

# Finance & Audit Committee

## **CENTRAL VALLEY STATUS REPORT**

March 2020 Report (data through January 2020)



## **Executive Summary**

#### Overall

- The Central Valley Status Report (CVSR) projections will be updated with the finalization of the Revised Baseline Schedules (RBS).
- Total contractor invoices for Construction Package (CP) 1-4 increased to \$50M, an uptick of \$8M from January 2020's projection of \$42M. February's expenditures are estimated to land on the \$58M mark, an increase of \$8M from January 2020 actuals.
- Construction labor increased to 737 workers in the last week of February which is the largest workforce to date.
- Guideway miles and structures construction progress this period saw an increase from last period's 72 miles to 76 miles and from 36 structures to 38 structures respectively.
- Approximately \$4B is currently under contract for CP 1-4, with \$6B required to be under contract to fulfill the American Recovery and Reinvestment
  Act (ARRA) grant terms. The total of \$6B includes the trackwork scope of the Track and Systems contract, as well as the major CP 1-4 scope additions
  underway that are within contingency.

### **Construction Package 1**

- The contractor invoiced \$23M, compared to the \$17M that was projected.
- Seven structures are built and ten structures and 12 miles of guideway are available for construction.
- Major Incidental Take Permits ITPs will be acquired by the end of the first quarter of 2020.
- Work will increase in six locations between April 2020 and August 2020 as Land Rights are conveyed, Right-of-Way (ROW) is acquired, and the utility relocations are completed.
- AT&T infrastructure is nearing completion; cut overs can then start.
- Working with Tutor Perini/Zachry/Parsons (TPZP) to implement design solutions that will NOT require design variances from third parties.
- All additional ROW for CP 1 is scheduled to be 100% delivered by November 2020.
- The Project and Construction Management (PCM) Contractor is reviewing the current scope, cost estimates for potential change orders, refining the schedule to meet milestones and mitigating issues in a timely manner.

## **Construction Package 2-3**

- The contractor invoiced \$14M, compared to the \$15M that was projected.
- Fourteen structures and 45 miles of guideway are available for construction with no gains from either of the construction lines since last period. Nineteen miles of guideway are substantially complete, and work is underway on 26 miles of guideway.
- Acquired seven out of the required nine Incidental Take Permits (ITPs). The remaining ITPs will be acquired by the end of the second quarter of 2020.
- The majority of the Third-Party Agreements are completed. The PCM will conclude maintenance agreements for Type 2 structures (Grade separations over the highways) as they are completed.
- Bridge construction is progressing at 11 locations.
- The PCM will complete 90% of the PG&E Land Right Conveyances by the second quarter of 2020.



### **Construction Package 4**

- The contractor invoiced \$13M, compared to the \$10M that was projected.
- Seven structures, an increase of two structures from the five reported in the prior period, and 19 miles of guideway, a gain of one mile from last month's 18 miles, are now available for construction.
- 100% of the main design is complete, however, the Design-Builder (DB) is redesigning one structure to overcome a utility conflict. This redesign is expected to be finished within the first quarter of 2020.
- The PCM acquired 10 out of the required 12 ITPs; the remaining ITPs are projected to be acquired within the second guarter of 2020.
- Bridge construction is progressing at seven locations.
- 85% of the guideway embankment is substantially complete.
- The Authority continues to negotiate with landowners regarding ROW acquisition, evaluation of the start of construction, and the implementation of mitigation actions.

## Real Property (Right-of-Way)

- The new Director of Real Property, Jennifer Lowden, is on board as of February 24, 2020.
- Project managers and additional consultants performing surveying/mapping have increased production.
- On boarded Towill, Inc. to increase production for legal description and plat maps for land rights conveyances.
- New lean Right-of-Way (ROW) possesses have been implemented and we continue to improve them using Lean/Six-Sigma tools to streamline production.
- The PCMs certified the ROW parcel acquisition requirements for each CP.
- Executive leadership, including the Chief Operating Officer (COO), is working directly with senior-level counterparts to improve third-party relationships in relation to land rights conveyance.
- Caltrans legal support is actively engaged and moving quickly to resolve eminent domain complaints.
- The PCM's are re-baselining CP 1-4 design/construction schedules to accurately reflect ROW acquisition, railroad, and land rights conveyance.
- Information included this month for ROW summary tables was certified by the PCMs as of March 9<sup>th</sup>. ROW summary graphs provide actuals for February to show progress relative to the additional information provided by the PCM. Future CVSR ROW data will return to the normal reporting practices.



# 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 January 31, 2020. The planned values from January 2020 to December 2022 are based on the Proposed Schedules developed for all the construction packages as of January 2020. The completion value (\$4B) 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 \$4B will be expended by end of June 2022.

## **CP 1-4 Projected Milestones**

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

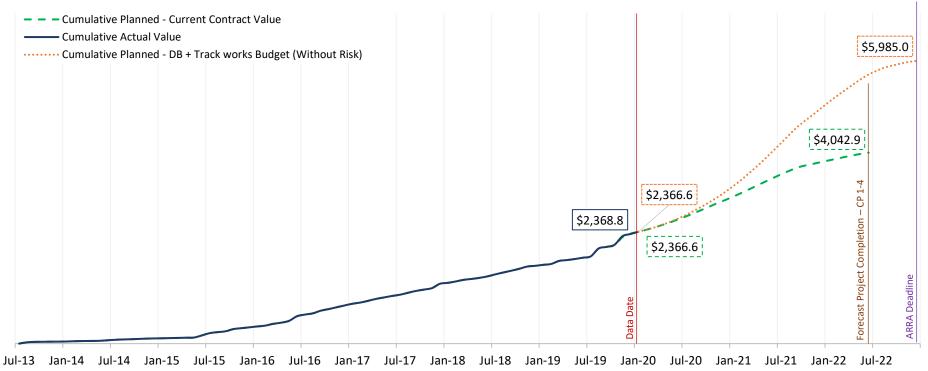
Milestone	Date
05. CP 2-3 Main Design Complete	May-20
06. CP 2-3 ROW Acquisition Complete	Jan-21²
07. CP 2-3 Environmental Clearance Complete	May-20 <sup>3</sup>
08. CP 2-3 Utility Relocation Complete	Mar-21 <sup>4</sup>

Milestone	Date
09. CP 4 Main Design Complete	Feb-20
10. CP 4 ROW Acquisition Complete	Dec-20
11. CP 4 Environmental Clearance Complete	Mar-20
12. CP 4 Utility Relocation Complete	Mar-21

- L. CP 1 Main Design has been pushed to March 2020 as the DB, PCM and UPRR address design delays for the utility relocations which is critically impacting the schedules.
- 2. A revised projection will be updated with the finalization of the Revised Baseline Schedules (RBSs).
- 3. CP 2-3 Environmental Clearance pushed to May 2020 in order to finalize the map book amendment regarding the locations of dedicated wildlife crossings.
- 4. The utility relation forecast date adjusted to account for the latest land right conveyance date.



## Remaining expenditures to achieve ARRA (DB+ Track Works) within the current baseline (No risk included - \$ millions)



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

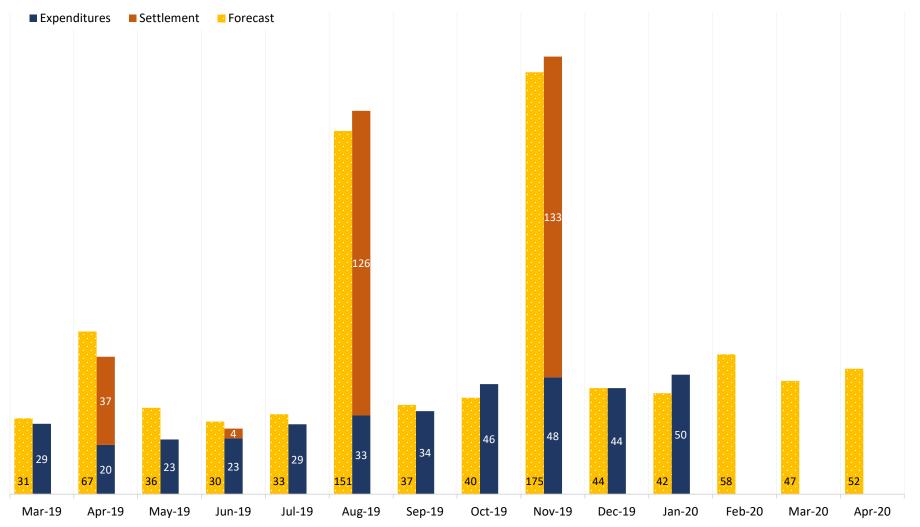
- Intrusion Protection Barriers and other railroad related works.
- North Extension (Avenue 17 to 19 in Madera County).
- Third-Party related work (e.g., Additional PGE and AT&T work).
- Track Works (Needed for ARRA fulfillment).
- Miscellaneous Works Modifications (e.g., Utility Relocation, Environmental 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 (RBS) are finalized.

- L. The Remaining Baseline items are the Design-Build future scope that are not currently contracted but are required to be completed for delivery of the 119-mile infrastructure.
- 2. The above forecast does not include the estimated risk in the baseline budget.



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

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

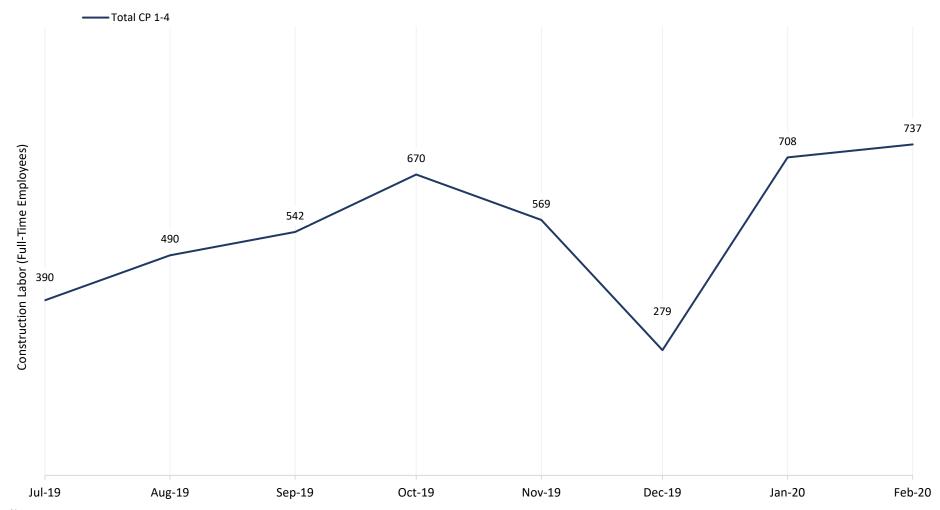


- 1. Expenditures contained in the chart above are specific to the Design-Builder production and based on the certified invoice reported in the respective month and do not include accrual adjustments.
- 2. Forecasted expenditures are based on the Proposed Schedules developed for CP 1-4 as of January 2020.
- 3. Sudden increases in the expenditure values are due to the Time Impact Analysis Settlements.



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

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

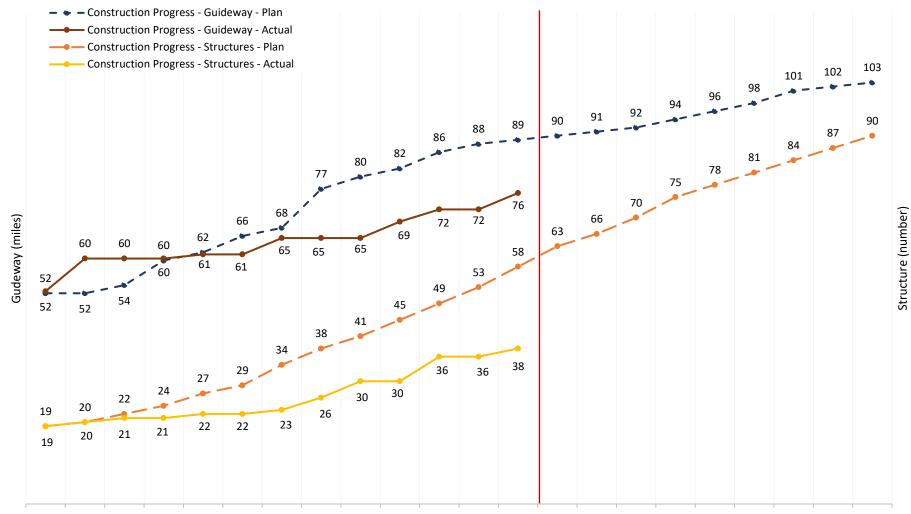


- 1. The Construction Labor numbers (Full-Time Employees) are based on the final week of each calendar month.
- 2. The December 2019 reporting number shows a sharp decrease due to the holiday week of December 23<sup>rd</sup> through December 31<sup>st</sup>.



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

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



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

- 1. Total Structures: 93 each.
- 2. Total Guideway: ~119 miles.
- 3. This forecast is based on the get to work plans developed in January 2019.
- 4. A revised projection will be updated with the finalization of the Revised Baseline Schedules (RBSs).



## **CP 1-4 - Construction Progress**

## **CP 1-4 Construction Progress Summary**

СР	Category	Progress	Status Update
CP 1	Structures	Planned:26 Structures Actual: 17 Structures Status: Behind by 9 Structures	<ul> <li>Golden State Boulevard abutments 1 and 5 are pending execution of out grants¹ to enable the utility cutover relocations. The PCM is finalizing plans for bents² 2, 3, and 4 for construction.</li> <li>The PCM is mitigating Jensen Trench Phase I and II gas and sewer relocations, which could bring completion forward to May 2020.</li> <li>The PCM is redesigning Central Avenue, Avenue 15 ½, Avenue 9 and McKinley Avenue to avoid additional ROW requirements. PG&amp;E out grants are in progress, and staff expects early civil packages by August 2020.</li> <li>Herndon Avenue (Two structures – One UPRR and One high-speed rail) are pending additional ROW acquisition, which will allow storm drain relocation construction to commence by the start of April 2020.</li> <li>Road 26 and Avenue 17 are pending utility redesigns and the execution of the North Extension Change Order.</li> </ul>
CP 1	Guideway	Planned: 16 Miles Actual: 12 Miles Status: Behind by 4 Miles	<ul> <li>Guideway has cleared 12 miles to include the utilities. There are still some delays in starting because the Intrusion Protection Barrier (IPB) has not been finalized (60% design is with the railroad and the Authority for review).</li> <li>Approximately 1.5 miles are being prevented due to Mechanically Stabilized Earth (MSE) wall approval.</li> <li>TPZP is successfully completing three test piles to progress with guideway in Madera County.</li> </ul>
CP 2-3	Structures	Planned: 21 Structures Actual: 14 Structures Status: Behind by 7 Structures	<ul> <li>Adams Avenue is on hold due to the Fresno County encroachment permit.</li> <li>Land rights conveyance issues are affected by the utilities deferring their start times. However, the PCM team and the Authority are actively working on mitigating these issues.</li> <li>The PCM is working to finalize the agreement between BNSF and SoCal Gas on site-specific land right agreements.</li> </ul>
CP 2-3	Guideway	Planned: 52 Miles Actual: 45 Miles Status: Behind by 7 Miles	• The PCM is currently evaluating the three-dimensional (3D) model defining the rally waves' effect on the soft soil. The PCM is currently acquiring more information from Dragados Flat Iron Joint Venture (DFJV) on the 3D test results. The DB and the Authority are collaborating to revise the designs, as necessary, for solutions to mitigate the affected areas. Once the PCM resolves these issues, eight miles of embankment will be available for construction.
CP 4	Structures	Planned: 11 Structures Actual: 7 Structures Status: Behind by 4 Structures	<ul> <li>Structures design is complete, however, one structure (Peterson Road Underpass) is being redesigned due to pending negotiations with third parties and utilities regarding the relocation of their assets.</li> <li>The PCM continues to negotiate with landowners regarding ROW acquisition. The PCM is evaluating the impact on the start of construction, and is implementing mitigation actions.</li> <li>Construction continues on the following seven structures: the Garces Highway Underpass, Pond Road Underpass, Poso Creek Underpass, Wasco Viaduct, Merced Avenue Overpass, Peterson Road Underpass and Kimberlina Road Underpass.</li> </ul>
CP 4	Guideway	Planned: 21 Miles Actual: 19 Miles Status: Behind by 2 Miles	<ul> <li>Guideway construction progress is affected by the ongoing negotiations with landowners regarding land right acquisitions.</li> <li>Clearing construction activities, subgrade preparation and importing embankment continued during the month.</li> <li>The Design-Builder commenced work on the wildlife crossings between Magnolia Avenue and Sherwood Avenue</li> <li>The PCM continues to work on relocating utilities, including PG&amp;E, Sempra, AT&amp;T and others.</li> <li>Demolition started on two buildings and earthworks continues along SR-46 and 6<sup>th</sup> Street.</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.



## CP 1 – 4 ROW Summary

- Parcel Tracking
  - o Parcel: Property rights required from others.
  - o Railroad: Property rights and other agreements required from railroads.
  - o Public Lands: Property rights required from public entities and/or multiple parties.
  - Tier 1 Land Rights Conveyances (critical): Entities requiring transfer of title prior to completion of work (Pacific Gas & Electric, Southern California Edison, Fresno Irrigation District, Fresno Metropolitan Flood Control District).
  - Tier 2 Land Rights Conveyances (non-critical): Entities where transfer of title does not need to occur prior to beginning work.
- Parcel acquisition summaries, railroad acquisition summaries, and Tier 1 Land Conveyances are included in this report. Additional parcel reporting
  will be included in future CVSRs.
- Parcel Acquisition Summary

The Modifications column below (column D) includes net changes from the previous reporting period (December) through March 9th as a result of:

- Additional parcels identified as necessary and provided by the PCM's on March 9<sup>th</sup>.
- o Adjustments necessary due to a quality review/assurance effort during data migration into GeoAMPS that identified issues with categorization/definition of some parcels.

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

Construction Package	March 9,2020 Total Needed <sup>1</sup>	November 30, 2019 Total Acquired <sup>2</sup>	November 30, 2019 Remaining to be Acquired	December 2019 to March 9, 2020 Modifications	December 2019 to March 9, 2020 Acquired	March 9, 2020 Remaining to be Acquired
	<b>(A)</b> = (B) + (F)	(B)	(C)	(D)	(E)	<b>(F)</b> = (C) + (D) – (E)
CP 1	919	827	101	-2	7	92
CP 2-3	956	573	277	118	12	383
CP 4	263	172	51	40	0	91
Total	2,138	<b>1,572</b> <sup>3</sup>	429	156	<b>19</b> <sup>4</sup>	566

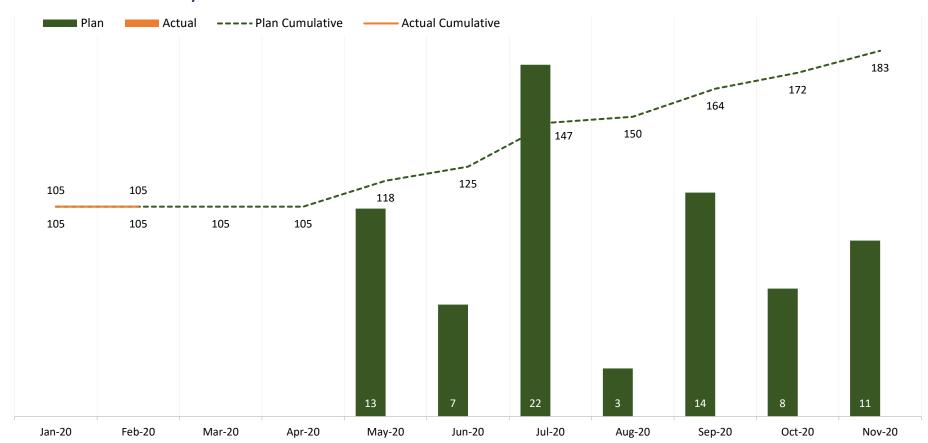
- 1. Total needed is defined as the number of parcel acquisitions needed to complete CP 1, 2-3, and 4.
- . Total acquired is defined as parcels that are legally possessed by the Authority.
- 3. Total includes the 14 Parcels Acquired in November 2019 (eight parcels in CP 2-3 and six parcels in CP 4) (January 2020 CVSR), and the 1,558 Total Acquired to Date as of October 31, 2019 (January 2020 CVSR).
- 4. Acquisition by month are as follows: five parcels in December, 10 parcels in January, four parcels in February, and zero parcels as of March 9, 2020.



## **CP 1-4 ROW Railroad Parcels to be Acquired and Remaining**

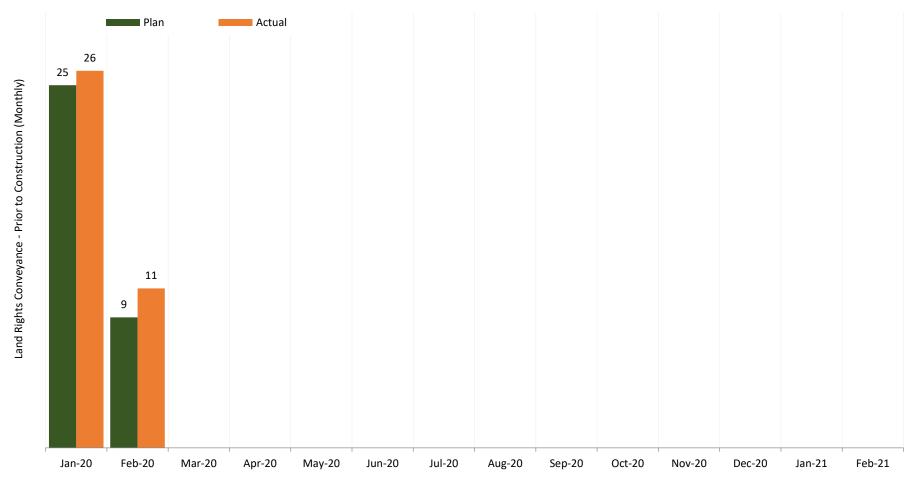
Construction Package	Total Needed Parcels March 9, 2020	Total Parcels Acquired to Date March 9, 2020	Remaining Parcels to be Acquired March 9, 2020
CP 1	95	52	43
CP 2-3	58	26	32
CP 4	30	27	3
Total	183	105	78

## CP 1-4 ROW Railroad Delivery - Plan vs. Actual





## CP 1-4 Land Rights Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) – Plan vs. Actual



#### Notes:

1. A revised projection will be updated with the finalization of the Revised Baseline Schedules (RBSs).



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

## CP 1-4 Look Ahead - Estimated completion timeline for Third-Party Agreements

Entity	Project Section	Result of Resolution	Previous Estimated Completion	Current Estimated Completion
County of Fresno	CP 1 & CP 2-3	Updates road closures reflecting design changes made since original Cooperative Agreement. Further clarifies remediation of County property post-construction.  Authority resolving with County the remaining issues: road remediation and irrigation lines.	Jan-20	Apr-20
County of Fresno	CP 1 & CP 2-3	Defines ownership and maintenance of grade separations between Authority and County in perpetuity.  Authority resolving with County the remaining issues: road remediation and irrigation lines.	Jan-20	Apr-20
Fresno Metropolitan Flood Control District	CP 1	Consent to Common Use Agreement (CCUA) $^1$ template allows prompt execution of land conveyances.	Jan-20	Completed
Fresno Metropolitan Flood Control District	CP 1	Joint Use Agreement (JUA) <sup>2</sup> template allows prompt execution of land conveyances.	Jan-20	Completed
Madera Valley Water Company	CP 1	Obtain MVWC's cooperation and capture essential terms working together to relocate Madera Valley Water Company (MVWC) facilities.  Madera Valley Water Company (MVWC) legal review.	Jan-20	Apr-20
Corcoran Irrigation District	CP 2-3	CID's review of technical engineering documents, coordination, and review of real property documents.  Authority submitted CID agreement on 2/13/2020. CID currently reviewing with expected signature by March 31, 2020.	Feb-20	Mar-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 Right-of-Way, or relocated to a new position within the Authority's Right-of-Way, but also still within the facility owner's existing Right-of-Way (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 Right-of-Way and outside or partly outside of the facility owner's existing Right-of-Way. JUAs also establish the facility owner's and Authority's respective rights and obligations for occupying, maintaining, and accessing the joint use area.



## CP 1-4 Look Ahead - Estimated completion timeline for Third-Party Agreements (cont'd.)

Entity	Project Section	Result of Resolution	Previous Estimated Completion	Current Estimated Completion
County of Kings	CP 2-3	Covers transfer of Right-of-Way between Authority and County. Grants immediate right of possession to Authority and use of existing Right-of-Way for construction.	Mar-20	Mar-20
County of Tulare	CP 2-3	Defines ownership and maintenance of grade separations between Authority and County in perpetuity.	Jan-20	Completed
Kings County Water District	CP 2-3	CCUA template allows prompt execution of land conveyances.	Mar-20	Mar-20
Kings County Water District	CP 2-3	JUA template allows prompt execution of land conveyances.	Mar-20	Mar-20
Lower Tule River Irrigation District	CP 2-3	Lower Tule River Irrigation District (LTRID) review of technical engineering documents, coordination, and review of real property documents.  Focused efforts on executing the LTRID Master Agreement Amendment. This agreement impacted critical path. Now accelerating efforts back to negotiating Reimbursement Agreement.	Jan-20	May-20
Settler's Ditch Company	CP 2-3	Settler's review of technical engineering documents, coordination, and review of real property documents.  Authority submitted agreement to Settler's on 2/13/2020. Settler's currently reviewing with expected signature by March 31, 2020.	Jan-20	Mar-20
People's Ditch Company	CP 2-3	People's review of technical engineering documents, coordination, and review of real property documents.  Authority submitted agreement to People's on 2/13/2020. People's currently reviewing with expected signature by March 31, 2020.	Jan-20	Mar-20
Southern California Edison	CP 2-3 & CP 4	Utility agreement addendum for duct and substructure construction work.  Escalation ladder established. Resolving remaining provision and will escalate if not resolved by March 16, 2020.	Jan-20	Mar-20



## CP 1-4 Look Ahead - Estimated completion timeline for Third-Party Agreements (cont'd.)

Entity	Project Section	Result of Resolution	Previous Estimated Completion	Current Estimated Completion
City of Wasco	CP 4	Covers transfer of Right-of-Way between Authority and County. Grants immediate right of possession to Authority and use of existing Right-of-Way for construction.	Feb-20	May-20
		Focused efforts on utility agreements. Now accelerating efforts back to negotiating this Right-of-Way Transfer Agreement.		
City of Wasco	CP 4	Defines ownership and maintenance of grade separations between Authority and City in perpetuity.  Focused efforts on utility agreements. Now accelerating efforts back to negotiating this Ownership and Maintenance Agreement.	Feb-20	May-20
City of Wasco	CP 4	Design and construction of pedestrian underpass at Wasco Amtrak station.  City refuses to sign utility agreements. Currently processing individual permits with City for construction.	Feb-20	On Hold
City of Wasco	CP 4	Design and construction of grade separation at Poso Avenue in Wasco.  City refuses to sign utility agreements. Currently processing individual permits with City for construction.	Feb-20	On Hold
Semitropic Water Storage District	CP 4	Design and construction of facilities.  Semitropic Board approval March 2020.	Feb-20	Feb-20
Semitropic Water Storage District	CP 4	JUA template allows prompt execution of land conveyances.  Semitropic Board approval March 2020.	Feb-20	Feb-20
Semitropic Water Storage District	CP 4	CCUA template allows prompt execution of land conveyances.  Semitropic Board approval March 2020.	Feb-20	Feb-20



## 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	Date of Approval / Issue
Utility Design Refinements	Contractor Revising	CP 1	Documents the changes in utility design at various locations in CP 1.	Mar-20 <sup>2</sup>
Hairy Orcutt Grass	Amendment Executed	CP 1	Identifies the mitigation site for Hairy Orcutt Grass (HOG). There is no impact on construction.	Feb-20
North Extension Separation of Rail	Authority QA/QC	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 <sup>3</sup>
Utility and BNSF Access Road Cleanup	TPZP/PCM	CP 1	This amendment is incomplete and is currently under review. The amendment will be resubmitted to California Department of Fish and Wildlife (CDFW) after the review is complete.	Mar-20

### 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	Date of Approval / Issue
Deer Creek/Cross Creek	CDFW Deemed Complete	CP 2-3	Accommodates design changes in the Deer and Cross Creek areas.	Mar-20 <sup>4</sup>
Table 5	In Review with CDFW	CP 2-3	Finalizes the locations of dedicated wildlife crossings.	May-20 <sup>5</sup>
BNSF/PG&E	In Review with CDFW	CP 4	Covers additional ROW adjacent to the mainline required for relocation of third-party utilities and access to utilities and BNSF operations areas. The amendment also includes various other small footprint adjustments along the alignment.	May-20 <sup>5</sup>

- 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. Date moved from February 2020 to March 2020 due to amendment with contractor for revision.
- 3. Date moved from March 2020 to June 2020 due to design changes currently being negotiated by the CP team.
- I. Date moved from February 2020 to March 2020 due to amendment under review with CDFW. Continuing negotiations with Authority and CDFW to resolve long-standing issues.
- 5. Date moved (Table 5 from February 2020 and BNSF/PG&E from April 2020) to May 2020 to prioritize higher construction priorities.



## **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
<b>Current Completion Date:</b>	11/02/2021

#### **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:	\$808,847,997.31	
Current Contract Amount:	\$1,831,835,997.31	
Approved Invoices to Date <sup>1</sup> :	\$1,170,263,425.18	
Remaining Contract Balance:	\$661,572,572.13	

#### **Contract Time Status**

Description	Duration
Original Contract Days:	1,628
Extension of Time Awarded:	1,312
Current Contract Days:	2,940
Work Days Spent (thru 1/31/2020):	2,299

#### **Expended to Date**

Description	Percentage
Time:	78.2%
Dollars:	63.9%

#### **Growth Percentage**

Description	Percentage
Time:	80.6%
Dollars:	79.1%

#### Note:

1. Includes estimated earned value for the reporting period.



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

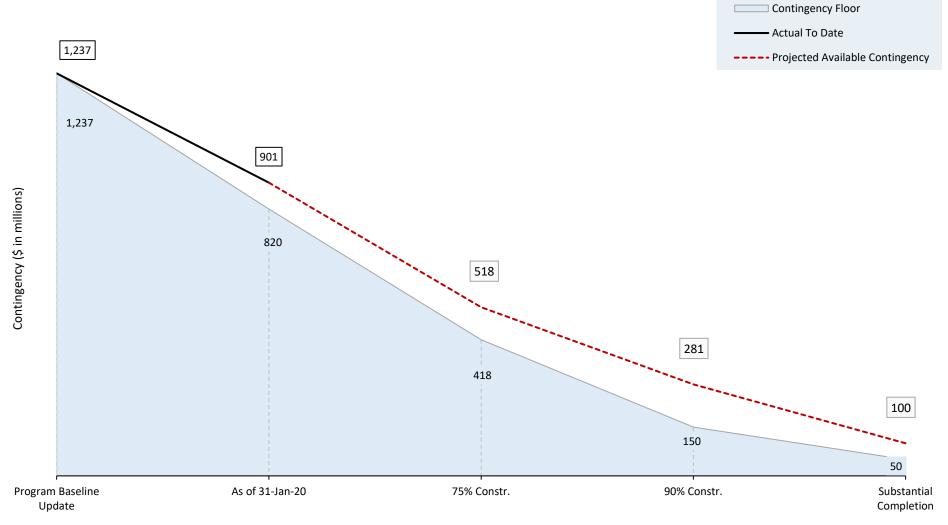
## **CP 1 – Executed Change Order Status**

CO Number	Title	Change Status	Amount	Executed Date
00286	Additional Bizhub Copiers	Executed	\$41,421.07	17-Jan-20
00282	Utility Relocation Redesign at California and Cherry Avenues	Executed	\$52,488.91	17-Jan-20
Total			\$93,909.98	



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

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

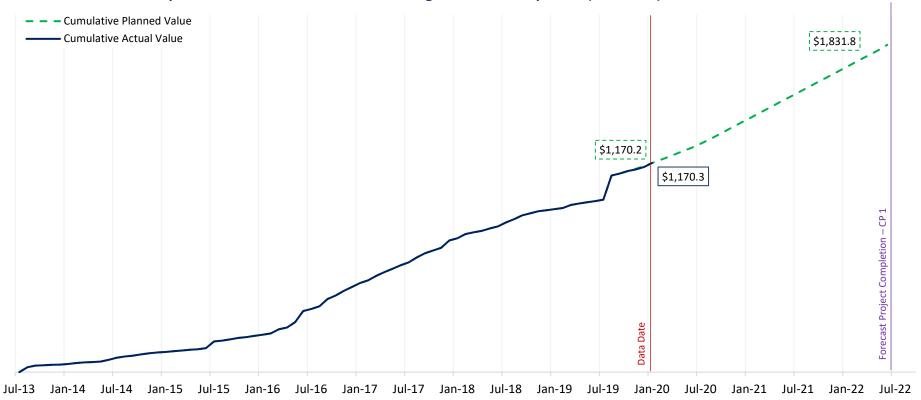


- 1. The Program Baseline Update was presented to and accepted by the Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 1 Project.
- 2. Contract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



## CP 1 - Earned Value

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



## **CP 1 – Projected Milestones**

Milestone	Date
Main Design Complete	Mar-20
ROW Acquisition Complete	Nov-20
Mates.	<u> </u>

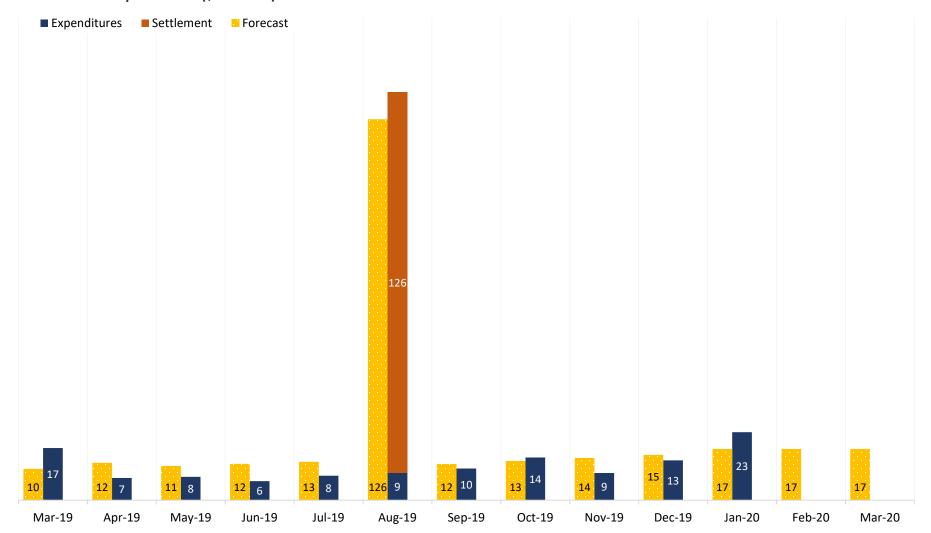
Milestone	Date
<b>Environmental Clearance Complete</b>	Feb-20
Utility Relocation Complete	Mar-21

- 1. The Planned Value and Contract Substantial Completion Date is based on the CP 1 Proposed Schedule as of January 2020. This is expected to be refined as future change orders are issued and a Revised Baseline Schedule (RBS) is finalized.
- 2. The sudden increase in the cumulative value is due to Time Impact Analysis settlement in August 2019.
- 3. 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.
- 4. Main Design has been pushed to March 2020 as the DB, PCM and UPRR address design delays for the utility relocations which is critically impacting the schedules.



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

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

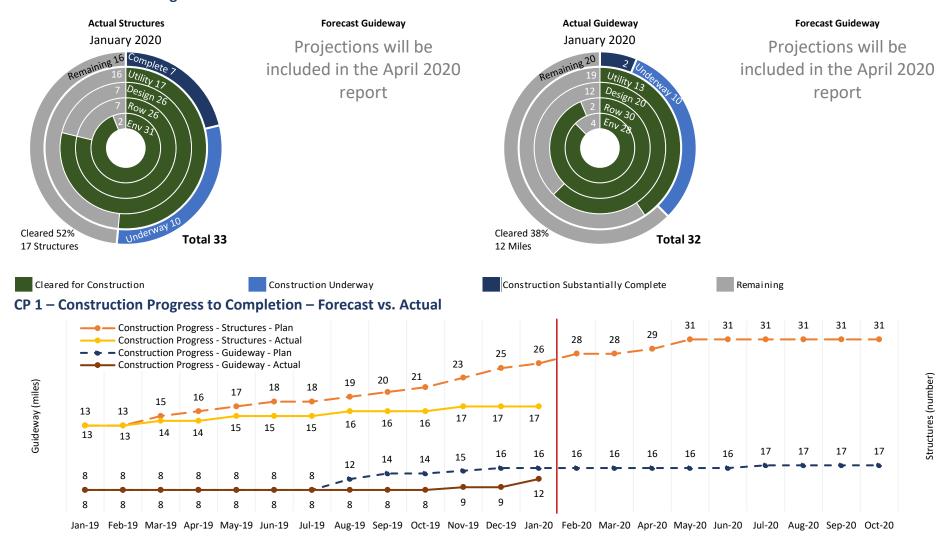


- 1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoices.
- 2. The sudden increase in the expenditure value in August 2019 is due to the Time Impact Analysis settlement.
- 3. CP 1 under-reported December 2019's forecast of \$6M by \$8.5M in Change Orders thus correcting the forecast to \$15M.



## **CP 1 – Construction Progress**

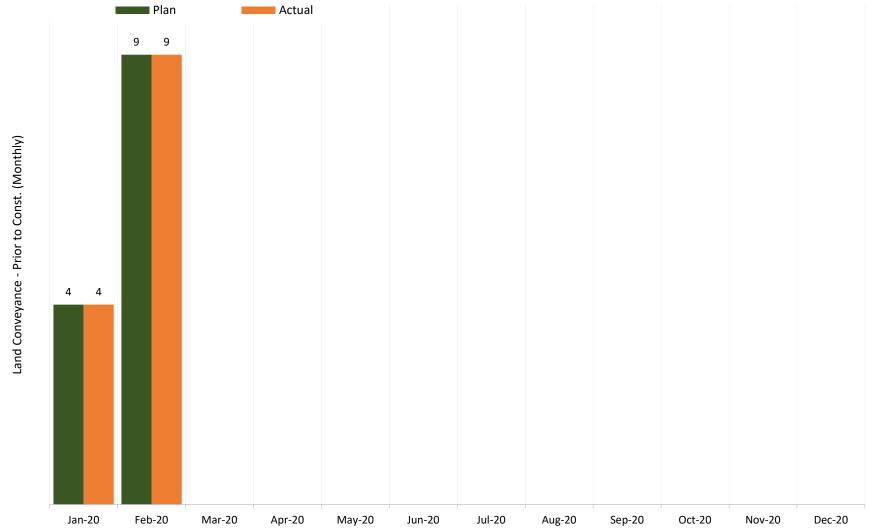
#### **CP 1 – Construction Progress**



- 1. 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. This forecast is based on the get to work plans developed in January 2019.
- 4. A revised projection will be updated with the finalization of the Revised Baseline Schedule (RBS).



# CP 1 – ROW Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) by Month - Plan vs. Actual CP 1 – Land Right Conveyance by Month

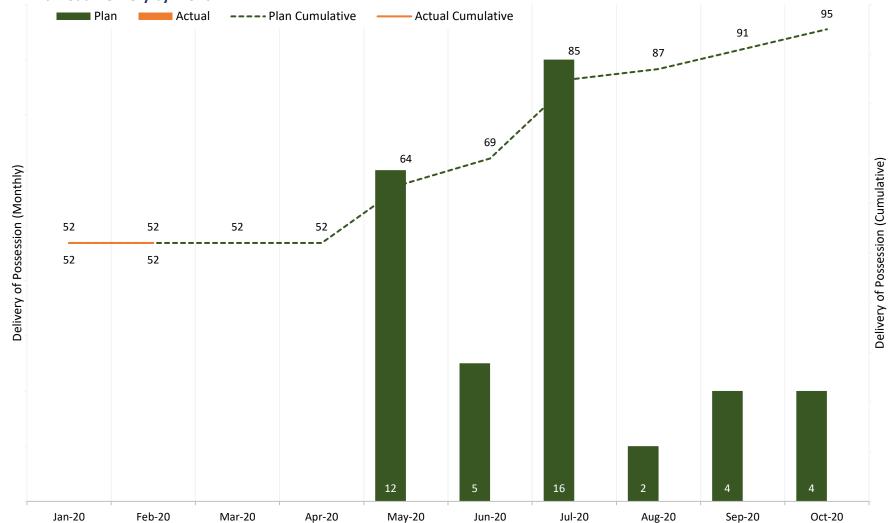


<sup>1.</sup> A revised projection will be updated with the finalization of the Revised Baseline Schedules (RBS).



## **CP 1 – ROW Railroad Delivery by Month – Plan vs Actual**

## CP 1 - Railroad Delivery by Month





## **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
<b>Current Completion Date:</b>	04/18/2022

#### 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:	\$318,544,565.42
Current Contract Amount:	\$1,683,880,455.42
Approved Invoices to Date <sup>1</sup> :	\$936,812,666.20
Remaining Contract Balance:	\$747,067,789.22

#### **Contract Time Status**

Description	Duration
Original Contract Days:	1,486
Extension of Time Awarded:	973
Current Contract Days:	2,459
Work Days Spent (thru 1/31/2020):	1,651

#### **Expended to Date**

Description	Percentage
Time:	67.1%
Dollars:	55.6%

#### **Growth Percentage**

Description	Percentage
Time:	65.5%
Dollars:	23.3%

#### Note:

1. Includes estimated January 2020 invoice amount of \$16,000,000.



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

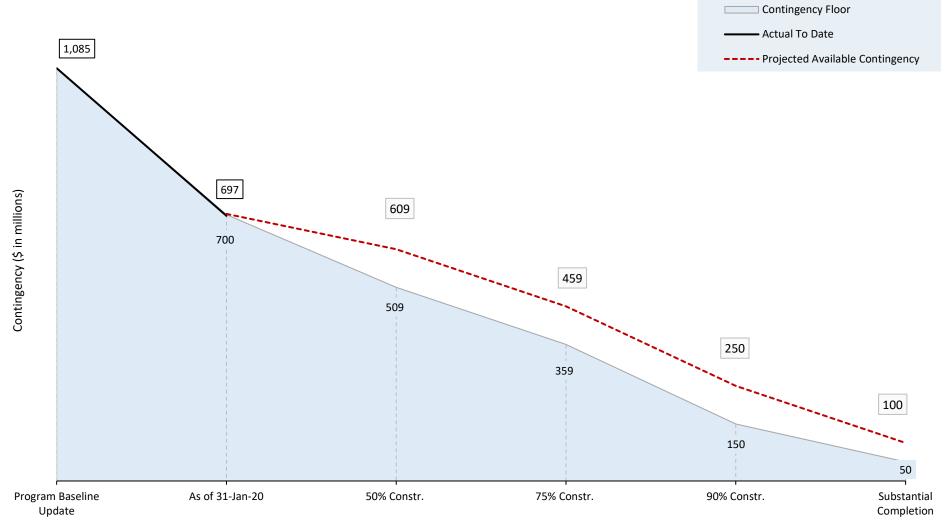
## **CP 2-3 – Executed Change Order Status**

CO Number	Title	Change Status	Amount	Executed Date
60.1	Alpaugh Irrigation District Permit	Executed	\$80,000.00	24-Jan-20
86.6	Private Irrigation Crossing - S 1 2 3	Executed	\$468,392.00	24-Jan-20
86.8	Private Irrigation Crossing – Segment 2	Executed	\$106,930.00	24-Jan-20
00024.15	Haz-Mat Abatement – FB-10-0398	Executed	\$23,315.00	30-Jan-20
00117	Corcoran Design Speed Reduction	Executed	\$74,900.00	30-Jan-20
0086.9	Private Irrigation Crossing – Segment 2	Executed	\$165,385.00	30-Jan-20
00094	Conejo Viaduct CIDH Test Pile	Executed	\$1,031,196.00	30-Jan-20
00045.2	Escalation Costs_Aug Sept Oct 2019	Executed	\$2,509,853.00	30-Jan-20
00045.3	Escalation Costs_November 2019	Executed	\$1,427,172.00	30-Jan-20
Total			\$5,887,143.00	



## 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 January 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**

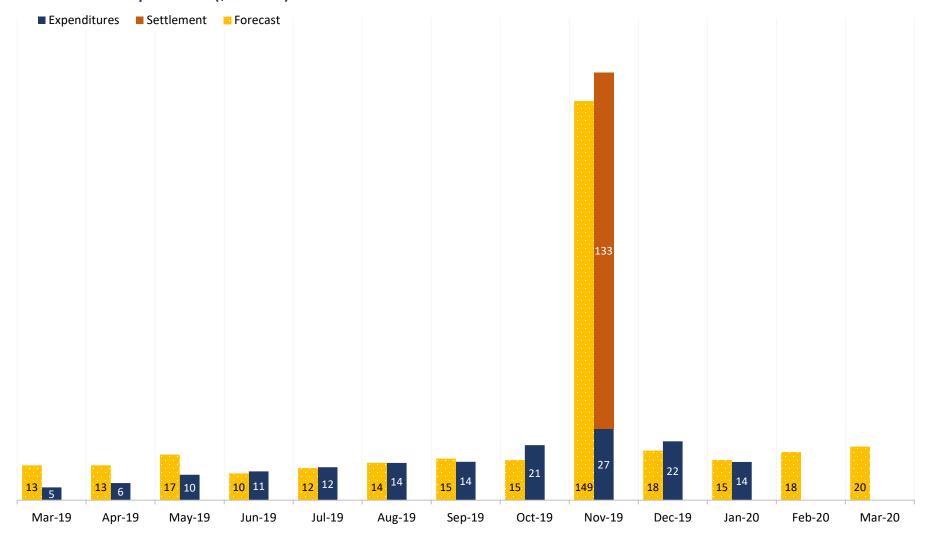
Milestone	Date	Milestone	Date		
Main Design Complete	May-20	<b>Environmental Clearance Complete</b>	May-20		
ROW Acquisition Complete	Jan-21	Utility Relocation Complete	Mar-21		

- 1. The Planned Value and Contract Substantial Completion Date is based on the CP 2-3 Proposed Schedule as of January 2020. This is expected to be refined as future change orders are issued and a Revised Baseline Schedule (RBS) is finalized.
- 2. The sudden increase in the cumulative value is due to the Time Impact Analysis (TIA) settlement.
- B. The Current Contract Value does not include unexecuted change orders including Project 517, the latest TIA settlement, and IPB change orders.
- 4. Environmental Clearance pushed to May 2020 in order to finalize the map book amendment regarding the locations of dedicated wildlife crossings.



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

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



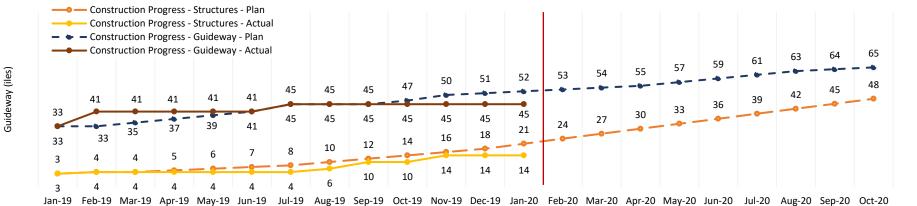
- 1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoices.
- 2. The sudden increase in the expenditure value in November 2019 is due to the Time Impact Analysis settlement.



## **CP 2-3 – Construction Progress**

## **CP 2-3 – Construction Progress**



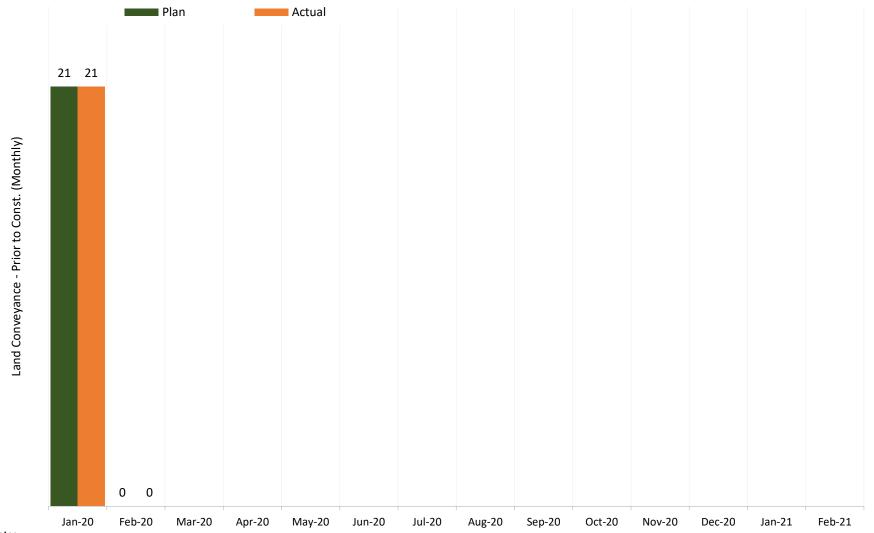


- 1. Total Structures: 49 each. This count has been reduced from 50 due to combining the structures resulting from Project 517.
- 2. Total Guideway: 65 miles.
- 3. This forecast is based on the get to work plans developed in January 2019.
- A revised projection will be updated with the finalization of the Revised Baseline Schedule (RBS).
- 5. December 2019 Structures reflected 12 complete, that was incorrect. It should have been reported 12 Underway.



# CP 2-3 – ROW Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) by Month - Plan vs. Actual

## CP 2-3 - Land Right Conveyance by Month

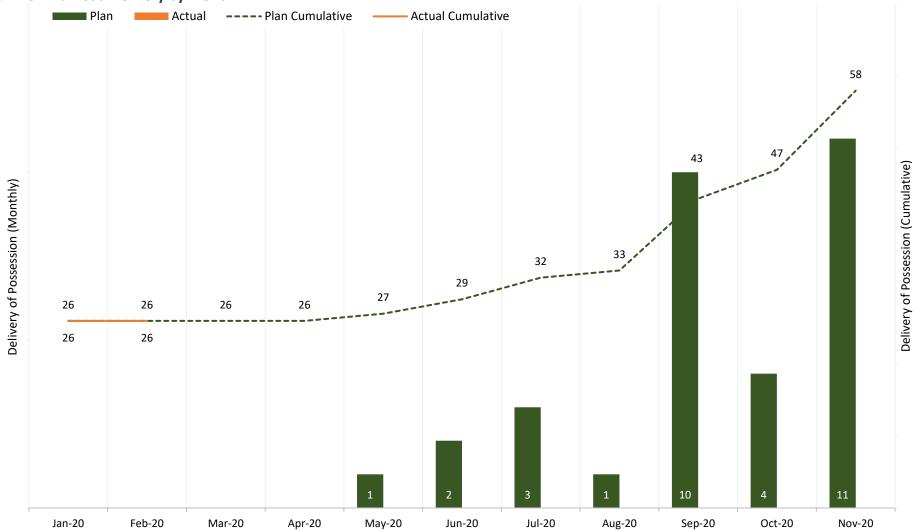


<sup>1.</sup> A revised projection will be updated with the finalization of the Revised Baseline Schedules (RBS).



## **CP 2-3 – ROW Railroad Delivery by Month – Plan vs. Actuals**

## **CP 2-3 – Railroad Delivery by Month**





## **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			
<b>Current Completion Date:</b>	06/30/2021			

#### 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:	\$82,950,793.89
Current Contract Amount:	\$527,197,793.89
Approved Invoices to Date <sup>1</sup> :	\$261,749,976.00
Remaining Contract Balance:	\$265,447,817.89

#### **Contract Time Status**

Description	Duration <sup>2</sup>
Original Contract Days:	1,144
Extension of Time Awarded:	757
Current Contract Days:	1,901
Work Days Spent (thru 1/31/2020):	1,385

#### **Expended to Date**

Description	Percentage
Time:	72.9%
Dollars:	49.6%

#### **Growth Percentage**

Description	Percentage
Time:	66.2%
Dollars:	18.7%

- 1. Calendar Days.
- 2. Included actuals through January 2020 and Estimate for February 2020.



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

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

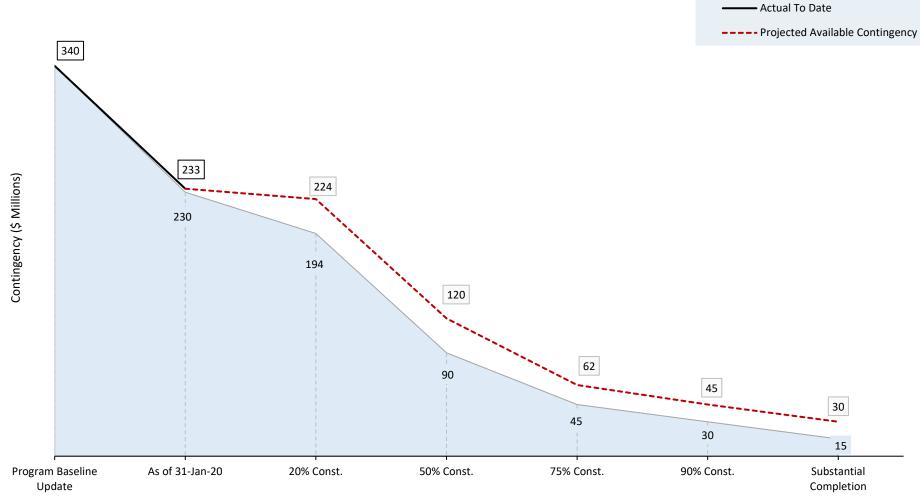
CO Number	Title	Change Status	Amount	Executed Date	
00050	Mitigation Cost Reimbursement Zones 12-15	Executed	\$1,914,162.87	16-Jan-20	
Total:			\$1,914,162.87		

Contingency Floor



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

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

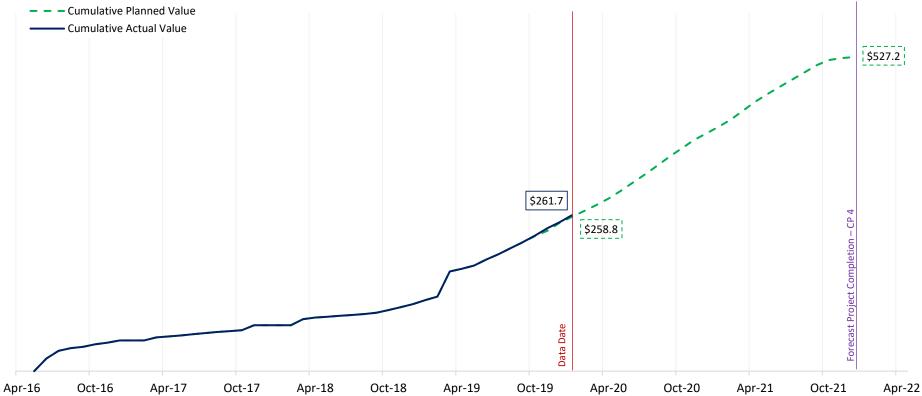


- 1. The Program Baseline Update was presented to and accepted by the Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 4 Project.
- 2. Contract through January 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
ROW Acquisition Complete	Dec-20

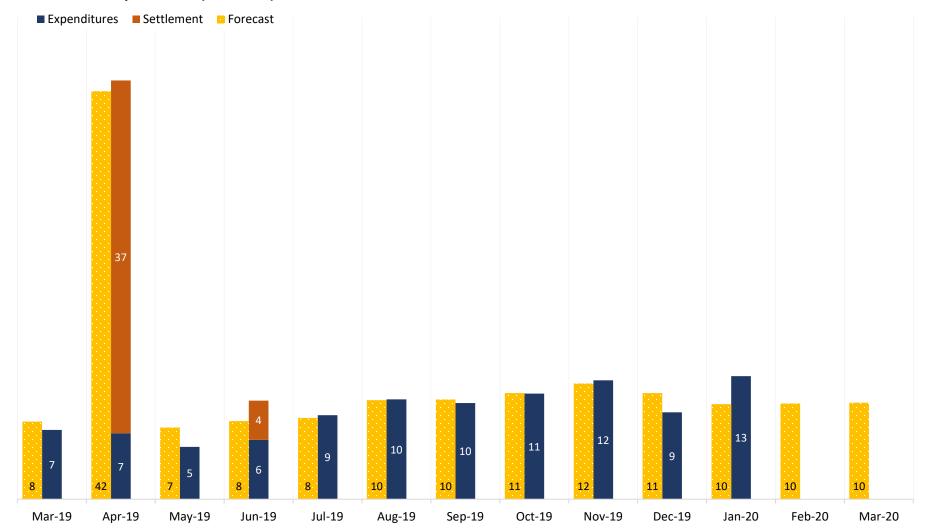
Milestone	Date
<b>Environmental Clearance Complete</b>	Mar-20
Utility Relocation Complete	Mar-21

- 1. The Planned Value and Contract Substantial Completion Date is based on the CP 4 Proposed Schedule as of January 2020. This is expected to be refined as future change orders are issued and a Revised Baseline Schedule (RBS) is finalized.
- 2. The above contract value does not include unexecuted change orders including SR-46 BNSF structure and IPB.



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

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

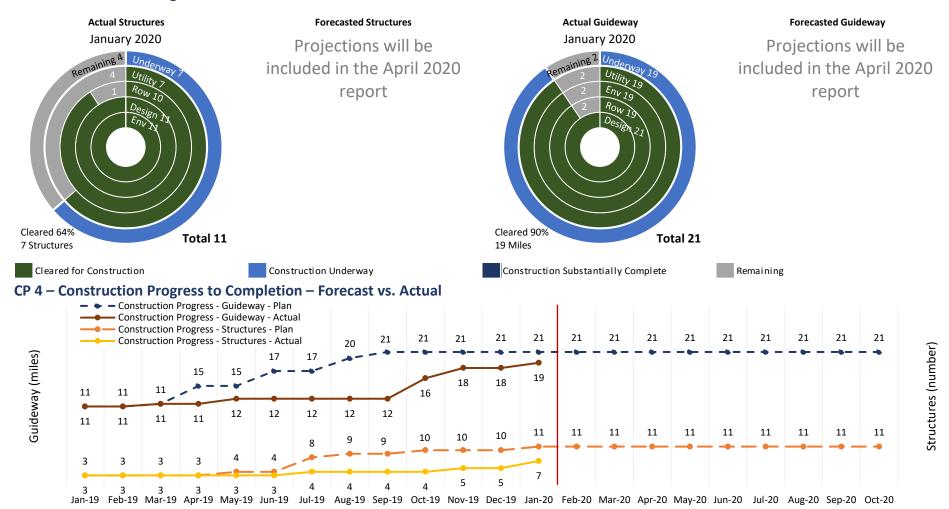


- 1. Expenditures in the chart above are specific to the Design-Builder production and based on the certified invoice and do not include accrual adjustments.
- 2. The sudden increase in the expenditure value in April 2019 is due to Time Impact Analysis settlement.



## **CP 4 – Construction Progress**

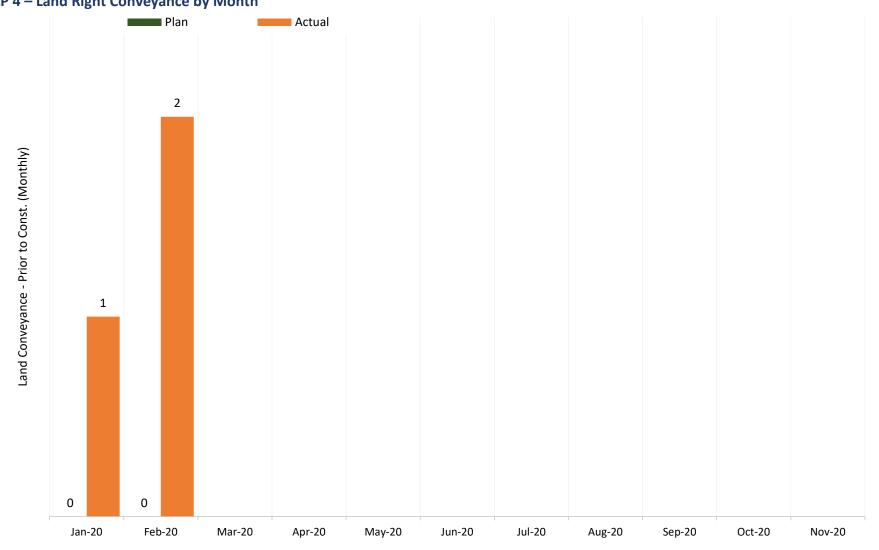
### **CP 4 – Construction Progress**



- 1. Total Structures: 11 structures.
- 2. Total Guideway: 21 miles.
- 3. Three miles of guideway have been cleared but not started.
- 4. This forecast is based on the get to work plans developed in January 2019.
- 5. A revised projection will be updated with the finalization of the Revised Baseline Schedule (RBS).



# CP 4 – ROW Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD) by Month - Plan vs. Actual CP 4 – Land Right Conveyance by Month



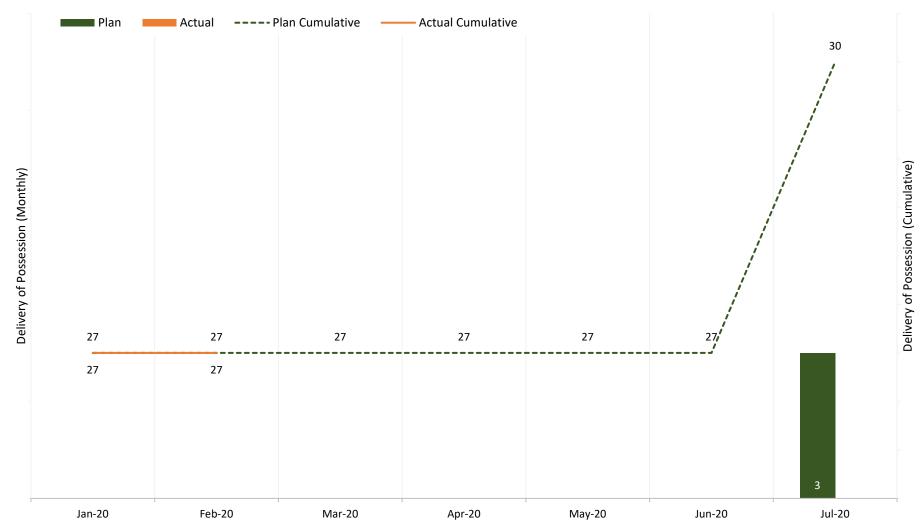
#### Notes:

1. A revised projection will be updated with the finalization of the Revised Baseline Schedules (RBS).



## **CP 4 – ROW Railroad Delivery by Month – Plan vs. Actual**

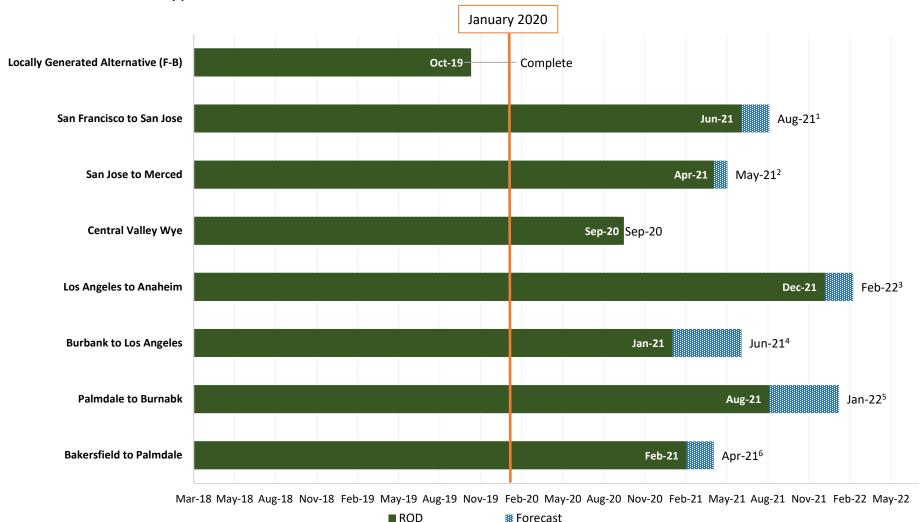
## CP 4 - Railroad Delivery by Month





## Project Development Schedule – Record of Decision (ROD)

## **Phase 1 Environmental Approval Schedule**



- 1. Nine-week delay due to late submittal of cooperating agency comments, remediation time to meet Web Content Accessibility Guidelines (WCAG) to address internal reviews and resource constraints.
- 2. One-month delay due to late submittal of cooperating agency comments, remediation time to meet Web Content Accessibility Guidelines (WCAG) to address internal reviews and resource constraints.
- 3. Two-month delay due to delay in receipt of BNSF environmental deliverables.
- Five-month delay due to late submittal of cooperating agency comments, remediation time to meet Web Content Accessibility Guidelines (WCAG) to address internal reviews and resource constraints.
- 5. Five-month delay in project delivery because of additional consultation with USACE and EPA for an avoidance alternative at Una Lake.
- 6. Two-month delay due to design revision to accommodate CCNM.



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

Program Priority	Segment	Progress	Complete Need Sta		Complete A Ana	Alternatives lysis	Board Cond Preliminary Alt. Draf	y Preferred	Publish Dr	aft EIR/EIS	Publish F Obtai	inal EIS & n ROD	Date EIR/ Comp	
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 Complete 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 Apr-20 47%	Apr-20 Jun-20 50%	Jun-21 Jun-21 0%	Jun-21 Aug-21 <sup>1</sup> 0%	Jun-21	Aug-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%	Mar-20 Mar-20 53%	Mar-20 Apr-20 55%	Apr-21 Apr-21 0%	Apr-21 May-21 <sup>2</sup> 0%	Apr-21	May-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%	Apr-20 Sep-20 50%	Sep-20 Sep-20 60%	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 Jan-21 68%	Nov-20 Jan-21 68%	Dec-21 Dec-21 0%	Dec-21 Feb-22 <sup>3</sup> 0%	Dec-21	Feb-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%	Feb-20 Apr-20 80%	Feb-20 May-20 85%	Jan-21 Jan-21 0%	Jan-21 Jun-21⁴ 0%	Jan-21	Jun-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 Feb-20 66%	Feb-20 Feb-20 66%	Aug-21 Aug-21 0%	Aug-21 Jan-22 <sup>5</sup> 0%	Aug-21	Jan-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%	Jan-20 Jan-20 87%	Jan-20 Jan-20 87%	Feb-21 Feb-21 0%	Feb-21 Apr-21 <sup>6</sup> 0%	Feb-21	Apr-21
8	HMF	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. Nine-week delay due to late submittal of cooperating agency comments, remediation time to meet Web Content Accessibility Guidelines (WCAG) to address internal reviews and resource constraints.
- 7. One-month delay due to late submittal of cooperating agency comments, remediation time to meet Web Content Accessibility Guidelines (WCAG) to address internal reviews and resource constraints.
- 8. Two-month delay due to delay in receipt of BNSF environmental deliverables.
- 2. Five-month delay due to late submittal of cooperating agency comments, remediation time to meet Web Content Accessibility Guidelines (WCAG) to address internal reviews and resource constraints.
- 3. Five-month delay in project delivery because of additional consultation with USACE and EPA for an avoidance alternative at Una Lake.
- 4. Two-month delay due to design revision to accommodate CCNM.



## **Project Development – Key Actions**

In January, the Authority conducted Environmental Impact Report (EIR) / Environmental Impact Statement (EIS) document reviews for several project sections. This included Finishing Team reviews for distributing to the cooperating agencies the San Jose to Merced and San Francisco to San Jose Project Section Administrative Draft EIR/EIS documents. The National Environmental Policy Act (NEPA) Assignment Team also conducted its review responsibilities for the Bakersfield to Palmdale Administrative Draft EIR/EIS and completed a review for the Burbank to Los Angeles Administrative Draft EIR/EIS. For permitting, work continued to obtain environmental approvals (e.g., a Biological Opinion from the U.S. Fish and Wildlife Service) and Fresno to Bakersfield - Locally Generated Alternative, and Central Valley Wye permits needed for project construction.

**Project Development – Key Actions Summary** 

Project Section	Key Actions
San Francisco to San Jose	<ul> <li>Incorporating cooperating and responsible agency comments received in late January into the Draft EIR/EIS.</li> <li>Selected administrative draft technical reports were distributed to resource agencies for simultaneous review.</li> <li>Continued coordination with Bay Conservation &amp; Development Commission (BCDC), Universal Paragon Corporation and the City of Millbrae.</li> </ul>
San Jose to Merced	<ul> <li>Program Environmental and Legal Services, NEPA Assignment and regional project staff completed direction on disposition of cooperating, responsible, and regulatory agency comments on the Administrative Draft EIR/EIS reviews.</li> <li>Conducted meetings with stakeholders throughout project corridor on the Environmental Justice analysis process and potential enhancements.</li> </ul>
Central Valley Wye	<ul> <li>Completed the Administrative Final Supplemental EIR/EIS and submitted to the Legal Office for review.</li> <li>Prepared a limited, focused re-circulation to address the recent listing of the Crotch bumble bee as a candidate species under the California Endangered Species Act.</li> <li>Coordinated with the Chowchilla Elementary School District on the Fairmead community center.</li> </ul>
Locally Generated Alternative	<ul> <li>The Combined Supplemental Record of Decision and Final Supplemental Environmental Impact Statement was released to the public and noticed in the Federal Register on November 8, 2019.</li> <li>Prepared the Section 404 and Section 401 Clean Water Act permits and Section 1602 permit for project construction for Authority review and approval.</li> </ul>
Bakersfield to Palmdale	<ul> <li>Incorporated cooperating and responsible agency comments into the Draft EIR/EIS.</li> <li>Completed Legal and NEPA Assignment Team review of the changes due to cooperating (federal) and responsible (state) agency review.</li> <li>Completed Legal and NEPA Assignment Team changes and resubmitted to Legal for final review and preparation for CEO signature of Draft in February.</li> <li>Preparing for stakeholder coordination meetings in January and February prior to circulation of the Draft EIR/EIS to the public on February 28.</li> </ul>
Palmdale to Burbank	<ul> <li>Finalizing a design option that will enable avoidance of Una Lake.</li> <li>Completed the Record Set Preliminary Engineering for Project Definition (PEPD) documents and submitted them to the FRA for review and comment.</li> <li>Submitted compiled administrative Draft EIR/EIS for Finishing Team review.</li> <li>Completed Finishing Team review of the Admin Draft EIR/EIS. Working with Regional Consultants to incorporate changes into Draft.</li> <li>Completed touch-point review with the Environmental and NEPA Assignment teams regarding continuing with Cooperating Agency review. Reached a decision to postpone the review until we resolve Checkpoint B agreement on range of alternatives with the United States Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA).</li> </ul>
Burbank to Los Angeles	<ul> <li>Continued to consult with municipalities and agencies within the project section by providing preliminary engineering plans for their review. Made refinements to the construction phasing plans based on this review.</li> <li>Cooperating Agency review of the EIR/EIS was completed in December 2019. Incorporating comments into the Draft EIR/EIS.</li> </ul>
Los Angeles to Anaheim	<ul> <li>Continued coordination with BNSF on project elements and analysis methods to be included in the Draft EIR/EIS.</li> <li>Continued coordination on shared-corridor strategies with Metro, Metrolink and other stakeholder agencies.</li> </ul>