

# Finance & Audit Committee CENTRAL VALLEY STATUS REPORT

September 2020 Report (data through July 2020)



## **Executive Summary**

#### Overall - Report projections will be updated with Revised Baseline Schedules (RBS) finalization.

Cumulative Invoicing to Fulfill American Recovery and Reinvestment Act (ARRA) Grant (Page 11):

- Total ARRA Cumulative Actual Invoice \$2,770.1M compared to Total ARRA Cumulative Forecasted Actual Invoice \$2,720.7M.
- Total Estimated Cumulative Actual Invoice to Fulfill ARRA \$5,606M (includes estimate for Track and Systems).

#### Construction Packages (CPs) Invoicing (Pages 10 through 12):

- July Total Actual Invoice \$73M compared to Total Forecasted Invoice \$59.2M, an increase of 150% from July 2019.
- Anticipated August Total Invoice \$90.9M.
- Total CP Cumulative Actual Invoice \$2,770.1M compared to Total CP Cumulative Forecasted Invoice \$2,688.7M. Total Cumulative Current Contract Amount \$4,705.9M. Expensed to date is at 58.8%.
- Total Executed Change Orders \$43.9M.
- In the last 12 months, cumulative invoicing for construction was approximately \$951.4M, 34.3% of all construction invoicing since July 2013.

## CP Construction Labor (Page 13):

- Total Monthly Average 996 daily-workers. An increase of 110 (886) daily workers from the previous month, another celebrated increase of over 268% from July 2019.
- Total Contracted CP Employees COVID-19 Positive four (two in CP 2-3 and two in CP 4).
- Daily Average Contracted CP Employees Quarantined 16.
- Contractors continued with construction while following safety protocols and guidelines from the Centers for Disease Control and Prevention (CDC) and Occupational Safety and Health Administration (OSHA).

## CP Construction/Underway (Page 14):

- Guideway 78 miles constructed/underway compared to 119 miles total. No increase from the previous month.
- Structures 44 constructed/underway compared to 93 structures total. An increase of one structure from the previous month. The number of structures in progress has doubled since July 2019.

#### CP Real Property/Right-of-Way (Pages 15 through 18):

- Parcels Delivered to Design-Builder (DB) 18 parcels. Zero delinquent critical parcels.
- Total Acquired Parcels (some pending delivery) Seven parcels.
- Total Parcels Delivered to Date 1,640 parcels compared to an Estimated Total Parcels Needed 2,322 parcels.
- For Construction Package 1-4: Seven parcels added and 38 removed due to design optimization.
- Railroad Parcels Delivered to DB Zero parcels. Zero delinquent critical parcels.
- Total Railroad Parcels Delivered to Date 112 parcels compared to an Estimated Total Railroad Parcels Needed 183 parcels.



- Land Right Conveyances (Tier I, Prior to Construction) Received Approval 28 Land Right Conveyances and zero delinquent critical land conveyances.
- Through December 2019, the Authority received approval on eight land right conveyances (Tier 1, Prior to and Post Construction) from impacted utility owners. From January 2020 to date, the Authority received approval on 385 land right conveyances (Tier 1, Prior to and Post Construction).

#### Third-Party Agreements (Pages 19 and 20):

- Seven remaining agreements. One agreement executed this month.
- In the past year, finalized 39 agreements. 33 of those agreements were critical to supporting construction.

#### Environmental Permitting (Page 21):

• Remaining Amendments – Three agreements.

Project Development (Environmental Clearance) Schedule – Record of Decision (ROD) (Pages 52 and 53):

- The California High-Speed Rail Authority CEO signed the Central Valley Wye Final SEIR/EIS on July 8, 2020 document remains on track for completion in September 2020.
- On July 10, 2020, the Authority published a Draft EIR/EIS for San Francisco to San José for public review marking a total of four Draft EIR/EISs issued within the first six months of Calendar Year 2020 including: Bakersfield to Palmdale, San José to Merced and Burbank to Los Angeles.
- Bakersfield to Palmdale and San José to Merced public review comment periods have closed. Burbank to Los Angeles and San Francisco to San José close in late August and early September respectively. Comment period extensions and associated public meetings / hearing accomplished virtually to meet COVID-19 social distancing requirements.
- Resolving Palmdale to Burbank Una Lake avoidance concerns with USACE/EPA. Working steadily to integrate BNSF facilities east of Fullerton into the Los Angles to Anaheim EIR/EIS in order to meet ARRA December 2022 deadline.



#### **Construction Package 1**

#### Invoicing (Pages 22, 25 & 26):

- Actual Invoice \$17.2M compared to Forecasted Invoice \$18M, an increase of over 100% from July 2019.
- Current Revised Baseline Substantial Completion Forecast Date December 30, 2022.
- Current Contract Amount \$2,237.5M compared to Cumulative Total Invoice \$1,274.5M. 57% expensed to date.

## Change Orders (Pages 23):

• Executed Change Orders – Eight for a total of \$12M.

#### Risk Contingency (Page 24):

• Original Contract Contingency – \$1,237M with Remaining Contract Contingency - \$482M.

## Construction Labor (Page 27):

• Total Monthly Average – 257 daily-workers. An increase of 47 (210) daily-workers from the previous month.

## Construction/Underway (Page 28):

- Guideway 13 miles constructed/underway compared to a total of 13 miles needed. No increase from the previous month.
- Structures 17 constructed/underway compared to a total of 17 needed. No increase from the previous month.

## Real Property/Right-of-Way (Pages 29 through 31):

- Parcels Delivered to Design-Builder (DB) Two parcels and zero delinquent critical parcels.
- Total Parcels Delivered to Date 832 parcels compared to an Estimated Total Parcels Needed 1,072 parcels.
- Railroad Parcels Delivered to Design-Builder Zero and zero delinquent critical parcels.
- Total Railroad Parcels Delivered to Date 59 parcels compared to an Estimated Total Railroad Parcels Needed 95 parcels.
- Land Right Conveyances (Tier I, Required Prior to Construction) Received Approval to Date 65 Land Right Conveyances and zero delinquent critical land conveyances.

#### **Revised Baseline Schedules:**

- Under Authority review.
- All projections are being monitored against the Conditional Acceptance of CP 1's Revised Baseline Schedule (RBS) as of July 2020.



## **CP 1 Construction Progress Summary**

Category	Status Update
General	<ul> <li>Six crossing applications have been approved.</li> <li>Downtown Shoofly: Delivered out-grants¹ and started utility relocation.</li> <li>North Extension: The two RFC Structures have been completed and approved.</li> <li>Herndon Avenue: AT&amp;T and FMFCD system relocations are underway; First order utility work continues to gather momentum; Large diameter seasonal storm drain construction work continues.</li> <li>Carnegie Avenue: AT&amp;T northern cut-over predecessor work has been completed thereby kicking off further precursor work along Herndon Avenue.</li> <li>Golden State Boulevard (North): Sewer system and OH power line relocations start in September 2020.</li> <li>Avenue 10 HST Overcrossing: Fine grading and fencing completed; aggregate base laid in preparation for asphalt.</li> <li>Shaw Avenue: Gas relocations have started.</li> <li>San Joaquin River Viaduct / River Span: Finishing touches on the Arch Span and clean-up work.</li> <li>Fresno Trench: Top Down Box under SR-180, completed transition from Stage 3 to Stage 4, placed rebar and shotcrete.</li> <li>Downtown Fresno Viaduct (Cedar Viaduct) and SR-99 Crossing: Removed falsework from Cedar Overhead and SR-99 Southbound.</li> <li>Manpower: The daily-worker monthly average of 138 in July 2019 increased by 86% to 257 in July 2020.</li> </ul>
Structures	<ul> <li>Golden State Boulevard Viaduct: Poured Abutment 5 walls, columns and flare caps for Bents<sup>2</sup> 3 and 4; drilled Bent 2 and Abutment 1 Cast-In-Drilled-Hole (CIDH) piles.</li> <li>American Avenue Overcrossing: Placed concrete for east abutment wing walls and placed embankment on the west side abutment.</li> <li>San Joaquin River - Viaduct River Span: Finishing touches on the Arch Span and clean-up work.</li> <li>Redesign underway for Central Avenue, Avenue 15½, Avenue 9 and McKinley Avenue to avoid additional Right-of-Way (ROW) requirements.</li> <li>PG&amp;E Out-grants progressed, and early civil packages are expected in August 2020.</li> <li>Downtown Shoofly: Out-grants were delivered allowing the start of utility relocations.</li> <li>McKinley Avenue: Detour construction will begin in August 2020 upon completion of the utilities design and relocation efforts.</li> </ul>
Guideway	<ul> <li>Avenue 15 (North): Major embankment fill and import has commenced.</li> <li>Intrusion Protection Barrier (IPB) Mobilization: Starting in September 2020, the deployment of this barrier will allow additional guideway to begin north of Cottonwood Creek.</li> <li>Avenue 10 / Avenue 11: Progress continues with the importing and compacting of the subgrade.</li> <li>Design started for two miles of guideway in the Caltrans section between Ashlan Avenue and McKinley Avenue Connector.</li> <li>Thirteen miles has been cleared for utility relocations.</li> <li>Central Avenue: Work will start in October 2020 when PG&amp;E's overhead power line relocation starts.</li> <li>Road 27: Contractor resumed night work and the cleaning out of air vents at deck.</li> </ul>

- 1. Out-grant refers to grant of interest or right to one to use government real property by a lease, easement, license, or permit. It is an agreement whereby a private party may, depending on the type of real estate instrument issued, enjoy an interest in or use real property.
- 2. Bents are the basic post and beam structure that forms a cross section for the frame that has been set in place, the bents are then lifted and dropped into place one by one by the crane.



#### **Construction Package 2-3**

#### Invoicing (Pages 32, 35 & 36):

- Actual Invoice \$43.5M compared to Forecasted Invoice \$30M, an increase of over 250% from July 2019.
- Current Revised Baseline Substantial Completion Forecast Date December 18, 2022.
- Current Contract Amount \$1,880.5M compared to Cumulative Total Invoice \$1,145.8M. 60.9% expensed to date.

#### Change Orders (Page 33):

• Executed Change Orders – Eight for a total of \$20.5M.

#### Risk Contingency (Page 34):

• Original Contract Contingency – \$1,085M with Remaining Contract Contingency - \$345M.

## Construction Labor (Page 37):

• Total Monthly Average – 509 daily-workers. An increase of 33 (476) daily-workers from the previous month.

## Construction/Underway (Page 38):

- Guideway 45 miles constructed/underway compared to a total of 45 miles needed. No increase from the previous month.
- Structures 20 constructed/underway compared to a total of 19 needed. An increase of one structure from the previous month.

## Real Property/Right-of-Way (Pages 39 through 41):

- Parcels Delivered to Design-Builder (DB) 16 parcels and zero delinquent critical parcels.
- Total Parcels Delivered to Date 645 parcels compared to Estimated Total Parcels Needed 1,011 parcels.
- Railroad Parcels Delivered to Design-Builder Zero and zero delinquent critical parcels.
- Total Railroad Parcels Delivered to Date 26 parcels compared to Estimated Total Railroad Parcels Needed 58 parcels.
- Land Right Conveyances (Tier I, Required Prior to Construction) Received Approval to Date 58 Land Right Conveyances and zero delinquent critical land conveyances.

#### **Revised Baseline Schedules:**

- Under Authority review.
- All projections are being monitored against the Conditional Acceptance of CP 2-3's Revised Baseline Schedule (RBS).



# CP 2-3 Construction Progress Summary

Category	Status Update
General	Design: 73 out of 100 design packages on CP 2-3 have been approved.
	Conejo Avenue: Main structure design approved.
	Hanford Viaduct Early Foundation Package: Has been approved.
	Land Right Conveyances: 18 received from various irrigation districts.
	Utility Relocations: 24 required relocations completed. Civil work is underway at 23 locations prior to relocation work.
	PG&E Electrical Distribution Relocations Completed: Adams Avenue & Cedar Avenue; Avenue 8.5; Niles Avenue & Avenue 5.5.
	PG&E Design Approvals: Four new Design packages approved in July adding 18 design approvals since July 2019.
	Melga Canal relocation at Jackson Avenue completed.
	Environmental Clearance:
	<ul> <li>All Incidental Take Permits (ITPs) approved.</li> </ul>
	<ul> <li>34 of 52 required Master Streambed Alteration Agreement (MSAA) sub-notifications approved.</li> </ul>
	<ul> <li>All 408 Minor Applications under review with U.S. Army Corps or California Department of Fish and Wildlife (CDFW).</li> </ul>
	Review and approval of Hanford Viaduct and the Tule River Bridge designs underway.
	BNSF and Construction Agreement (Package A) executed, furthering construction on utility relocations and Type II structures.
	<ul> <li>Manpower: The daily-worker monthly average of 106 in July 2019 increased more than 480% to 509 in July 2020.</li> </ul>
Structures	Adams Avenue Type 2 bridge construction work started.
	Four Structures, Peach Avenue, Kent Avenue, Kansas Avenue and Excelsior Avenue are substantially complete.
	Hanford Viaduct Type 1 bridge substructure substantially complete.
	Conejo Viaduct Type 1 construction progressing at full speed.
	Jackson Avenue Type 2 bridge DOT roadway embankment is now complete.
	Idaho Avenue Type 2 test pile program completed.
	9 <sup>th</sup> Avenue Type 1 Abutment footings completed.
	Fargo Avenue Type 2 East abutment excavation completed.
	<ul> <li>Construction of Wildlife crossings across the alignment is progressing. 12 wildlife crossings completed in July.</li> </ul>
	• Land Right Conveyance: 10 PG&E utility relocations underway enabling Fowler Avenue, Elkhorn and Dover Avenue bridges to start construction.
	Caltrans Early Work Approvals:
	<ul> <li>SR-43 Tied Arch – DFJV Working on the RFC Comment resolution.</li> </ul>
	<ul> <li>SR-43 Tule River – Caltrans Permit Issued. DFJV working on the utility relocations.</li> </ul>
	• SR-43 Curved Bridge – Caltrans approved the detour plans and permit issued on 7/15/20.
Guideway	Design mitigation of Segment 3 soft soils expected in August, will open eight miles of additional guideway.



#### **Construction Package 4**

#### Invoicing (Pages 42, 45 & 46):

- Actual Invoice \$12.4M compared to Forecasted Invoice \$11.2M, an increase of over 43% from July 2019.
- Current Revised Baseline Substantial Completion Forecast Date December 15, 2021.
- Current Contract Amount \$587.9M compared to Cumulative Total Invoice \$349.8M. 59.5% expensed to date, with approximately half of expenditures occurring in the past 12 months.

## Change Orders (Page 43):

• Executed Change Orders – 10 for a total of \$11.4M.

#### Risk Contingency (Page 44):

• Original Contract Contingency – \$340M with Remaining Contract Contingency - \$172M.

## Construction Labor (Page 47):

• Total Monthly Average – 230 daily-workers. An increase of 29 (201) daily-workers from the previous month.

## Construction/Underway (Page 48):

- Guideway 20 miles constructed/underway compared to a total of 19 miles needed. No increase from the previous month.
- Structures Seven constructed/underway compared to a total of nine needed. No increase from the previous month.

## Real Property/Right-of-Way (Pages 49 through 51):

- Parcels Delivered to Design-Builder (DB) Zero and zero delinquent critical parcels.
- Total Parcels Delivered to Date 163 parcels compared to the Estimated Total Parcels Needed 239 parcels.
- Railroad Parcels Delivered to Design-Builder Zero and zero delinquent critical parcels.
- Total Railroad Parcels Delivered to Date 27 parcels compared to Estimated Total Railroad Parcels Needed 30 parcels.
- Land Right Conveyances (Tier I, Required Prior to Construction) Received Approval to Date Nine Land Right Conveyances and zero delinquent critical land conveyances.

#### **Revised Baseline Schedules:**

- Under Authority review.
- All projections are being monitored against the Conditional Acceptance of CP 4's Revised Baseline Schedule (RBS).



# **CP 4 Construction Progress Summary**

Category	Status Update
General	<ul> <li>Guideway and structure designs have been completed; RFC's have been issued.</li> <li>Intrusion Protection Barrier (IPB): DB is currently reviewing the new design bulletin.</li> <li>Environmental Clearance: 11 out of 13 required ITPs were completed; the remainder will be acquired within the 3rd quarter of 2020.</li> <li>Manpower: The daily-worker monthly average of 125 in July 2019 has almost doubled to 230 in July 2020.</li> </ul>
Structures	<ul> <li>Peterson Road Underpass: Redesign is complete, and construction is underway.</li> <li>McCombs Avenue: Agreements reached with Kern County and Caltrans – Abutment 4 MSE wall started and embankment work resumed.</li> <li>Wasco Viaduct: 76 pre-cast girders have been over BNSF tracks. Work continued at Bent 7 and Bent 8 upper edge beam; poured sections of CIP wall 279.9 footing and wall. Set forms for Bent 9 column upper flare and started setting Bent 10 column.</li> <li>Pond Road Underpass deck poured.</li> <li>Garces Highway Underpass post tensioning completed and grouting tendons.</li> <li>Poso Creek Overpass deck and stem walls poured.</li> <li>Completed Intrusion Protection Barrier (IPB) and Cast-In-Place (CIP) wall between McCombs Avenue and SR-46.</li> <li>Construction continued on seven structures: Garces Highway Underpass, Pond Road Underpass, Poso Creek Overpass, McCombs Avenue Overpass, Wasco Viaduct, Merced Avenue Overpass, and the Kimberlina Road Underpass.</li> </ul>
Guideway	<ul> <li>Started construction on Access Road south of Peterson Road, and on the BNSF Shoofly.</li> <li>Continued work on the wildlife box culverts at crossings north and south of Garces Highway.</li> <li>Construction continued on embankment import between Semi-Tropic Canal and Wolloomes Avenue.</li> <li>Embankment efforts continued between Poso Creek and Tausig Avenue.</li> <li>Kimberlina Road (South): Access road construction started.</li> <li>Wasco Viaduct (North): Continued efforts on the CIP wall.</li> <li>Embankment, slope trimming and topsoil placement ongoing throughout guideway.</li> <li>Utility relocations, PG&amp;E, SEMPRA, AT&amp;T and others ongoing at numerous sites.</li> <li>Completed SoCal Edison relocations on Peterson Road.</li> </ul>



# Infrastructure Delivery Overview – 119-mile Central Valley Segment Construction Packages 1-4 (CP 1-4)

#### **CP 1-4 – Earned Value**

## CP 1-4 - Planned vs. Actual Expenditures from Contract Award Through Contract Completion (\$ Millions)



The chart above shows historical expenditures from the award of the first construction package through July 31, 2020. The planned values are based on the Proposed Revised Baseline Schedules developed for all the construction packages as of July 2020. The completion value (\$4.7B) is based on the current contract values of the construction packages and does not include SR-99. This value does not include change orders that

are yet to be executed. It is anticipated that the total current contractual value of \$4.7B will be expended by end of December 2022.

## **CP 1-4 – Projected Milestones**

Milestone	Date
01. CP 1 Main Design Complete	Oct-201
02. CP 1 ROW Critical Parcels Acquisition Complete	Nov-20
03. CP 1 Environmental Clearance Complete	Nov-20 <sup>4</sup>
04. CP 1 Utility Relocation Complete	Mar-21

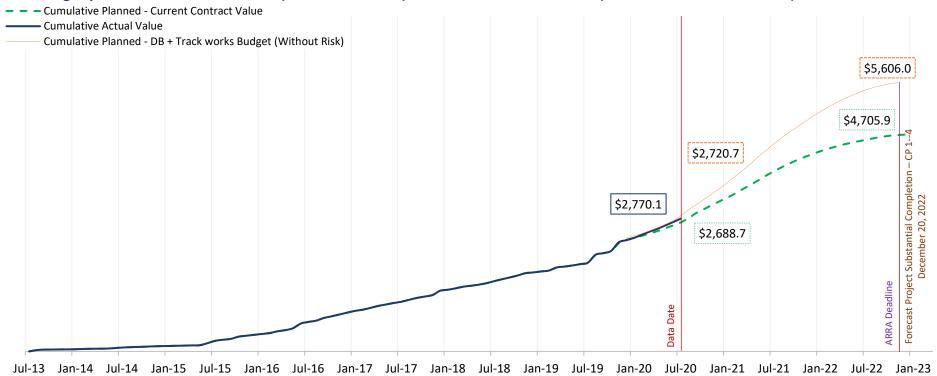
Milestone	Date
05. CP 2-3 Main Design Complete	Dec-20 <sup>2</sup>
06. CP 2-3 ROW Critical Parcels Acquisition Complete	Jan-21 <sup>3</sup>
07. CP 2-3 Environmental Clearance Complete	May-20 (Complete)
08. CP 2-3 Utility Relocation Complete	Mar-21

Milestone	Date
09. CP 4 Main Design Complete	Feb-20 (Complete)
10. CP 4 ROW Acquisition Complete	Dec-20
11. CP 4 Environmental Clearance Complete	Nov-20 <sup>5</sup>
12. CP 4 Utility Relocation Complete	Mar-21

- 1. CP 1 Main Design has been pushed to October 2020 as the DB and PCM get the FCN/DCN process into contract compliance to enforce the verification and validation certification. Mitigating issue via NCR and directive letter to ICE/ISE to enforce compliance.
- 2. CP 2-3 Main Design has been pushed to December 2020 as the DB, PCM, Caltrans and BNSF address design delays for the utility relocations. This is critically impacting the schedules.
- Projection has been updated based on the Revised Baseline Schedules (RBSs).
- 4. CP 1 Environmental Clearance pushed to November 2020 to review the Hazardous Abatement designs and incorporate additional utilities and BNSF access roads at the structure and guideway sites.
- 5. CP 4 Environmental Clearance on lands requiring utility relocations delayed from July 2020 to November 2020 pending issuance of ITP Amendment, per California Rail Builders (CRB).



#### Remaining Expenditures to Achieve ARRA (DB + Track Works) Within the Current Baseline (No Risk Included - \$ millions)



#### Remaining DB and Track Work Baseline Items:

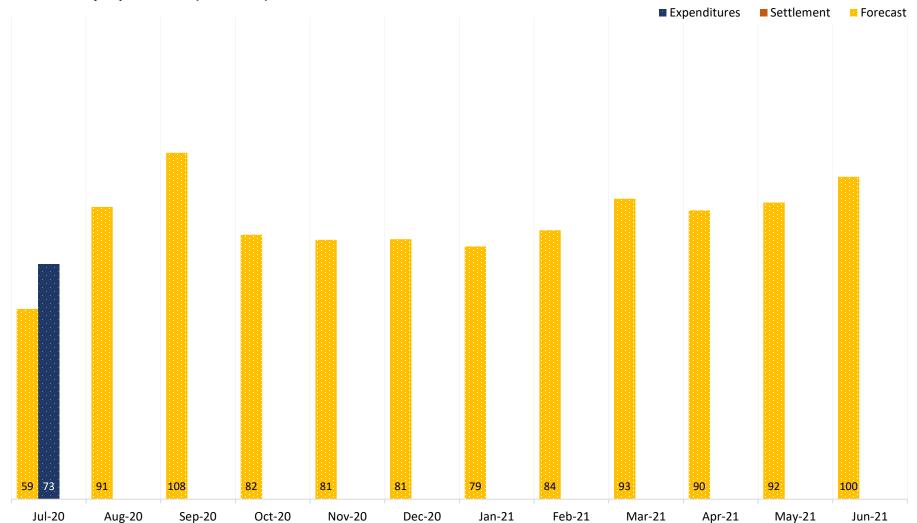
- Intrusion Protection Barriers and other railroad related works.
- North Extension (Avenue 17 to 19 in Madera County).
- Third-Party related work (e.g., Additional PG&E and AT&T work).
- Track Works (Needed for ARRA fulfillment).
- Miscellaneous Works Modifications (e.g., Utility Relocation, Environmental Mitigation, Cast in Place Walls).
- Cumulative Planned Current Contract Value (dotted green line) is based on the current contact values for CP 1-4. This will be updated once the Revised Baseline Schedules (RBSs) are finalized.

- 1. The Cumulative Planned DB + Track Works curve has been adjusted to reflect only the ARRA scope required to complete the 119-mile infrastructure by December 31, 2022. For the T&S contract, this adjustment includes only the estimated cost to place plain-line track.
- 2. The July 2022 Cumulative Plan forecast projection increased from \$4,662.1M to \$4,705.9M due to \$43.9M in July 2020 CO executions.



# CP 1-4 - Design-Build Planned vs. Actual Expenditures - Near Term

## **CP 1-4 – Monthly Expenditures (\$ Millions)**

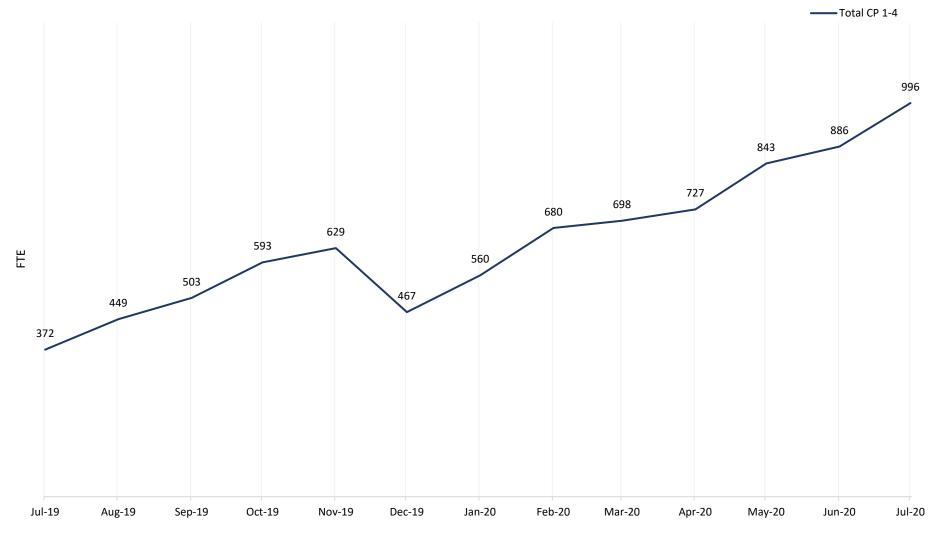


- 1. Expenditures contained in the chart above are specific to the Design-Builder production and based on the certified invoice reported in the respective month and do not include accrual adjustments.
- 2. All projections are being monitored against the Conditional Acceptance of CP 1-4's Revised Baseline Schedule (RBS) as of July 2020.



# **CP 1-4 – Monthly Construction Workforce Total**

## **CP 1-4 – Monthly Construction Workforce Total – Actual**

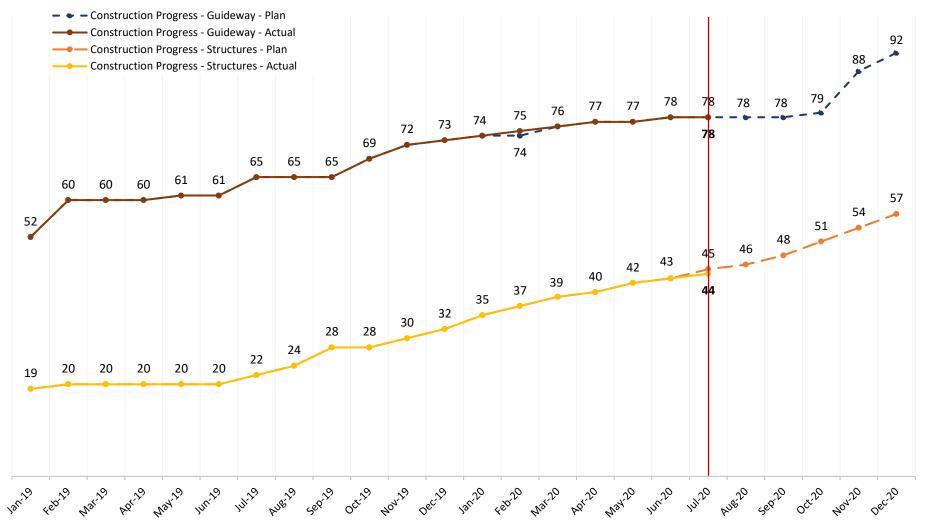


- 1. The Construction Labor numbers (Full-Time Employees) are based on the weekly totals divided by the number of weeks within the working calendar month.
- 2. The December 2019 reporting number shows a sharp decrease due to the holiday week of December 23<sup>rd</sup> through December 31<sup>st</sup>.
- 3. The data from July 2019 to April 2020 was previously presented with data from each month's final week. The data has been updated to represent more accurately the overall total on a per working calendar month average status.



## **CP 1-4 – Structures and Guideway Progress – Planned vs. Actuals**

#### **CP 1-4 – Construction Progress to Completion – Planned vs. Actual**



- 1. Total Structures: 93 each.
- 2. Total Guideway: ~119 miles.
- 3. The March 2020 CVSR incorrectly reported Planned Structures and Planned Guideway data. This report includes the corrected data.
- 4. The Forecasted Structures and Guideway are based on the Authority's Conditional Acceptance of CP 1-4's Revised Baseline Schedule (RBS) as of July 2020.



## CP 1-4 – Right-of-Way (ROW) Summary

#### ROW established metrics to track the following:

- Acquisition Tracking
  - Parcel: Property rights required from others and public lands (property rights required from public entities and/or multiple parties).
  - Railroad: Property rights and other agreements required from railroads.
- Land Right Conveyance Tracking
  - Tier 1: Land Right Conveyances (critical); entities requiring transfer of title prior to construction (PG&E, Southern California Edison, Fresno Irrigation District and the Fresno Metropolitan Flood Control District).
  - Tier 1: Land Right Conveyances (non-critical); due to the PG&E letter agreement (executed May 6, 2020) temporarily reclassified numerous critical PG&E land right conveyances as non-critical for construction and transfer of title occurs post construction.
  - Tier 2: Land Right Conveyances (non-critical); entities where transfer of title occurs post construction.

#### **CP 1-4 – ROW Parcel Acquisition Summary**

Construction Package	June 30, 2020 Total Needed (A)	Total Needed COS <sup>1</sup> Modifications <sup>2</sup> (B)	July 31, 2020 Total Needed (C) = (A) + (B)	June 30, 2020 Total Acquired (D)	July 31, 2020 Acquired (E)	July 31, 2020 Total Acquired (F) = (D) + (E)
CP 1	1,073	-1	1,072	831	1	832
CP 2-3	1,014	-3	1,011	670	6	676
CP 4	266	-27	239	163	0	163
Total	2,353	-31	2,322	1,664	7	1,671

#### Note:

- 1. Certificate of Sufficiency (COS)
- 2. For Construction Package 1-4: Seven parcels added and 38 removed due to design optimization.

## CP 1-4 – ROW Acquired but Not Delivered to Design-Builder (DB)

Construction Package	July 31, 2020 Total Acquired <sup>1</sup>	July 31, 2020 Delivered to DB <sup>2</sup>	July 31, 2020 Total Delivered to DB <sup>3</sup>	July 31, 2020 Total Acquired, Remaining to Deliver to DB
	<b>(G)</b> = (F)	(H)	(1)	<b>(J)</b> = (G) - (I)
CP 1	832	2	832	0
CP 2-3	676	16	645	31
CP 4	163	0	163	0
Total	1,671	18	1,640	31

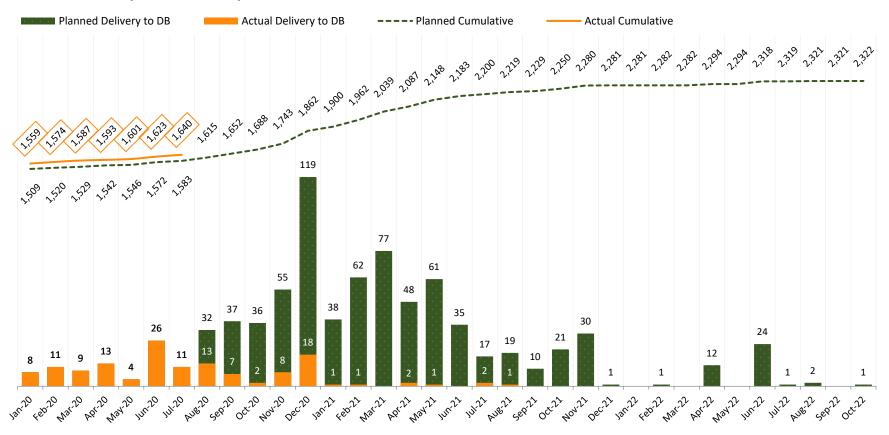
- 1. Total Acquired is defined as parcels that are legally possessed by the Authority.
- 2. The 18 parcels delivered to the DB includes: three due in July; one in August; 11 in December; and three in 2021.
- 3. Total Delivered to DB is defined as parcels certified for construction and delivered to the Design-Builder.



## CP 1-4 - ROW Summary

Construction Package	Total Needed Parcels July 31, 2020	Total Parcels Delivered to Date July 31, 2020	Remaining Parcels to be Delivered July 31, 2020
CP 1	1,072	832	240
CP 2-3	1,011	645	366
CP 4	239	163	76
Total	2,322	1,640	682

## CP 1-4 - Parcel Delivery to DB Summary



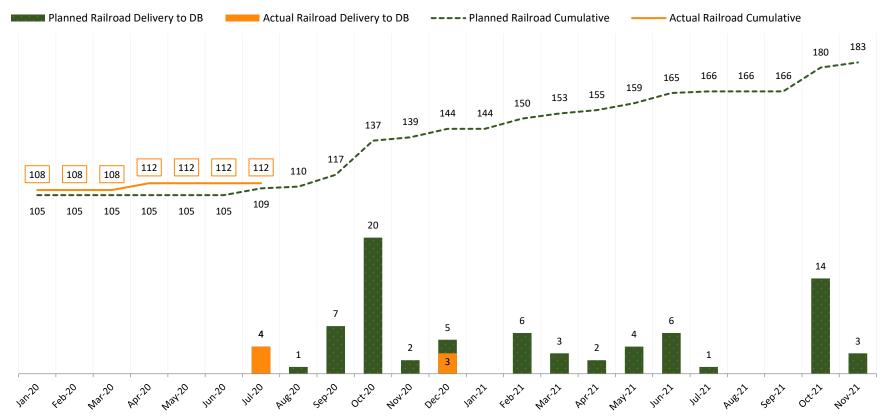
- 1. This now reflects the Revised Baseline Schedules (RBSs) for CP 1, CP 2-3, and CP 4.
- 2. Planned Delivered to DB parcels may be adjusted periodically based on continued refinement of the RBS.
- 3. Actual cumulative line for July 2020 reflects delivered parcels that are forecasted in future months.
- 4. Actual cumulative line for January 2020 includes updated total of parcels Delivered to DB.



# **CP 1-4 – ROW Railroad Summary**

Construction Package	Total Needed Railroad Parcels July 31, 2020	Total Railroad Parcels Delivered to Date July 31, 2020	Remaining Railroad Parcels to be Delivered July 31, 2020
CP 1	95	59	36
CP 2-3	58	26	32
CP 4	30	27	3
Total	183	112	71

## CP 1-4 - Railroad Parcel Delivery to DB Summary



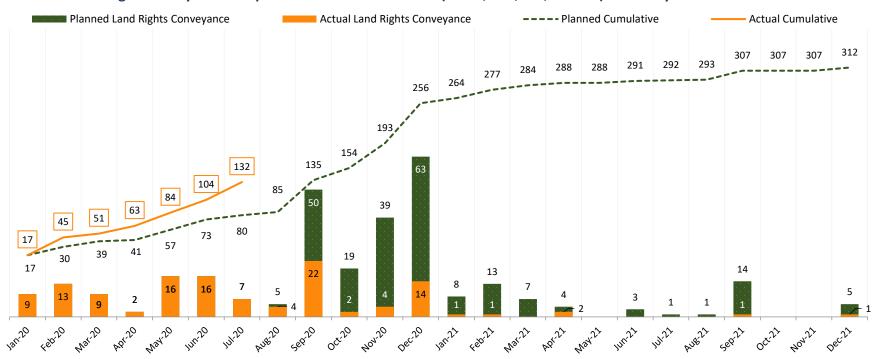
- 1. This now reflects the Railroad Revised Baseline Schedules (RBSs) for CP 1, CP 2-3, and CP 4.
- 2. Planned Railroad Delivery to DB parcels may be adjusted periodically based on continued refinement of the RBS.



## CP 1-4 – Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) Summary

Construction Package	Total Needed Land Right Conveyances June 30, 2020	Total Needed Land Right Conveyances Modifications	Total Needed Land Right Conveyances July 31, 2020	Total Land Right Conveyances Approved <sup>5,6</sup> to Date June 30, 2020	Total Land Right Conveyances Approved July 31, 2020	Remaining Land Right Conveyances to be Approved July 31, 2020
CP 1	128	-6	122	52	13	57
CP 2-3	166	-5	161	45	13	103
CP 4	30	-1	29	7	2	20
Total	324	-12	312	104	28	180

## CP 1-4 - Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) Summary



- This projection has been revised based on the Revised Baseline Schedules (RBSs).
- 2. The PG&E letter agreement (executed May 6, 2020) temporarily reclassified numerous critical land right conveyances as non-critical for construction and is reflected above.
- 3. Actual Cumulative for July 2020 includes completed land right conveyances that are forecasted in future months.
- 4. Planned land right conveyances were adjusted from last month's report due to continued refinement of the RBS.
- 5. The term "Approved" is defined as land right conveyances with Director of Real Property for signature, PG&E for signature, or recorded.
- 6. Approved land right conveyances for May 2020 was adjusted from last month's report due to conveyance recategorization.
- 7. Total needed land right conveyances were reduced by 12 that are no longer required prior to construction.



# **119-Mile Central Valley Segment – Third-Party Agreements**

## **CP 1-4 – Look Ahead - Estimated Completion Timeline for Critical Third-Party Agreements**

Entity	Project Section	Result of Resolution	Previous Estimated Completion	Current Estimated Completion
Madera Valley Water Company (MVWC)	CP 1	Obtain MVWC's cooperation and capture essential terms working together to relocate MVWC facilities.  MVWC seeking outside financial consultant to implement audit-prevention measures.	Jul-20	Oct-20
County of Kings	CP 2-3	Covers transfer of ROW between Authority and County. Grants immediate right of possession to Authority and use of existing ROW for construction.  Began negotiations of agreement in early June 2020.	On Hold	Sept-20
Lower Tule River Irrigation District (LTRID)	CP 2-3	LTRID review of technical engineering documents, coordination, and review of real property documents.  Executed July 31, 2020.	Jul-20	Completed
City of Wasco	CP 4	Covers transfer of ROW between Authority and City. Grants immediate right of possession to Authority and use of existing ROW for construction.  City of Wasco halted negotiations due to dispute on additional financial Farmworker Housing support.	Jul-20	On Hold
City of Wasco	CP 4	Defines ownership and maintenance of grade separations between Authority and City in perpetuity.  City of Wasco halted negotiations due to dispute on additional financial Farmworker Housing support.	Jul-20	On Hold



## **CP 1-4 – Look Ahead - Estimated Completion Timeline for Critical Third-Party Agreements (cont'd.)**

Entity	Project Section	Result of Resolution	Previous Estimated Completion	Current Estimated Completion
Semitropic Water Storage District	CP 4	Design and construction of facilities.  Semitropic Board approved March 2020. Semitropic counsel still finalizing provisions with the Authority's Legal Office.	Jul-20	Sept-20
Semitropic Water Storage District	CP 4	CCUA <sup>1</sup> template allows prompt execution of land conveyances.  Semitropic Board approved March 2020. Semitropic counsel still finalizing provisions with the Authority's Legal Office.	Jul-20	Sept-20
Semitropic Water Storage District	CP 4	JUA <sup>2</sup> template allows prompt execution of land conveyances.  Semitropic Board approved March 2020. Semitropic counsel still finalizing provisions with the Authority's Legal Office.	Jul-20	Sept-20

- 1. Consent to Common Use Agreement (CCUA) CCUAs recognize/perpetuate a facility owner's existing rights where a facility is either protected in place in an area that is now within the Authority's ROW, or relocated to a new position within the Authority's ROW, but also still within the facility owner's existing ROW (for example, an open canal is converted to a box culvert under the Authority corridor). CCUAs also establish the facility owner's and Authority's respective rights and obligations for occupying, maintaining, and accessing the joint use area.
- 2. Joint Use Agreement (JUA) JUAs identify and convey replacement easement rights to facility owners when their utility facility relocates to a position within the Authority's ROW and outside or partly outside of the facility owner's existing ROW. JUAs also establish the facility owner's and Authority's respective rights and obligations for occupying, maintaining, and accessing the joint use area.



# 119-Mile Central Valley Segment – Environmental Clearance - Incidental Take Permits (ITP) Summary<sup>1</sup>

## Merced-Fresno 2081 ITP, Permit Number 2081-2013-025-04, Issued on 12-Mar-14

ITP Name	Amendment Status	Construction Project	ITP Amendment Construction Implications	Previous Date of Approval / Issue	Current Date of Approval / Issue
CP 1AB M-F Clean Up No. 2	In Review with CDFW	CP 1	With CDFW for completeness determination	Mar-20	Sept-20 <sup>2</sup>
North Extension Separation of Rail	In Review with CDFW	CP 1	Accommodates increase in construction footprint to realign high-speed rail guideway away from existing freight rail lines in the North Extension of CP 1	Jun-20	Aug-20 <sup>3</sup>

## Fresno-Bakersfield, 2081 ITP, Permit Number 2081-2015-024-04, Issued on 15-Jun-15

ITP Name	Amendment Status	Construction Project	ITP Amendment Construction Implications	Previous Date of Approval / Issue	Current Date of Approval / Issue
BNSF/PG&E	Issued	CP 4	Issued on July 9, 2020.	May-20	Jul-20

- 1. The above table represents a snapshot in time of the ITP amendments needed to complete CP 1-4. Some additional design changes may occur to complete utility relocations. As design progresses and achieves final approval, the risk of additional amendments shrinks.
- 2. TPZP provided a response to CDFW notification of incomplete request on June 23, 2020. Waiting for CDFW to review information and deem application complete.
- 3. CDFW and Authority are working through discrepancies in land cover types (GIS). New projected date is in August.



# **CONSTRUCTION PACKAGE 1 (CP 1) OVERVIEW**

## **CP 1 – Design-Build Contract Summary**

#### Milestones

Milestone	Date
RFQ Date:	11/15/2011
SOQ Date:	12/19/2011
RFP Date:	03/22/2012
Proposal:	01/18/2013
Bid Open Date:	04/13/2013
Award Date:	08/16/2013
NTP 1 Date:	10/15/2013
NTP 2 Date:	11/22/2013
NTP 3 Date:	07/11/2014
Original Completion Date:	03/31/2018
Current Substantial Completion Date <sup>2</sup> :	12/30/2022

#### **Contract Value**

Description	Amount
Fixed Bid Price:	\$969,988,000.00
Provisional Sums:	\$53,000,000.00
Original Contract Price:	\$1,022,988,000.00
Executed Change Orders:	\$1,214,525,970.39
Current Contract Amount:	\$2,237,513,970.39
Approved Invoices to Date <sup>1</sup> :	\$1,274,534,950.89
Remaining Contract Balance:	\$962,979,019.50

#### **Contract Time Status**

Description	Duration <sup>3</sup>
Original Contract Days:	1,628
Extension of Time Awarded:	1,801
Current Contract Days:	3,429
Work Days Spent (thru 07/31/2020):	2,481

_					_	
Exp	en	ae	'n	tο	Da	te

Description		Percentage
Time:		72.4%
Dollars:		57.0%

#### **Growth Percentage**

Description	Percentage
Time:	110.6%
Dollars:	118.7%

- 1. Includes actuals through July 2020 and estimate for August 2020.
- 2. Current RBS Substantial Completion Forecast Date (Pending Executed Change Order Letter Issuance) December 30, 2022.
- 3. Calendar Days.



# **CP 1 – Executed Change Order Status**

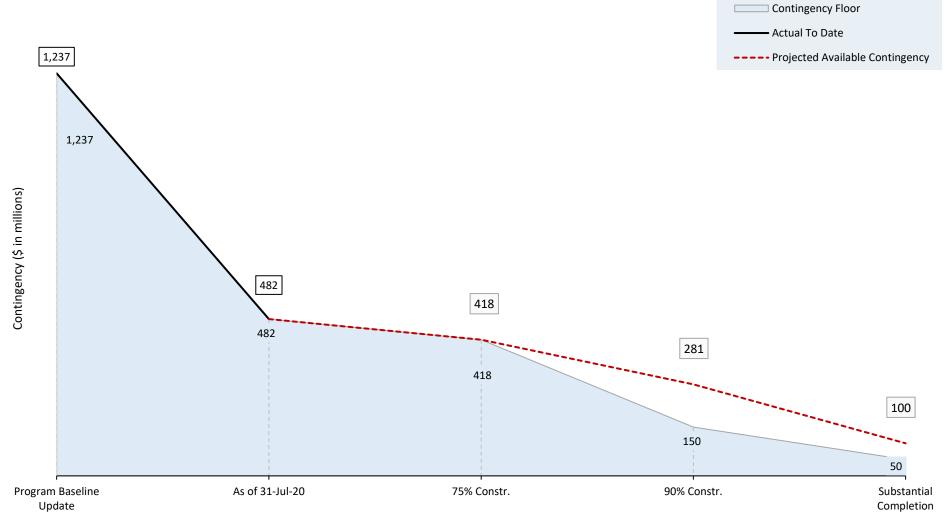
## **CP 1 – Executed Change Order Status**

CO Number	Title	Change Status	Amount	Executed Date
00070.01 R1	UPRR Fresno Street Utilities - Design	Executed	\$141,348.31	27-Apr-20
00278 R1	DL 0182 Church Avenue Basin Redesign due to Hazardous Material - Design Only	Executed	\$42,737.00	29-Apr-20
00311	Under Track Conduits - Changes to Design Criteria	Executed	\$116,240.61	29-Apr-20
00233.4	Road 27 Delays - MVWC Review Services Extended Agreement Fee	Executed	\$28,595.00	02-Jul-20
00338	1625-1626 Tulare St Contaminated Material Mitigation	Executed	\$225,000.00	02-Jul-20
00341	Tuolumne Street Overhead Sign Removal	Executed	\$13,166.30	02-Jul-20
00344	Upgrade of Concrete Barriers on City of Fresno Bridges	Executed	\$78,881.00	10-Jul-20
00308.01	Westside Shoofly Modifications - Construction Revision	Executed	\$11,358,356.00	29-Jul-20
	Total:	_	\$12,004,324.22	



# **CP 1 – Risk - Contingency Report**

## **CP 1 – Risk - Contingency Report**

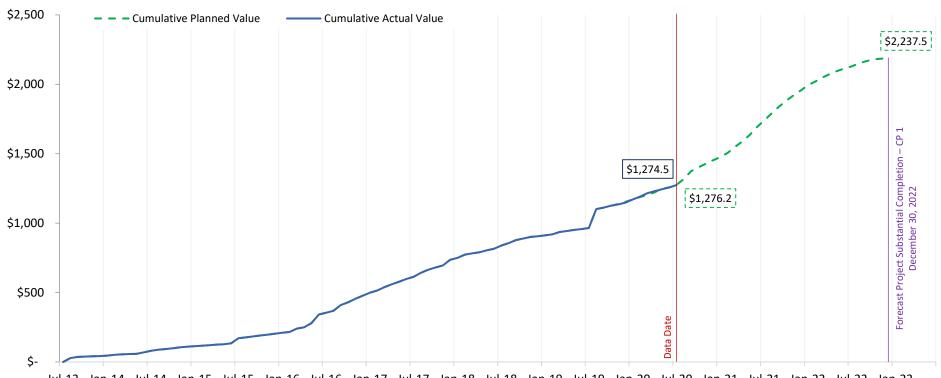


- 1. The Program Baseline Update was presented to and accepted by the Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 1 Project.
- 2. Contract through July 31, 2020.



## **CP 1 – Earned Value**

## **CP 1 – Planned vs. Actual Expenditures from Contract Award Through Contract Completion (\$ Millions)**



Jul-13 Jan-14 Jul-14 Jan-15 Jul-15 Jan-16 Jul-16 Jan-17 Jul-17 Jan-18 Jul-18 Jan-19 Jul-19 Jan-20 Jul-20 Jan-21 Jul-21 Jan-22 Jul-22 Jan-23

#### **CP 1 – Projected Milestones**

Milestone	Date
Main Design Complete	Oct-20
ROW Critical Parcels Acquisition Complete	Nov-20

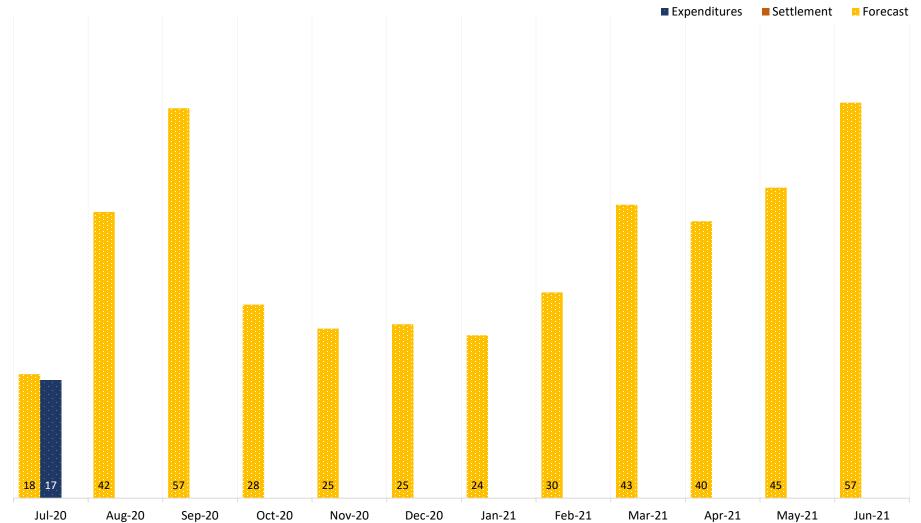
Milestone	Date
<b>Environmental Clearance Complete</b>	Nov-20
Utility Relocation Complete	Mar-21

- 1. The Current Contract Value at completion does not include unexecuted change orders, including IPB, Herndon, SR-99 section remaining works, and the North Extension Revision.
- 2. Main Design has been pushed to October 2020 as the DB and PCM get the FCN/DCN process into contract compliance to enforce the verification and validation certification.
- 3. CP 1 Environmental Clearance pushed to November 2020 in order to review the Hazardous Abatement designs and incorporate additional utilities and BNSF access roads at the structure and guideway sites.
- 4. The Planned Value and Contract Substantial Completion Date (December 2022) are based on the Authority's Conditional Acceptance of CP 1's Revised Baseline Schedule (RBS) as of July 2020. This is expected to be refined as future change orders are issued and finalized.



# CP 1 – Design-Build Planned vs. Actual Expenditures – Near Term

## **CP 1 – Fiscal Year Expenditures (\$ Millions)**

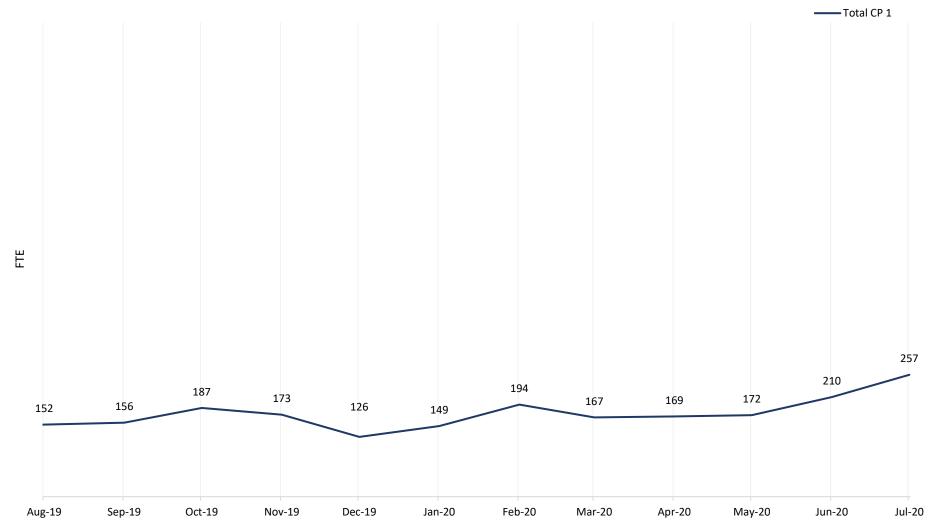


- 1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoices.
- 2. The projections are being monitored against the Conditional Acceptance of CP 1's Revised Baseline Schedule (RBS) as of July 2020.



# **CP 1 – Monthly Construction Workforce Total**

## **CP 1 – Monthly Construction Workforce Total – Actual**

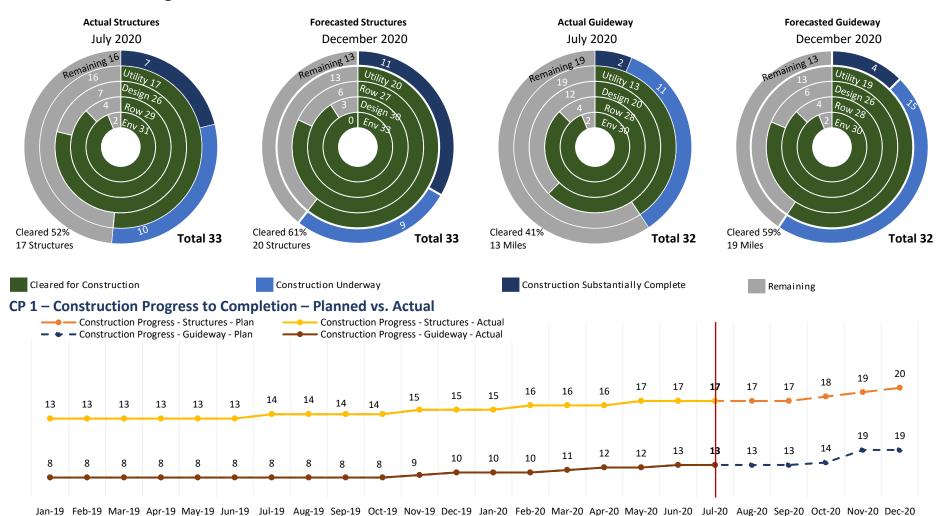


- 1. The Construction Labor numbers (Full-Time Employees) are based on the working calendar month.
- 2. The December 2019 reporting number shows a sharp decrease due to the holiday week of December 23<sup>rd</sup> through December 31<sup>st</sup>.
- 3. The data from July 2019 to April 2020 was previously presented with data from each month's final week. The data has been updated to represent more accurately the overall total on a per working calendar month average status.



## **CP 1 – Construction Progress**

#### **CP 1 – Construction Progress**



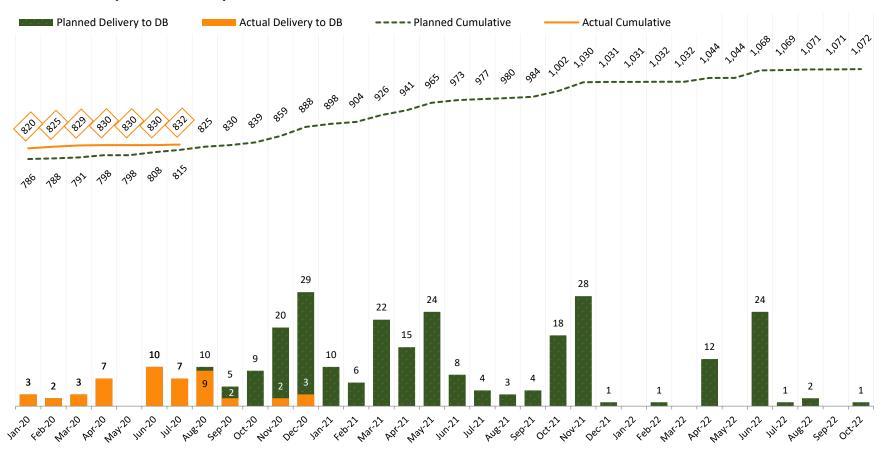
- Total Structures: 33 structures.
- 2. Total Guideway: 32 miles (this does not include SR-99 section) Guideway was added to the Caltrans contract resulting in a guideway total of approximately 32 miles.
- 3. The Forecasted Structures and Guideway are based on the Authority's Conditional Acceptance of CP 1's Revised Baseline Schedule (RBS) as of July 2020.



## **CP 1 – ROW Summary**

Construction Package	Total Needed Parcels	Total Parcels Delivered to Date	Remaining Parcels to be Delivered
	July 31, 2020	July 31, 2020	July 31, 2020
CP 1	1,072	832	240

#### **CP 1 – Parcel Delivery to DB Summary**



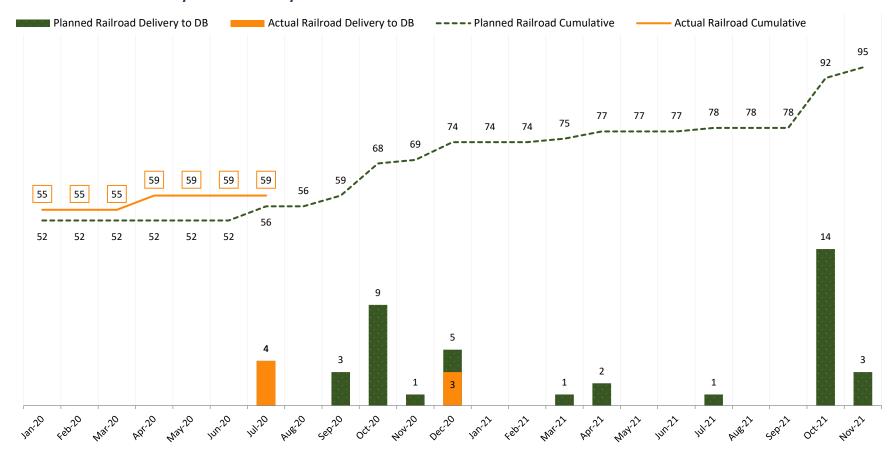
- 1. This now reflects the Revised Baseline Schedules (RBSs) for CP 1.
- 2. Planned Delivered to DB parcels may be adjusted periodically based on continued refinement of the RBS.
- 3. Actual cumulative line for July 2020 reflects delivered parcels that are forecasted in future months.



# **CP 1 – ROW Railroad Summary**

Construction Package	Total Needed Railroad Parcels July 31, 2020	Total Railroad Parcels Delivered to Date July 31, 2020	Remaining Railroad Parcels to be Delivered July 31, 2020
CP 1	95	59	36

## CP 1 - Railroad Parcel Delivery to DB Summary



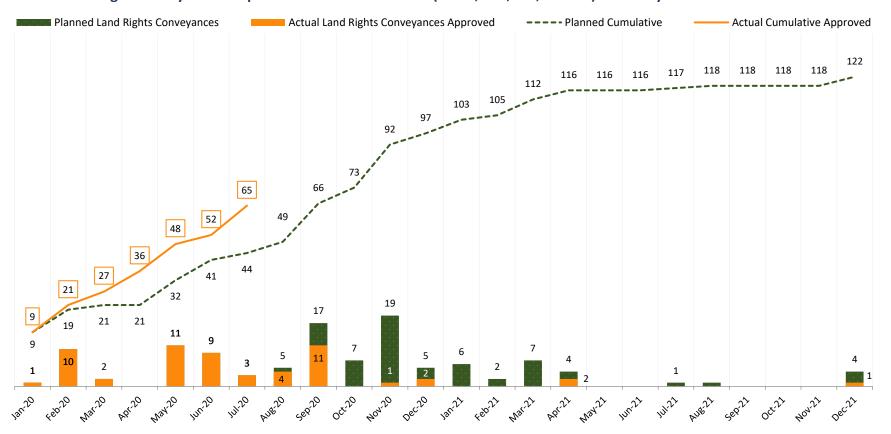
- 1. This now reflects the Railroad Revised Baseline Schedules (RBSs) for CP 1.
- 2. Planned Railroad Delivery to DB parcels may be adjusted periodically based on continued refinement of the RBS.



## CP 1 – Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) Summary

Construction Package	Total Needed Land Right Conveyances July 31, 2020	Total Land Right Conveyances Approved <sup>5,6</sup> to Date July 31, 2020	Remaining Land Right Conveyances to be Approved July 31, 2020
CP 1	122	65	57

#### CP 1 – Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) Summary



- 1. This projection has been revised based on the Revised Baseline Schedules (RBSs).
- 2. The PG&E letter agreement (executed May 6, 2020) temporarily reclassified numerous critical land right conveyances as non-critical for construction and is reflected above.
- 3. Actual Cumulative for July 2020 includes completed land right conveyances that are forecasted in future months.
- 4. Planned land right conveyances were adjusted from last month's report due to continued refinement of the RBS.
- 5. The term "Approved" is defined as land right conveyances with Director of Real Property for signature, PG&E for signature, or recorded.
- 6. Approved land right conveyances for May 2020 was adjusted from last month's report due to recategorization.
- 7. Total needed land right conveyances for CP 1 were reduced by six that are no longer required prior to construction.



# **CONSTRUCTION PACKAGE 2-3 (CP 2-3) OVERVIEW**

## **CP 2-3 – Design-Build Contract Summary**

#### Milestones

Milestone	Date
RFQ Date:	10/09/2013
SOQ Date:	12/13/2013
RFP Date:	04/03/2014
Proposal:	10/30/2014
Bid Open Date:	12/11/2014
Award Date:	06/10/2015
NTP 1 Date:	06/12/2015
NTP 2 Date:	07/25/2015
Original Completion Date:	08/19/2019
Current Substantial Completion Date <sup>2</sup> :	12/18/2022

#### **Contract Value**

Description	Amount
Fixed Bid Price:	\$1,205,335,890.00
Provisional Sums:	\$160,000,000.00
Original Contract Price:	\$1,365,335,890.00
Executed Change Orders:	\$515,139,767.00
Current Contract Amount:	\$1,880,475,657.00
Approved Invoices to Date <sup>1</sup> :	\$1,145,787,540.40
Remaining Contract Balance:	\$734,688,116.60

#### **Contract Time Status**

Description	Duration <sup>3</sup>
Original Contract Days:	1,486
Extension of Time Awarded:	1,284
Current Contract Days:	2,770
Work Days Spent (thru 07/31/2020):	1,833

#### **Expended to Date**

Description		Percentage
Time:		66.2%
Dollars:		60.9%

#### **Growth Percentage**

Description	Percentage
Time:	86.4%
Dollars:	37.7%

- 1. Includes actuals through July 2020 and estimate for August 2020.
- 2. Current RBS Substantial Completion Forecast Date (Pending Executed Change Order Letter Issuance) December 18, 2022.
- 3. Calendar Days.



# **CP 2-3 – Executed Change Order Status**

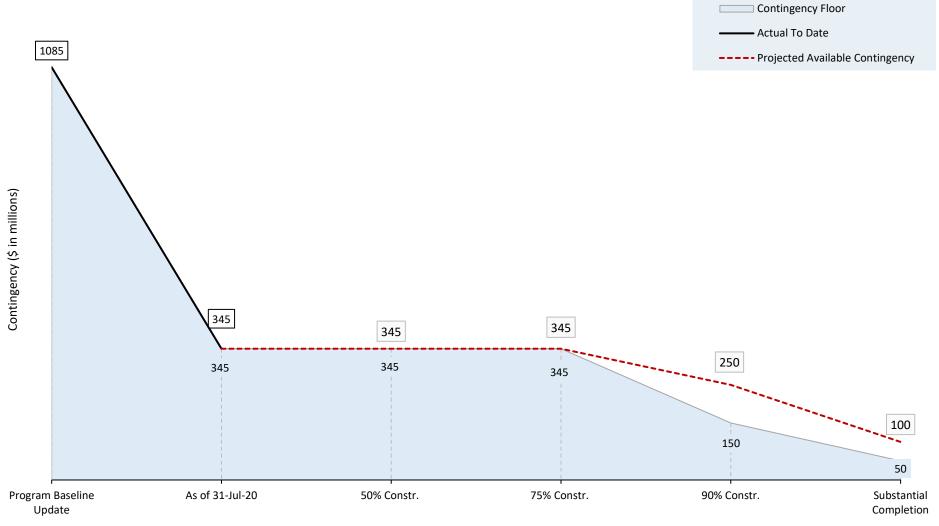
# **CP 2-3 – Executed Change Order Status**

CO Number	Title	Change Status	Amount	Executed Date
00045.9	Escalation Costs - May 2020	Executed	\$441,274.00	02-Jul-20
00156	Concurrent Closure Adams/South Avenue	Executed	\$1,000,000.00	02-Jul-20
00155	Insurance Costs	Executed	\$18,000,000.00	07-Jul-20
00024.18	HazMat Asbestos Seg.3	Executed	\$121,170.00	07-Jul-20
00154	Tule River Gas Line	Executed	\$314,058.00	10-Jul-20
00086.10	Private Irrigation Crossings S2	Executed	\$538,820.00	13-Jul-20
00149	Project Biologist Coordination - CDFW	Executed	\$30,000.00	20-Jul-20
00159	IPB Yield Line Theory Analysis	Executed	\$35,770.00	20-Jul-20
Total: \$20,481,092.00				



# **CP 2-3 – Risk - Contingency Report**

## **CP 2-3 – Risk - Contingency Report**



- 1. The Program Baseline Update was presented to and accepted by the Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 2-3 Project.
- 2. Contract through July 31, 2020.



## CP 2-3 - Earned Value

## CP 2-3 – Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)



# **CP 2-3 – Projected Milestones**

Milestone	Date	
Main Design Complete	Dec-20 <sup>4</sup>	Env
ROW Critical Parcels Acquisition Complete	Jan-21	

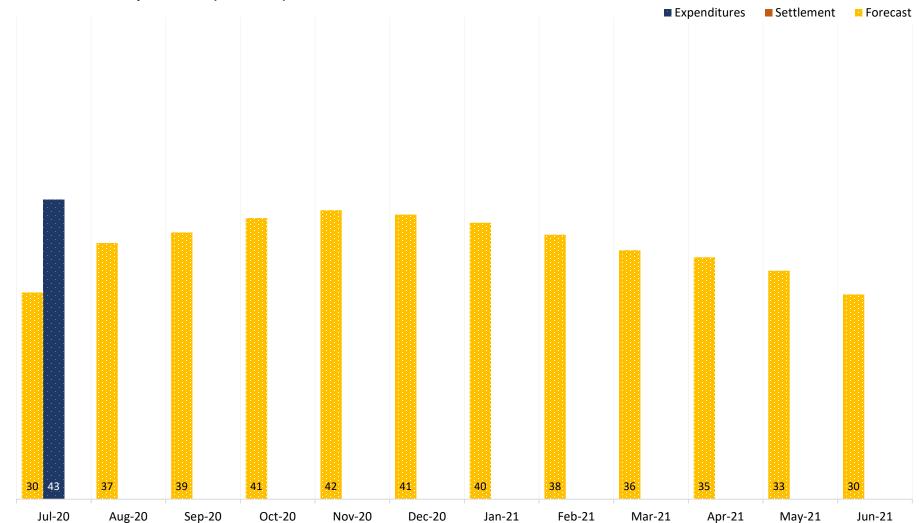
Milestone	Date	
Environmental Clearance Complete	May-20 Complete	
Utility Relocation Complete	Mar-21	

- 1. The Planned Value and Contract Substantial Completion Date are based on the CP 2-3 Proposed Revised Baseline Schedule as of July 2020. This is expected to be refined as future change orders are issued.
- 2. The Current Contract Value does not include unexecuted change orders including Project 517, the latest TIA settlement, and IPB change orders.
- 3. Main Design has been pushed to December 2020 as the DB, PCM, Caltrans and BNSF address design delays for the utility relocations, which is critically impacting the schedules.



# **CP 2-3 – Design-Build Planned vs. Actual Expenditures – Near Term**

## **CP 2-3 – Fiscal Year Expenditures (\$ Millions)**

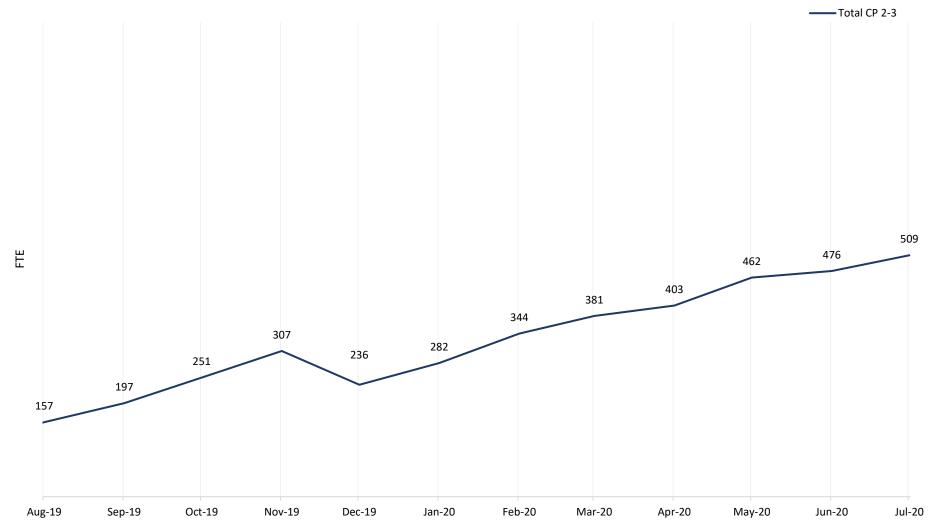


- 1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoices.
- 2. The projections are being monitored against the Conditional Acceptance of CP 2-3's Revised Baseline Schedule (RBS) as of July 2020.



# **CP 2-3 – Monthly Construction Workforce Total**

### **CP 2-3 – Monthly Construction Workforce Total – Actual**

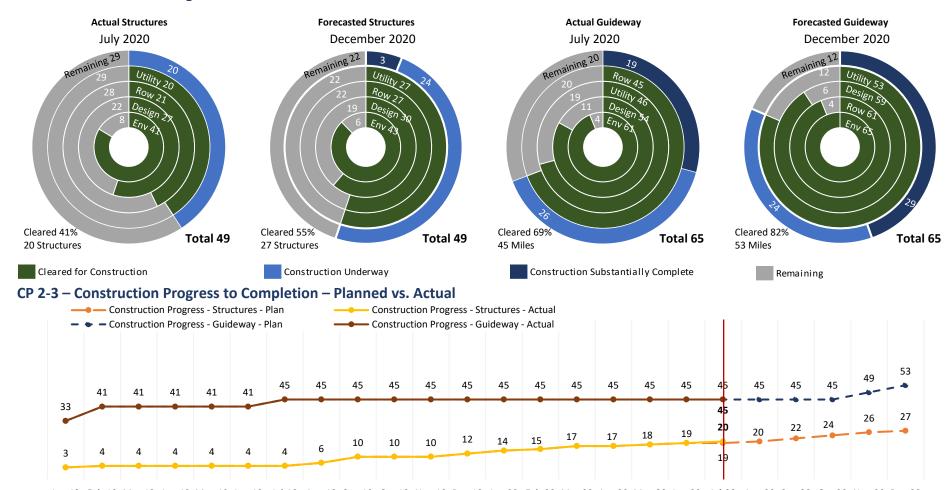


- 1. The Construction Labor numbers (Full-Time Employees) are based on the working calendar month.
- 2. The December 2019 reporting number shows a sharp decrease due to the holiday week of December 23rd through December 31st.
- 3. The data from July 2019 to April 2020 was previously presented with data from each month's final week. The data has been updated to represent more accurately the overall total on a per working calendar month average status.



# **CP 2-3 – Construction Progress**

### **CP 2-3 – Construction Progress**



Jan-19 Feb-19 Mar-19 Apr-19 May-19 Jul-19 Jul-19 Jul-19 Aug-19 Sep-19 Oct-19 Nov-19 Dec-19 Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20

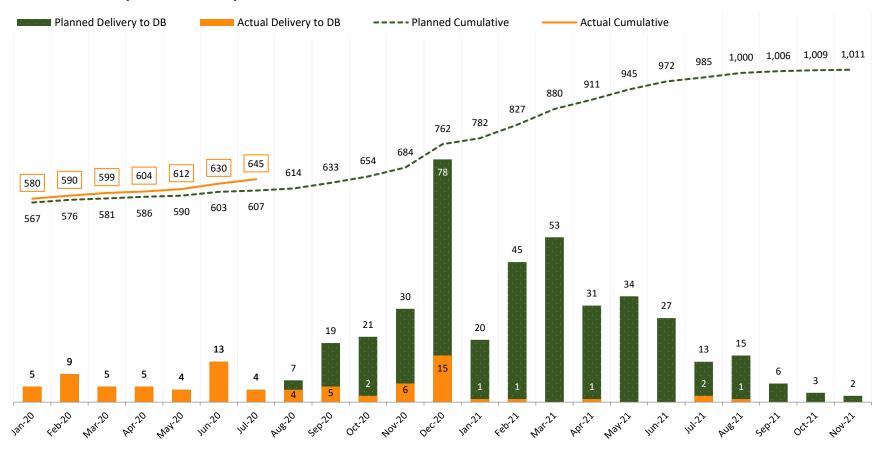
- 1. Total Structures: 49 each. This count has been reduced from 50 due to combining the structures resulting from Project 517.
- 2. Total Guideway: 65 miles.
- 3. The Forecasted Structures and Guideway are based on the Authority's Conditional Acceptance of CP 2-3's Revised Baseline Schedule (RBS) as of July 2020.



# CP 2-3 - ROW Summary

Construction Package	Total Needed Parcels	Total Parcels Delivered to Date	Remaining Parcels to be Delivered
	July 31, 2020	July 31, 2020	July 31, 2020
CP 2-3	1,011	645	366

### CP 2-3 - Parcel Delivery to DB Summary



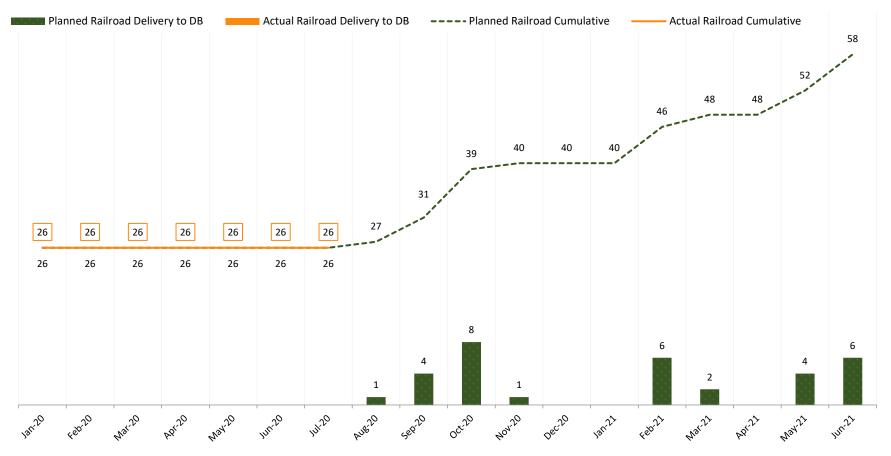
- 1. This now reflects the Revised Baseline Schedules (RBSs) for CP 2-3.
- 2. Planned Delivered to DB parcels may be adjusted periodically based on continued refinement of the RBS.
- 3. Actual cumulative line for July 2020 reflects delivered parcels that are forecasted in future months.
- 4. Actual cumulative line for January 2020 includes updated total of parcels Delivered to DB.



# **CP 2-3 – ROW Railroad Summary**

Construction Package	Total Needed Railroad Parcels July 31, 2020	Total Railroad Parcels Delivered to Date July 31, 2020	Remaining Railroad Parcels to be Delivered July 31, 2020
CP 2-3	58	26	32

### **CP 2-3 – Railroad Parcel Delivery to DB Summary**



- 1. This now reflects the Railroad Revised Baseline Schedules (RBSs) for CP 2-3.
- 2. Planned Delivered to DB parcels may be adjusted periodically based on continued refinement of the RBS.



# CP 2-3 – Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) Summary

Construction Package	Total Needed Land Right Conveyances July 31, 2020	Total Land Right Conveyances Approved <sup>5</sup> to Date July 31, 2020	Remaining Land Right Conveyances to be Approved July 31, 2020
CP 2-3	161	58	103

### CP 2-3 – Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) Summary



- 1. This projection has been revised based on the Revised Baseline Schedules (RBSs).
- 2. The PG&E letter agreement (executed May 6, 2020) temporarily reclassified numerous critical land right conveyances as non-critical for construction and is reflected above.
- 3. Actual Cumulative for July 2020 includes completed land right conveyances that are forecasted in future months.
- 4. Planned land right conveyances were adjusted from last month's report due to continued refinement of the RBS.
- 5. The term "Approved" is defined as land right conveyances with Director of Real Property for signature, PG&E for signature, or recorded.
- 6. Total needed land right conveyances for CP 2-3 were reduced by five that are no longer required prior to construction.



# **CONSTRUCTION PACKAGE 4 (CP 4) OVERVIEW**

# **CP 4 – Design-Build Contract Summary**

#### Milestones

Milestone	Date
RFQ Date:	11/20/2014
SOQ Date:	01/30/2015
RFP Date:	05/27/2015
Proposal:	11/25/2015
Bid Open Date:	01/05/2016
Award Date:	02/29/2016
LNTP Date:	03/01/2016
NTP Date:	04/15/2016
Original Completion Date:	06/03/2019
Current Substantial Completion Date <sup>2</sup> :	12/15/2021

### **Contract Value**

Description	Amount
Fixed Bid Price:	\$337,247,000.00
Provisional Sums:	\$107,000,000.00
Original Contract Price:	\$444,247,000.00
Executed Change Orders:	\$143,698,949.43
Current Contract Amount:	\$587,945,949.43
Approved Invoices to Date <sup>1</sup> :	\$349,756,451.00
Remaining Contract Balance:	\$238,189,498.63

### **Contract Time Status**

Description	Duration <sup>3</sup>
Original Contract Days:	1,144
Extension of Time Awarded:	987
Current Contract Days:	2,131
Work Days Spent (thru 07/31/2020):	1,559

#### **Expended to Date**

Description	Percentage
Time:	73.2%
Dollars:	59.5%

### **Growth Percentage**

Description	Percentage
Time:	86.3%
Dollars:	32.3%

- 1. Includes actuals through July 2020 and estimate for August 2020.
- 2. Current RBS Substantial Completion Forecast Date (Pending Executed Change Order Letter Issuance) December 15, 2021.
- 3. Calendar Days.



# **CP 4 – Executed Change Order Status**

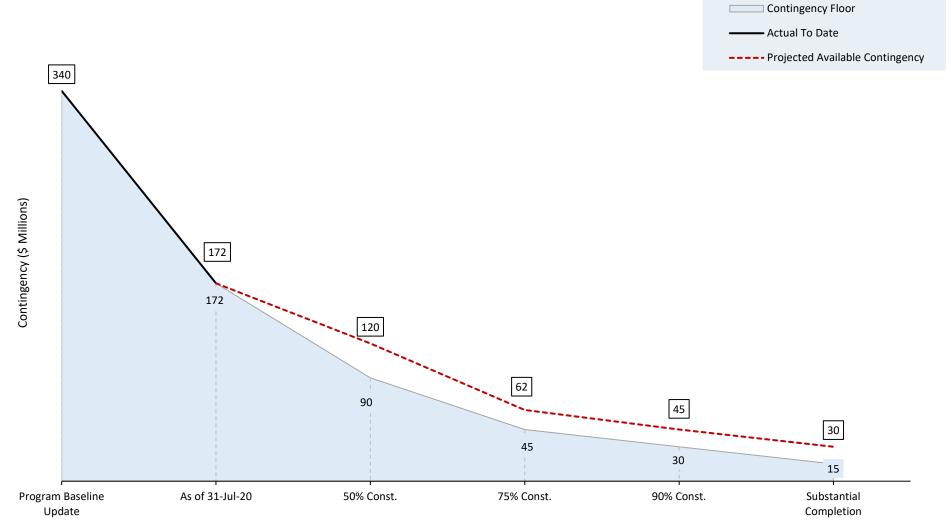
# **CP 4 – Executed Change Order Status**

CO Number	Title	Change Status	Amount	Executed Date
57	Electrostatic Disinfection Services	Executed	\$43,206.60	10-Jul-20
60	Mitigation Measures at Wasco Viaduct – Drilled Shafts	Executed	\$601,385.66	10-Jul-20
62	Poso Avenue UPRR Schedule Mitigation Measures	Executed	\$3,922,875.11	14-Jul-20
63	Lafrati Farms Landowner Reimbursement	Executed	\$14,245.58	14-Jul-20
65	Wasco Amtrak Station Security	Executed	\$10,523.92	14-Jul-20
67	Daily Sanitizing Porter Services	Executed	\$57,780.00	14-Jul-20
59	McCombs CIDH Piling Re-sequencing	Executed	\$382,517.88	16-Jul-20
64	PG&E Conflicts Out of Sequence Work #2 for Review (UPSTO 46/47)	Executed	\$1,628,345.78	16-Jul-20
61	McCombs Overpass Construction	Executed	\$2,027,317.69	31-Jul-20
69	Environmental Monitoring Additional Cost up to Jan 2020	Executed	\$2,701,092.97	31-Jul-20
	Total:			



# **CP 4 – Risk - Contingency Report**

### **CP 4 – Risk - Contingency Report**



- 1. The Program Baseline Update was presented to and accepted by the Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 4 Project.
- 2. Contract through July 31, 2020.



### CP 4 - Earned Value

# **CP 4 – Planned vs. Actual Expenditures from Contract Award Through Contract Completion (\$ Millions)**



### **CP 4 – Projected Milestones**

Milestone	Date	
Main Design Complete	Feb-20 (Complete)	
ROW Acquisition Complete	Dec-20	

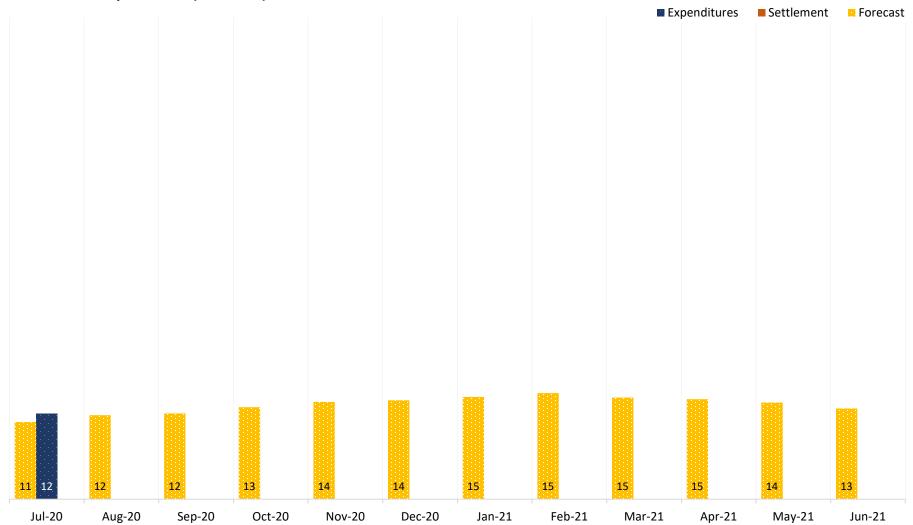
Milestone	Date	
<b>Environmental Clearance Complete</b>	Nov-20 <sup>3</sup>	
Utility Relocation Complete	Mar-21	

- 1. The above contract value does not include unexecuted change orders including SR-46 BNSF structure.
- 2. Environmental Clearance on lands requiring utility relocations delayed from July 2020 to November 2020 pending issuance of ITP Amendment, per California Rail Builders (CRB).
- 3. The Planned Value and Contract Substantial Completion Date (December 2021) are based on the Authority's Conditional Acceptance of CP 4's Revised Baseline Schedule (RBS) as of July 2020. This is expected to be refined as future change orders are issued and finalized.



# CP 4 - Design-Build Planned vs. Actual Expenditures - Near Term

# **CP 4 – Fiscal Year Expenditures (\$ Millions)**

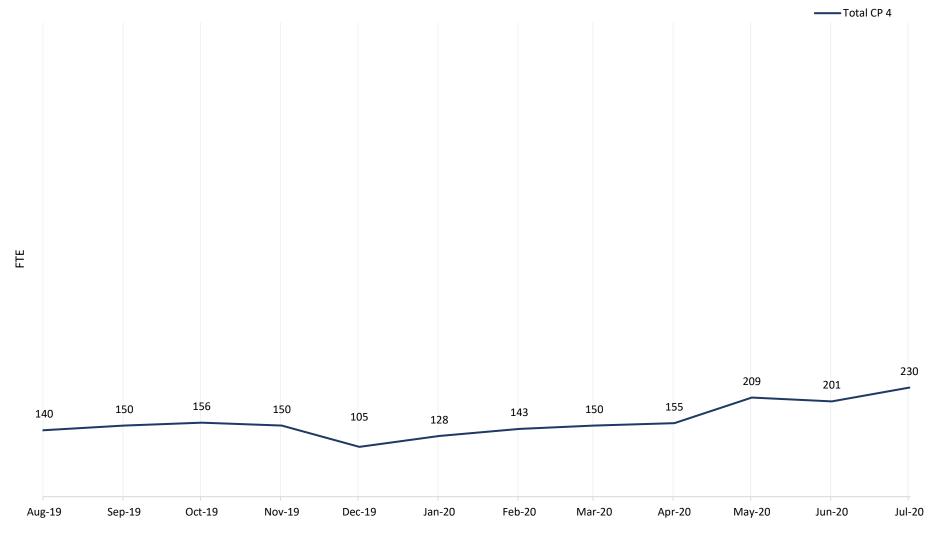


- 1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
- 2. The projections are being monitored against the Conditional Acceptance of CP 4's Revised Baseline Schedule (RBS) as of July 2020.



# **CP 4 – Monthly Construction Workforce Total**

### **CP 4 – Monthly Construction Workforce Total – Actual**

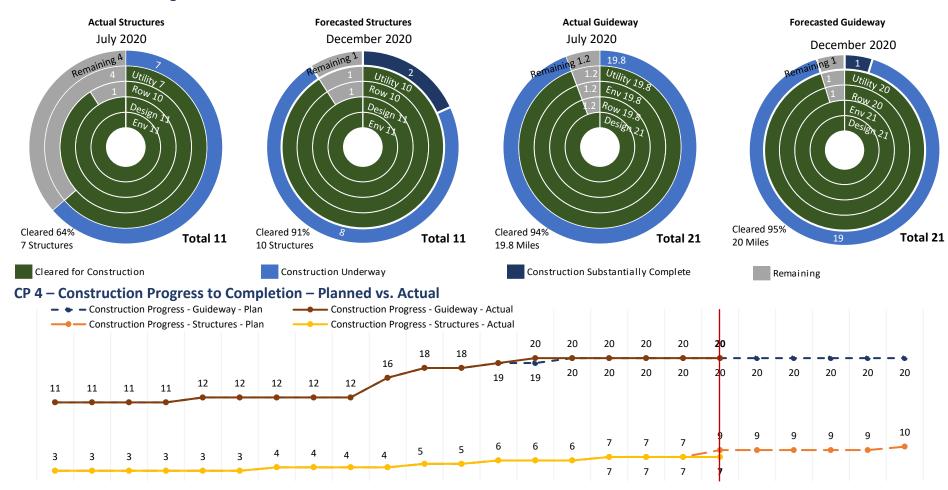


- 1. The Construction Labor numbers (Full-Time Employees) are based on the working calendar month.
- 2. The December 2019 reporting number shows a sharp decrease due to the holiday week of December 23rd through December 31st.
- 3. June 2020's total was overstated (225) and has been corrected to 201.
- 4. The data from July 2019 to April 2020 was previously presented with data from each month's final week. The data has been updated to represent more accurately the overall total on a per working calendar month average status.



# **CP 4 – Construction Progress**

### **CP 4 – Construction Progress**



Jan-19 Feb-19 Mar-19 Apr-19 May-19 Jun-19 Jul-19 Aug-19 Sep-19 Oct-19 Nov-19 Dec-19 Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20

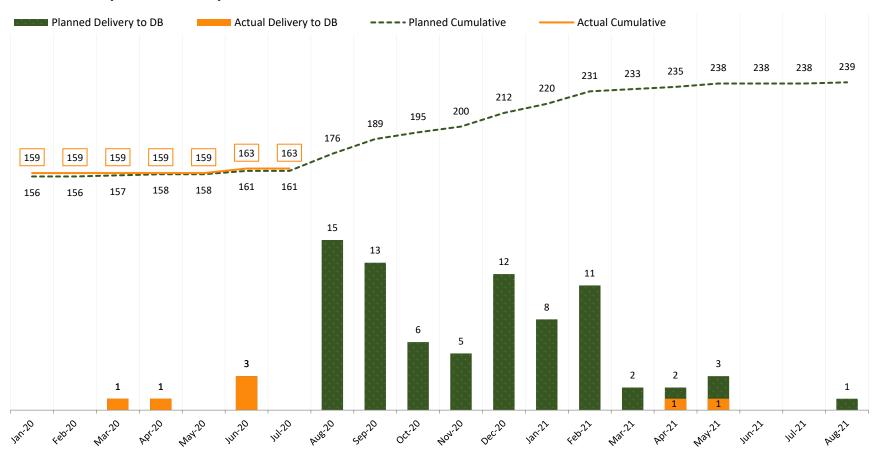
- 1. Total Structures: 11 structures.
- 2. Total Guideway: 21 miles.
- 3. Actual Guideway progress for May 2020 was 19.8 miles. The graph reflects 20 miles due to the rounding up within the mathematical formula.
- I. The Forecasted Structures and Guideway are based on the Authority's Conditional Acceptance of CP 4's Revised Baseline Schedule (RBS) as of July 2020.



# **CP 4 – ROW Summary**

Construction Package	Total Needed Parcels	Total Parcels Delivered to Date	Remaining Parcels to be Delivered
	July 31, 2020	July 31, 2020	July 31, 2020
CP 4	239	163	76

### **CP 4 – Parcel Delivery to DB Summary**



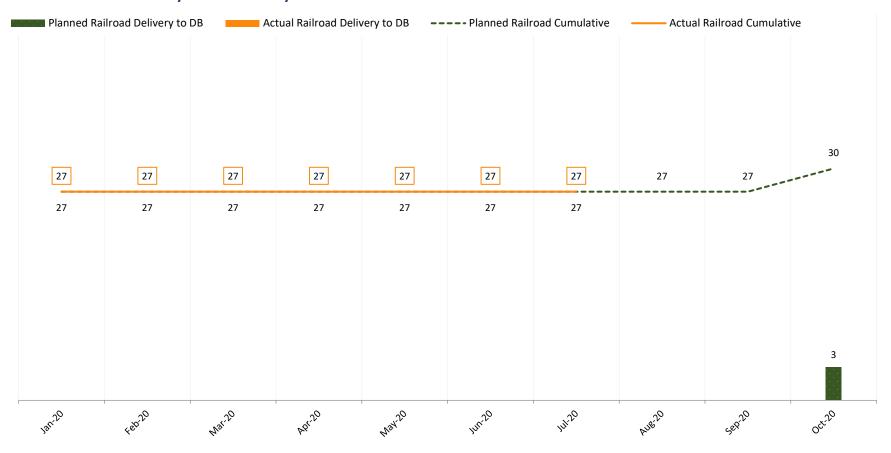
- 1. This now reflects the Revised Baseline Schedules (RBSs) for CP 4.
- 2. Planned Delivered to DB parcels may be adjusted periodically base on continued refinement of the RBS.
- 3. Actual cumulative line for July 2020 reflects delivered parcels that are forecasted in future months.



# **CP 4 – ROW Railroad Summary**

Construction Package	Total Needed Railroad Parcels July 31, 2020	Total Railroad Parcels Delivered to Date July 31, 2020	Remaining Railroad Parcels to be Delivered July 31, 2020		
CP 4	30	27	3		

# CP 4 - Railroad Parcel Delivery to DB Summary



- 1. This now reflects the Railroad Revised Baseline Schedules (RBSs) for CP 4.
- 2. Planned Delivered to DB parcels may be adjusted periodically based on continued refinement of the RBS.



# CP 4 – Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) Summary

Construction Package	Total Needed Land Right Conveyances July 31, 2020	Total Land Right Conveyances Approved <sup>5</sup> to Date July 31, 2020	Remaining Land Right Conveyances to be Approved July 31, 2020		
CP 4	29	9	20		

### CP 4 – Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) Summary



- 1. This projection has been revised based on the Revised Baseline Schedules (RBSs).
- 2. The PG&E letter agreement (executed May 6, 2020) temporarily reclassified numerous critical land right conveyances as non-critical for construction and is reflected above.
- 3. Actual Cumulative for July 2020 includes completed land right conveyances that are forecasted in future months.
- Planned land right conveyances were adjusted from last month's report due to continued refinement of the RBS.
- 5. The term "Approved" is defined as land right conveyances with Director of Real Property for signature, PG&E for signature, or recorded.
- 6. Total needed land right conveyances for CP 4 were reduced by one that is no longer required prior to construction.



# Project Development Schedule – Record of Decision (ROD)

### **Project Development Schedule (to ROD)**

Program Priority	Segment	Progress	Complete Purpose & Need Statement		Complete Alternatives Analysis		Board Concurrence of Preliminary Preferred Alt. Draft EIR/EIS		Publish Draft EIR/EIS		Publish Final EIS & Obtain ROD		Date EIR/EIS To Be Completed	
Number	Section	Due Dates	Last Month	Current	Last Month	Current	Last Month	Current	Last Month	Current	Last Month	Current	Last Month	Current
Document Complete	Merced to Fresno	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Fresno to Bakersfield	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Compl0ete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	CV Electrical Interconnections	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Locally Generated Alternative (F-B)	Plan For <b>e</b> cast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
1	San Francisco to San Jose	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Apr-20 Jul-20 92%	Apr-20 Jul-20 100%	Jun-21 Aug-21 0%	Jun-21 Oct-21 <sup>1</sup> 0%	Aug-21	Oct-21
2	San Jose to Merced	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Apr-21 Jun-21 5%	Apr-21 Aug-21 <sup>2</sup> 7%	Jun-21	Aug-21
3	Central Valley Wye (M-F)	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-20 Sep-20 91%	Sep-20 Sep-20 94%	Sep-20	Sep-20
4	Los Angeles to Anaheim	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Nov-20 Jun-21 78%	Nov-20 Jun-21 80%	Dec-21 Jul-22 0%	Dec-21 Jul-22 <sup>3</sup> 0%	Jul-22	Jul-22
5	Burbank to Los Angeles	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Jan-21 Jul-21 0%	Jan-21 Aug-21⁴ 0%	Jul-21	Aug-21
6	Palmdale to Burbank	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Feb-20 Jun-20 68%	Feb-20 Jun-21 70%	Aug-21 Jul-22 0%	Aug-21 Jun-22 <sup>5</sup> 0%	Jul-22	Jun-22
7	Bakersfield to Palmdale	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Feb-21 May-21 10%	Feb-21 May-21 <sup>6</sup> 12%	May-21	May-21
8	НМЕ	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Apr-16 TBD 0%	Apr-16 TBD 0%	Sep-16 TBD 0%	Sep-16 TBD 0%	Feb-21 TBD 0%	Feb-21 TBD 0%	TBD	TBD

- 1. Four-month delay due to late submittal of cooperating agency comments, remediation time to meet Web Content Accessibility Guidelines (WCAG), internal reviews and resource constraints, allowance for 15-day extension of Draft EIR/EIS comment period, and program-wide resolution of Cooperating Agency review constraint.
- 2. Three-month delay due to late submittal of cooperating agency comments, remediation time to meet WCAG, internal reviews and resource constraints, agreement to include a new NAT quality review cycle, 15-day extension of Draft EIR/EIS comment period, receipt of substantial comments on Draft EIR/EIS in excess of baseline assumptions, and program-wide resolution of Cooperating Agency review constraint.
- 3. Seven-month delay due to late submittal of BNSF environmental deliverables, time required to reach concurrence with BNSF on design issues, and full incorporation of a modified V30 Legal and Environmental Review Process
- I. Seven-month delay due to extension of the Draft EIR/EIS public comment period from July 16 to August 31, late submittal of cooperating agency comments, and time to address internal reviews & resource constraints.
- 5. Publication of draft corrected to address delay due to additional consultation with the U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency (EPA). Ten-month delay in delivery of ROD because of additional design and analysis for developing the avoidance alternative at Una Lake, to provide additional review by National Environmental Policy Act (NEPA) Assignment Team before CEO signature, and to incorporate internal resource constraints. (Mitigations for minimizing delays are being evaluated.)
- 6. Three-month delay due to design revision to accommodate Cesar Chavez National Monument (CCNM) and full incorporation of a modified V30 Legal and Environmental Review Process.



# **Project Development – Key Actions**

In July 2020, the Authority conducted Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) document reviews for several project sections. EEC work on the San Francisco to San José Project Section Draft EIR/EIS document was extended as a result of additional needed text changes identified in April, which delayed public release by two weeks to July 10, 2020. Completed delimiting of 777 comment submittals on the San José to Merced Draft EIR/EIS into 3,350 separate comments and began active coordination with ES, NAT, Legal, and Rail Ops on response development. Legal/NAT/ES review of the draft CVY Final SEIR/EIS completed. The draft CVY Final SEIR/EIS also passed the 508 remediation tests and is ready for release on August 7. The Burbank to Los Angeles project section hosted a virtual public hearing on July 8 for the Draft EIR/EIS. The comment period for the Burbank to Los Angeles Draft EIR/EIS was extended from July 16, 2020 to August 31, 2020. Permitting for the Central Valley Wye and the Locally Generated Alternative will progress following Board action on the Merced and Bakersfield extensions.

**Project Development – Key Actions Summary** 

Troject bevelo	pment – Key Actions Summary
Project Section	Key Actions
San Francisco to San Jose	<ul> <li>Draft EIR/EIS was released for public circulation on July 10, 2020. CEO has extended the public review period to September 9, 2020.</li> <li>Performed open house outreach activities to support the Draft EIR/EIS, including open houses and office hours.</li> </ul>
San José to Merced	<ul> <li>Preparing standard and individualized responses to 3,350 separate comments received on the Draft EIR/EIS.</li> <li>Project staff are coordinating with Rail Ops, ES, Permitting, and Legal on OCS design refinements for bird-safe assurances within extents of alignment occupied by California condor, Golden eagle, or Sandhill crane (CA fully-protected species). Preparing proof-of-concept design drawings of Rail Ops OCS refinements. Permitting is coordinating with the B-P and P-B teams using program-wide factors for determining other affected alignment extents.</li> </ul>
Central Valley Wye	<ul> <li>RC prepared responses to comments from cooperating agencies and Caltrans, incorporated into Final EIR/EIS, and completed review process with Legal/NAT/ES.</li> <li>Continued coordination with Chowchilla Elementary School District (CESD) on assessment of school bus routes impacts due to HSR. Cost estimate prepared by CESD is being reviewed by Authority. A proposal package will be prepared, in the form of MOU, once the evaluation is completed.</li> <li>Madera County is reviewing draft agreement related to Fairmead community center. Advanced draft agreements with the City of Chowchilla and Fairmead Community and Friends on mitigation measures for the Fairmead community. Meeting is scheduled to discuss with Fairmead Community &amp; Friends.</li> </ul>
Locally Generated Alternative	<ul> <li>The Combined Supplemental Record of Decision and Final Supplemental Environmental Impact Statement was completed on October 31, 2019.</li> <li>Permitting for the Locally Generated Alternative will progress following Board action on the Merced and Bakersfield extensions.</li> </ul>
Bakersfield to Palmdale	• Received, workshopped, and responded to comments from ES/NAT/Legal on draft comment-responses and Various Engineering Refinements (VER) documentation. Commenced work on preparing Administrative Final EIR/EIS, ROD/NOD, and MMRP/MMEP.
Palmdale to Burbank	<ul> <li>In meetings with USACE and EPA regarding the Una Lake Avoidance option, the reaction has been supportive. The new option is being incorporated into the project, with connections to all three of the original alternatives.</li> <li>The RC engineering team has finalized the footprints for the three new alternatives and transmitted it to the environmental team. Updates on the technical reports and Administrative Draft document has been completed.</li> <li>Checkpoint B is anticipated to be complete in June 2021 and Cooperating Agency review is expected in January 2021.</li> </ul>
Burbank to Los Angeles	<ul> <li>The Burbank to Los Angeles project section hosted a virtual public hearing on July 8 for the Draft EIR/EIS.</li> <li>The comment period for the Burbank to Los Angeles Draft EIR/EIS was extended from July 16, 2020 to August 31, 2020.</li> </ul>
Los Angeles to Anaheim	<ul> <li>Continued work to incorporate BNSF facilities east of Fullerton into the LA-A environmental document.</li> <li>Conducted Step 2 review of LA-A draft chapters and technical reports for technical adequacy and project consistency.</li> </ul>