

### Caltrain

Advocacy and Major Projects Committee

February 22, 2023







# Northern California's Megaregion Today

#### Economy, Jobs & Housing:

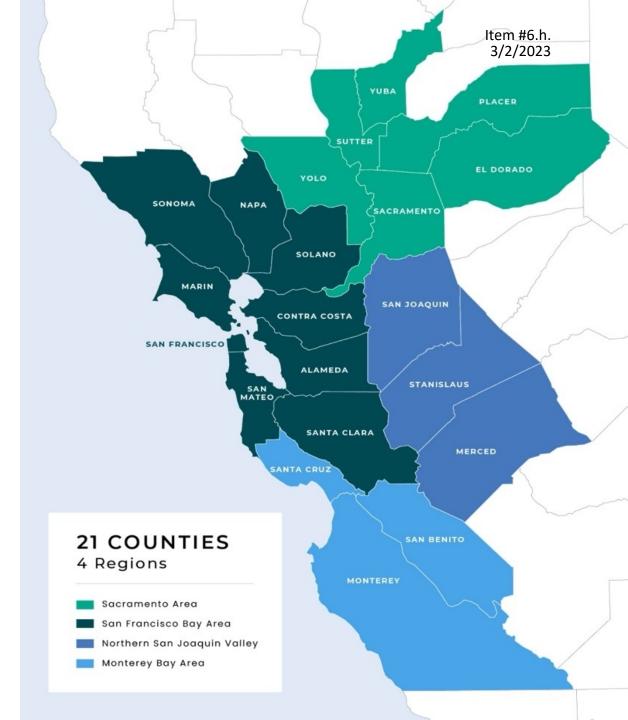
- Fifth largest megaregional economy in country
- Jobs and affordable housing imbalance

### Roadway Congestion & Climate Risks:

- Persistent traffic
- Climate and health-damaging air pollution

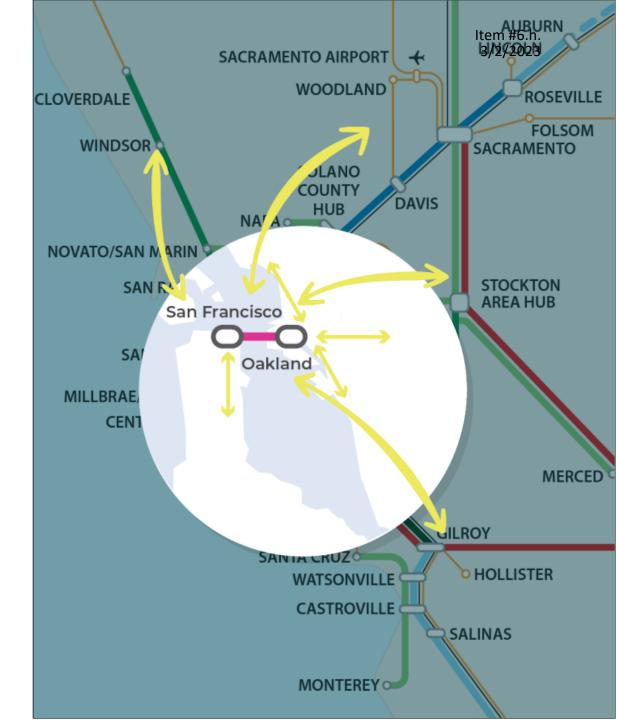
### Passenger Rail Service & Infrastructure:

- Inconvenient, disconnected train network with limited routes and service
- One rail crossing of Bay (BART Transbay Tube)



# Link21: A Program of Projects

- A new transbay passenger rail crossing between Oakland and San Francisco (BART, regional rail or both)
- Synergies between rail projects throughout the Megaregion to reduce the perceived distance between destinations
- Network improvements for both regional rail and BART: better travel time, frequency, hours of service, new markets



# Link21 Unlocks Travel Potential

### Markets

Better Megaregional connectivity

### Service

- Improved travel, frequency with some one-seat rides, and faster transfer opportunities
- More capacity, service redundancy and reliability, between BART and Regional Rail

### Technology

Greener, lighter, and faster trains

### Infrastructure

Enhanced tracks, signaling, structures, and facilities



## Link21: Modern Trains and Service

**Example: Caltrain EMU** 

**BART** 

**MODERN REGIONAL RAIL** 

URBAN METRO SERVICE



#### **MODERN REGIONAL RAIL**

LONG DISTANCE SERVICE



More freque

**FREQUENCY** 

More frequent trains		Less frequent trains
Every 2-30 minutes	Similar to BART	Every 30 minutes
(varies by route/time of day)		(varies by route/time of day)

STOPS 1-5 miles apart Similar to BART 5+ miles apart (express service)

TRACK Designated BART only Shared with national network Shared with national network

Urban/Suburban Areas
SERVICE AREA Within 5-County BART District

**Urban/Metro areas** 

**Urban/Suburban Centers**Across 21-County Megaregion

**NEW TRAIN TECHNOLOGY** that is greener, lighter, and faster



# Link21 and the Caltrain Corridor

- Caltrain assumptions from Caltrain Service Vision (start with 6TPH per PBA2050)
- Modern vehicles (standard gauge, zeroemission) compatible with Caltrain EMU
- Electrification and Downtown Extension / The Portal are important predecessor projects to Link21





Sources: Caltrain (EMU) and SFCTA (DTX map)

# Megaregional benefits: Peninsula / San Francisco to East Bay

### More connectivity

 Peninsula direct to Oakland, Berkeley, other East Bay destinations

# Improved travel time and traveler convenience

- New Regional Rail crossing would enable some trips without a transfer
- New BART crossing would enable additional transfer points to Regional Rail

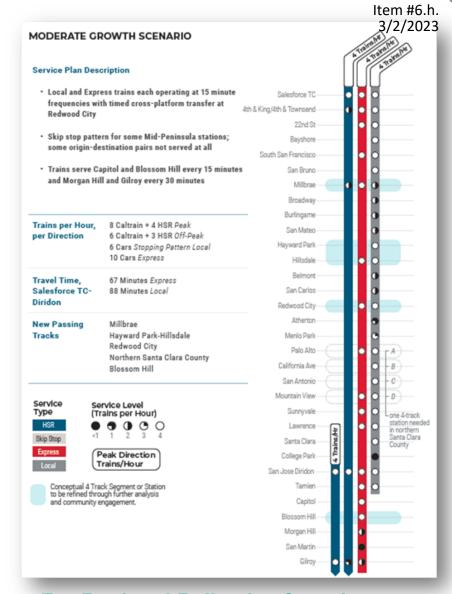
### More train service

- Potentially up to 5 min. frequency
- Caltrain to increase frequencies with new electric-powered fleet



### **Service Considerations**

- Regional Rail Crossing 10 TPHPD
  - 6 Caltrain connect to East Bay through crossing
    - Metro Service operation (higher frequency, more stops)
  - 4 TPHPD from East Bay turn at STC
    - Express / Intercity Service (lower frequency, fewer stops)
    - Potential to increase service in crossing consistent with Caltrain's Vision
- HSR 4TPHPD to STC
- BART (New) Crossing 24TPHPD
  - Existing BART tube assumed 30 TPHPD
  - Results in increased frequency on all East Bay BART lines



For Regional Rail, mix of service types and stopping patterns - similar to Caltrain service



# Link21 Program Timeline

PHASE 0 (2019 - 2022)

PHASE 1 (2022 – 2024)

PHASE 2 (2024 – 2028) PHASE 3 (2028 – 2039)

# PROGRAM DEFINITION

- Business Case Framework
- Problem & Vision Statement
- Goals & Objectives

# PROJECT IDENTIFICATION

- Preliminary Business Case
- Identify Project Concepts

# PROJECT SELECTION

- Intermediate Business Case
- Project Alternative(s)
- Environmental Review
- Final Business Case & Implementation Strategy

# PROJECT DELIVERY

- Funding Strategy
- Design
- Construction
- Testing & Commissioning
- Ready for Service



## Link21's Four-Part Business Case



STRATEGIC CASE

# What are the Megaregion benefits?

- Passenger
   Experience
- Community, Livability, and Equity
- Economic Growth and Competitiveness
- Environmental Stewardship
- Land Use



**ECONOMIC CASE** 

# What are the economic costs and benefits?

- Benefit/Cost Analysis
- User benefits
- Business and Employment



FINANCIAL CASE

# What is the financial viability?

- Revenue
   Generation
- Cost Effectiveness
- Funding Opportunities
- Financing Options



### DELIVERABILITY & OPERATIONS CASE

# What is required to deliver and operate the project?

- Governance
- Project Risks
- Construction and Operations
- Network Functionality

