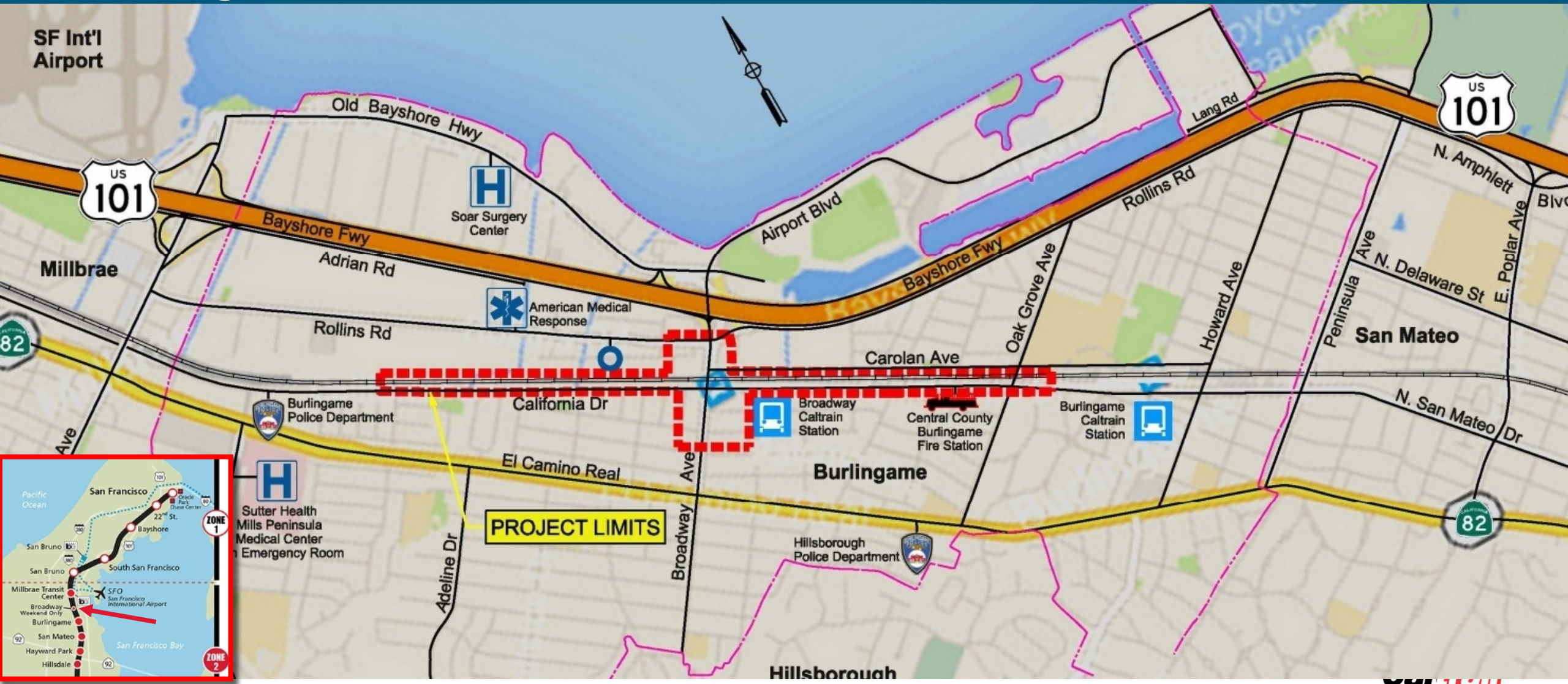
Broadway Burlingame Grade Separation Project

Project Delivery Evaluation

Technology, Operations, Planning, and Safety (TOPS) Committee

February 22, 2023

Project Location



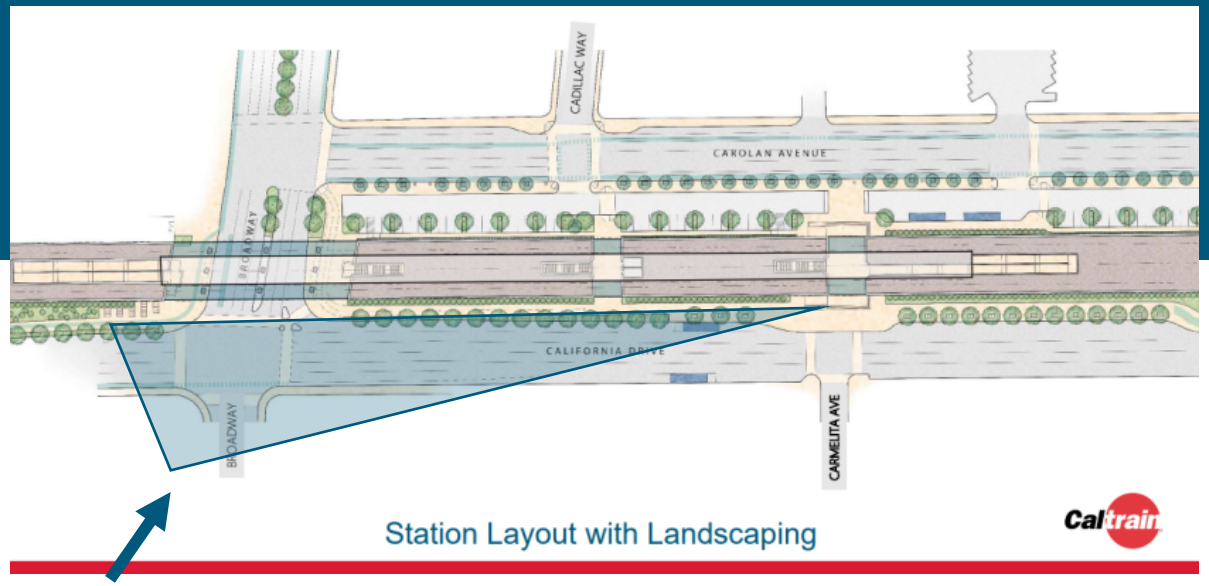
Project Goals & Scope

- Enhance **safety** for all modes of travel
  - Provide ADA compliant station
- Improve overall **traffic flow**
- **Reduce congestion,** delays and queuing
- **Minimize impact** of the project to the community and existing businesses

- **Elevate** the existing two-track railroad
- **Reconstruct** the Broadway station with a central boarding platform
- **Reconfigure** existing station parking
- Pedestrian/bicycle access improvements
- Temporary shoofly tracks during construction.

Broadway/ California Drive

Source: City Council Meeting
Project Aesthetics Presentation
October 3, 2022

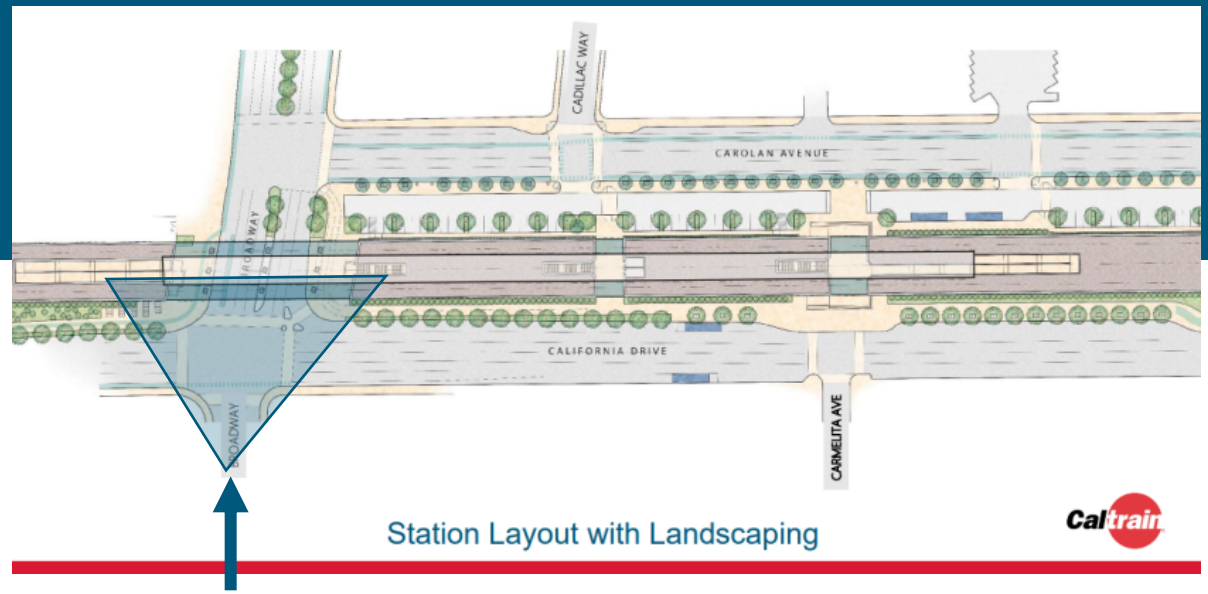


CONCEPTUAL RENDERING

Caltrain

Broadway Overcrossing

Source: City Council Meeting
Project Aesthetics Presentation
October 3, 2022

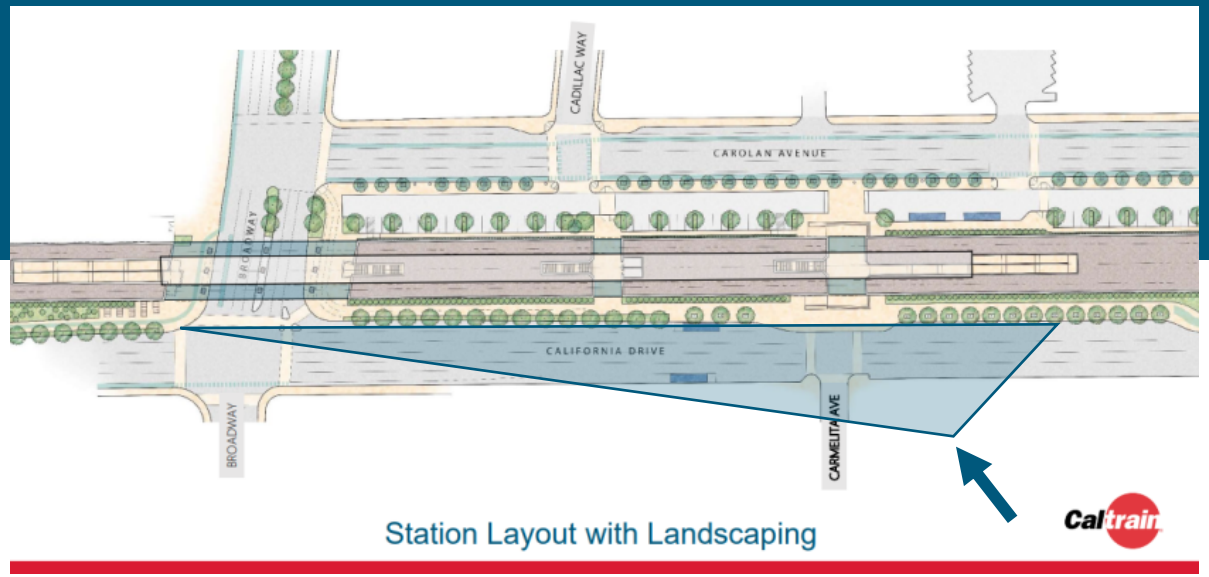


CONCEPTUAL RENDERING

Caltrain

Carmelita Avenue Entrance

Source: City Council Meeting
Project Aesthetics Presentation
October 3, 2022



Station Layout with Landscaping

CONCEPTUAL RENDERING

Caltrain

Current Project Schedule

Phase	Start	Finish
Project Study Report	Jan 2014	Jan 2017
Preliminary Engineering / Environmental Clearance	Mar 2017	Oct 2020
Final Design / Environmental Permits	Jan 2021	Jul 2024
Right of Way / Utilities	Jan 2024	Sep 2024
Construction	Oct 2024	May 2028

Current Phase

Legislative Basis for CMGC

CA Public Utility Code section 103395 et. seq.

- Allows District to use CMGC delivery after evaluation of both traditional design-bid-build process and CMGC project delivery method in a public meeting
- District must make a written finding that the use of CMGC will accomplish one or more of the following objectives:
    - ***Reduce project costs***
    - ***Expedite the project's completion***
    - ***Or provide features not achievable through the design-bid-build method***
- Written findings must be made prior to the District executing a CMGC contract and included as part of any application for state funds for the transit project

Project Delivery Methods Evaluated

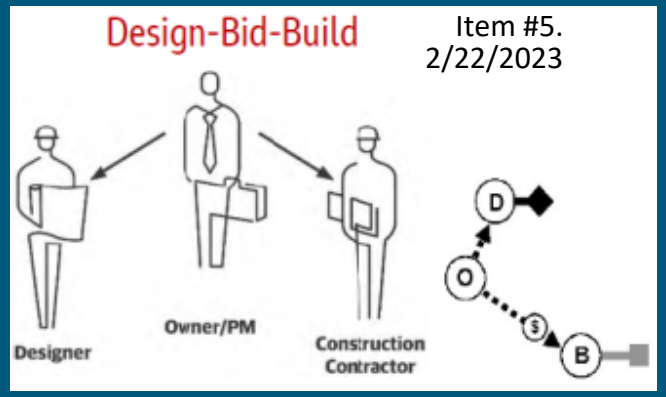
Design-Bid-Build (Traditional)

- Standard US project delivery method – provides the baseline delivery method
- Contractual obligations are well understood by design and construction industry
- Typically, the longest project delivery duration

Construction Manager/General Contractor (CMGC)

- Caltrain controls **Final Design**
- Maximizes cost savings opportunities – **commercial pricing**
- **Teamwork** develops during design reducing conflict risk during construction

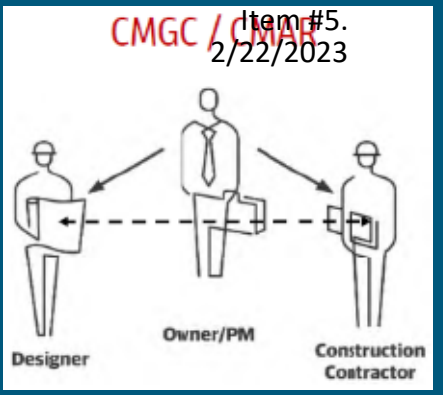
Design-Bid-Build
Advantages & Disadvantages



- Competitive bidding = **lowest initial price**
- Designer and contractor **"checks and balances"**
- Rights and obligations **well understood**
- Exemption from competitive bidding not required
  - No public hearing and record of findings

- Optimistic pricing = increased likelihood of **claims**
- **Eliminates communication** between Caltrain-Contractor on constructability, work plans, mean and methods, and phasing during final design
- **Risk of inadequate budget** for jurisdictional stakeholder expectations, QC, schedule control, etc.
- **Higher** Caltrain construction administration
- Potential to develop **adversarial positions**

CMGC
Advantages & Disadvantages



- Maximizes potential cost saving opportunities – **commercial pricing**
- Caltrain influences **conduct of construction**
  - Analyze options to meet stakeholder and jurisdiction expectations
  - Commercial pricing of options
  - Contractor buy-in
- **Competitive pricing**
  - **Open-book** evaluation of all costs
  - Appropriate **risk apportionment**
  - Sub-contracts are **low-bid**
  - Targeted **best value** to support diversity contracting

- **Claim risk reduced** due to early contractor involvement
- **Schedule flexibility** allows issue resolution
- **Teamwork** develops during pre-construction design phase, reducing conflict risk during construction

- CMGC **exemption requires** public hearing
- **Reduces competitive leverage** on General Conditions
- **Claims** may occur at **subcontractor level**

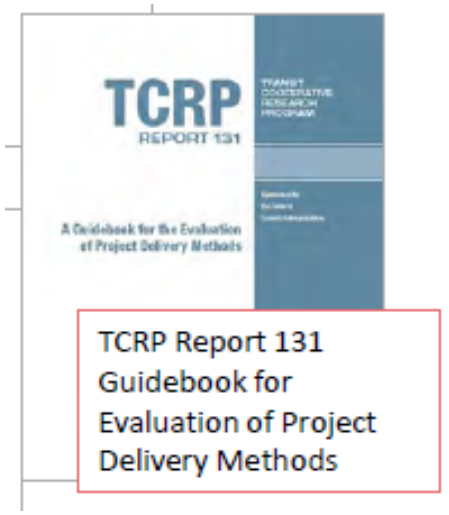
Project Delivery Workshop

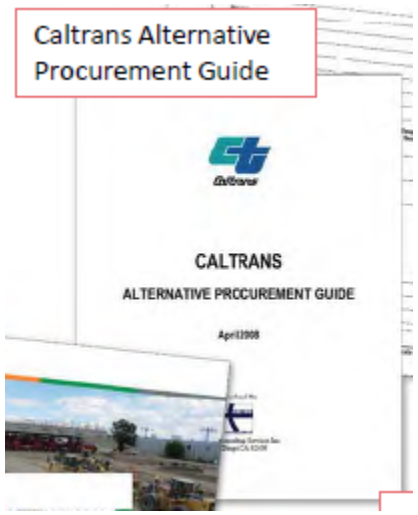
Objective

- Evaluate DBB vs CMGC
- Determine most appropriate delivery method

Participants

- Caltrain, City of Burlingame, and SMCTA staff





Evaluation Tools

- TCRP Report 131 Analytical Project Delivery Assessment
- Caltrans Modified Quantitative Project Delivery Method Selection

Project Delivery Workshop - Results

Based on this project's **unique features and complexities**

Construction Manager/General Contractor delivery method **most appropriate choice**

Ranking or Scoring Method	Design-Bid-Build	Construction Manager General Contractor
TCRC Report 131 Analytical Method	46	62
Modified Caltrans Qualitative Method	52	77

CMGC Findings
Reduce Project Costs

Optimize Costs

- Provides total contract price (TCP)
- Provides less competitive leverage on general condition pricing

Secure competitive construction bids

- Owner has an off-ramp to competitively bid the construction phase if TCP agreement not reached with contractor

CMGC Findings

Expedite Project's Completion

Optimize overall schedule

- Achieves reduced delivery time by overlapping traditional DBB procurement tasks

Targeted construction schedule reductions

- Allows for early enabling construction work such as utility relocations and other site preparation work
- Allows for early procurement of long-lead items

CMGC Findings

Provide features not achievable under design bid build method

- Provide **early contractor input** to design to incorporate preferred construction means and methods and phasing
- Allows for **collaboration** between the owner, designer, and contractor to deliver project requirements
- **Early bid packages:**
  - Utility relocation
  - Procurement and/or fabrication of long-lead items
  - Advance bid package for discreet critical path items – like bridge foundations and tunnel sections

CMGC Schedule

Activity	Milestone Dates	Duration	Notes
Authorize Use of CMGC	Mar 2023		
Amend MOU and add to budget	Apr 2023		
Issue RFP for CMGC Pre-Construction Svcs.	Mid-May 2023		
Proposal Due	Mid-Jul 2023	8 weeks	Same as Mt. View project
Technical Evaluation	Mid-Aug 2023	4 weeks	
Interviews	1st week of Sep 2023		
Negotiation	Last week of Sep 2023		
Notice of Intent to Award	Mid-Oct 2023		
CMGC Pre-Construction Contract Award	Dec 2023		

Staff Recommendations

- **Make findings** that the use of CMGC will accomplish one or more of the required objectives pursuant to Public Utility Code Section 103395

- **Authorize use** of CMGC project delivery method

Questions

FOR MORE INFORMATION

WWW.CALTRAIN.COM