

Caltrain Business Plan

PROJECT UPDATE – SPRING 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?



Electrification is the Foundation for Growth with Plans for More

Website: www.calmod.org



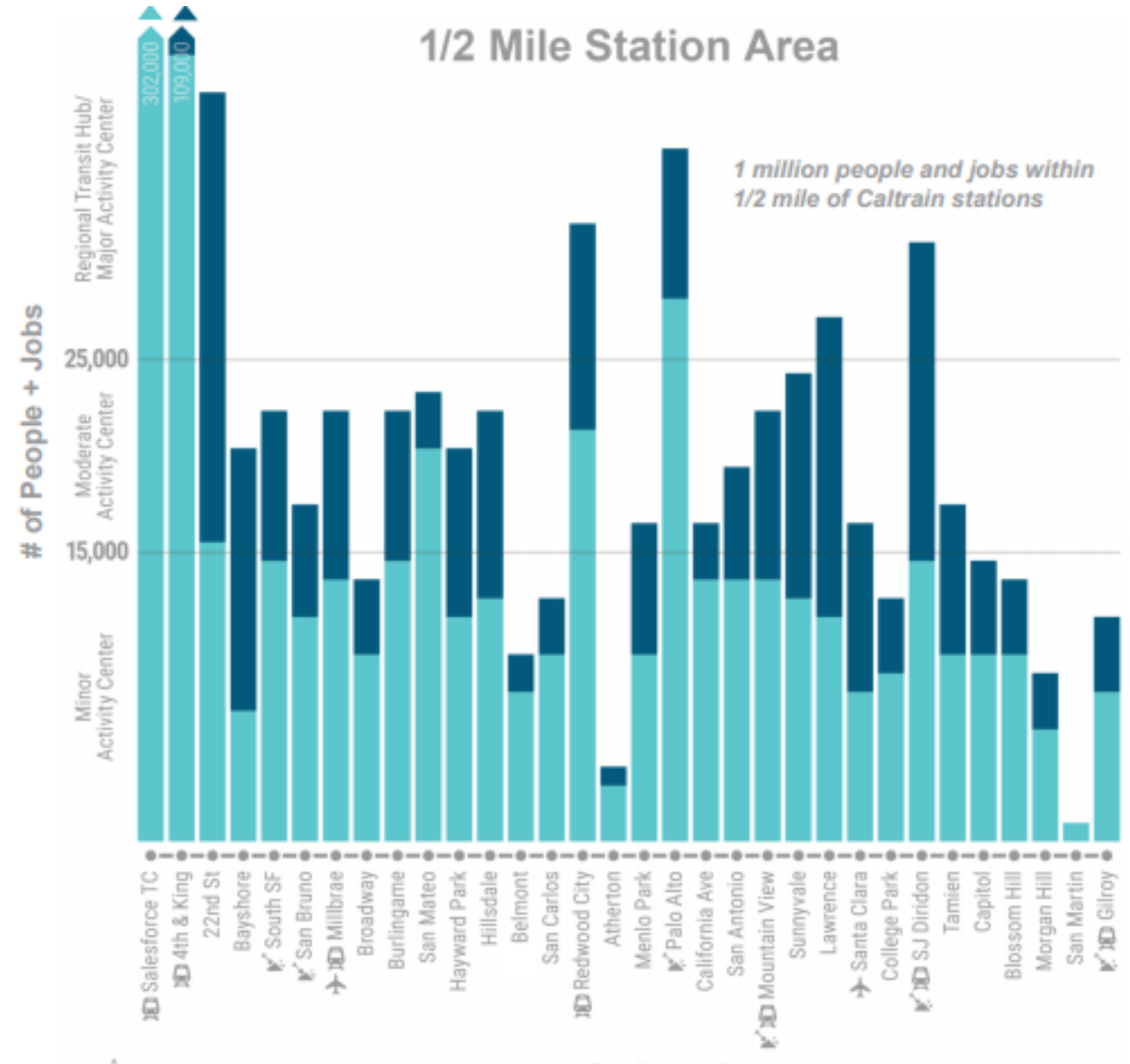
2040 Demand

The Caltrain corridor is growing

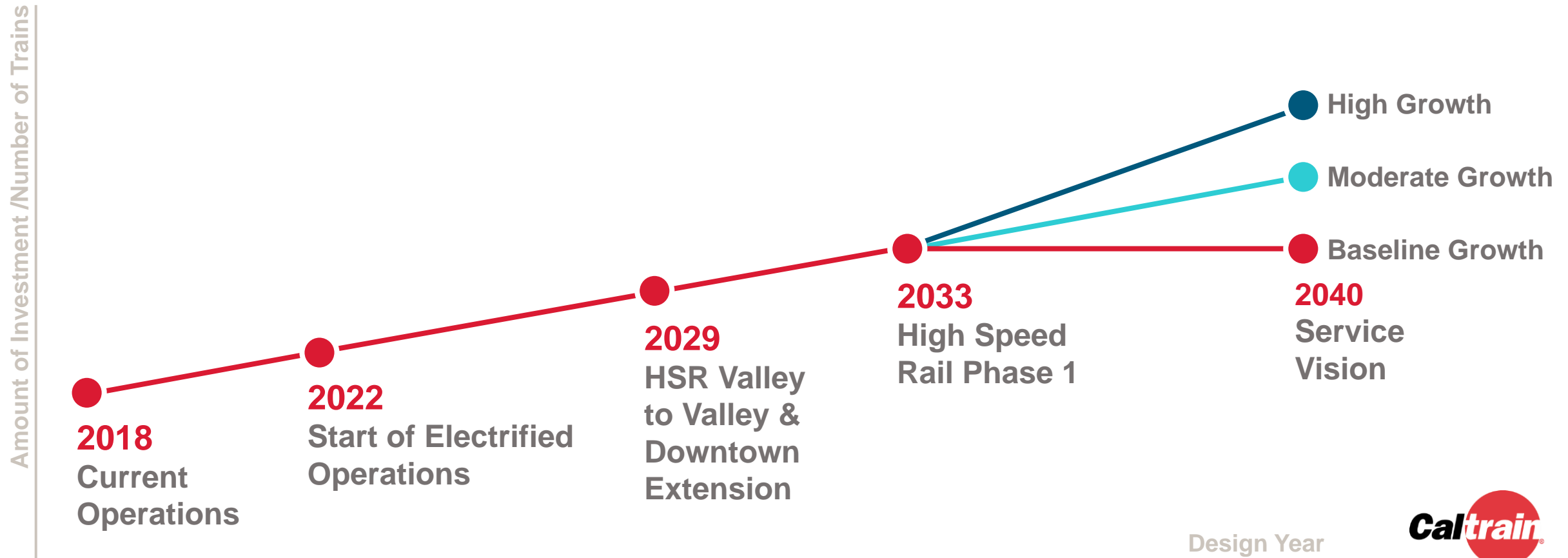
- By 2040 the corridor expected to add 1.2 million people and jobs within 2 miles of Caltrain (+40%)¹
- 80% growth expected in San Francisco and Santa Clara Counties

Major transit investments are opening new travel markets to Caltrain

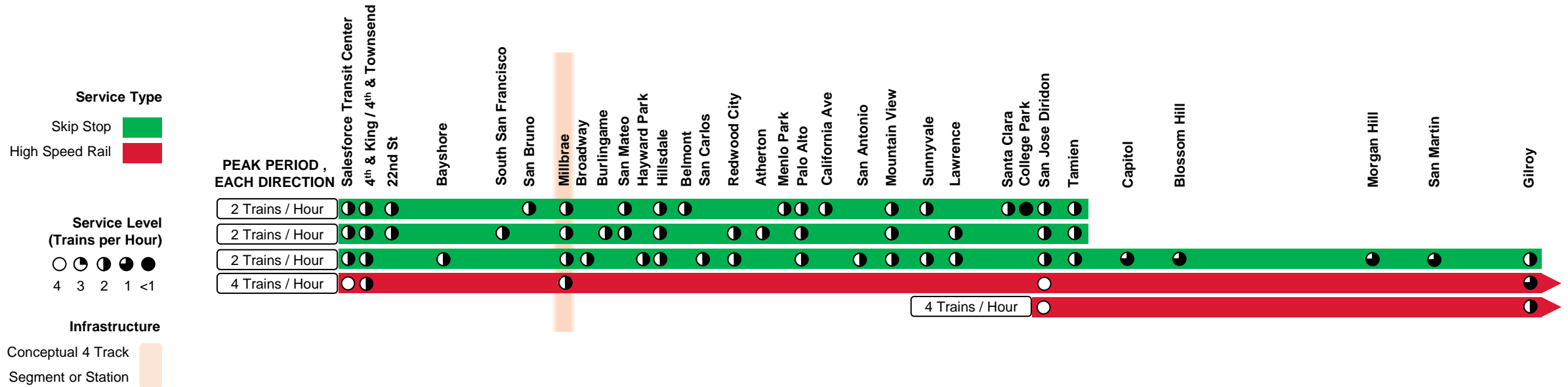
- Downtown Extension and Central Subway
- Dumbarton Rail, BART to San Jose, and improvements to Capitol Corridor and ACE
- HSR and Salinas rail



2040 Service Scenarios: Different Ways to Grow



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

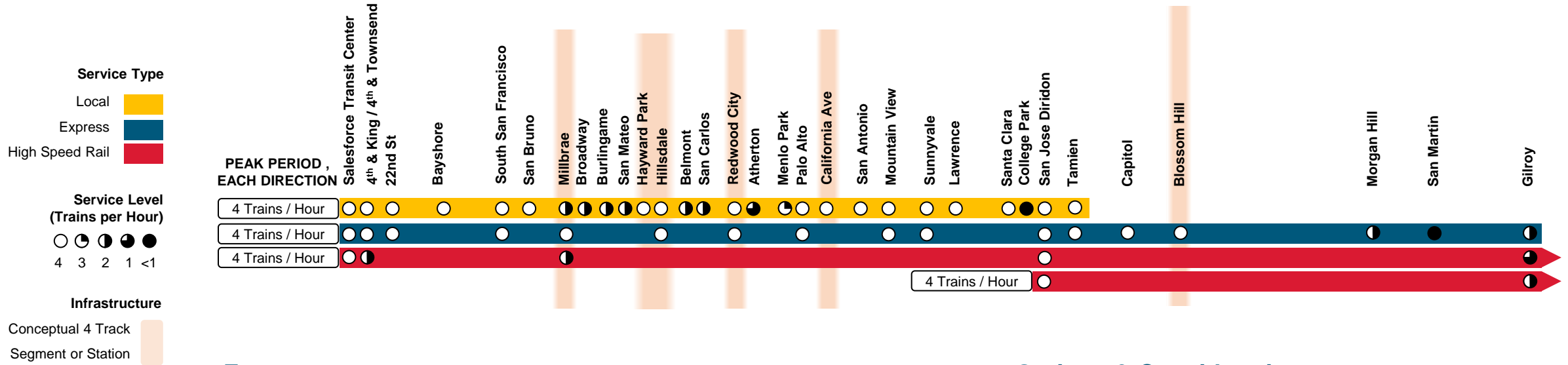
Passing Track Needs

- 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

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

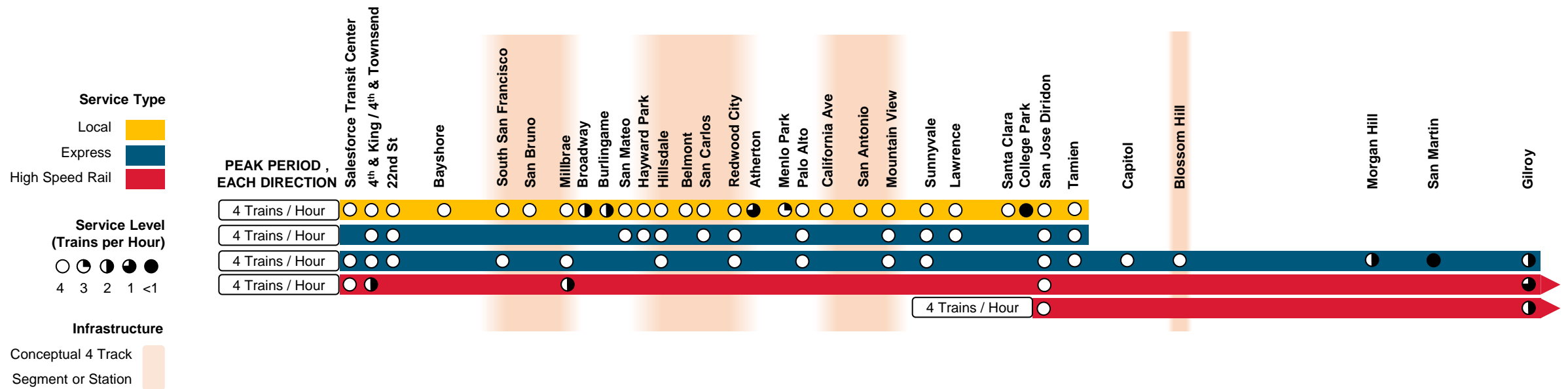
Passing Track Needs

- 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 - in particular, San Mateo is underserved and lacks direct connection to Millbrae
- 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

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

Explorations and Integration

Examples;

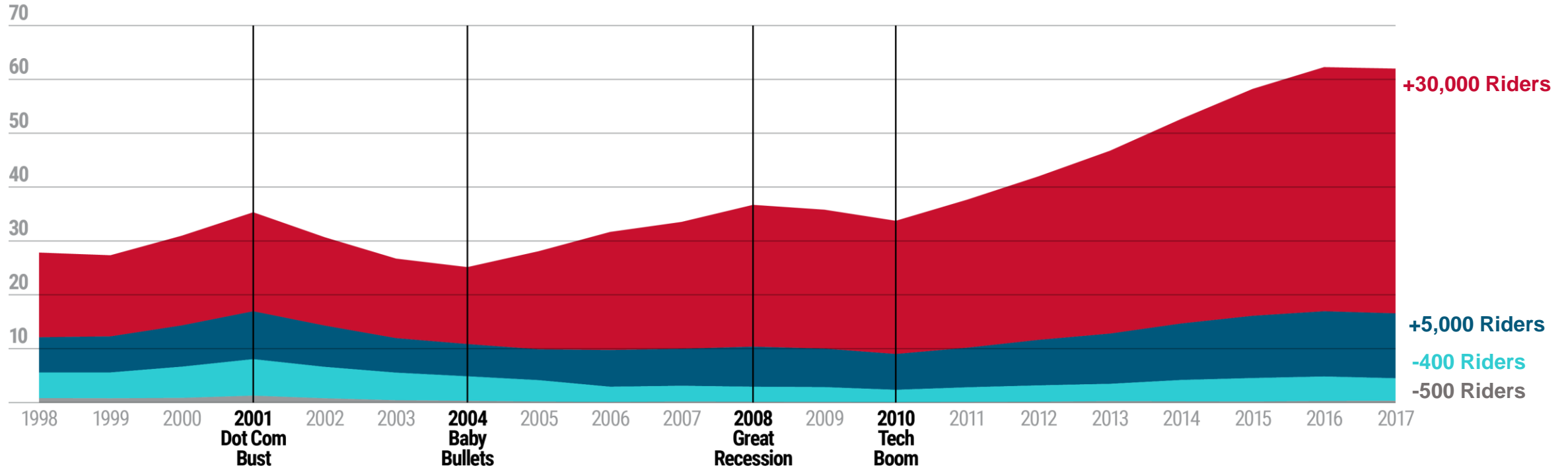
- Stopping pattern options and tradeoffs
- ACE and Capitol Corridor connections
- Monterey County connections
- Dumbarton service connection in Redwood City
- East Bay run-through service via second Transbay Tube



Ridership Growth Over Time

Change in Ridership (Thousands)

1998 – 2017



Top 8 Stations

4th & King, Millbrae, Hillsdale, Redwood City, Palo Alto, Mountain View, Sunnyvale, San Jose Diridon

Middle 8 Stations

22nd Street, Burlingame, San Mateo, San Carlos, Menlo Park, California Ave, Santa Clara, Tamien

Bottom 8 Stations

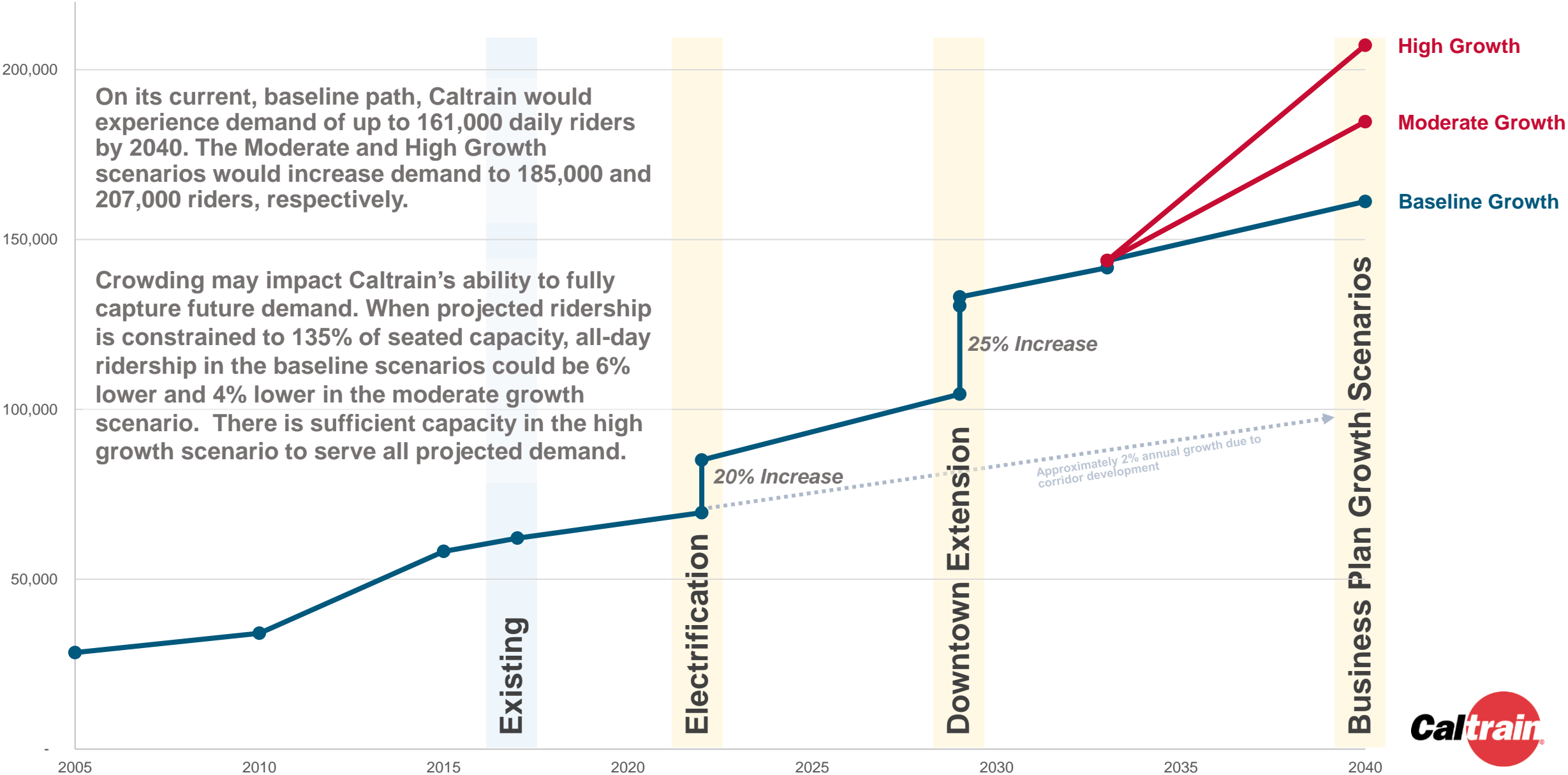
Bayshore, South San Francisco, San Bruno, Hayward Park, Belmont, San Antonio, Lawrence, College Park

Gilroy Service

Capitol, Blossom Hill, Morgan Hill, San Martin, Gilroy

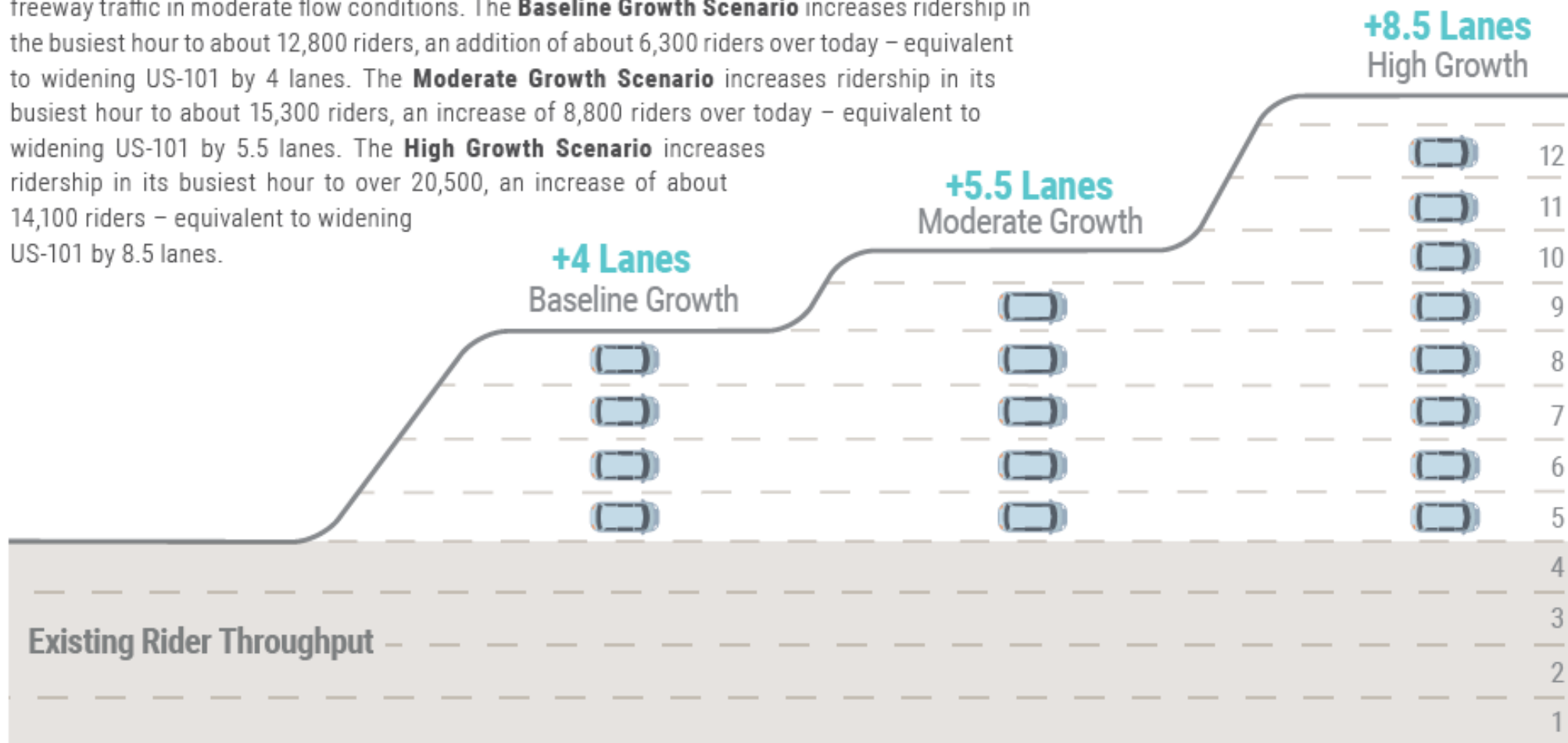


Ridership Projections



Trains vs. Lanes

Today, Caltrain serves about 6,500 riders during its busiest hour, which is equivalent to 4 lanes of freeway traffic in moderate flow conditions. The **Baseline Growth Scenario** increases ridership in the busiest hour to about 12,800 riders, an addition of about 6,300 riders over today – equivalent to widening US-101 by 4 lanes. The **Moderate Growth Scenario** increases ridership in its busiest hour to about 15,300 riders, an increase of 8,800 riders over today – equivalent to widening US-101 by 5.5 lanes. The **High Growth Scenario** increases ridership in its busiest hour to over 20,500, an increase of about 14,100 riders – equivalent to widening US-101 by 8.5 lanes.



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

The Interface Between the Railroad and its Surrounding Communities Creates both Opportunities and Challenges

Local/Regional Mobility



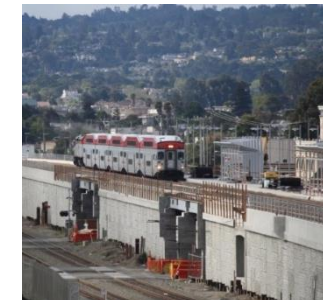
Place-Making



Noise/Vibration



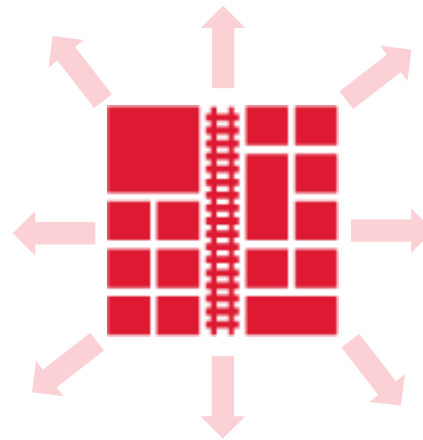
Physical Structures



Land Use Opportunities



Economic Development



Visual Impact



Traffic/Safety



Grade Separations are a Critical Investment

- 42 at-grade crossings on the corridor Caltrain owns between San Francisco and San Jose
- 28 additional at-grade crossings on the UP-owned corridor south of Tamien

At-Grade Crossing by County in Caltrain Territory

- San Francisco: 2 at-grade crossings
- San Mateo: 30 at-grade crossings
- Santa Clara: 10 at grade crossings (with 28 additional crossings on the UP-owned corridor)

Today, during a typical weekday, Caltrain's at-grade crossings are traversed by approximately 400,000 cars. This is equivalent to the combined traffic volumes on the Bay Bridge and San Mateo Bridge



Grade Separations are a Critical Investment

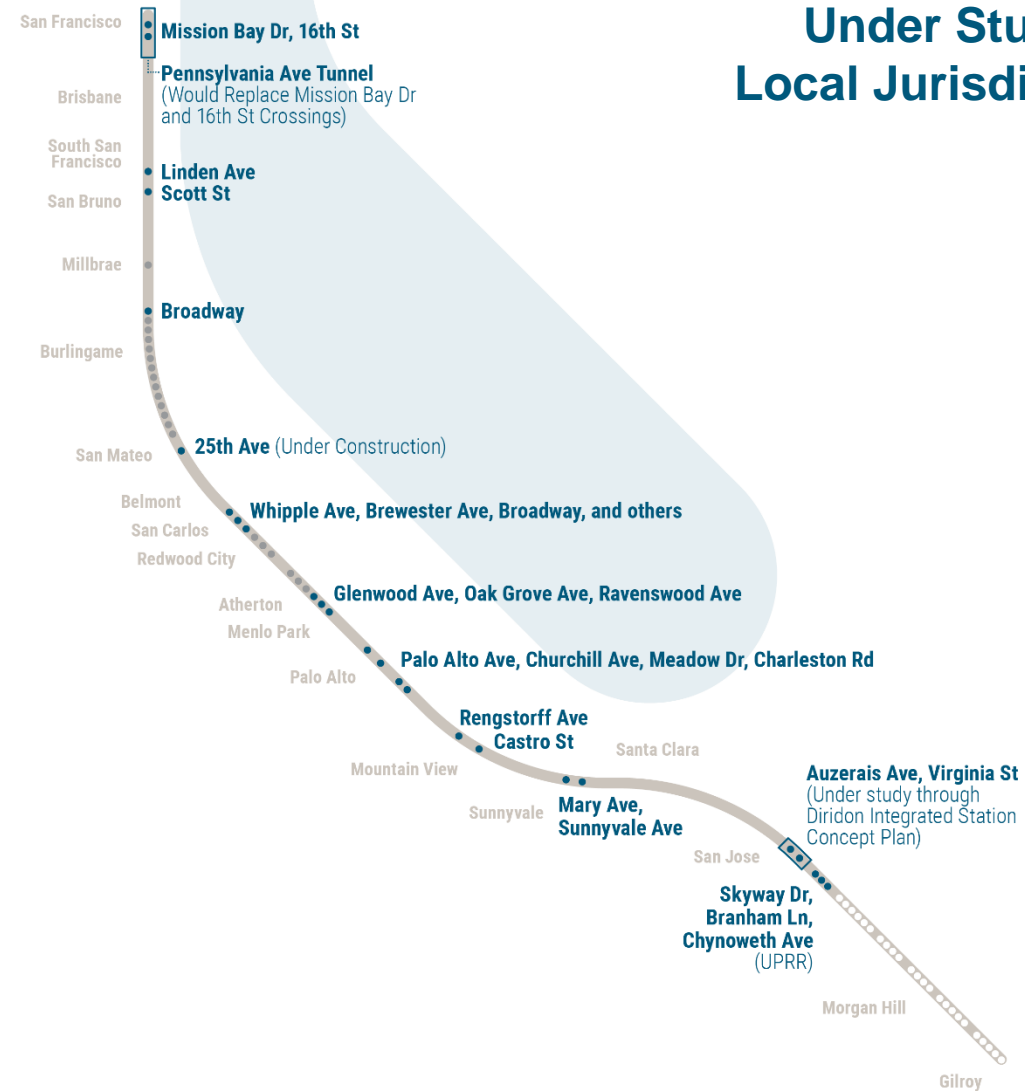
Calculating the Need

- Across the corridor, cities are undertaking studies and projects to look at grade separation
- Caltrain has accounted for all of these projects in our analysis of the potential need for grade separation in the corridor as well as additional investments
- In total, the Business Plan team estimates that the total need for investment in grade separations could be between \$8.5 and \$11 Billion dollars

Taking the Next Step

- Incorporate grade separation investments into Business Plan financial and funding analysis
- Develop corridor wide grade separation strategy addressing topics like;
 - Risk assessment and prioritization factors
 - Construction standards and methods
 - Project coordination and sequencing
 - Community resourcing and organizing
 - Funding analysis and strategy

Crossings With Grade Separations or Closures Planned or Under Study by Local Jurisdictions



How do we Choose a Service Vision?

Choosing a long range “Service Vision” is not just about picking which service pattern looks the best- it requires evaluating which package of service and investments will deliver the best value to the corridor and the region

Service



This update describes different **illustrative** 2040 service concepts that underlie each Growth Scenario. The different concepts shown are not proposals or recommendations. They represent an indicative **range of options** for how Caltrain service could grow given different levels of investment in the corridor

Business Case



During the spring of 2019 the Business Plan team will develop a detailed “Business Case” analysis for each of the different growth scenarios. The Business Case will quantify the financial implications and wider costs and benefits of each growth scenario



Next Steps & Outreach

Next Steps

Over the next two months the Business Plan team is working to complete a full set of draft materials to support Board consideration and adoption of a 2040 Service Vision

Ongoing Analysis

- Service simulation and integration analysis
- Capital costing and Operations and Maintenance Analysis
- Economic analysis and benefits calculations
- Organizational assessment
- Community Interface documentation and peer case studies

Upcoming Milestones

- Major Board Workshop targeted for **August 1** to review expanded set of materials and discuss recommended “Service Vision”
- Subsequent adoption of Service Vision in August timeframe pending Board discussion and stakeholder feedback

Next Steps Continued

Following Board designation of a long range “Service Vision” staff will work to complete a full Business Plan document by the end of 2019

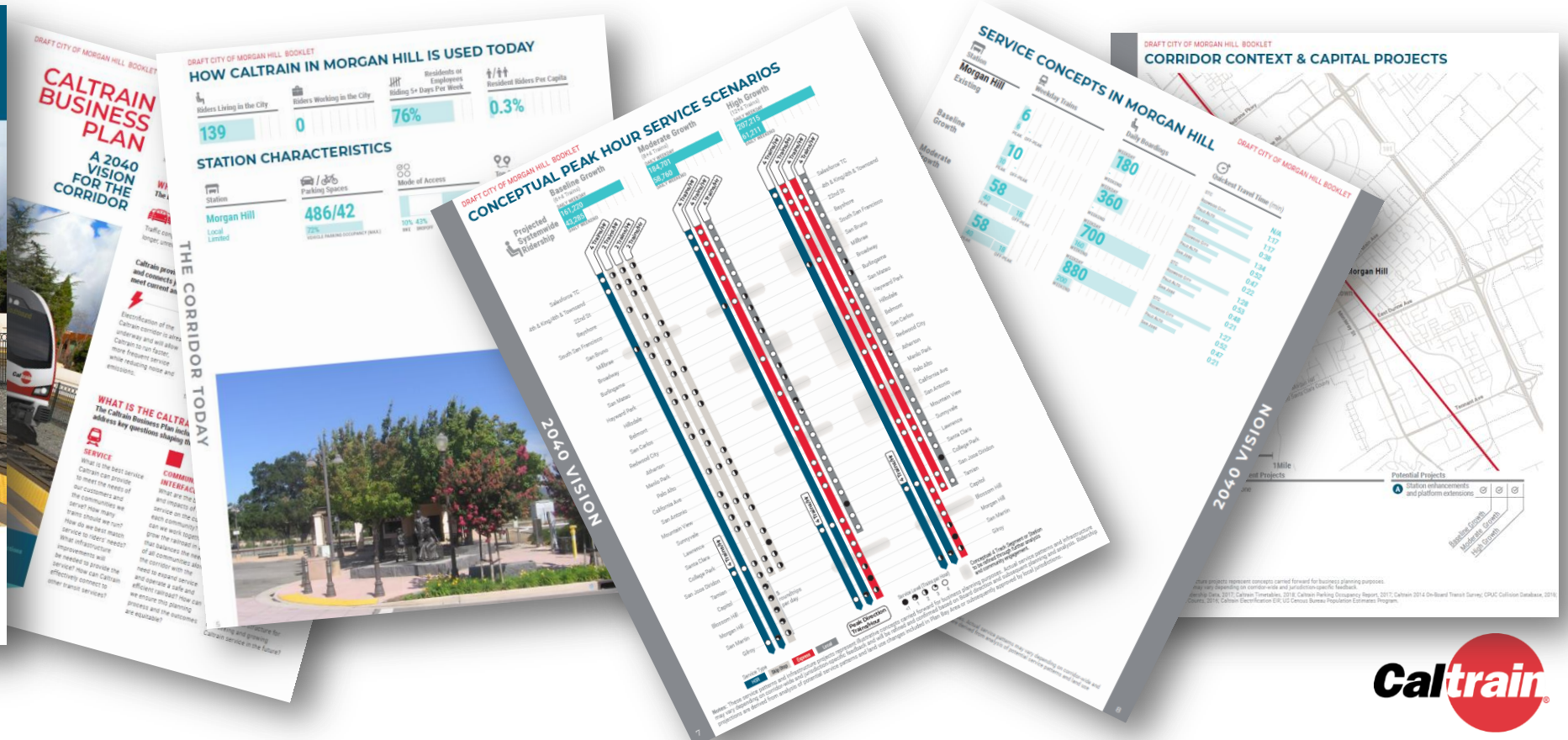
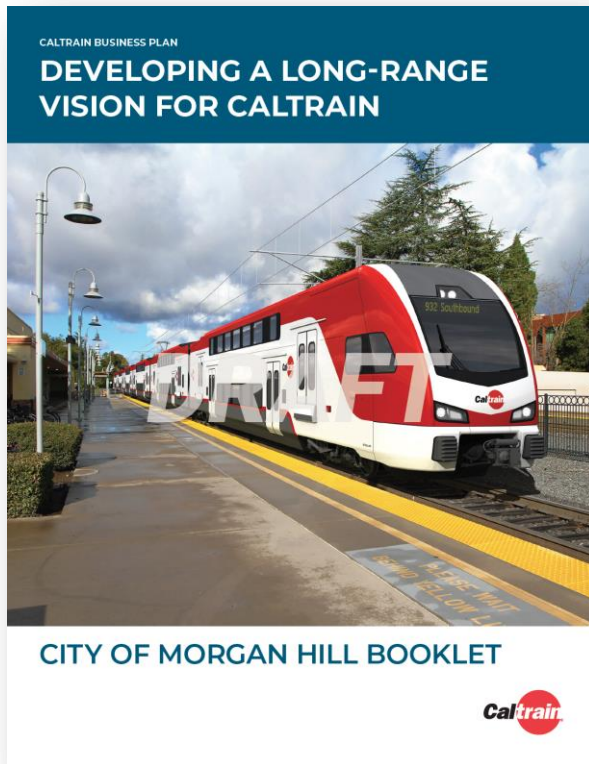
Work to be Undertaken following Board Adoption of a “Service Vision”

- Near- and mid-term service planning
- First- and last mile analysis
- Additional organizational analysis
- Funding analysis including;
 - Commercial revenue strategies
 - Potential new sources of funding

Engagement with Local Jurisdictions

Monthly Updates, Individual Meetings and Individualized Materials for 21 Local Jurisdictions

Website: www.caltrain2040.org



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	●	●	●	●	●	●	●	●	●	●	●	●
Jurisdiction Specific Meetings (Meetings w/ every jurisdiction; City Council meetings)			●	●	●				●	●	●	●
Stakeholder Advisory Group				●			●				●	
Partner General Manager				●			●				●	
Website & Survey Launch					●							
Community Meetings (SPUR, Friends of Caltrain, Reddit, Station Outreach, Youtube live)	●						●	●	●		●	●
Sister Agency Presentations (SFCTA, SF Capital Planning, TJPA, SamTrans, SMCTA, CCAG, VTA, MTC)					●	●	●	●	●	●	●	●

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

13,000+

Website Views

27,000

Social Media Engagements

FOR MORE INFORMATION
www.caltrain2040.org

