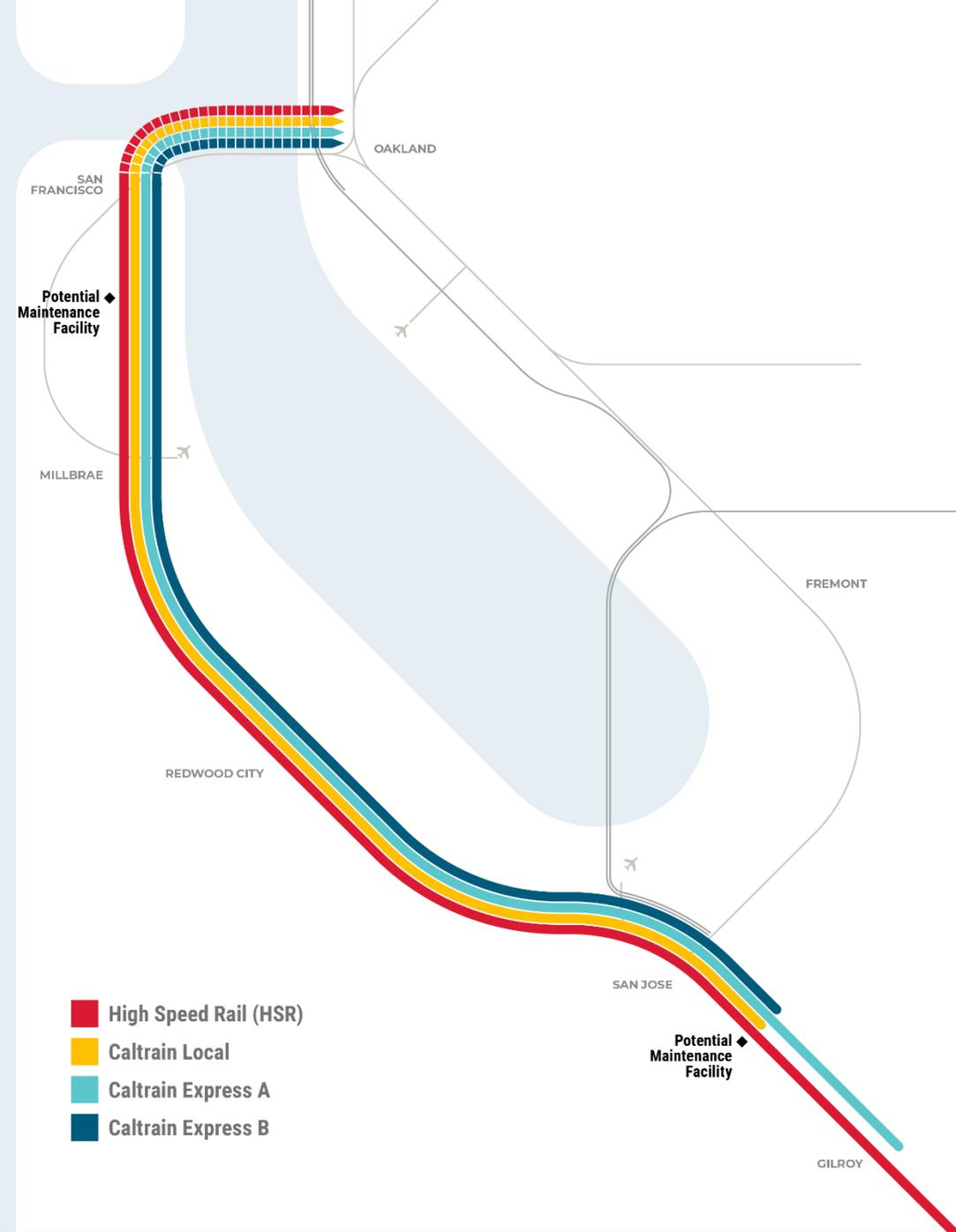
Options for a Regionalized Rail System

Dumbarton Bridge Interlining



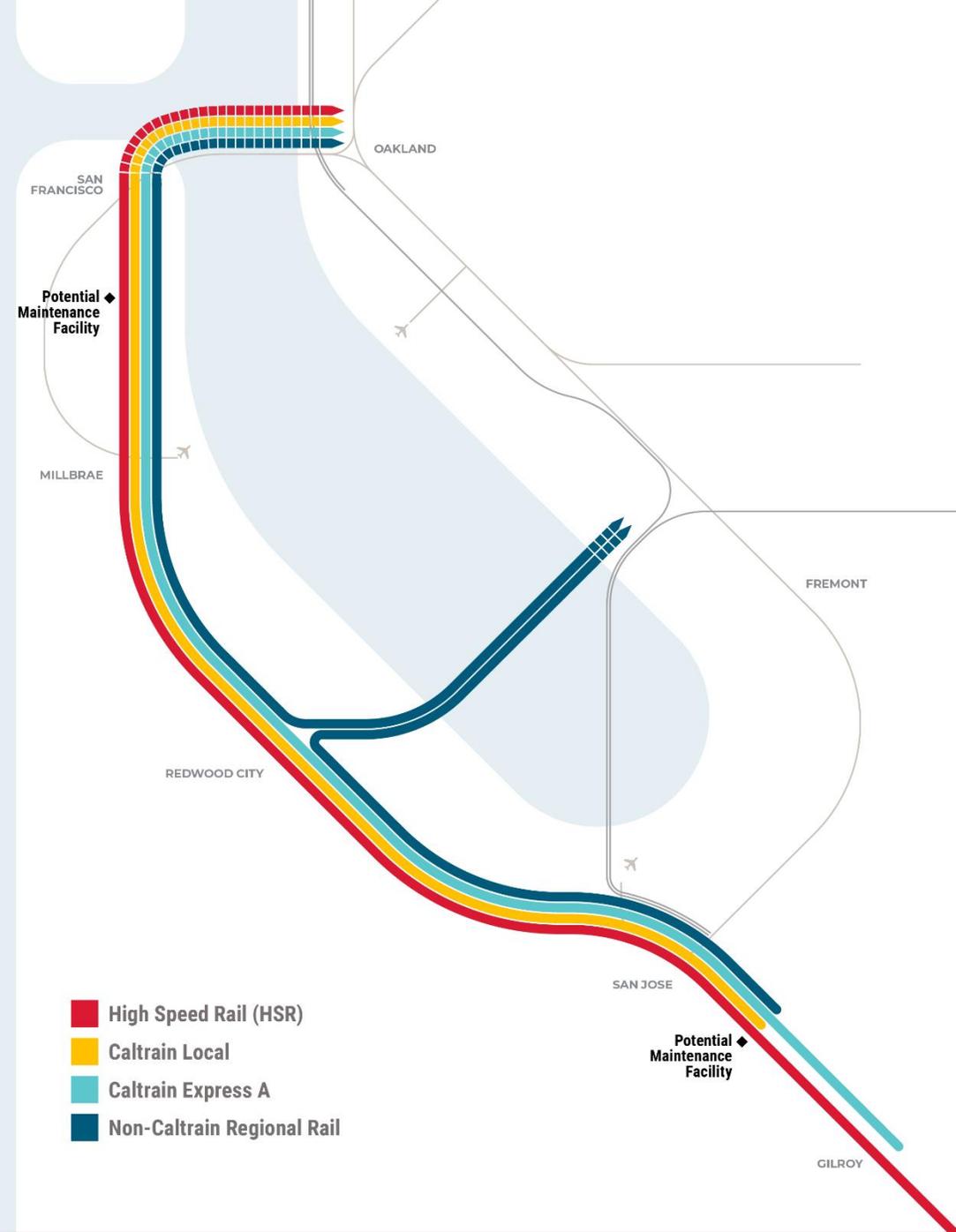
Options for a Regionalized Rail System

Second Transbay Tube Interlining



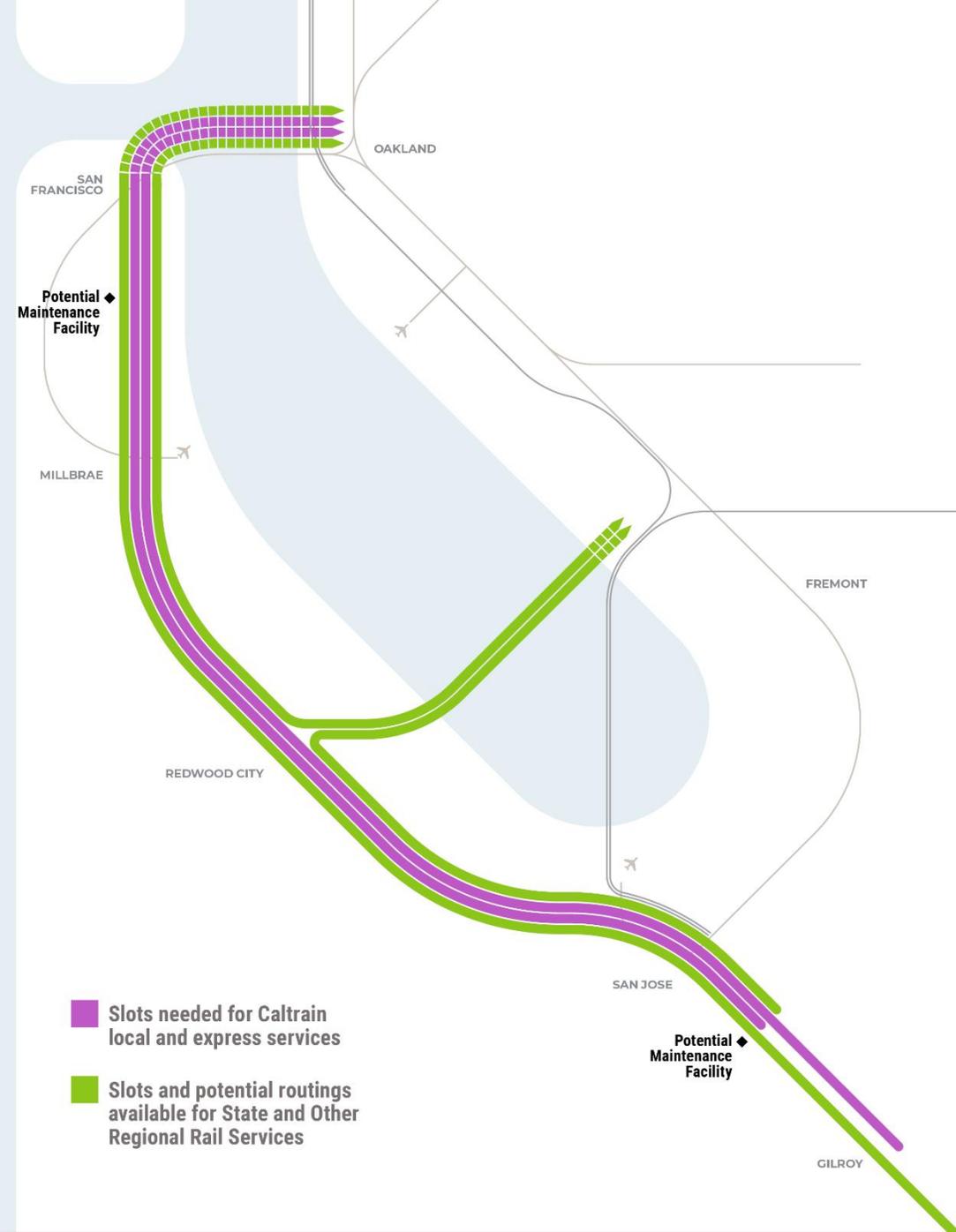
Options for a Regionalized Rail System

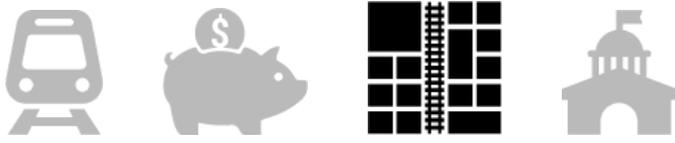
Dumbarton Bridge and Second Transbay Tube Interlining



Options for a Regionalized Rail System

Train Slot Allocation





Railroad-Community Interface Update

Why We Are Addressing the Railroad-Community Interface

As Caltrain plans for growth and transformation, careful and intentional management of the interface between the railroad and its surrounding communities is critical

Caltrain and the communities we serve are all part of a shared corridor. The railroad is a community asset

As the corridor grows and changes we have both the ability and responsibility to work together in a way that improves quality of life for both riders and residents



Key Themes

From Public, Stakeholder, and Community Interface Outreach



Service Frequency

Ensure service is increased along the corridor and at stations



Ridership and Growth Projections

Understand how much growth to expect and what the railroad can accommodate



Physical Infrastructure

Manage the balance between service increases and infrastructure impacts. Address at grade crossings



Station Area Planning

Consider land use and station access factors including TOD, first/last-mile connections, and transfers

Railroad Community Interface Meetings

Purpose

1. Update cities on work done to-date
2. Build awareness of the Business Plan schedule and the communication channels available to cities
3. Understand full breadth of the interface that affects communities
4. Collect input on growth scenarios

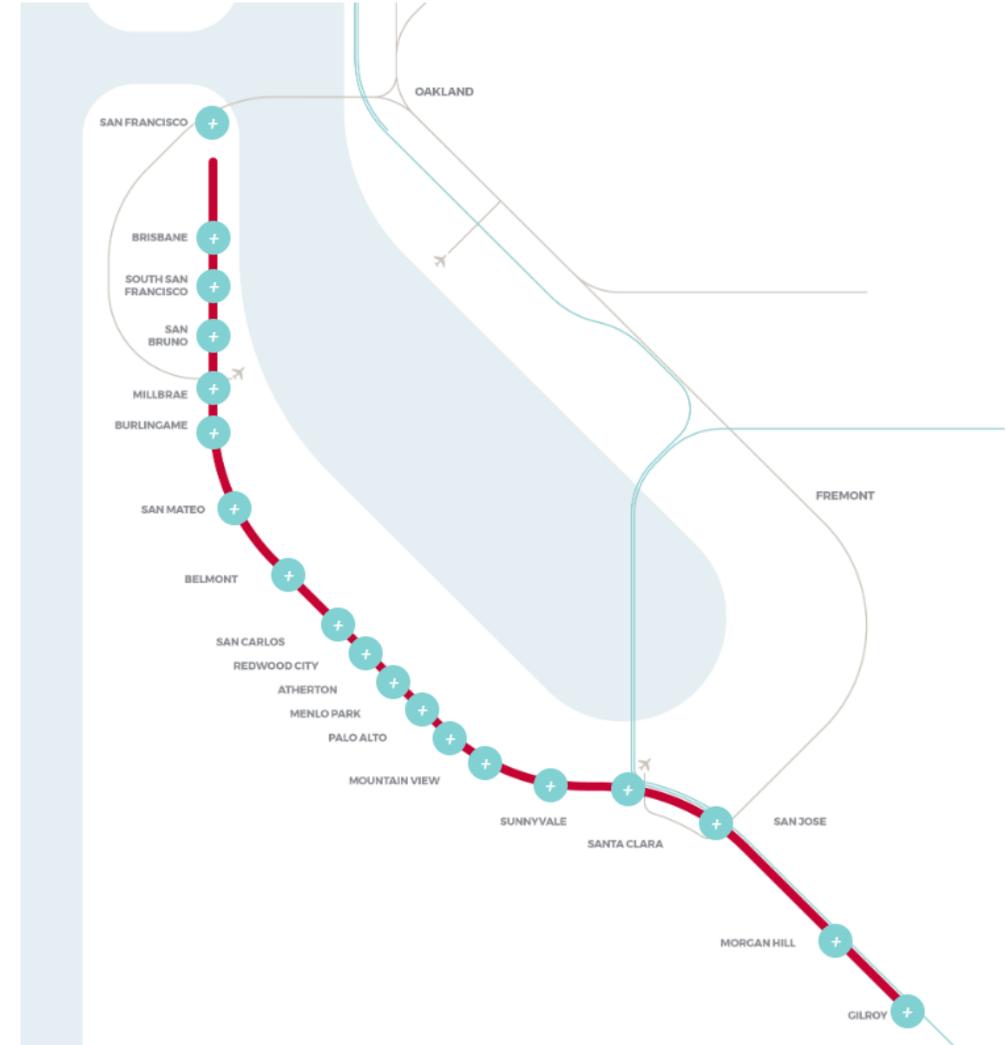
Attendees

City staff representing public works, planning, economic development, and city managers offices + City Council members + Caltrain Railroad Community Interface team

When

September - October 2018

March – April 2019



Work Products

Defining the Railroad Community Interface

The railroad-community interface is complex and manifests differently in different communities. It includes physical interfaces as well as activities and outcomes

During the Spring of 2019 the Business Plan team developed a set of “definitions” that describe the railroad-community interface. These definitions have been developed through interviews with City staff as well as interviews with Caltrain personnel

What is the Railroad-Community Interface?



Physical

- Railroad ROW
- Structures
- Facilities, track, fleet, systems, & equipment
- Stations
- Station access facilities
- Crossings



Activities

- Rail service
- Station access & personal travel
- Maintenance
- Construction
- Land use & development



Outcomes

- Railroad performance
- Mobility, access, and congestion
- Economic development
- Environment
- Safety

Work Products

Community Interface Case Studies

During the Spring of 2019 the Business Plan team also began development on a series of brief “community interface” case studies based on key themes we heard from our meetings with City staff

These case studies are intended to showcase examples of the many different railroads and corridors around the country and the world where railroad-community interface issues have been addressed

Case Study Focus Areas

Sub-Focus Areas

Crossings

- Improved at-grade crossings
- Coordinated grade separation programs
- Integrated grade separation design

Land Use & Development

- Traditional “parking lot” TOD
- Small-scale Station Activation
- Intensive Station Development

Station Access & Personal Travel

- Multi-Modal Stations
- Bicycle Access
- Schedule Coordination
- Public / Private Flexible Mobility

Noises & Nuisances

- Noise & Vibration Solutions
- Maintenance & Construction Mitigation
- Preventing Trespassing and Intrusions

Work Products

Definitions & Case Study Booklets

The team is working to create two, summary-level booklets that document the corridor-community interface and highlight the different community interface case-studies considered

- Two 30- 40-page booklets documenting 16 different “interfaces” and 35 different case studies and examples
- Written at a summary level for a general audience including local policymakers and interested members of the public
- Intended to be a resources that helps ground discussion and prompt further research and exchange of ideas
- Will be made available in Fall 2019



An at-grade crossing in Ontario, Canada



Grade Separations in Melbourne, Australia



Berlin Stadtbahn, Germany





Organizational Assessment Update

Why We Are Undertaking an Organizational Assessment

The Caltrain organization is preparing for significant change across multiple timescales. To be successful the organization must simultaneously:

- Serve its current customers and maintain existing service
- Complete the Peninsula Corridor Electrification Program and successfully launch a transformed, electrified rail service
- Plan for a future of continued expansion including integration with significant local, regional and state projects such as terminal projects, HSR and grade separations as well as significant increases to its own service and ridership levels



Areas of Focus

The Caltrain “Organization” is a broad topic that spans many different, overlapping levels and subjects

The work within the organizational assessment is comprehensive and broad, addressing multiple types and levels of organizational considerations

Work has been supported by Stanford University and led by Howard Permut, former President of Metro-North Railroad



Service Delivery

- The manner in which Caltrain operates and delivers its services
- Focus on train service delivery and contracting mechanism



Internal Organization

- The manner in which Caltrain organizes itself
- Focus on resources, functionality, and supporting / shared services



Governance

- The manner in which Caltrain is overseen by a governing body
- Focus on options for self- directed change, regional integration and certain parallel considerations

Key Questions

For each focus area (service delivery, organization and governance) various potential options have been identified and analyzed. Recommendations will be framed around the following three questions:

- Is this the right time to have this discussion?
What are the implications if no decisions are reached?
- Which of the options and alternatives identified should remain under active consideration? Which can be set aside?
- What additional work is needed to reach a decision as to a path forward and an implementation plan?

Work Products

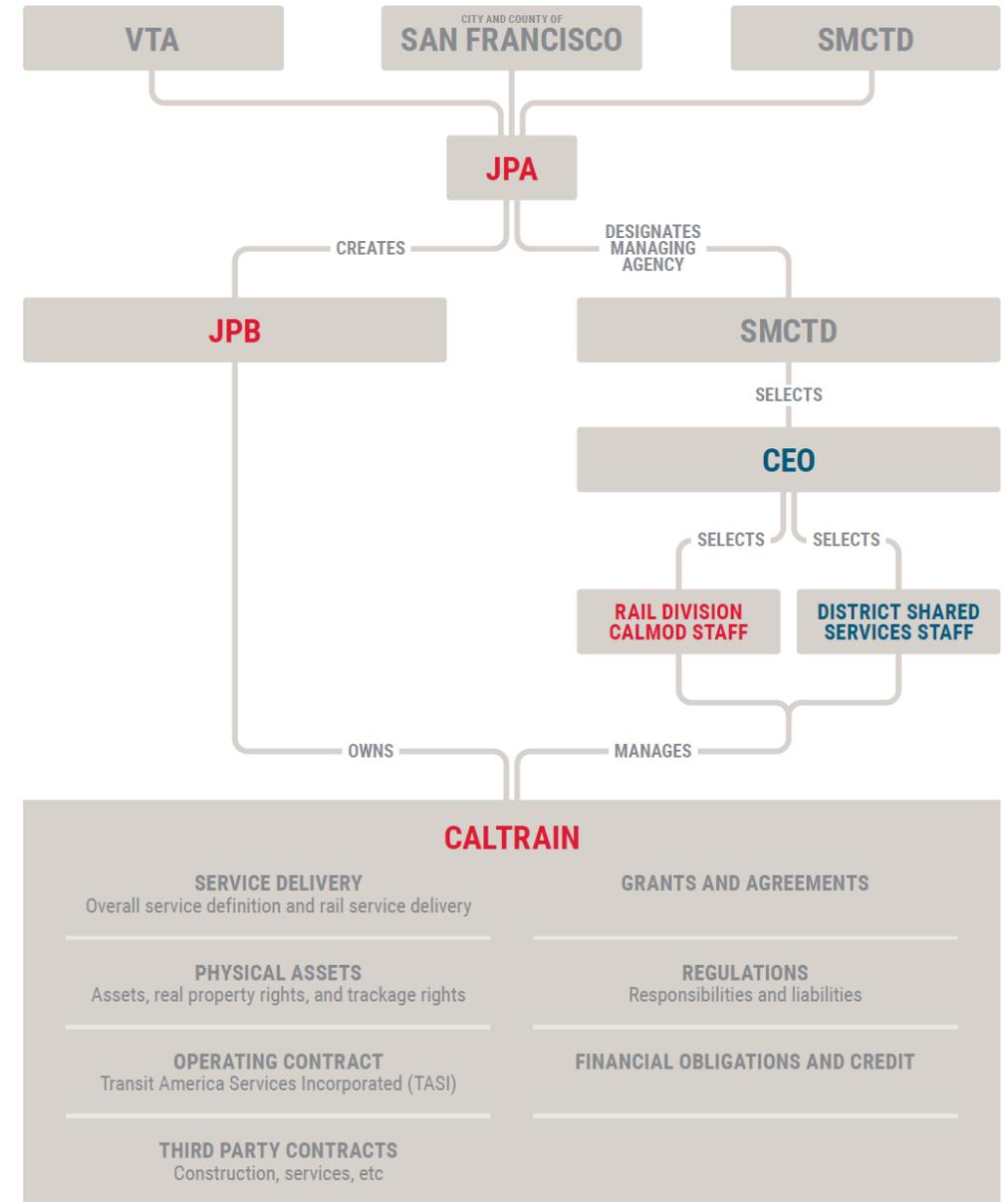
Data Gathering & Initial Assessment

Reviewed key agency documents and agreements and conducted in depth interviews with over 50 people including Board Members, Caltrain staff, partner agency staff and external experts and stakeholders

Defining & Mapping Railroad Functions

Defined and described standard outputs and functions of passenger railroads

Mapped these functions to the Caltrain Organization, documenting how the railroad is organized and how various functions are fulfilled today



Work Products

Comparison to Other Systems

Worked with Professor Michael Bennon and the Stanford Global Projects Center to conduct peer research on US railroads as well as select analysis of railroads around the world

Focus areas included varied by railroad and included alternative service delivery models, governance structure and organization of shared services

US Railroads Reviewed

- Capitol Corridor (CCJPA)
- Southern California Regional Rail Authority (Metrolink)
- San Joaquin Regional Rail Commission (ACE)
- Sonoma-Marín Area Rail Transit (SMART)
- Massachusetts Bay Transportation Authority (MBTA)
- Southeastern Pennsylvania Transportation Authority (SEPTA)

International Railroads Reviewed

- Bern-Lötschberg-Simplon (BLS) Railway (Switzerland)
- Kintetsu Rail Company (Japan)
- Chiltern Railroad (UK)

Work Products

Organizational & Governance Analysis

Analyzed key issues and choices related to service delivery, internal organization and governance

Developed a detailed set of options and alternatives for the Board and member agencies to consider

Recommendations and next steps under Development

A full, detailed report will be provided in late July. Howard Permut will provide an in depth presentation of his work as part of the August Workshop



Governance Options Analyzed and Discussed

Self-Directed Options

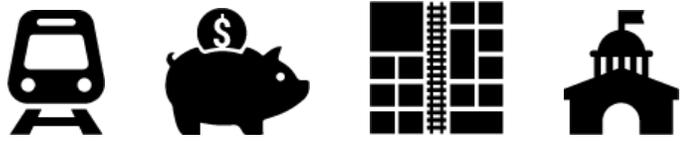
- a) Retention of status-quo
- b) Retention of JPA with modifications to management structure
- c) Retention of JPA reorganized as rail authority
- d) Retention of JPA reorganized as rail authority with shared services
- e) Creation of Special District to govern Caltrain

Non-Self-Directed Options (Regional Options)

- f) Enhanced regional coordination
- g) Regionalization of key functions
- h) Regional “umbrella” authority with subsidiary railroads
- i) Consolidated regional rail authority

Parallel, Governance-Related Considerations

- Mega Project Delivery (including analysis of construction authorities and grade separation districts)
- Service expansion / integration with other rail operators
- Role of the private sector and market forces



Outreach Update and August Board Workshop

Outreach Activities to Date

July 2018 – June 2019 Timeline

	2018						2019					
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Local Policy Maker Group	●	●	●		●	●		●	●	●		●
City/County Staff Coordinating Group	●	●	●		●	●		●	●	●		●
Project Partner Committee	●	●	●	●	●	●	●	●	●	●	●	●
Railroad-Community Interface Meetings			●	●	●				●	●		
Stakeholder Advisory Group				●			●				●	
Partner General Manager				●			●				●	
Website & Survey Launch (over 1,000 survey responses)					●							
Community Meetings (SPUR, Friends of Caltrain, Reddit TownHall, Station Outreach, YouTube Live)					●		●	●	●		●	●
Sister Agency Presentations (SFCTA, SF Capital Planning, TJPA, SamTrans, SMCTA, CCAG, VTA, MTC, Diridon Station JPAB)					●	●	●	●	●	●	●	●

Individual Jurisdiction Outreach

	Atherton	Belmont	Brisbane	Burlingame	Gilroy	Menlo Park	Millbrae	Morgan Hill	Mountain View	Palo Alto	Redwood City	San Bruno	San Carlos	San Francisco	San Jose	San Mateo	Santa Clara	South San Francisco	Sunnyvale
Round 1: Fall 2018 Railroad-Community Interface Meeting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Round 2: Spring 2019 Railroad-Community Interface Meeting	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
City Council Meeting Completed or Scheduled		✓		✓			✓		✓	✓	✓			✓*		✓			

*SFCTA



Outreach Activities to Date

July 2018 – June 2019 by the Numbers

Stakeholders Engaged

21

Jurisdictions

26

Public Agencies

142

Stakeholder Meetings

93

Organizations in Stakeholder Advisory Group

Public Outreach

45

Public Meetings and Presentations

1,000+

Survey Responses

300+

Video Presentation Views

260,000+

Social Media Impressions

Timeline



What to Expect in August

The primary purpose of the Board Workshop in August will be to present a draft, staff Recommendation for the 2040 Service Vision

The recommended Service Vision will be based on the analysis conducted to date and will be expressed as a high-level policy statement describing the type and quantity of service envisioned for the corridor

The August workshop is **informational only**. Based on comments received staff will return to the Board at a subsequent meeting with a final vision for adoption

The Service Vision will guide staff's completion of the Business Plan and will provide critical guidance to a number of long term planning efforts

Summary of Work Completed

- Summary of analysis completed over last year
- Focus on comparison between different growth scenarios

Full Business Case Analysis

- Comprehensive financial outputs for each service scenario
- Economic and cost/benefit analysis for each scenario

Organizational Assessment

- Detailed documentation of organizational assessment
- Presentation by Howard Permut
- Recommendations and next steps

Recommend Service Vision

- Presentation of draft recommended service vision
- Discussion of key steps to complete the Business Plan

Planned Outreach

The Caltrain Business Plan team will expand outreach activities during the months of July, August and September as the Board considers a draft recommendation for a long range service vision.

The Board will receive a summary of outreach undertaken and feedback received prior to any request to take action on the long range service vision.

Outreach dates and locations can be viewed here: www.caltrain2040.org/get-involved/

Prior to August 1 Workshop

- July 22 – Online Public Meeting
- July 24- Inaugural Caltrain Planning Subcommittee Meeting
- Launch of “Online Open House”
- Briefings with partner agency General Managers / Executives

August and September (Prior to request for Board Action)

- 3 Dedicated Public Meetings
- Rider outreach
- Caltrain Citizen Advisory Committee and Bicycle Advisory Committee
- SB 797 Agency Group
- Sister Agency Boards (SFCTA, SamTrans, SMCTA, VTA and others)
- Boards of Supervisors
- Local Policy Maker Group and City/County Staff Group
- City Councils, as requested
- Stakeholder Advisory Group
- Federal and State delegation briefings
- Business Group briefings



FOR MORE INFORMATION

WWW.CALTRAIN2040.ORG

BUSINESSPLAN@CALTRAIN.COM

650-508-6499

