Network Integration

Caltrain
Service
Flexibility

Simulation

Network Integration

Caltrain

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.

2018 California State Rail Plan

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)
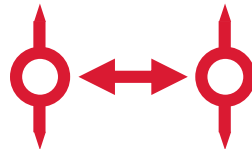
Transfer Volumes
- Amount of people making connections

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

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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

Potential Transbay Crossing

Potential Dumbarton Corridor Crossing

CP Coast

Gilroy
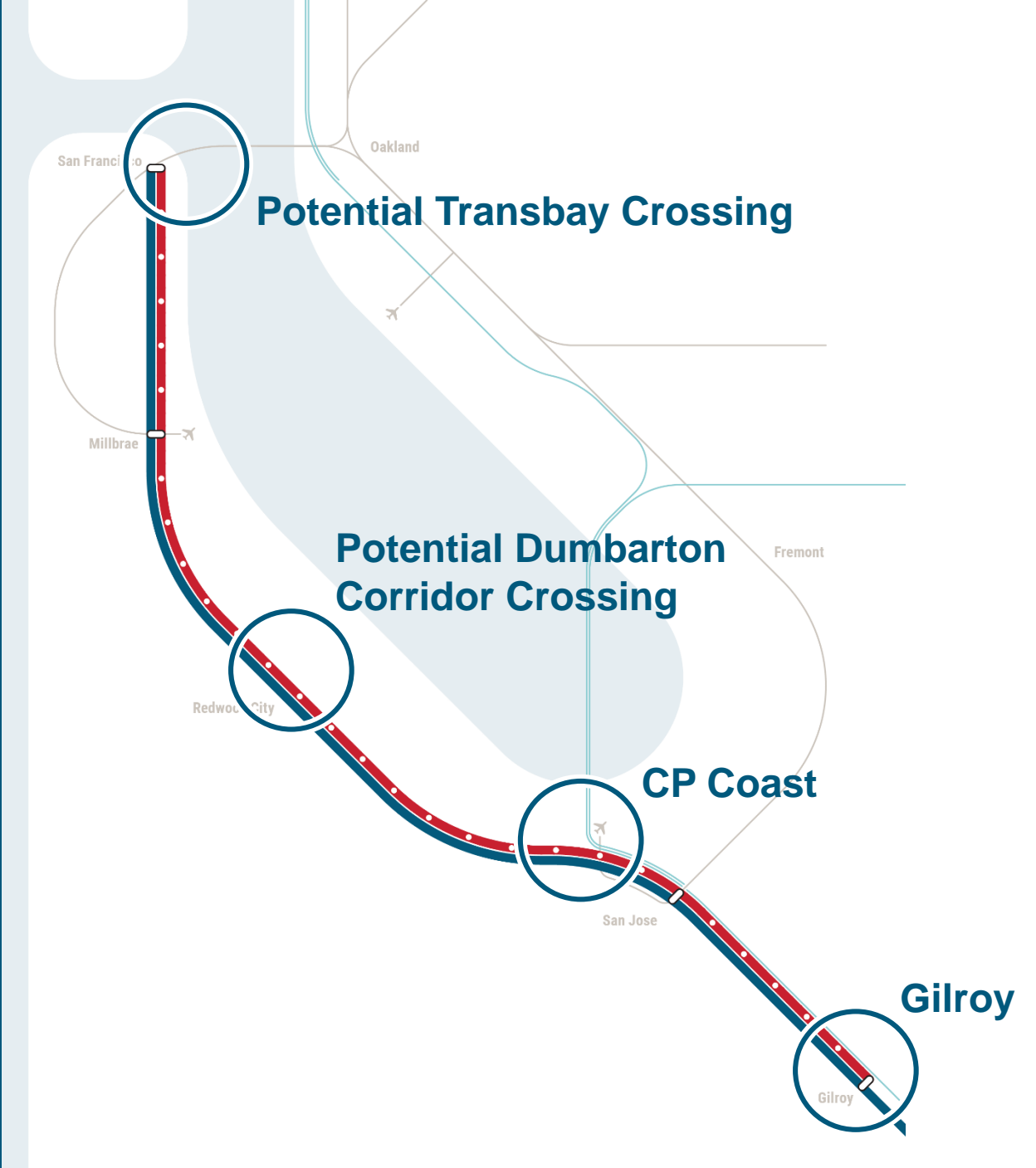
Interlining: Caltrain Considerations
Balancing Limited Capacity Across Corridor and Regional Markets

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**

**Caltrain**

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
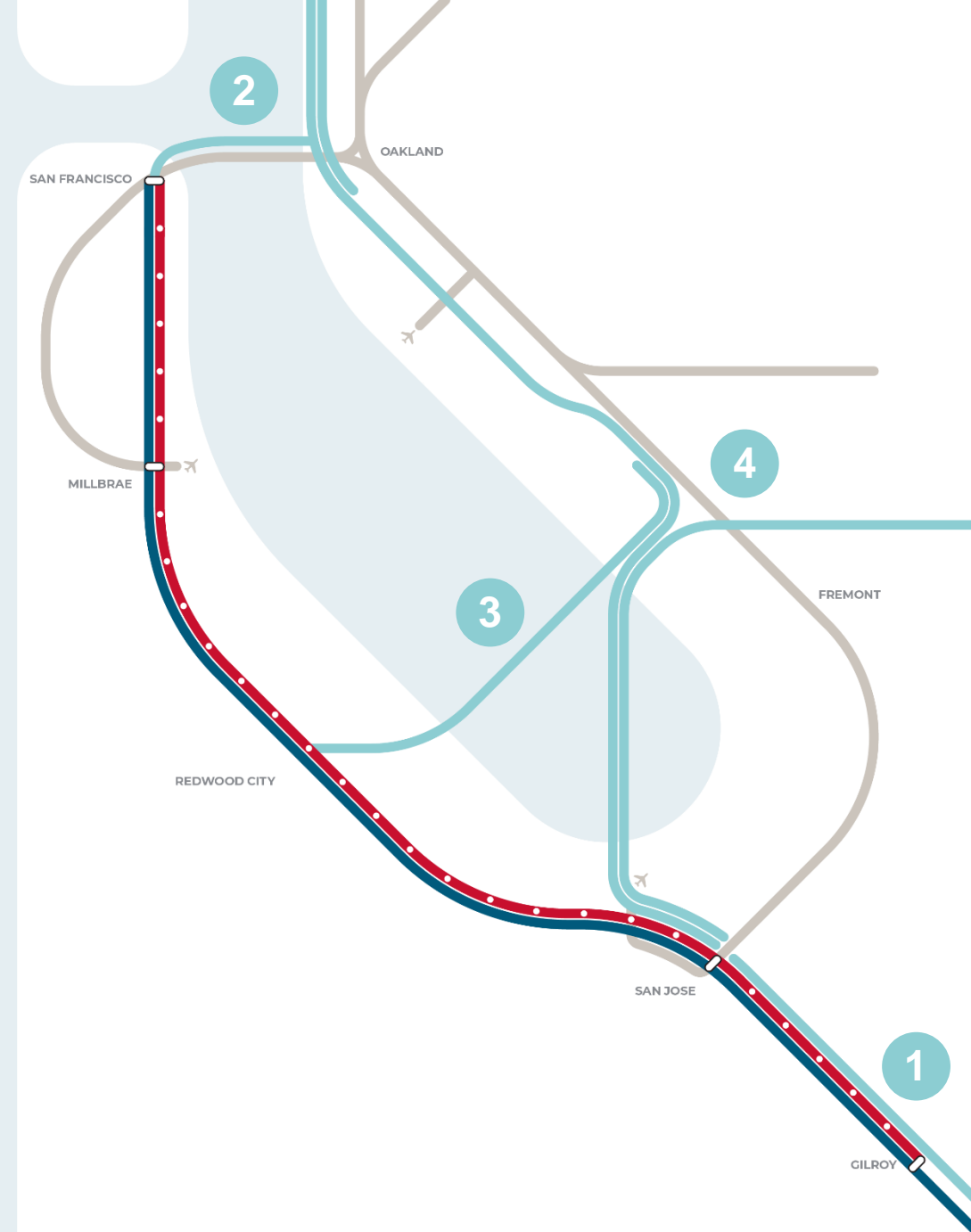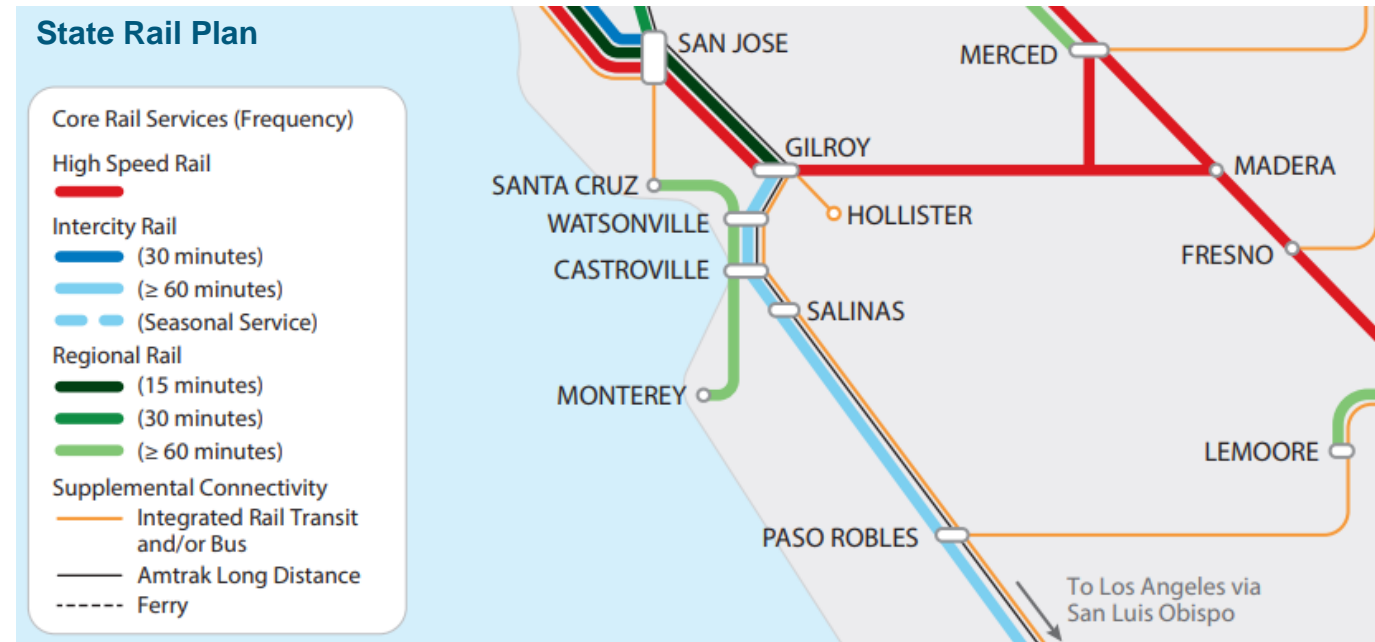
Rail Service to Central Coast / Monterey County

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

State Rail Plan

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

State Rail Plan

Core Rail Services (Frequency)

High Speed Rail

Intercity Rail
- (30 minutes)
- (≥ 60 minutes)
- (Seasonal Service)

Regional Rail
- (15 minutes)
- (30 minutes)
- (≥ 60 minutes)

Supplemental Connectivity
- Integrated Rail Transit and/or Bus
- Amtrak Long Distance
- Ferry

To Los Angeles via San Luis Obispo