



Finance & Audit Committee

CENTRAL VALLEY STATUS REPORT

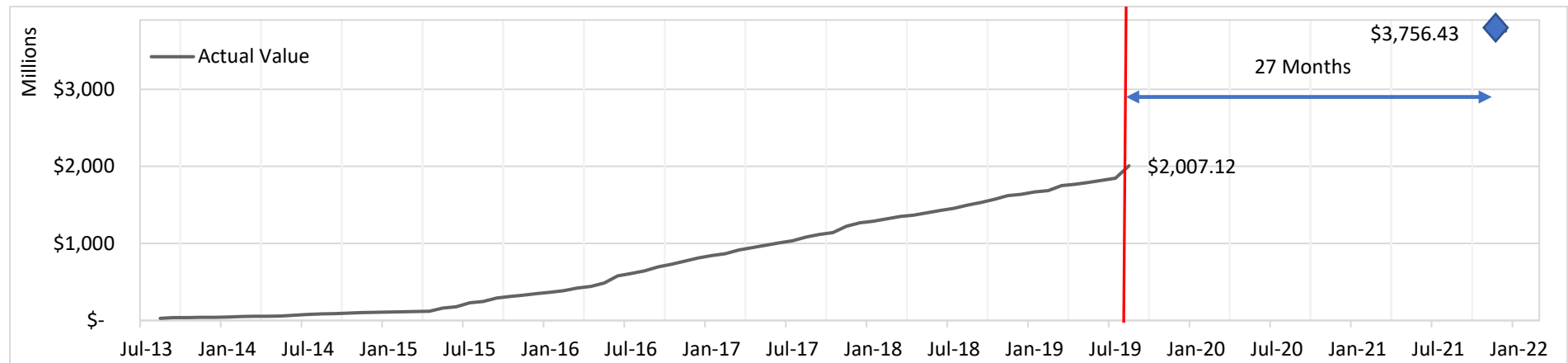
October 2019 Report - (data through August 2019)

1. EXECUTIVE SUMMARY

1.1 INFRASTRUCTURE DELIVERY OVERVIEW – 119 MILE CENTRAL VALLEY SEGMENT CONSTRUCTION PACKAGES 1-4 (CP 1-4)

CP 1-4 Earned Value

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



Notes:
Figure 1 shows historical expenditures from the award of the first construction package through the August 30, 2019. There are 27 months until December 2021 and it is anticipated that the total current contractual value \$3.75643B will be expended.

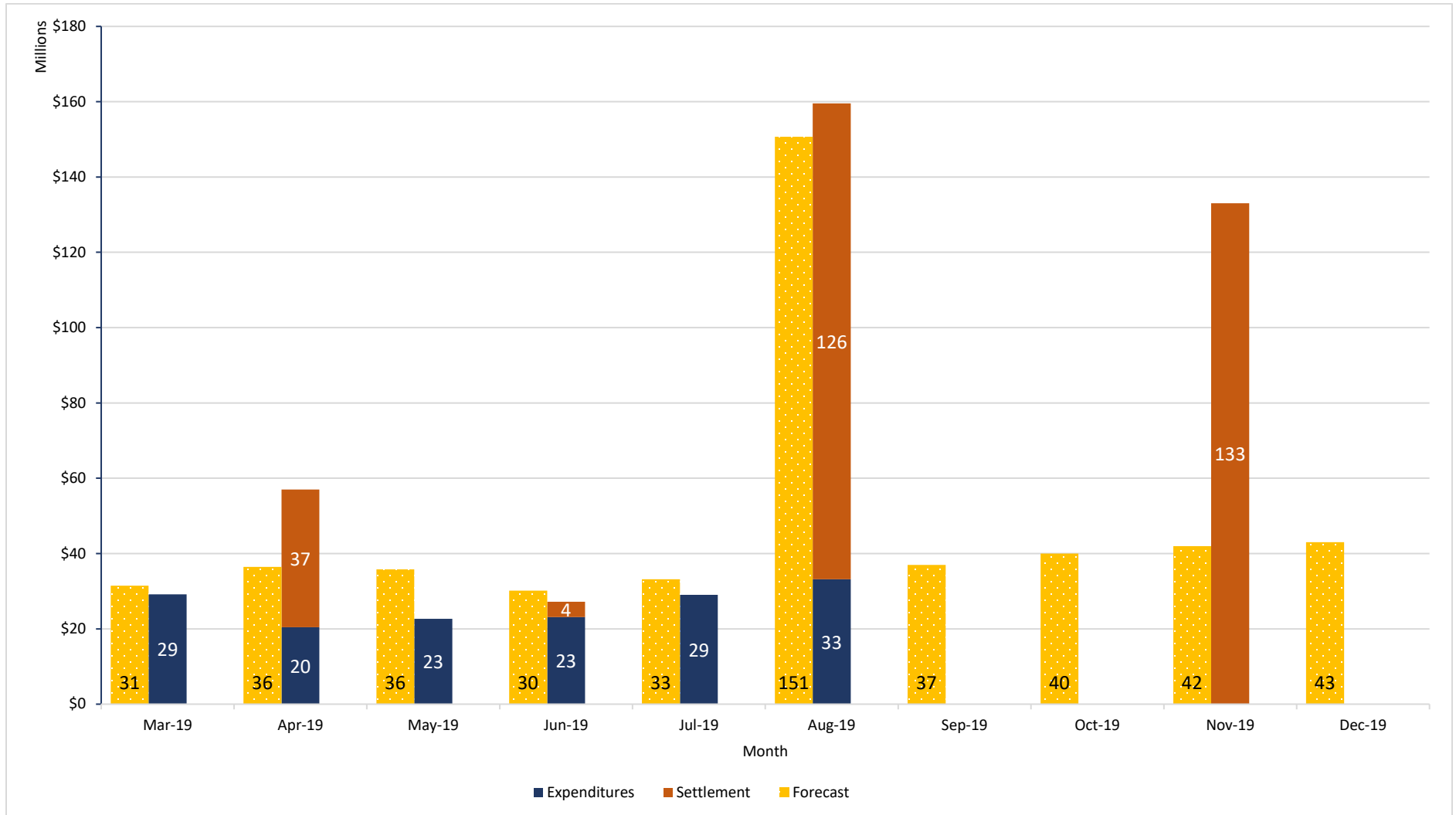
Table 1 - CP 1-4 Projected Milestones

Milestone	Date	Milestone	Date	Milestone	Date
01. CP1 Main Design Complete	Nov-19	05. CP2-3 Main Design Complete	May-21	09. CP4 Main Design Complete	Feb-20
02. CP1 ROW Acquisition Complete	Nov-20	06. CP2-3 ROW Acquisition Complete	Jan-21	10. CP4 ROW Acquisition Complete	Sep-20
03. CP1 Environmental Clearance Complete	Mar-20	07. CP2-3 Environmental Clearance Complete	Feb-20	11. CP4 Environmental Clearance Complete	Apr-20
04. CP1 Utility Relocation Complete	Mar-21	08. CP2-3 Utility Relocation Complete	Feb-21	12. CP4 Utility Relocation Complete	Mar-21

Notes:
The above at completion value (\$3,756.43M) is based on the current contract values of the construction packages and does not include SR99

CP 1-4 Planned vs. Actual Expenditures – Near Term

Figure 2 – CP 1-4 Monthly Expenditures (\$ Millions)



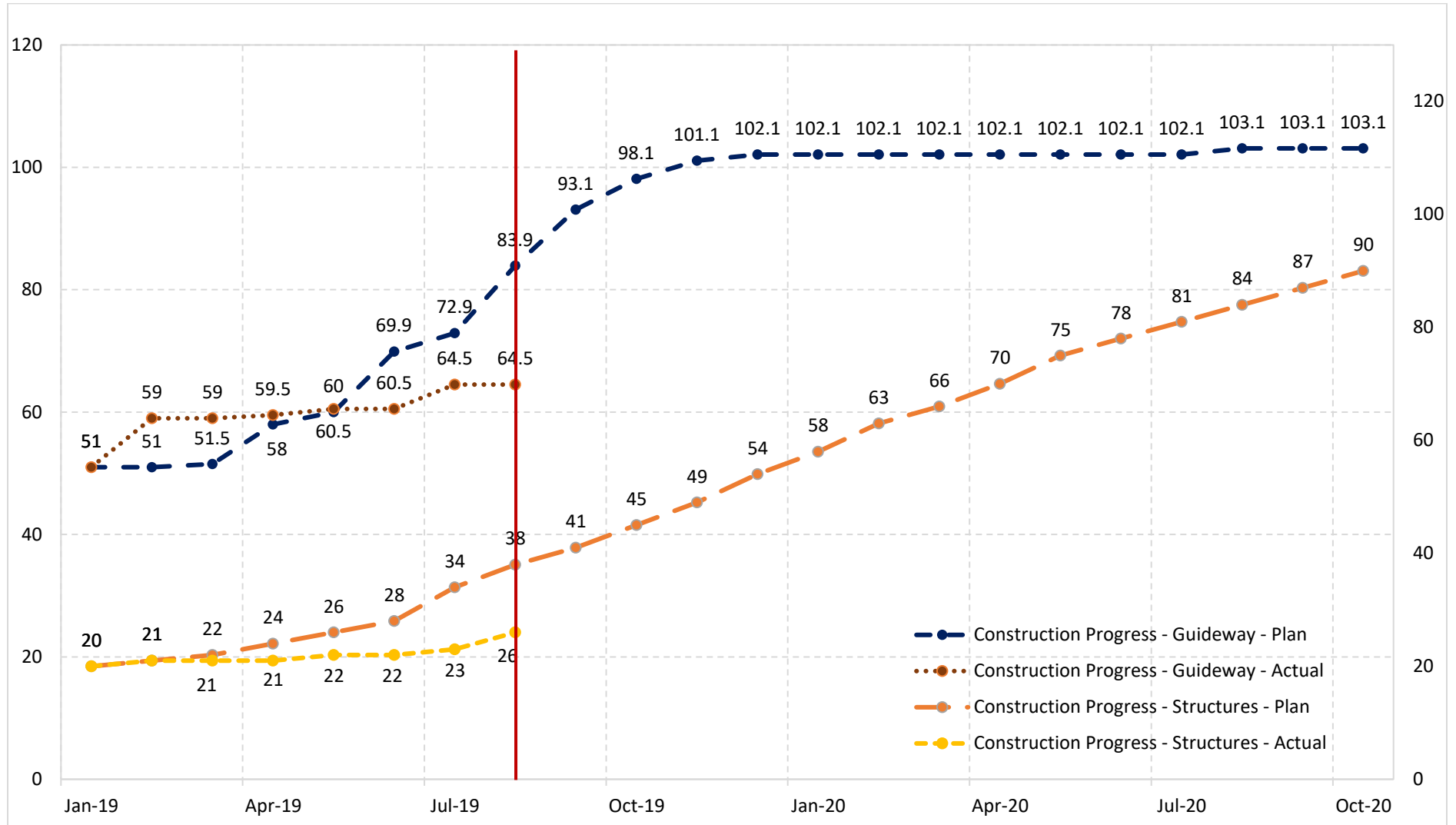
Notes:

Expenditures contained in the chart above are based on the certified invoice and do not include accrual adjustments.

Forecasted expenditures are based on adjusted Re-baseline Schedule as of July 2019 and June 2019 for CP 1 and CP 4 respectively. For CP 2-3, it is based on current work forecast as the RBS is not in place yet.

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

Figure 3 – CP 1-4 Construction Progress to Completion – Forecast vs. Actual



Notes:
 Total Structures: 94ea
 Total Guideway: 117mi does not include mileage for SR-99
 This forecast is based on the get to work plans developed in Jan 2019

CP1-4 - Construction Progress

Construction Package	Category	Planned vs. Actuals	Status Update
CP 1	Structures	Planned Progress: 19 structures Actual Progress: 16 Structures Progress 3 structures behind	<p>1 structure was completed in the month (Avenue 8)</p> <ul style="list-style-type: none"> Avenue 15.5 couldn't be cleared due to ROW being required for PG&E at the location. A redesign effort is being explored to avoid ROW requirements. Avenue 9 couldn't be cleared due to ROW being required for PG&E at the location. A redesign effort is being explored to avoid ROW requirements. Ave 7 Bridge construction could not start. The MOT in the County Permit was rejected. TPZP was asked to revise using Ave 9 as a detour instead of Ave 8 originally planned. Design in progress
CP 1	Guideway	Planned Progress: 12 Miles Actual Progress: 7.5 Miles Progress 4.5 Miles behind	<p>The AT&T Cut-over is preventing Guideway work in the city of Fresno on Guideway 2. Working around the clock to complete.</p> <ul style="list-style-type: none"> Guideway construction is progressing in Guideway 1 between San Joaquin River Viaduct and Ave 15 Ave 15 Intrusion Projection Barrier (IPB) design is holding up the clearance of guideway between Ave 15 and the North Extension IPB next to Fresno awaiting UPRR restart permission. Responded to UPRR comments on scuppers retrofit, should receive the green light to restart construction anytime now.
CP 2-3	Structures	Planned Progress: 10 structures Actual Progress: 6 Structures Progress 4 structures behind	<ul style="list-style-type: none"> As of end of September 2019, there are 7 structures under construction. Delaying factors are unavailability of Right of Way and delayed starts of utilities works. Work on one structure (Avenue 88) will commence in mid-October 2019 following completion of ongoing utilities works. <p>Three more structures (Flint Avenue, Fargo Avenue and Dover Avenue) are planned to start in November 2019 following completion of ongoing utilities works.</p>
CP 2-3	Guideway	Planned Progress: 52 Miles Actual Progress: 45 Miles Progress 7 Miles behind	<ul style="list-style-type: none"> Unavailability of several parcels of Right of Way and consequential impacts on utilities works remains the main factor in delaying guideway works. DFJV are being pursued to start embankment works on all available parcels.
CP 4	Structures	Planned Progress: 9 structures Actual Progress: 4 Structures Progress 5 structures behind	<ul style="list-style-type: none"> Re-design of one structure (Merced Avenue Overpass) was not completed as per plan due to ongoing negotiations with third parties and utilities regarding the relocation of their services. Environmental clearance (preparation of the Pre-Construction Survey) is ongoing and preparation and process of required documentation and has not been processing according to the plan. Ongoing negotiations with landowners is taking longer than anticipated impacting the acquisition of ROW and the start of construction on anticipated structures
CP 4	Guideway	Planned Progress: 19.9 Miles Actual Progress: 12 Miles Progress 7.9 Miles behind	<ul style="list-style-type: none"> Ongoing negotiations with landowners is taking longer than anticipated. In addition, environmental clearance (preparation of the Pre-Construction Survey) has delayed the start of construction on the remaining alignment.

CP 1-4 – ROW Parcels Acquired by Month – Plan vs. Actuals. vs. Forecast

Figure 4 – CP 1-4 ROW Parcels acquired by month - Plan vs. Actual vs. Forecast

	Total Parcels as of July 30	Total Railroad Parcels	Total Parcels Excluding Railroads	Total Delivered to date excluding railroads as of July 30	Total remaining parcels as of July 30	Additional parcels in August	Total Parcels Remaining as of August 30 excluding railroads
CP1	893	54	839	827	12	93	105
CP2-3	756	42	714	547	167	140	307
CP4	210	10	200	166	44	13	57
Total	1859	106	1753	1540	223	246	469

119-Mile Central Valley Segment - Third Party Agreements

Table 2 – CP 1-4 Look Ahead - Estimated completion timeline for key Third Party Agreements

Entity	Project Section	Result of Resolution	Estimated Completion
Calif. Dept. of Toxic Substances Control	CP 1	Provides for environmental review and mitigation between the design-builder and Calif. Dept. of Toxic Substances Control.	Jan 20
County of Fresno	CP 1	Updates road locations to be closed to reflect design changes since original Cooperative Agreement and provide further clarity regarding remediation of County property post-construction.	Jan 20
County of Fresno	CP 1	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Jan 20
Fresno Metropolitan Flood Control District	CP 1	CCUA template allows for prompt execution of the CCUA land conveyances.	Nov 19
Fresno Metropolitan Flood Control District	CP 1	JUA template allows for prompt execution of the JUA land conveyances.	Nov 19
Madera Valley Water Company	CP 1	Obtains cooperation on our project and captures the essential terms on how we work together to relocate Madera Valley Water Company's facilities.	Oct/Nov 19
Corcoran Irrigation District	CP 2-3	Provides for CID's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Feb 20
County of Fresno	CP 2-3	Updates the road locations to be closed to reflect design changes since original Cooperative Agreement and provides further clarity regarding remediation of County property post-construction.	Jan 20
County of Fresno	CP 2-3	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Jan 20
County of Kings	CP 2-3	Covers the transfer of right-of-way between the Authority and the County. Allows the Authority's immediate right of possession and use of existing right-of-way to construct the HSR project.	Mar 20
County of Tulare	CP 2-3	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Dec 19
Kings County Water District	CP 2-3	JUA template allows for prompt execution of the JUA land conveyances.	Mar 20
Kings County Water District	CP 2-3	CCUA template allows for prompt execution of the CCUA land conveyances.	Mar 20
Lakeside Ditch Company	CP 2-3	Provides for the necessary coordination for the development of JUA/CCUA.	Nov/Dec 19
Lower Tule River Irrigation District	CP 2-3	Provides for Lower Tule's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Jan 20
Lower Tule River Irrigation District	CP 2-3	Defines the ownership and maintenance of facilities between the Authority and Lower Tule in perpetuity.	Oct/Nov 19
People's Ditch Company	CP 2-3	Provides for People's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Nov 19
Settler's Ditch Company	CP 2-3	Provides for Settler's review of technical engineering documents, coordination with the Authority, and review of documents for JUA/CCUA.	Nov 19
Southern California Edison	CP 2-3	JUA template allows for prompt execution of the JUA land conveyances.	Oct/Nov 19
Southern California Gas Company (Sempra)	CP 2-3	Southern California Gas Company's replacement rights needed in the BNSF right-of-way.	Oct/Nov 19
Southern California Edison	CP 2-3	CCUA template allows for prompt execution of the CCUA land conveyances.	Oct/Nov 19
Southern California Edison	CP 2-3	Utility agreement addendum for Duct and Substructure Work for Construction.	Oct/Nov 19
Southern California Edison	CP 2-3	EP templates for providing either a temporary right where SCE's prior rights were in franchise and facilities be in franchise again post-construction, or a permanent replacement right for franchise prior rights where roadway will be vacated.	Feb 20

Entity	Project Section	Result of Resolution	Estimated Completion
City of Wasco	CP 4	Covers the transfer of right-of-way between the Authority and the City. It allows the Authority's immediate right of possession and use of existing right-of-way to construct the HSR project.	Feb 20
City of Wasco	CP 4	Defines the ownership and maintenance of grade separations between the Authority and City in perpetuity.	Feb 20
City of Wasco	CP 4	Design and construction of a pedestrian underpass at the Wasco Amtrak station.	Feb 20
City of Wasco	CP 4	Design and construction of a grade separation at Poso Ave. in Wasco.	Feb 20
County of Kern	CP 4	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Oct 19
County of Kern	CP 4	Covers the transfer of right-of-way between the Authority and the County. It allows the Authority's immediate right of possession and use of existing right-of-way to construct the HSR project.	Oct 19
County of Tulare	CP 4	Defines the ownership and maintenance of grade separations between the Authority and County in perpetuity.	Nov 19
Semitropic Water Storage District	CP 4	This agreement is for design and construction of facilities.	Nov/Dec 19
Semitropic Water Storage District	CP 4	JUA template allows for prompt execution of the JUA land conveyances.	Nov/Dec 19
Semitropic Water Storage District	CP 4	CCUA template allows for prompt execution of the CCUA land conveyances.	Nov/Dec 19
Southern California Edison	CP 4	EP templates for providing either a temporary right where SCE's prior rights were in franchise and facilities be in franchise again post-construction, or a permanent replacement right for franchise prior rights where roadway will be vacated.	Jan 20
Southern California Edison	CP 4	Utility agreement addendum for Duct and Substructure Work for Construction.	Oct/Nov 19
Southern California Gas Company (Sempra)	CP 4	Southern California Gas Company's replacement rights needed in the BNSF right-of-way.	Oct/Nov 19
Pacific Gas & Electric Company	CP 4	Allows for the continuation of CP 4 PG&E design and construction work for 4.5 additional years until June 30, 2024.	Dec 19

119-Mile Central Valley Segment – Environmental Clearance – Incidental Take Permits (ITP) Summary

ITP Name	Amendment Status	Construction Project	ITP Amendment Construction Implications	Date of Approval / Issue
Merced-Fresno 2081 ITP, Permit Number 2081-2013-025-04, Issued on 12-Mar-14				
Utility Design Refinements	In draft with contractor	CP 1	Documents changes in utility design at various locations in CP 1.	Feb-20
Hairy Orcutt Grass	In draft with contractor	CP 1	Administrative to identify the mitigation site for HOG. no impact on construction.	Feb-20
North Extension Separation of Rail	In draft with contractor	CP 1	Accommodates increase in construction footprint to realign the HST away from existing freight rail lines in the North Extension of CP 1.	Mar-20
Fresno-Bakersfield, 2081 ITP, Permit Number 2081-2015-024-04, Issued on 6/15/2015				
Kings River Complex	In Review with CDFW	CP 2-3	Increases construction footprint in the Kings River area.	Dec-19
Deer Creek/Cross Creek	In Review with CDFW	CP 2-3	Accommodates design changes in the Deer and Cross Creek areas for wildlife mobility.	Feb-20
CP 2-3 IPB	In Review with CDFW	CP 2-3	construction of IPB at various locations in CP 2-3.	Feb-20
Table 5	In Review with HSR	CP 2-3-	Administrative map book amendment to finalize the locations of dedicated wildlife crossings.	Feb-20
Fresno-Bakersfield, 2081 ITP, Permit Number 2081-2015-024-04, Issued on 6/15/2015				
Wasco At-Grade	In Review with CDFW	CP 4	Increases construction footprint to complete construction of cast-in-place concrete walls.	Feb-20
Semitropic Utilities	In Review with CDFW	CP 4	Increases construction footprint for the relocation of multiple Semitropic Water Storage District utilities to new ROW adjacent to the HST.	Jan-20
Gromer Utility Relocation	In Review with CDFW	CP 4	Increases construction footprint for relocation of PG&E transmission and distribution lines.	Mar-20
McCombs and Merced/Scaroni Caltrans	In Review with HSR	CP 4	Increases construction footprint for design variations at McCombs and Merced/Scaroni interchanges with SR 43, utility relocations, Caltrans roadway improvements, access roads, and other covered activities.	Apr-20
Table 5	In Review with HSR	CP 4	Administrative map book amendment to finalize the locations of dedicated wildlife crossings.	Feb-20
BNSF/PG&E	In draft with contractor	CP 4	Covers additional ROW adjacent to the mainline required for relocation of 3rd party utilities and access to utilities and BNSF operations areas	Apr-20

Notes:
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.

1.2 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:	3/22/2012
Proposal:	1/18/2013
Bid Open Date:	4/13/2013
Award Date:	8/16/2013
NTP 1 Date:	10/15/2013
NTP 2 Date:	11/22/2013
NTP 3 Date:	7/11/2014
Original Completion Date:	3/31/2018
Current Completion Date:	11/2/2021

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:	\$719,808,136.24
Current Contract Amount:	\$1,742,796,136.24
Approved Invoices to Date ¹ :	\$1,100,755,720.70
Remaining Contract Balance:	\$642,040,415.54

Baseline Rev 1 Contingency Status

Description	Amount
Authorized Contingency ² :	\$192,983,151.00
Executed Change Orders ³ :	\$192,983,151.00
	\$0.00

Contract Time Status

Description	Duration
Original Contract Days:	1,628
Extension of Time Awarded:	1,312
Work Days Spent (thru 8/31/2019):	2,146

Expended to Date

Description	Percentage
Time:	73.0%
Dollars:	63.2%

Growth %

Description	Percentage
Time:	73.0%
Dollars:	63.2%

Notes:

1. Includes estimated earned value for the reporting period
2. Approved by Business Oversight Committee (BOC) or through the Delegation of Authority (DOA) based on Baseline Rev 1.
3. Contingency funded change orders only
4. The budget status table has been removed this period as it contains same information as the contract value.

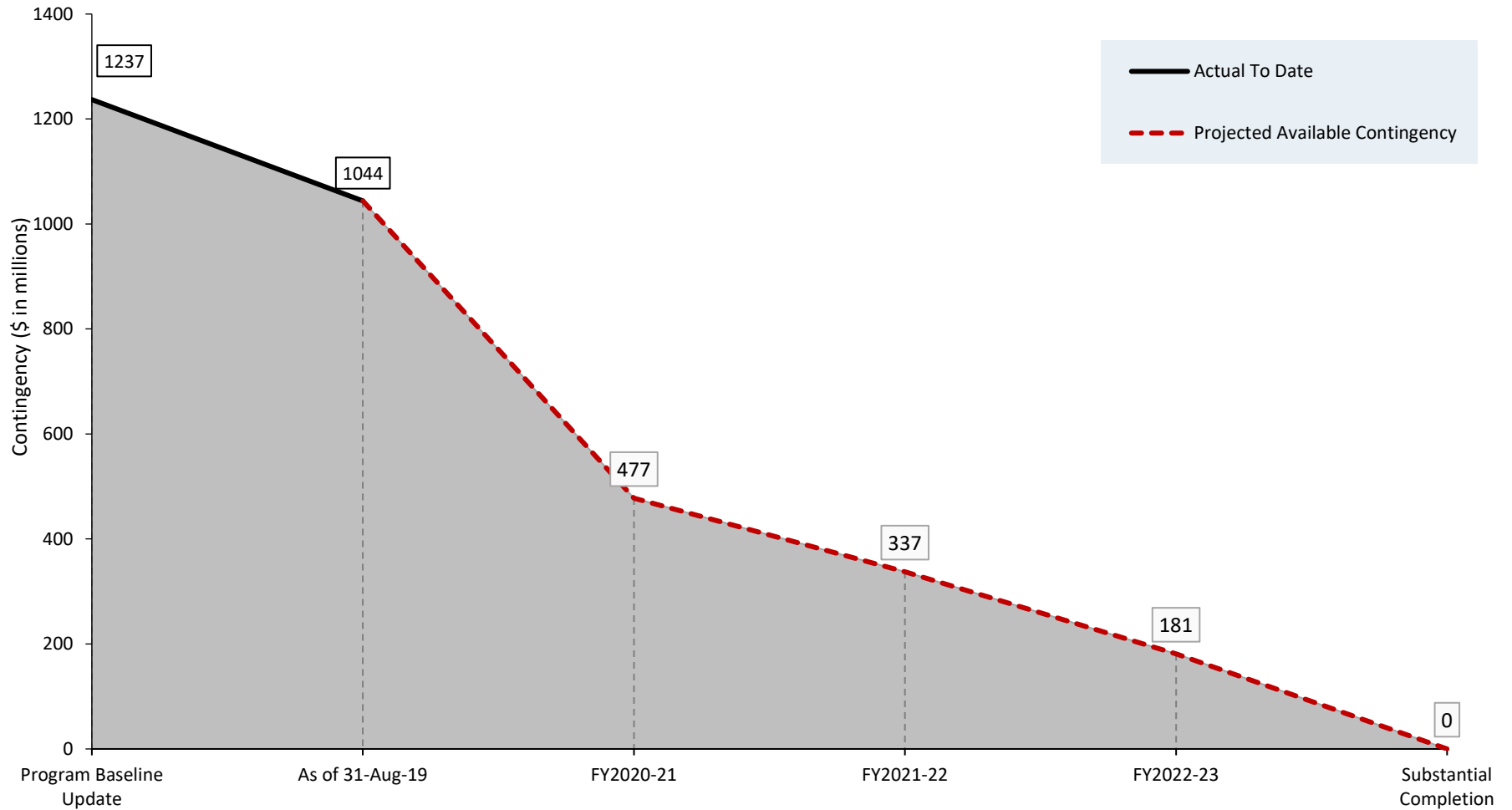
CP 1 – Executed Change Order Status

Table 3 - CP 1 – Executed Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
00256	Westside Shoofly Modifications - Construction	Rescinded	(\$4,341,700.68)	08/15/19
00264	Dry Creek Canal Sprint Facility Relocation Costs	CO Executed	\$727,099.61	08/06/19
00261	Switch Relocation for UPRR Siding No. 729	CO Executed	\$102,271.87	08/06/19
00048.3	PGE and ATT Facilities Relocation Provisional Sum Supplement 3	CO Executed	\$19,000,000.00	08/06/19
00099.2	Agreement for Settlement, Release and Waiver for Delays, Claims and Disputes through May 1, 2019	CO Executed	\$126,000,000.00	08/06/19
00265	UPRR Safety and Security	CO Executed	\$100,000.00	08/19/19
	Total:		\$141,587,670.80	

CP 1 – Risk - Contingency Report

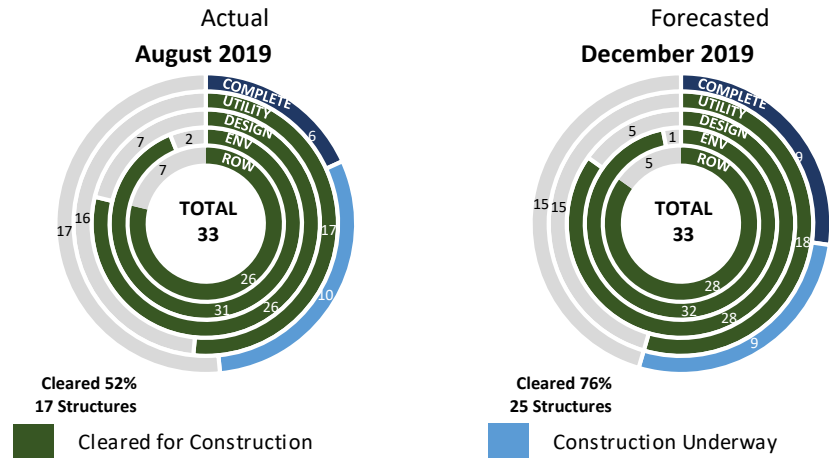
Figure 5 - CP 1 – Risk - Contingency Report



Notes:
The Program Baseline Update was presented to and accepted by the CHSRA 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. Contract through August 31, 2019.

CP 1 – Construction Progress

Structures



Guideway

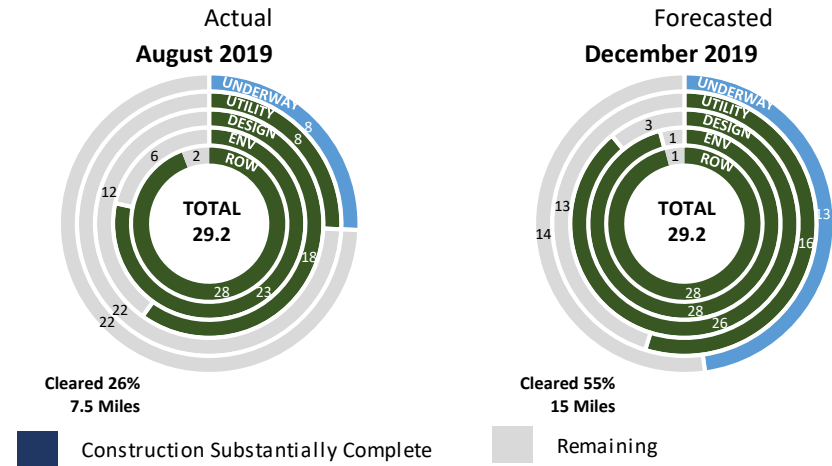
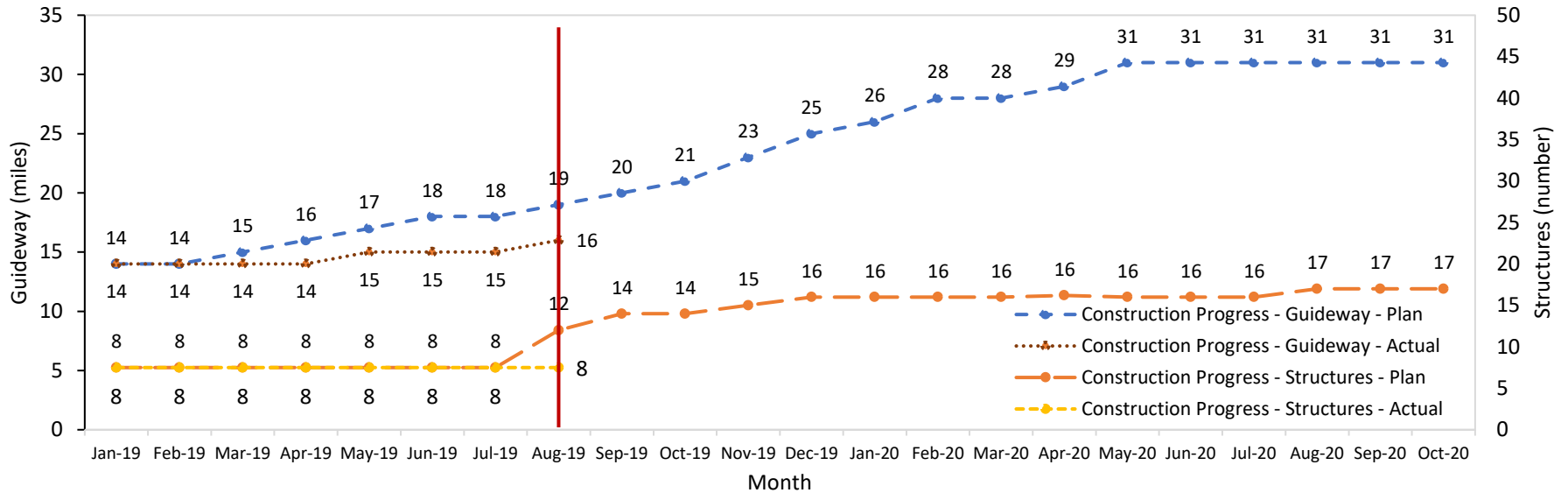


Figure 6 – CP 1 - Construction Progress to Completion – Forecast vs. Actual

Notes:
Total Structures: 33 structures
Total Guideway: 29 miles



Notes:
This forecast is based on the get to work plans developed in Jan 2019

1.3 CONSTRUCTION PACKAGE 2-3 (CP 2-3) OVERVIEW

CP 2-3 – Design Build Contract Summary

Milestones

Milestone	Date
RFQ Date:	10/9/2013
SOQ Date:	12/13/2013
RFP Date:	4/3/2014
Proposal:	10/30/2014
Bid Open Date:	12/11/2014
Award Date:	6/10/2015
LNTP Date:	6/12/2015
NTP Date:	7/25/2015
Original Completion Date:	8/19/2019
Current Completion Date:	5/22/2020

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:	\$144,752,926.28
Current Contract Amount:	\$1,510,088,816.28
Approved Invoices to Date ¹ :	\$699,727,013.75
Remaining Contract Balance:	\$810,361,802.53

Baseline Rev 1 Contingency Status

Description	Amount
Authorized Contingency ² :	\$57,871,379.45
Executed Change Orders ³ :	\$57,871,379.45
	\$0.00

Contract Time Status

Description	Duration
Original Contract Days:	1,486
Extension of Time Awarded:	277
Current Contract Days:	1,763
Work Days Spent (thru 8/31/2019):	1,498

Expended to Date

Description	Percentage
Time:	85.0%
Dollars:	46.3%

Growth %

Description	Percentage
% Time Growth:	18.6%
% Dollars Growth:	10.6%

Notes:

1. Includes estimated Aug 2019 invoice of \$14,000,000
2. Approved by Business Oversight Committee (BOC) or through the Delegation of Authority (DOA) based on Baseline Rev 1.
3. Contingency funded change orders only
4. The budget status table has been removed this period as it contains same information as the contract value.

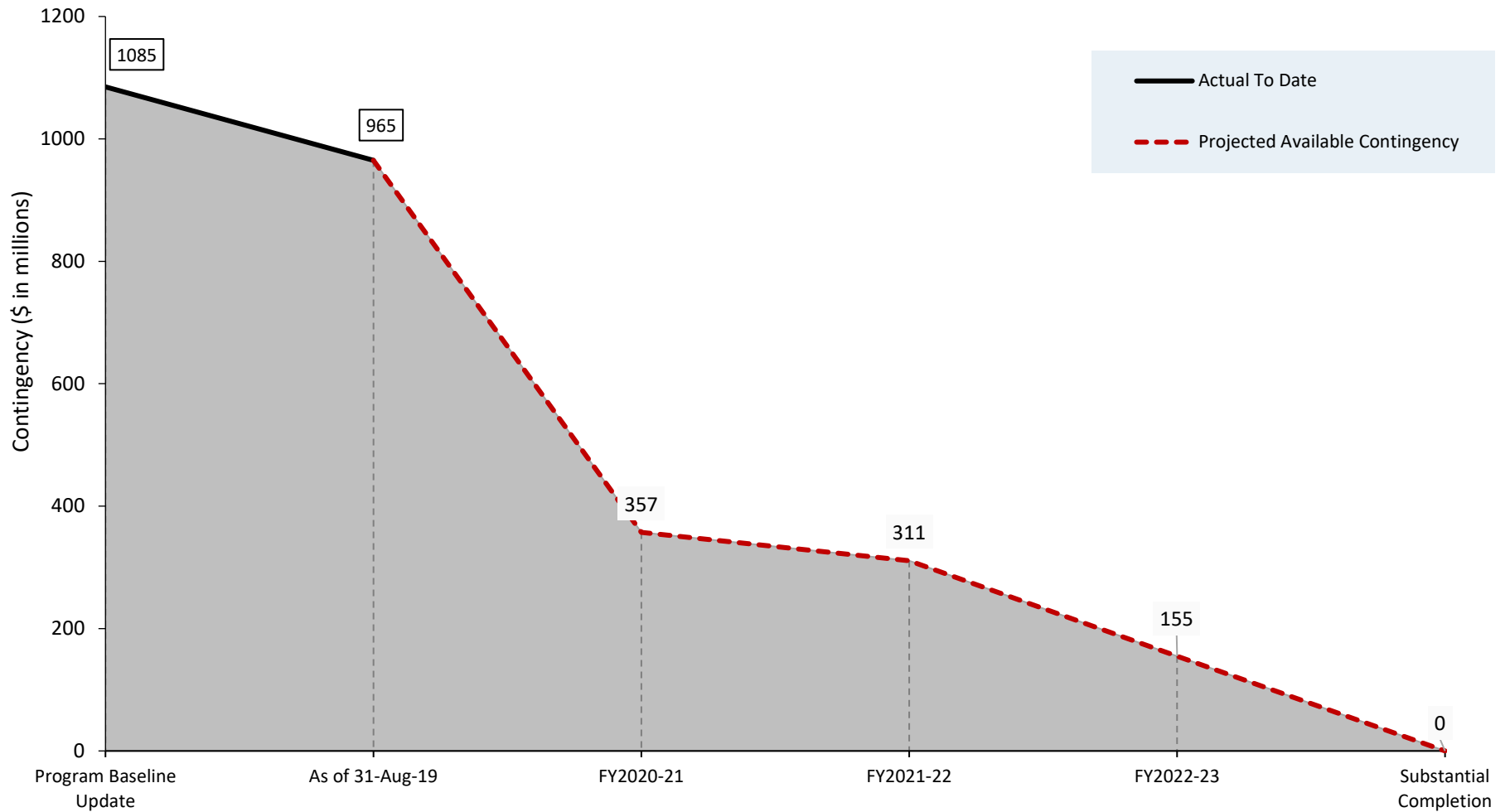
CP 2-3 – Executed Change Order Status

Table 4 - CP 2-3 – Executed Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
0024.11	Hazmat Abatement FB-10-0398	Fully Executed	\$17,969	8/30/2019
0024.14	Hazmat Abatement COP 0088.14	Fully Executed	\$98,094	8/30/2019
0095	CID 200 pct Flow - Elkhorn Ditch	Fully Executed	\$4,460,874	8/30/2019
00100	Elkhorn Ditch Relocation Final Design	Fully Executed	\$165,850	8/30/2019
00101	Dover Intersection Sight Distance	Fully Executed	\$42,800	8/30/2019
00104	Type 2 Structure Concrete Barrier	Fully Executed	\$839,950	8/30/2019
00112	South Ave. Grade Separation	Fully Executed	\$982,667	8/30/2019
0024.12.1	Hazmat Abatement. Conc. Slab Removal	Fully Executed	\$30,998	8/30/2019
0087	E. Lincoln Ave. Grade Separation	Fully Executed	\$58,088	8/27/2019
0098	SR 43 Hesse Ave. Design Structure CT UTC	Fully Executed	\$84,263	8/27/2019
0099	SR 43 Ave. 88 Struct. Design Caltrans UTC	Fully Executed	\$84,263	8/27/2019
00102	City of Corcoran Increased Design Speed	Fully Executed	\$124,950	8/27/2019
	Total		\$6,990,766	

CP 2-3 – Risk - Contingency Report

Figure 7 - CP 2-3 – Risk - Contingency Report

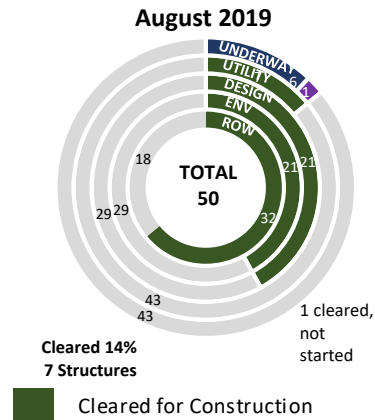


Notes:
The Program Baseline Update was presented to and accepted by the CHSRA Board in May 2019. The adoption of the Program Baseline Update resulted in changes to contingency amounts. The contingency drawdown curve has been revised to reflect updated contingency amount for the entire CP 1 Project. Contract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

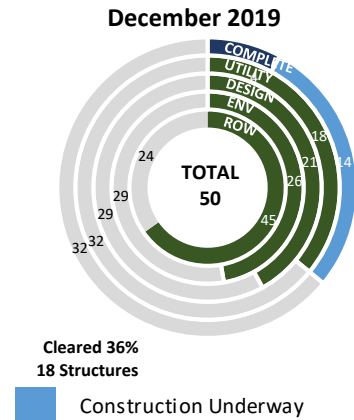
CP 2-3 – Construction Progress

Structures

Actual

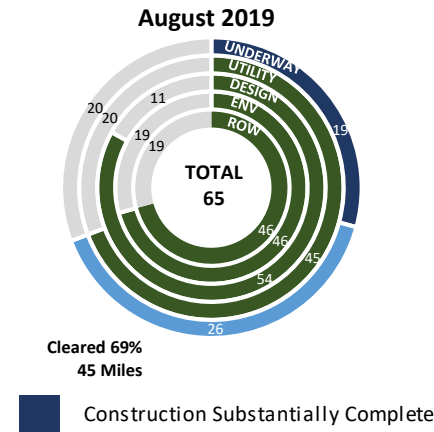


Forecasted



Guideway

Actual



Forecasted

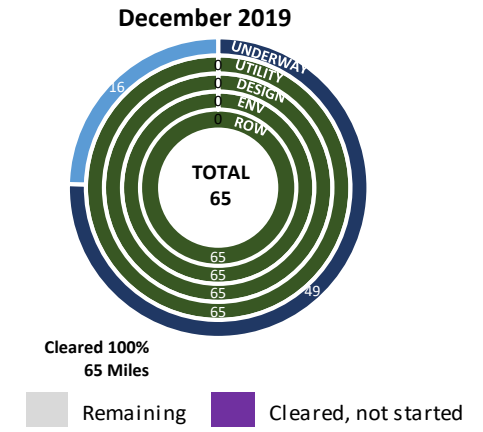
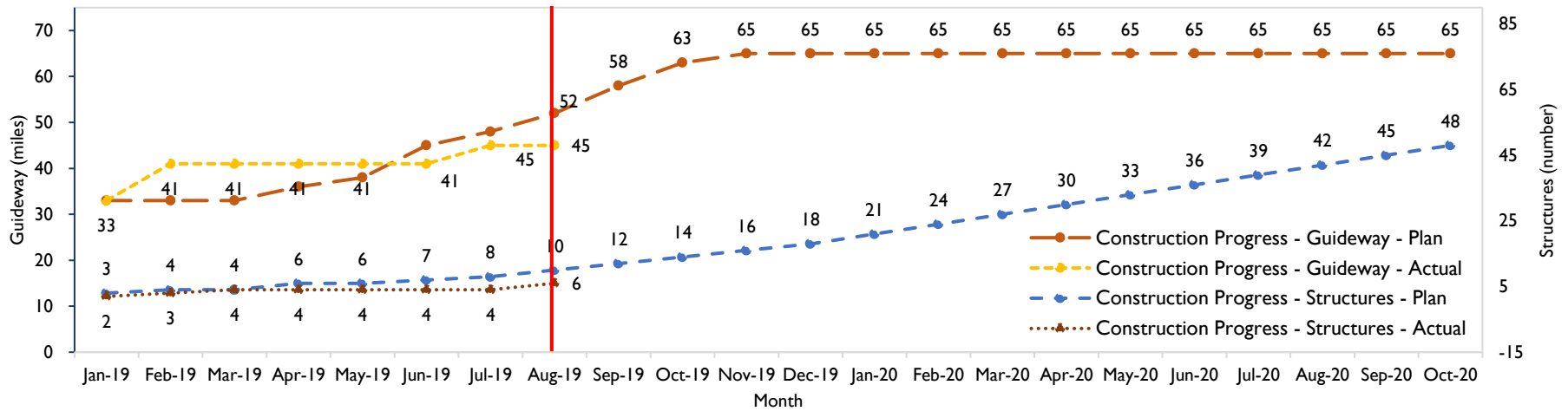


Figure 8 - CP 2-3 - Construction Progress to Completion – Forecast vs. Actual

Notes:
Total Structures: 50ea
Total Guideway: 65mi



Notes:
This forecast is based on the get to work plans developed in Jan 2019

1.4 CONSTRUCTION PACKAGE 4 (CP 4) OVERVIEW

CP 4 – Design Build Contract Summary

Milestones

Milestone	Date
RFQ Date:	11/20/2014
SOQ Date:	1/30/2015
RFP Date:	5/27/2015
Proposal:	11/25/2015
Bid Open Date:	1/5/2016
Award Date:	2/29/2016
LNTP Date:	3/1/2016
NTP Date:	4/15/2016
Original Completion Date:	6/3/2019
Current Completion Date:	6/30/2021

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:	\$59,297,699.49
Current Contract Amount:	\$503,544,699.49
Approved Invoices to Date ² :	\$206,632,393.10
Remaining Contract Balance:	\$296,912,306.39

Baseline Rev 1 Contingency Status

Description	Amount
Authorized Contingency ³ :	\$46,448,798.00
Executed Change Orders ⁴ :	\$46,448,798.00
	\$0.00

Contract Time Status

Description	Duration ¹
Original Contract Days:	1,144
Extension of Time Awarded:	757
Current Contract Days:	1,901
Work Days Spent (thru 8/31/2019):	1,232

Expended to Date

Description	Percentage
Time:	64.8%
Dollars:	41.04%

Growth %

Description	Percentage
% Time Growth:	66.2%
% Dollars Growth:	13.35%

Notes:

1. Calendar days
2. Includes actuals through July 2019 with accrual estimates for August 2019
3. Approved by Business Oversight Committee (BOC) or through the Delegation of Authority (DOA) based on Baseline Rev 1.
4. Contingency funded change orders only
5. The budget status table has been removed this period as it contains same information as the contract value.

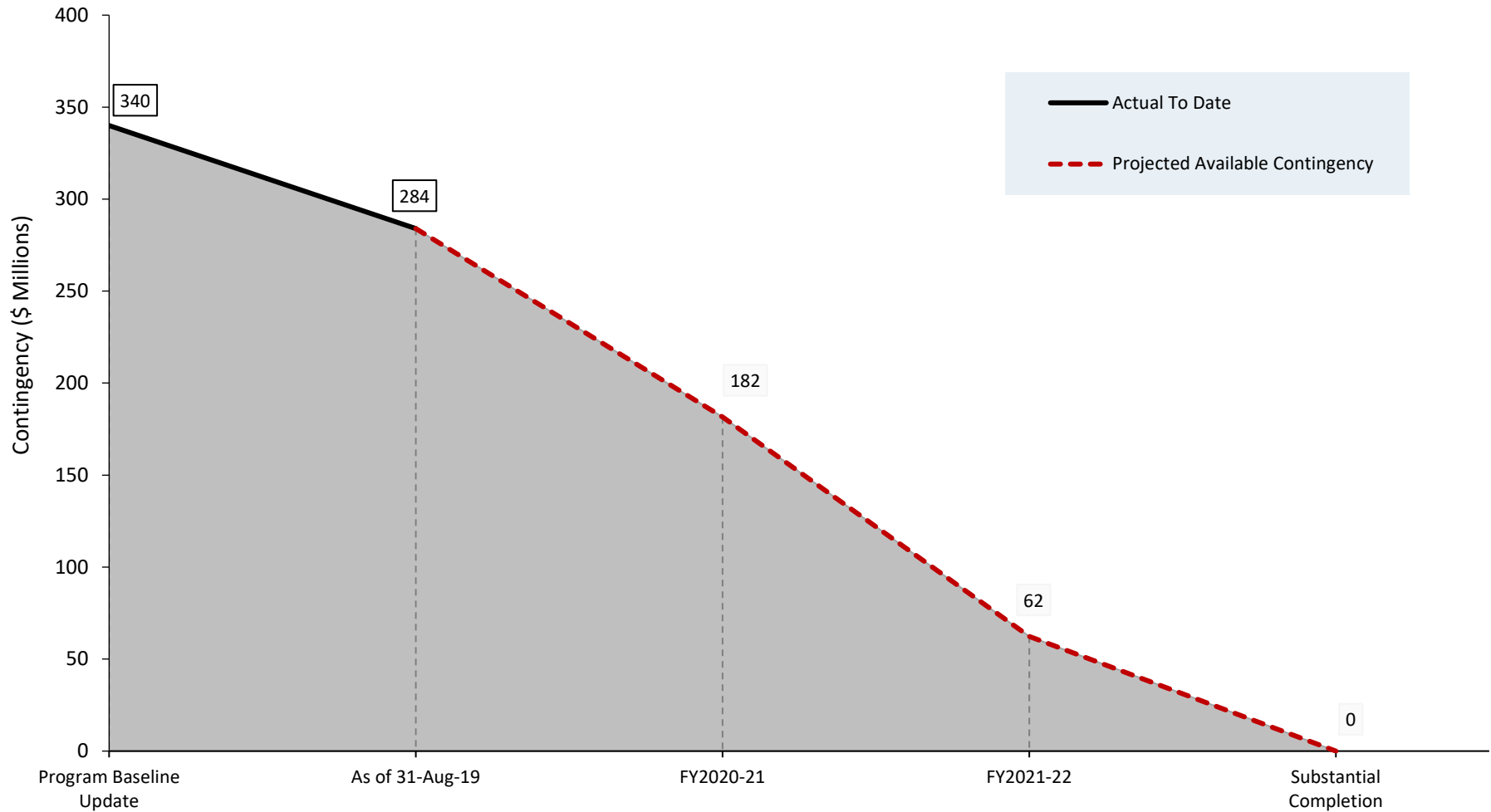
CP 4 – Executed Change Order Status

Table 5 - CP 4 – Executed Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
0027R1	CO 27 SR 46 @ BNSF Crossing Design	CO Executed	\$242,102.40	08/28/19
0035	Reimbursement for Specific CDFW fees	CO Executed	\$73,052.62	08/06/19
0038	BNSF Access Road	CO Executed	\$3,717,579.65	08/15/19
0039	IBP Last Mile	CO Executed	\$5,500,000.00	08/28/19
0040	Unidentified Frontier Utility Conflicts 2000 and 2002	CO Executed	\$25,879.00	08/26/19
	Total:		\$9,558,613.67	

CP 4 – Risk - Contingency Report

Figure 9 - CP 4 – Risk - Contingency Report



Notes:
The Program Baseline Update was presented to and accepted by the CHSRA 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. Contract through August 31, 2019.

CP 4 – Earned Value

Figure 10 – CP 4 - Planned vs. Actual Expenditures from Contract Award through Contract Completion (\$ Millions)

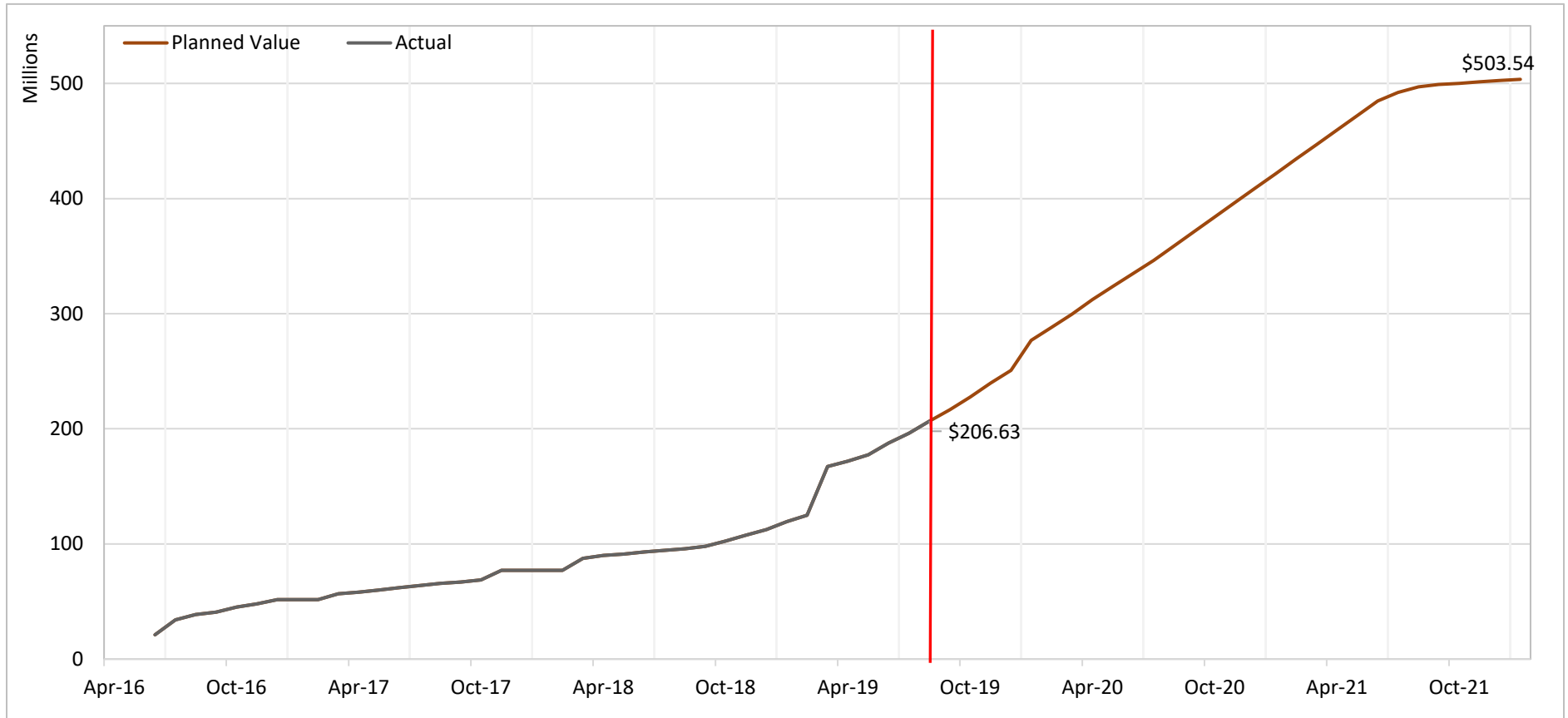


Table 6 - CP 4 Projected Milestones

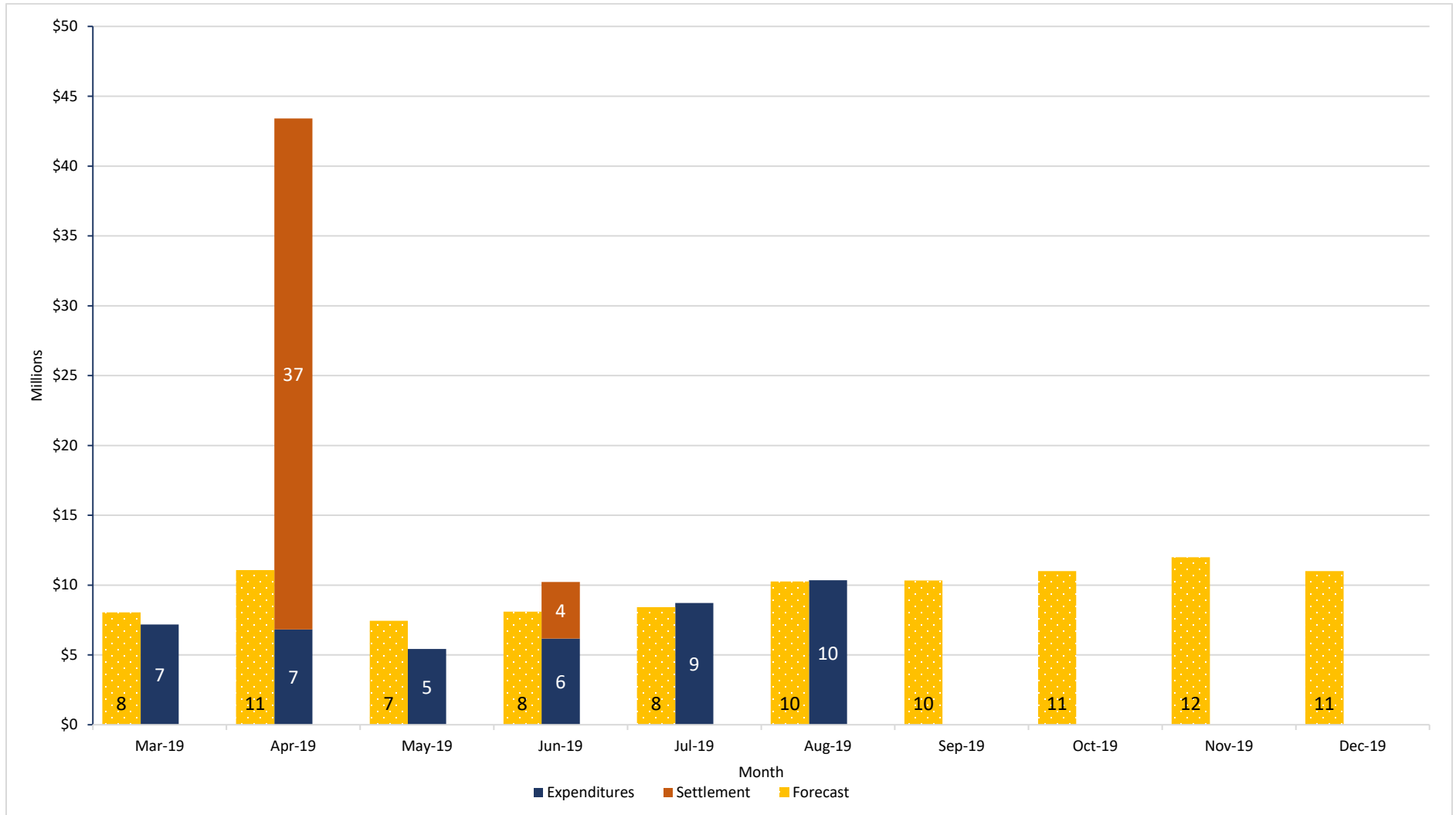
Milestone	Date	Milestone	Date
Main Design Complete	Feb-20	Environmental Clearance Complete	Apr-20
ROW Acquisition Complete	Sep-20	Utility Relocation Complete	Mar-21

Notes:

Contract completion date is based on adjusted Re-baseline Schedule as of May 2019
The sudden increase in the cumulative value is due to Time Impact Analysis settlement.

CP 4 – Planned vs. Actual Expenditures – Near Term

Figure 11 – CP 4 - Fiscal Year Expenditures (\$ Millions)



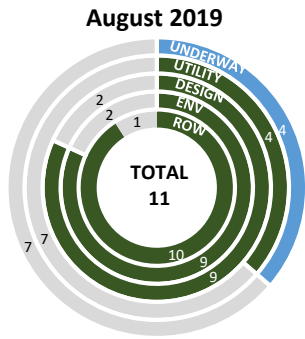
Notes:

Expenditures in the chart above are based on the certified invoice and do not include accrual adjustments
 Contract completion date is based on adjusted Re-baseline Schedule as of May 2019
 The sudden increase in the cumulative value is due to Time Impact Analysis settlement.

CP 4 –Construction Progress

Structures

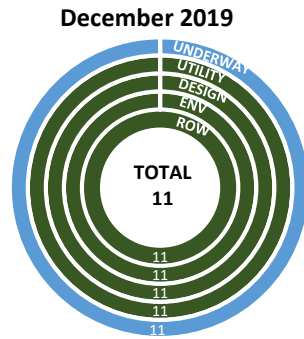
Actual



Cleared 36%
4 Structures

■ Cleared for Construction

Forecasted

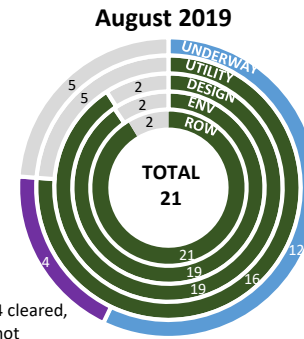


Cleared 100%
11 Structures

■ Construction Underway

Guideway

Actual

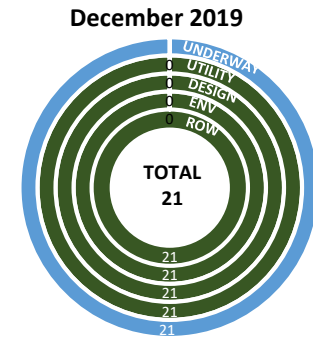


4 cleared,
not started

Cleared 77%
16.1 Miles

■ Construction Substantially Complete

Forecasted



Cleared 100%
21 Miles

■ Remaining ■ Cleared, not started

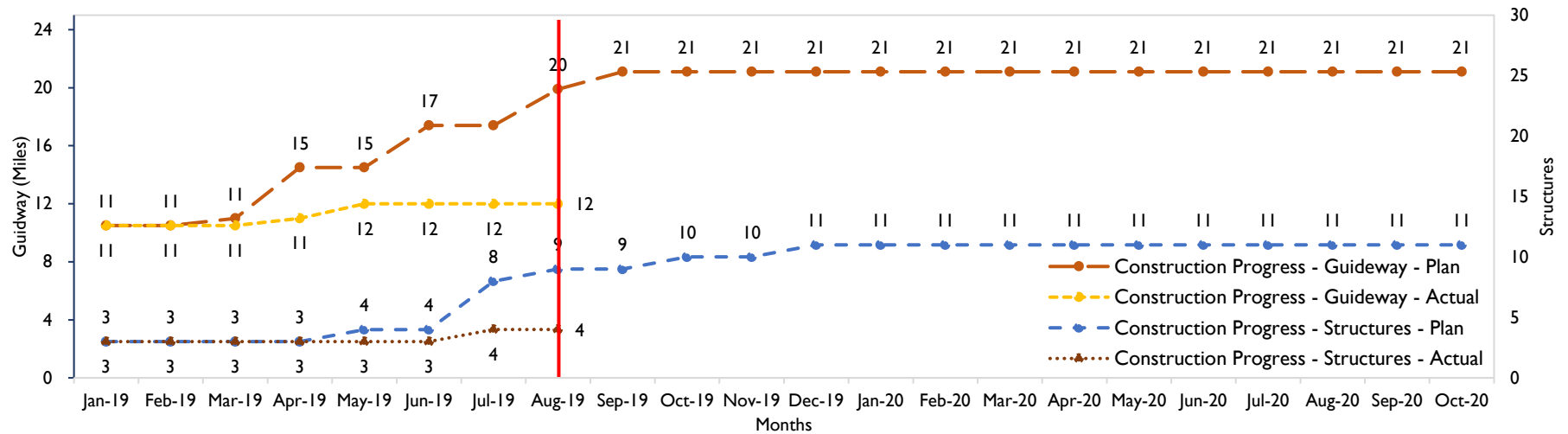
Figure 12 – CP 4 - Construction Progress– Forecast vs. Actual

Notes:

Total Structures: 11ea

Total Guideway: 21mi

Four miles of guideway have been cleared not started



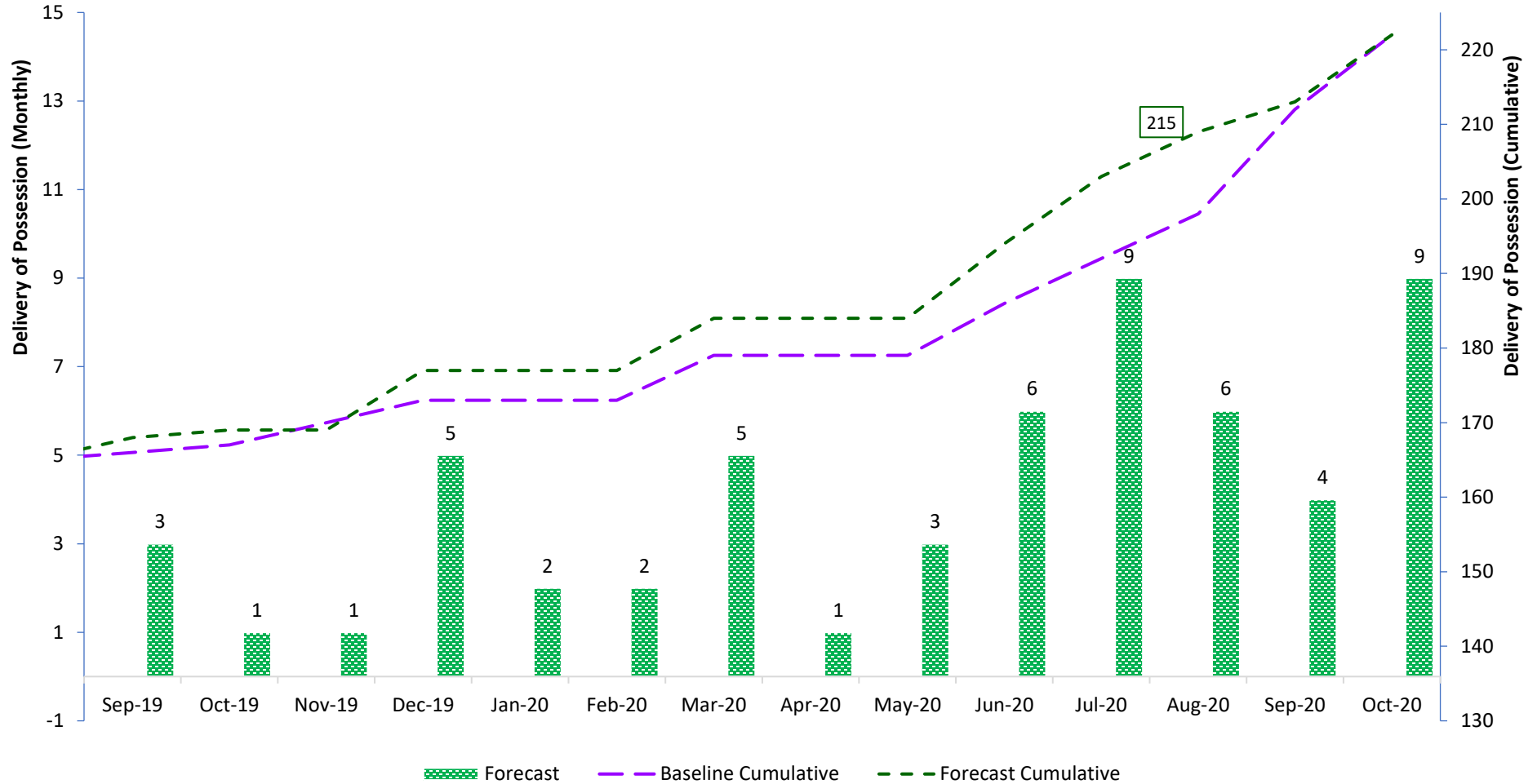
Notes:

This forecast is based on the get to work plans developed in Jan 2019

CP 4 – ROW Parcels Acquired by Month – Plan vs. Actuals. vs. Forecast

Figure 13 – CP 4 - Parcels Acquired by Month

CP 4 - Parcels Acquired by Month

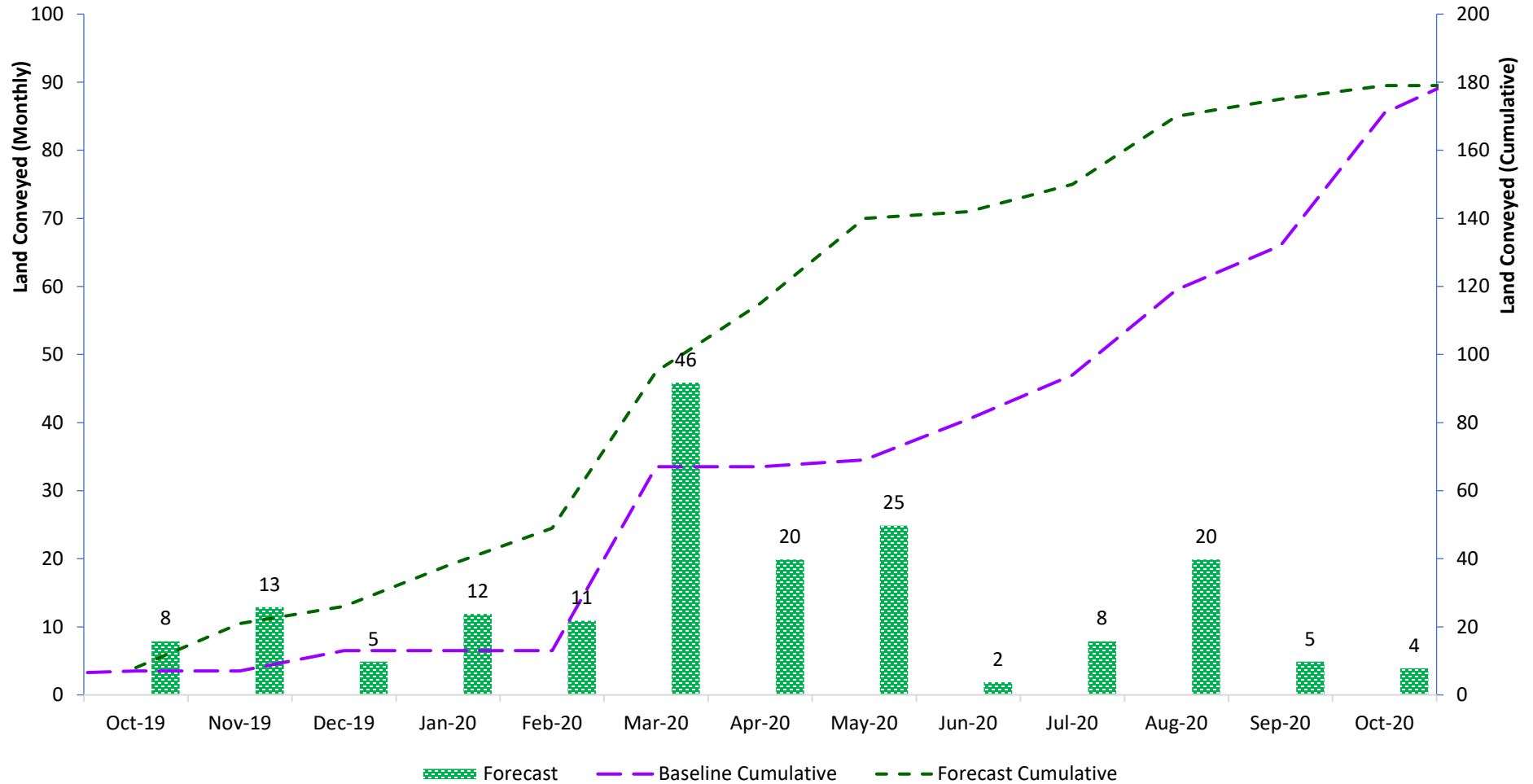


Notes:
Total = 222
Acquired = 165
Remaining = 57

CP 4 – ROW Land Conveyance by Month – Plan vs. Actual vs. Forecast

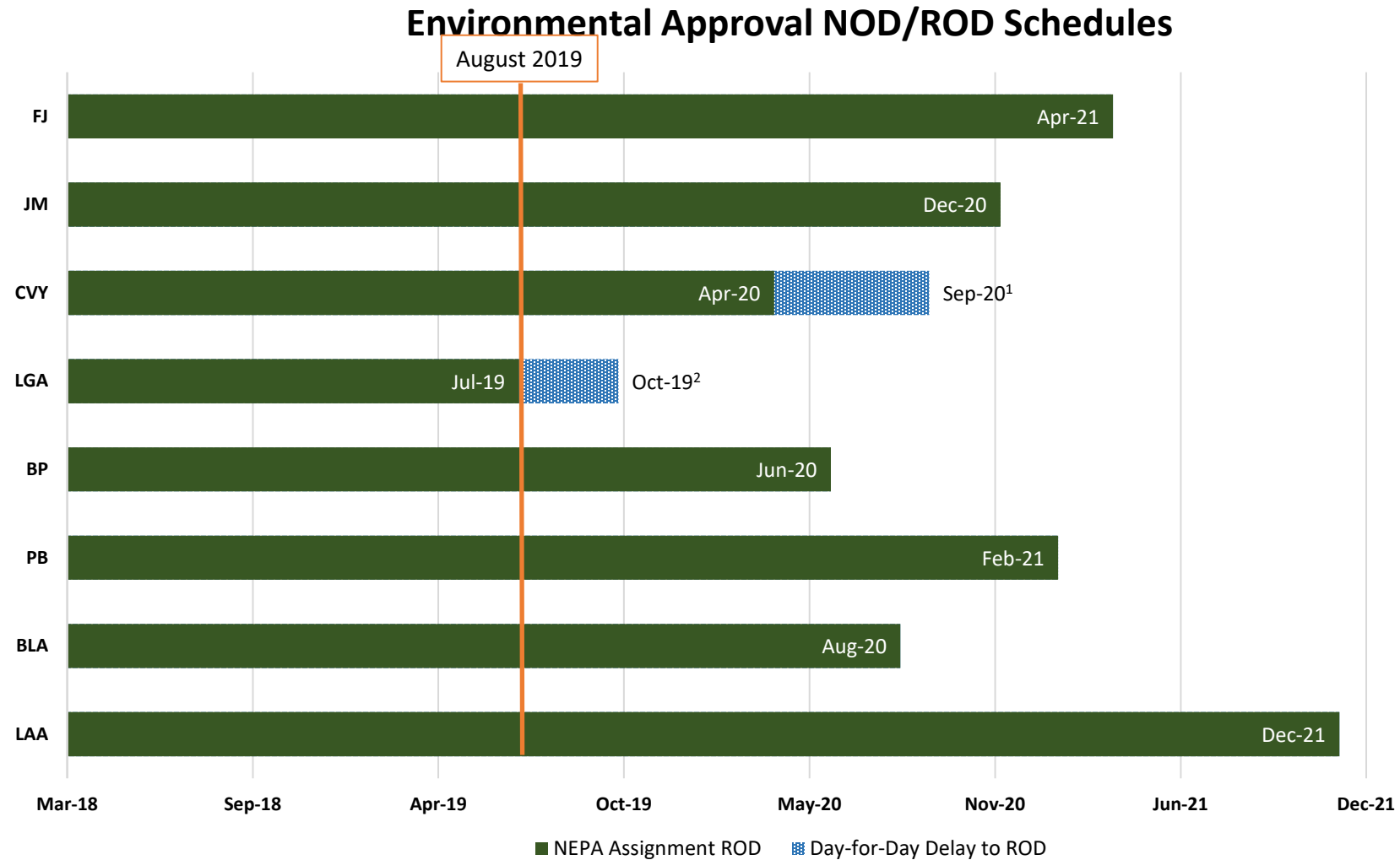
Figure 14 – CP 4 - Land Conveyance by Month

CP 4 - Land Conveyance by Month



1.5 PROJECT DEVELOPMENT SCHEDULE – RECORDS OF DECISION (ROD)

Figure 15 – Phase 1 Environmental Approval Schedule



Notes:

1. Actual 4-month delay (day for day slip due to lack of NEPA Assignment).
2. Actual 3-month delay (day for day slip due to lack of NEPA Assignment).

Table 7 - Project Development Schedule (to ROD)

Program Priority	Segment	Progress	Complete Purpose & Need Statement		Complete Alternatives Analysis		Board Concurrence of Preliminary Preferred Alternative for Draft EIR/EIS		Publish Draft EIR/EIS		Publish Final EIS & Obtain ROD		Date EIR/EIS To Be Completed	
			Due Dates	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month
Document Complete	Merced to Fresno	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%
Document Complete	Fresno to Bakersfield	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%
Document Complete	CV Electrical Interconnections	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%
1	San Francisco to San Jose	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Sep-19 Sep-19 95%	Sep-19 Sep-19 98%	Mar-20 Mar-20 47%	Mar-20 Apr-20 48%	Apr-21 Apr-21 0%	Apr-21 ¹ Apr-21 0%	Apr-21	Apr-21
2	San Jose to Merced	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Sep-19 Sep-19 95%	Sep-19 Sep-19 98%	Dec-19 Feb-20 43%	Dec-19 Mar-20 44%	Dec-20 Dec-20 0%	Dec-20 Dec-20 ² 0%	Dec-20	Dec-20
3	Central Valley Wye (M-F)	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	May-18 Sep-19 90%	May-18 Sep-19 99%	Apr-20 Sep-20 0%	Apr-20 Sep-20 ³ 4%	May-20	Sep-20
4	Locally Generated Alternative (F-B)	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Jul-19 Oct-19 92%	Jul-19 Oct-19 ⁴ 92%	Aug-19 Oct-19	Aug-19 Oct-19
5	Los Angeles to Anaheim	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Nov-20 TBD TBD	Nov-20 Nov-20 68%	Dec-21 Dec-21 0%	Dec-21 Dec-21 0%	Dec-21	Dec-21
6	Burbank to Los Angeles	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Sep-19 Oct-19 70%	Sep-19 Oct-19 70%	Aug-20 Aug-20 0%	Aug-20 Aug-20 ⁵ 0%	Aug-20	Aug-20
7	Palmdale to Burbank	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Dec-19 Jan-20 64%	Dec-19 Jan-20 64%	Feb-21 Feb-21 0%	Feb-21 Feb-21 ⁶ 0%	Feb-21	Feb-21
8	Bakersfield to Palmdale	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Jul-19 Oct-19 84%	Jul-19 Mar-20 84%	Jun-20 Jun-20 0%	Jun-20 Jun-20 ⁷ 0%	Jun-20	Jun-20
9	HMF	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	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 Potential 2-month delay (CEQA Guideline Changes). Developing mitigation plans to minimize or eliminate associated schedule impacts.

² Potential 4-month delay (CEQA Guideline Changes). Developing mitigation plans to minimize or eliminate associated schedule impacts.

³ Actual 4-month delay (day for day slip due to lack of NEPA Assignment).

⁴ Actual 3-month delay (day for day slip due to lack of NEPA Assignment).

⁵ Potential 5-month delay (Construction assumptions update and External Agency coordination: Burbank Airport). Developing mitigation plans to minimize or eliminate associated schedule impacts.

⁶ Potential 6-month delay (External Agency Coordination: Una Lake). Developing mitigation plans to minimize or eliminate associated schedule impacts.

⁷ Potential 6-month delay (External Agency Coordination: CCNM). Developing mitigation plans to minimize or eliminate associated schedule impacts.

Project Development – Key Actions

The Authority assumed federal lead agency status with NEPA Assignment. On July 23, the NEPA Assignment Team began working with all project sections, especially the Central Valley project sections, to conduct NEPA environmental clearance actions.

Table 8 - Project Development – Key Actions Summary

Project Section	Key Actions
San Francisco to San Jose	Key actions included: <ul style="list-style-type: none"> • Project schedule revisions to include changes in environmental processes to reflect FRA award of NEPA Assignment • Continuation of internal Authority review of the administrative draft EIR/EIS (Environmental Impact Report/Environmental Impact Statement) • Preparation of the staff-recommended Preferred Alternative staff report in response to internal Authority comments.
San Jose to Merced	Key actions included: <ul style="list-style-type: none"> • Preparation of the staff-recommended State’s Preferred Alternative staff report and Authority Board memorandum in response to internal Authority comments to draft products • Participation in public and local government outreach activities to gather input on the staff-recommended Preferred Alternative • Other activities included advancing the Geotechnical Investigation Plan for the western and eastern approaches to Pacheco Pass and associated seismic faults.
Central Valley Wye	Key actions included: <ul style="list-style-type: none"> • Preparing the draft supplemental EIS for public circulation on September 13, 2019 with the comment period ending October 28, 2019. • Continued process of recording comment submissions to the draft supplemental EIR.
Locally Generated Alternative	Key action included: <ul style="list-style-type: none"> • The federal cooperating agency review period closed August 30, 2019. The Authority will then respond to the comment and ready for publication the final supplemental EIS.
Bakersfield to Palmdale	Key actions included: <ul style="list-style-type: none"> • Engineering analysis continues to be conducted to avoid adversely affecting the Cesar Chavez National Monument (CCNM). • On August 28, 2019, Authority staff presented additional design options to the consulting parties for review and comment. • From this feedback, the Authority intends to prepare a Finding of Effect report that would be shared with the consulting parties in October.
Palmdale to Burbank	Key actions included: <ul style="list-style-type: none"> • Coordination continued with USACE and USEPA on Checkpoint B (for approvals and permits) with regard to impacts to Una Lake. • Cooperating agency review of the EIR/EIS is planned for late October or early November 2019.
Burbank to Los Angeles	Key actions included: <ul style="list-style-type: none"> • Continued to conduct consultation with municipalities and agencies within the project section by providing preliminary engineering plans for their review. • From this review, refinements were made to the construction phasing plans. • In addition, the regional team continued to revise its technical analyses for the administrative draft EIR/EIS.
Los Angeles to Anaheim	Key action included: <ul style="list-style-type: none"> • Coordination continued with BNSF on project elements and analysis methods for inclusion in the draft EIR/EIS.