

Capital Programs Quarterly Progress Report FY23 – Q1

WPLP

November 16, 2022



Capital Program




- Capital Program Quarterly Report: FY23 – Q1
- Negotiated Procurements: Risk Management and Incentive Programs

Capital Program Quarterly Report: FY23 – Q1

- Caltrain's Rail Development Team is currently managing **28 capital projects**
 - 16 in **Design**
 - 2 in **Bidding**
 - 9 in **Construction**
 - 1 in **Closeout**
- **9 other** projects are in the planning and miscellaneous group

Capital Program Quarterly Report: FY23 – Q1




- Key Performance Indicator Summary

Status Light	Safety	Schedule	Budget	Funding
 Green	100.0%	67.6%	94.6%	89.2%
 Yellow	0.0%	5.4%	0.0%	8.1%
 Red	0.0%	27.0%	5.4%	2.7%

(Percentage of projects in each status light by performance category)

Capital Program Quarterly Report: FY23 – Q1

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- Schedule KPI**
Significant area of the team's focus
 - 3 improved
 - 4 slipped

Capital Program Quarterly Report: FY23 – Q1

- Program Trend Summary for Projects in Planning, Design, or Construction

Status Changes	Projects	Pct. Projects
All green	16	43.2%
Improved	6	16.2%
Got worse	5	13.5%
Stayed the same (except all green)	10	27.0%
Total Projects	37	

Capital Program Quarterly Report: FY23 – Q1

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- Mitigation plans** being implemented
- Some projects have been **re-baselined** with changed conditions

Capital Program Quarterly Report: FY23 – Q1

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- 4 Schedule increases**
- 1 Budget increase**

Capital Program Projects with **Mitigation Plans**

Project	Planned Date	Description
Ticket Vending Machine Rehabilitation	On-going	Recovering from supply chain delays
✓ Clipper Next Generation Validator Site Preparation	Implemented	Recovered from contractor submittal delays
San Mateo Replacement Parking Track	6/28/2023	CTC allocation of Caltrain's FY23 LPP funding
Churchill Ave Grade Crossing	CPUC Approval	Recover from CPUC approval duration
Bayshore Station Overpass Ped Bridge Rehab	On-going	Recovering from delay in starting site work

Capital Program

Projects to **Re-Baselined: Near Term**

Project	Planned Date	Description
✓ Guadalupe River Bridge Replacement - Extension	Implemented	Updated schedule. Fund activation in November
✓ CCF BCCF Virtualization	Implemented	With FY23 Construction funding approval - approved
✓ San Mateo Grade Crossing Improvements	Implemented	City led final design package complete
Automatic Passenger Counter 4 th and King Station	October 2022	Update schedule for closeout
MP-36 Locomotive Mid-Life Overhaul	October 2022	Update schedule, budget, and funding
Mini High Platforms	November 2022	Update schedule
Rengstorff Grade Separation	November 2022	Approval of Cooperation Agreement for final design
Broadband Wireless Communication System	November 2022	Update schedule/budget at contract award

Capital Program Projects to Re-Baselined: Future

Project	Planned Date	Description
✓ CCF BCCF Virtualization	Implemented	With FY23 Construction funding approval - approved
San Francisquito Creek Bridge Replacement	TBD	At approval to proceed with next phase, funding use
Bernardo Avenue Undercrossing	TBD	At approval of next phase by local jurisdiction
Whipple Avenue Grade Separation	TBD	At approval of next phase by local jurisdiction

Capital Program Projects in **Closeout** with Variances

Project	Planned Date	Description
South San Francisco Station Improvements	NA	Extended closeout period – nearing completion
✓ Marin and Napoleon Bridge Replacement	Sept 2022	Extended closeout period – nearing completion

Next steps:

- Final Phase/Gate approval from Management Committee - report on project metrics
- Conduct lessons learned
- Remove project from Quarterly Report

Capital Program Quarterly Report: FY23 – Q1

Table S3. Individual Projects

Project Number	Title	Safety		Schedule		Budget		Funding		Page
		Q4	Q1	Q4	Q1	Q4	Q1	Q4	Q1	
CONSTRUCTION/IMPLEMENTATION										
Grade Separations										
002088	25th Avenue Grade Separation	●	●	●	●	●	●	●	●	7
Stations										
002146	South San Francisco Station Improvement	●	●	●	●	●	●	●	●	13
ROW Bridges										
100439	Bayshore Station Overpass Pedestrian Bridge Rehab	●	●	●	●	●	●	●	●	19
ROW Communications & Signals										
100278	Mary Avenue Traffic Signal Preemption	●	●	●	●	●	●	●	●	25
Fare Collection										
100240	Ticket Vending Machines (TVM) Rehab	●	●	●	●	●	●	●	●	30
100574	Clipper Next Generation Validators Site Preparations	●	●	●	●	●	●	●	●	35
Miscellaneous										
100233	MP-36 Locomotive Mid-Life Overhaul Project		●		●		●		●	40
100430	CCF BCCF Virtualization	●	●	●	●	●	●	●	●	44
100445	Automatic Passenger Counters at San Francisco 4th & King Station	●	●	●	●	●	●	●	●	48

Portion shown here

Full report on Caltrain's web site

Capital Program

- Capital Program Quarterly Report: FY23 – Q1
- **Negotiated Procurements: Risk Management and Incentive Programs**

Procurement Types

- **Public Works**
 - Erection, construction, alteration, repair, or improvement of any structure, building, road, or other improvement of any kind
- **Invitation for Bids (IFB) (Over \$10,000)**
 - Lowest responsive and responsible bidder
- **Alternative contract delivery using Request for Proposal (RFP)**
 - Negotiated procurements using best value with negotiated price and terms
 - **Construction Manager/General Contractor** (Public Utilities Code Section 103394-103399.1 requirements)
 - **Design – Build** (Public Contract Code Section 22160 - 22169 requirements)

Procurement Types

Incentive and Risk Programs

- **Invitation for Bids (IFB) (Over \$10,000)**
 - Only allowed if **included** with bid documents
 - Example: established dollar value for completion a set number of days early
- **Alternative contract delivery using Request for Proposal (RFP)**
 - Best management practice – **state intent** to include in contract with RFP
 - Negotiated during **BAFO** (Best and Final Offer) phase for Design Build
 - Negotiated during **TCP** (Total Contract Price) phases for Construction Manager – General Contractor
 - Must not be a **cardinal change**
 - In the **public's interest**

Negotiated Procurements

Risk Management

Risk

- Broadly includes any item that has the potential to **threaten** the project's **baseline** scope, schedule, or budget

Contingency

- Used to **monetize** the **level of risk** inherent for a project's baseline scope, schedule and budget

Negotiated Procurements Risk Management

Risk Management programs

- Identify – the what
- Assess – likelihood and impact
- Respond – the action plan
 - Avoid
 - Reduce
 - Transfer
 - Retain
- Manage the time-based action plan

Appropriate management and allocation of risks a critical success factor for project delivery

Negotiated Procurements Risk Management

- Alternative contract delivery models provide opportunity for *early contractor involvement*
- This early involvement provides the opportunity to **enhance** the **effectiveness** of risk management
- Owner – Design – Contractor *collaboratively develop* a comprehensive list of risks – risk register
- During **design phase**, the team seeks to **avoid** and **reduce risks**

Negotiated Procurements Risk Management

For **construction phase** risks that are **retained** or **transferred**

- Develop the **monetized value** of the risk
- Determine who is **best suited** to manage the risk
 - Owner held risk
 - Contractor held risk
 - Shared risk
- Establish a **Risk Table**
 - Prior to construction defining the value and responsibility
 - Define **rules** for over and under runs

Negotiated Procurements Risk Management

Risk Responses

- **Transfer**
 - By contract or agreement transfer to another party
- **Guiding principles**
 - Transfer to those **best capable of managing**
 - **Equitable** allocation of risk
 - Transferring risk is **not free**
- **Example**
 - TriMet's Orange Line East Segment property acquisition
 - Property acquisition delays may impact efficient construction
 - Contractor paid \$1.2m to accept risk

Negotiated Procurements Risk Management

Risk Responses

- **Transfer (shared)**
 - By contract or agreement transfer portion to another party
- **Example**
 - TriMet's Tilikum Crossing
 - Cable stayed structure across Willamette River
 - On critical path of \$1.49 billion project
 - Risk pool for unforeseen subsurface conditions for 10' diameter deep shafts
 - **\$4 m** risk pool: any underrun split 75% owner - 25% contractor
 - **\$4 m - \$10m**: cost split 75% owner - 25% contractor
 - **Over \$10m**: costs 100% owner

Negotiated Procurements Risk Management

Risk Responses

- **Retain**
 - Retain and **protect against** it
 - Risks are **unavoidable** – like contaminated media
 - **Action**
 - **Establish contingencies** that can absorb realized risks

Negotiated Procurements Risk Management

Both negotiated procurement methods provide the ability to allocate risk

- CM/GC
 - Risk Tables during TCP negotiations
- Design Build
 - Seek input on risks from construction community prior to RFP
 - Request for Industry Comment – identify top 10 risks
 - Discussion on risks during **confidential one-on-ones** with short listed teams
 - **Defined risk table** as part of **BAFO** for all short-listed teams

Negotiated Procurements Incentive Programs

Structured program with the intent to drive performance on elements **critical to Caltrain's business needs**

- Elements vary and are selected based on **unique character** of each project
- Criteria evaluation may be **quantitative and/or qualitative**
- Portion of Contractor's fee put "**at-risk**" (67%-75% Contractor funded, example \$2m)
- Incentive pool increased with **Caltrain funds** (25%-33% Caltrain funded, example \$1m)
- "B" level performance – Contract earns their "at-risk" fee back
- Performance above a "B" level – Contractor **earns supplemental Caltrain funds**

Negotiated Procurements Incentive Programs

Example Criteria

- Safety
 - Recordable Incident Rate, Loss Time
 - Near Miss Reporting, Safety walks, Site cleanliness

- Schedule Control, Impact to Traveling Public
 - Impact to Caltrain operation, roadways, adjacent transit service
 - Interim milestones
 - Final completion

Negotiated Procurements Incentive Programs

Example Criteria

- Cost Control
 - Duration of processing change order
 - Percent of increase in Contract value for non Caltrain added items
- Quality
 - Non-Conforming Reports – duration to resolve items
- Diversity Contracting
 - Exceeded RFP commitment, mentoring new skills

Negotiated Procurements Incentive Programs

Two Teams participate in **Quarterly Review Sessions** to evaluate performance

- Project Team:
 - Contractor Construction Manager
 - Caltrain Construction Manager

- Incentive Program Leadership Team
 - Contractor Senior Executive
 - Caltrain Senior Executive
 - External Senior Level Stakeholder Representative (example: Chair of Business Association)

Negotiated Procurements Incentive Programs

Quarterly Review Sessions to evaluate performance

- Project Team
 - Contractor and Caltrain Construction Manager each **prepare and present** a written report detailing performance against criteria
- Incentive Program Leadership Team
 - Deliberate and reach consensus on score for each review criteria
 - **Earned funds** are distributed next pay request
 - **Unearned funds** are deducted from Contract at project close out
 - **Discussion at executive level linked to fee drives field performance**

Re-tooled Capital Program

Changes

- Evaluate **construction delivery options** to select the most appropriate method to minimize construction impacts, enhance cost and schedule certainty, and effectively manage risk – **in place**
- Evaluate construction contracts for appropriate use of **risk and/or incentive programs** to support effective delivery – **add to low bid contracts**

Questions

FOR MORE INFORMATION
WWW.CALTRAIN.COM

