



Finance & Audit Committee

CENTRAL VALLEY STATUS REPORT

December 2022 Report (data through October 2022)

Executive Summary

Construction Packages (CP) Design-Build Expenditures ([Page 5](#))

- October 2022 Expenditures totaled \$97.6M:
 - Construction Package 1 – (Page 14) - Expenditures totaled \$16.6M.
 - Construction Package 2-3 – (Page 23) - Expenditures totaled \$60.1M.
 - Construction Package 4 – (Page 34) - Expenditures totaled \$20.9M.
- Total CP Cumulative Actual Expenditures (Pages 13, 22, and 31) – \$4,249.5M.
- Total Cumulative Current Contract Amount (Pages 13, 22, and 31) – \$6,345.2M.

Change Orders

- Executed Change Orders this period – 12 for a total of \$291.0M:
 - Construction Package 1 (Page 15) – One for a total of \$2.5M.
 - Construction Package 2-3 (Page 24) – Seven for a total of \$273.2M.
 - Construction Package 4 (Page 35) – Four for a total of \$15.3M.

Risk Contingency ([Page 6](#))

- Approved Contingency – \$4,000.7M budgeted contract contingency. Contingency balance is \$605.5M as of October 31, 2022.
 - Construction Package 1 (Page 16) – \$1,944.5M budgeted contract contingency. Contingency balance is \$319.5M as of October 31, 2022.
 - Construction Package 2-3 (Page 25) – \$1,638.4M budgeted contract contingency. Contingency balance is \$221.2M as of October 31, 2022.
 - Construction Package 4 (Page 36) – \$417.8M budgeted contract contingency. Contingency balance is \$64.8M as of October 31, 2022.

CP Design (Structures/Guideway)

- CP major design - Ready for Construction (RFC). Milestone of 100% of the required 163 RFC design approvals agreed with the Authority in June 2022 for Construction.
 - Construction Package 1 – 40 of 40 total design packages approved by the Authority for construction.
 - Construction Package 2-3 – 109 of 109 total design packages approved by the Authority for construction.
 - Construction Package 4 – 14 of 14 total design packages approved by the Authority for construction.

CP Construction Labor ([Page 7](#))

- October 2022, Average Daily Site Workers (by Week) – 1,318 workers. An increase of 24 workers from the previous period (from 1,294):
 - Construction Package 1 (Page 17) – 271 workers. An increase of 26 workers from the previous month (245).
 - Construction Package 2-3 (Page 26) – 758 workers. An increase of 6 workers from the previous month (752).
 - Construction Package 4 (Page 37) – 289 workers. A decrease of 8 workers from the previous month (297).
- Contractors continued with construction while following safety protocols and guidelines from the Centers for Disease Control and Prevention (CDC) and Occupational Safety and Health Administration (OSHA).

CP Construction Progress (Page 8)

- Structures – 69 underway/construction complete compared to 93 structures (74%) total. An increase of one from the previous period.
 - Construction Package 1 – 26 structures underway/construction complete.
 - Construction Package 2-3 – 32 structures underway/construction complete.
 - Construction Package 4 – 11 structures underway/construction complete.
- Guideway – 88 miles underway/construction complete compared to 119 miles (74%) total. An increase of one from the previous period.
 - Construction Package 1 – 18 miles underway/construction complete.
 - Construction Package 2-3 – 48 miles underway/construction complete.
 - Construction Package 4 – 22 miles underway/construction complete.

Utility Relocations Status (Page 9)

- Relocated: 928 (50%); In Progress: 385 (21%); Approved to Start: 51 (3%); Not Started: 486 (26%); Total: 1,850. A total of 33 relocated in the October 2022 reporting period. A sequence of activities must be completed to begin utility relocation work. These activities include environmental clearance, executed third-party agreement(s), design approval, construction work plans, pre-construction walkthroughs, acquisition of real property, and/or land right conveyances:
 - Construction Package 1 – Relocated: 414 (42%); In Progress: 334 (34%); Approved to Start: 0 (0%); Not Started: 244 (24%); Total: 992.
 - Construction Package 2-3 – Relocated: 417 (59%); In Progress: 37 (5%); Approved to Start: 29 (4%); Not Started: 222 (32%); Total: 705.
 - Construction Package 4 – Relocated: 97 (63%); In Progress: 14 (9%); Approved to Start: 22 (15%); Not Started: 20 (13%); Total: 153.

CP Real Property/Right-of-Way (ROW) (Pages 10 - 12)

- Total Parcels Delivered to Date – 2,157 parcels compared to an estimated 2,305 parcels needed.
- Parcels Delivered to Design-Builder (DB) – 16 parcels in October 2022.
- Construction Packages 1-4 – Four parcels added to meet Third Party design requirements, and zero parcels removed. The Authority continues to receive requests for additional parcels primarily related to third-party requirements. The Authority reviews these as received and if merit is found, those parcels will be added and acquired per contractual terms.
- Railroad Parcels Delivered to Design-Builder – Zero parcels.
- Total Railroad Parcels Delivered to Date – 136 parcels delivered compared to an estimated 170 total railroad parcels needed.
- Land Right Conveyances (Tier 1, Prior to Construction):
 - Zero land right conveyances approved.
 - To date, the Authority received approval on 671 land right conveyances.

Project Development (Environmental Clearance) Schedule – Notice of Determination (NOD)/Record of Decision (ROD) ([Pages 42 - 43](#))

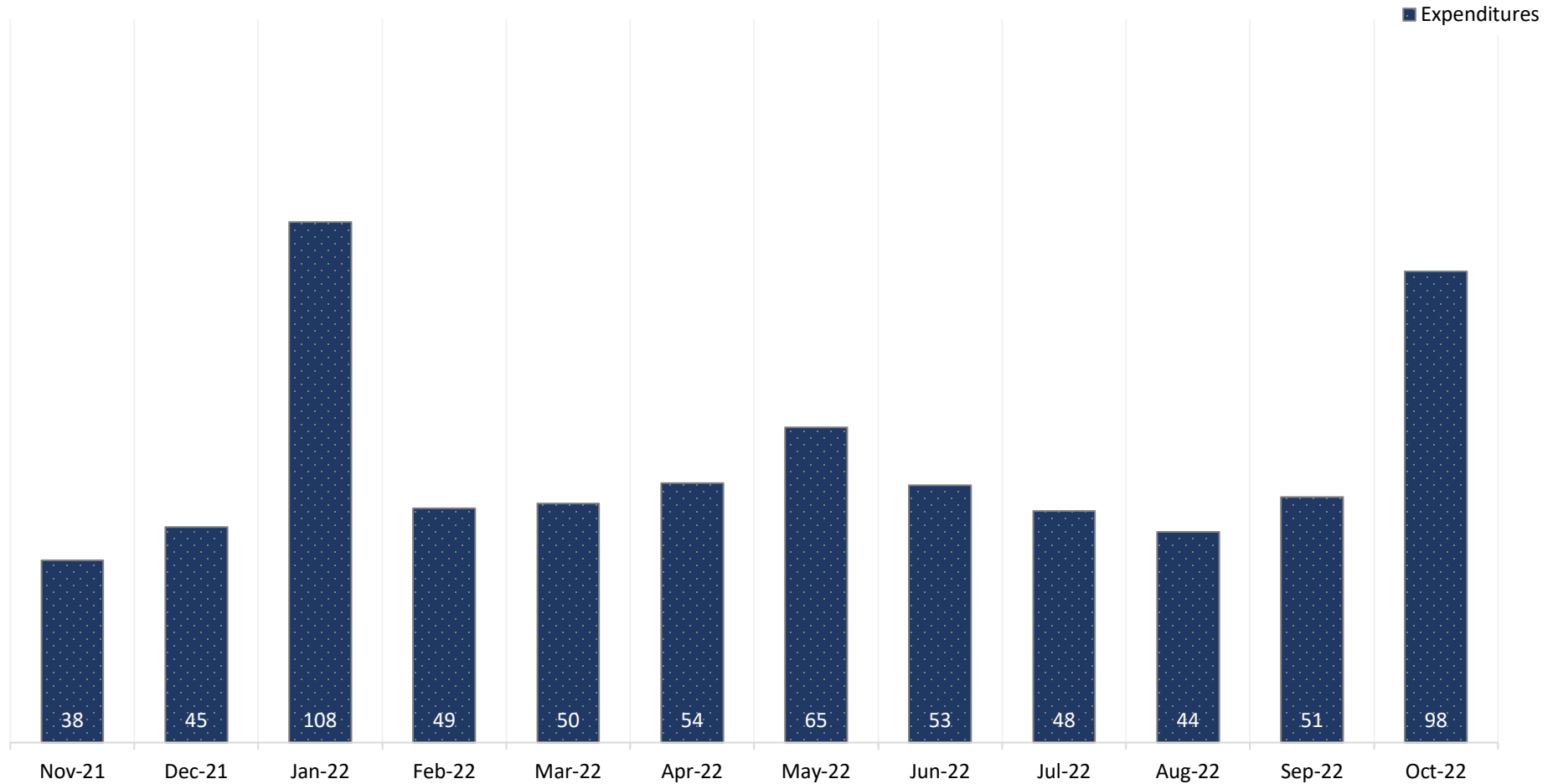
- San Francisco to San Jose – The Authority’s Chief Executive Officer (CEO) signed the NEPA Record of Decision (ROD) on October 14, 2022.
- San Jose to Merced – Final Record of Decision (ROD) was signed by the Authority’s CEO on June 1, 2022. Staff continues to assemble the Administrative Record.
- Bakersfield to Palmdale – Work through Notice of Determination/Record of Decision (NOD/ROD) has been completed. Continued meeting with key stakeholders, including the Center for Biological Diversity.
- Palmdale to Burbank – The Draft EIR/EIS was released to the public on September 2, 2022. The public comment period was extended from 60 days to 90 days and closes on December 1, 2022.
- Burbank to Los Angeles – Work through NOD/ROD has been completed. Project closeout activities are ongoing.
- Los Angeles to Anaheim – Continued integrating additional Burlington Northern Santa Fe Corporation (BNSF) deliverables pertaining to the Colton and Lenwood facilities into the assembled Administrative Draft EIR/EIS.

Project Development (Post-Record of Decision) Schedule ([Page 44](#))

- Merced Extension (Merced to Madera) – The California High-Speed Rail Authority executed an Agreement (HSR 22-02) with Stantec on October 4, 2022 for \$41M, followed by the issuance of Notice to Proceed – 01 (NTP-1) on October 05, 2022 to perform Configuration Footprint design services. Task Order – 01 was executed on October 11, 2022 that defines the scope of work for the Project Management Plan, Annual Work Program, and other early actions for the first three months of work to be performed by Stantec and their subconsultants.
- Fresno to Bakersfield Locally Generated Alternative (LGA) – HNTB Corporation (HNTB), under agreement HSR 22-01, continues to make progress on the early actions of this Project, including submittal of various draft documents such as the Project Management Plan-Draft.

CP 1-4 – Design-Build Expenditures

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

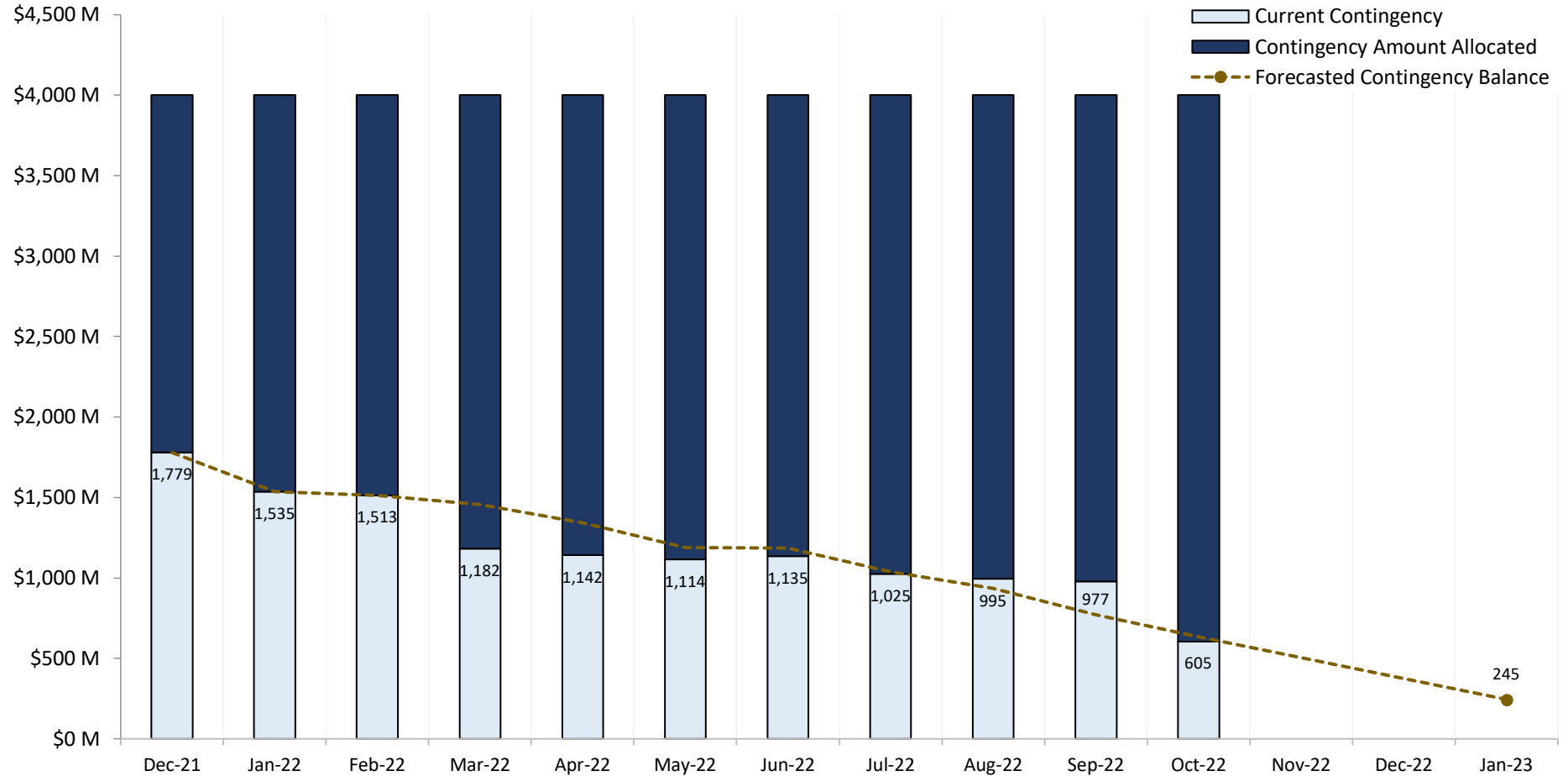


Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the Capital Outlay and Expenditure Report.
2. October 2022 Expenditures totaled \$97.6M:
 - a. Construction Package 1 – Expenditures totaled \$16.6M.
 - b. Construction Package 2-3 – Expenditures totaled \$60.1M.
 - c. Construction Package 4 – Expenditures totaled \$20.9M.

CP 1-4 – Risk Contingency

CP 1-4 – Risk Contingency Status (\$ Millions)

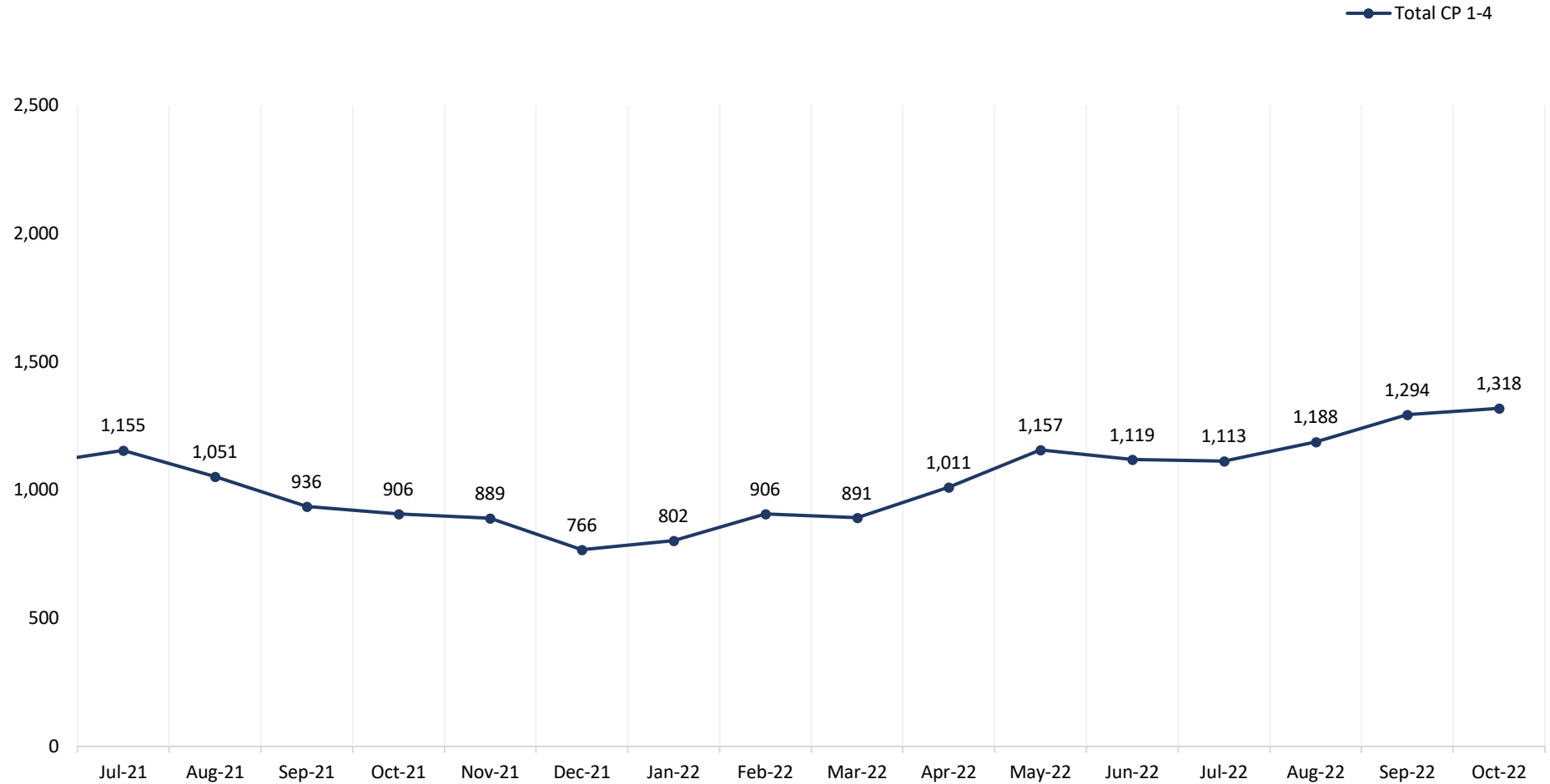


Notes:

1. Program baseline is \$4,000.7M.
2. Contingency balance updated to reflect the Board’s adoption of Resolution #HSR21-11 (Expenditure Authorization Increase).
3. Contingency Amount Allocated reflects all executed change orders and Business Oversight Committee (BOC) approved items for all CPs.
4. The Forecasted Contingency Balance drawdown curve is based only on agreed change orders expected to be executed within the three-month window. Due to change order negotiations, and dispute resolution, timing and value of Forecasted Contingency Balance is uncertain.

CP 1-4 – Construction Labor

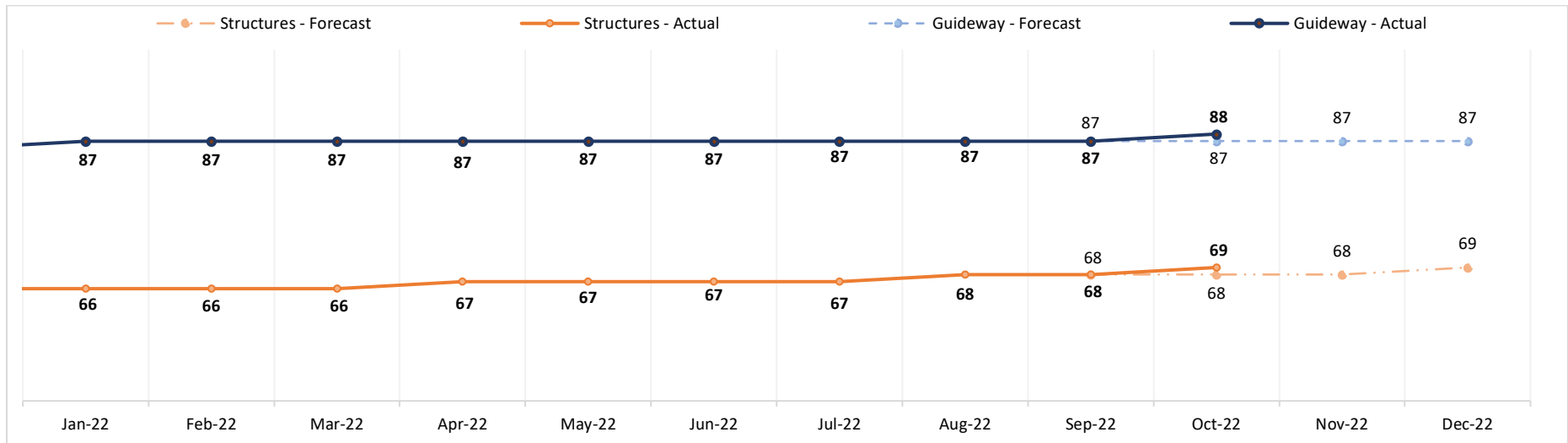
CP 1-4 – Monthly Construction Workforce Total – Actual (FTE)



- Notes:**
1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).
 2. October 2022, Average Daily Site Workers (by week) – 1,318 workers. An increase of 24 workers from the previous period (from 1,294):
 - a. Construction Package 1 (Page 17) – 271 workers. An increase of 26 workers from the previous month (245).
 - b. Construction Package 2-3 (Page 26) – 758 workers. An increase of 6 workers from the previous month (752).
 - c. Construction Package 4 (Page 37) – 289 workers. A decrease of 8 workers from the previous month (297).

CP 1-4 – Construction Progress

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



Monthly Construction Status – In Progress vs. Completed

Construction	CP 1		CP 2-3		CP 4		Overall		Total
	In Progress	Completed	In Progress	Completed	In Progress	Completed	In Progress	Completed	
Structures	10	16	18	14	6	5	34	35	69
Guideway	16	2	15	33	8	14	39	49	88

Notes:

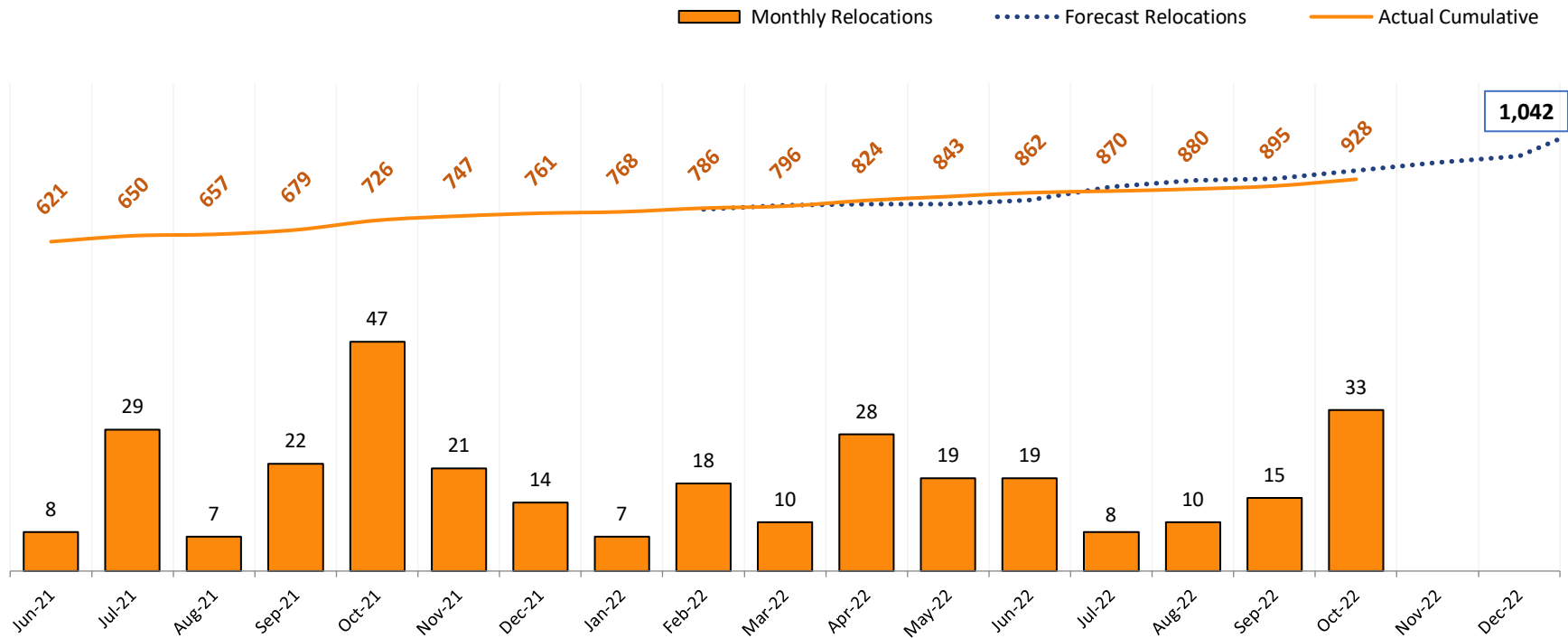
- The chart above incorporates provisional forecast numbers as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.
- Construction Complete definition:
 - Structure Completion – all concrete work is complete.
 - Guideway Completion – earthworks complete with rough grading.
- Total Structures: 93
- Structures – 69 underway/construction complete compared to 93 structures total. (74%) An increase of one from the previous period.
 - CP 1 – 26 structures underway/construction complete.
 - CP 2-3 – 32 structures underway/construction complete. Location, Deer Creek Viaduct.
 - CP 4 – 11 structures underway/construction complete.
- Total Guideway: approximately 119 miles
- Guideway – 88 miles underway/construction complete compared to 119 miles total. (74%) An increase of one from the previous period..
 - CP 1 – 18 miles underway/construction complete. Location North of Fresno River Viaduct towards Avenue 17 (0.9 miles).
 - CP 2-3 – 48 miles underway/construction complete.
 - CP 4 – 22 miles underway/construction complete. The actual miles for CP 4 are 21.5 miles but rounded to 22 miles for consistency in reporting.

CP 1-4 – Utility Relocations

CP 1-4 – Utility Relocation Summary

Construction Package	Total Relocations October 31, 2022	Total Utilities Relocated to Date October 31, 2022	Remaining Utility Relocations October 31, 2022
CP 1	992	414	578
CP 2-3	705	417	288
CP 4	153	97	56
Total	1,850	928	922

CP 1-4 – Utility Relocation Status Summary-Monthly



Notes:

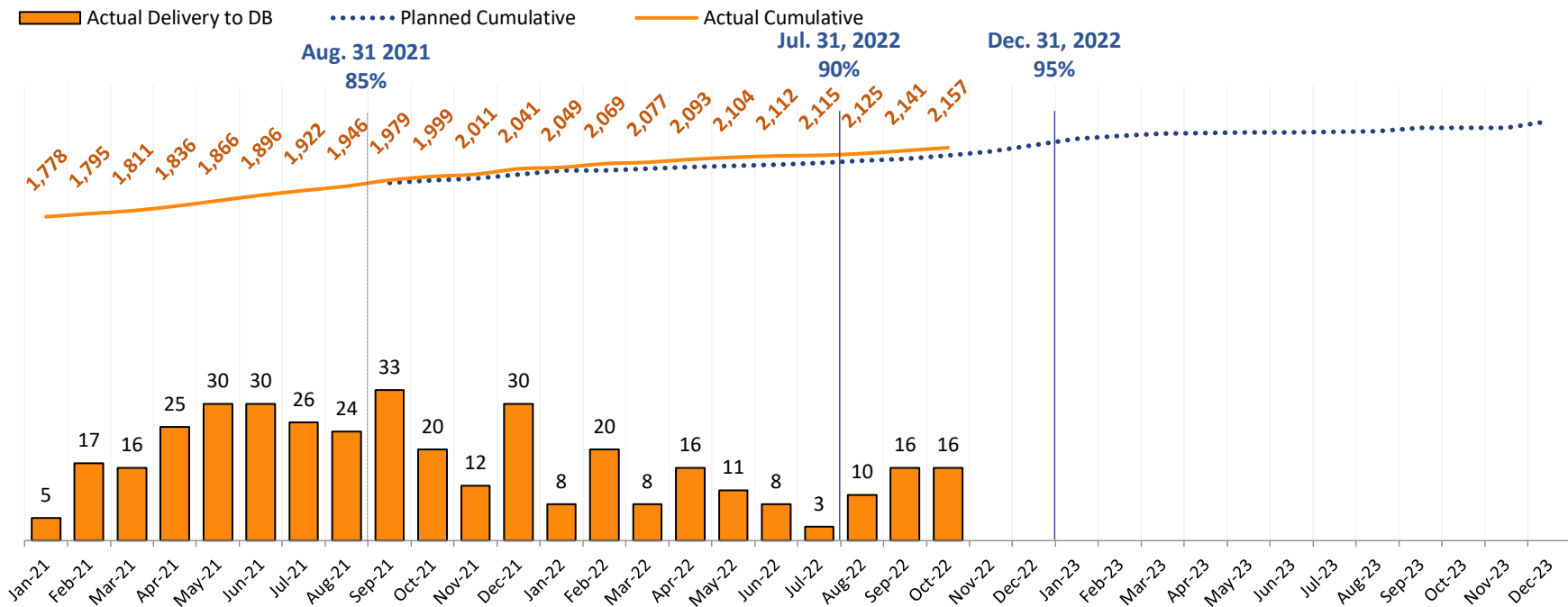
1. In Progress 385 (21%).
2. Approved to start 51 (3%).
3. Not Started 486 (26%).

CP 1-4 – Real Property/Right-of-Way (ROW)

CP 1-4 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels October 31, 2022	Total Parcels Delivered to Date October 31, 2022	Remaining Parcels to be Delivered October 31, 2022
CP 1	1,083	1,016	67
CP 2-3	991	928	63
CP 4	231	213	18
Total	2,305	2,157	148

CP 1-4 – Parcel Delivery to Design-Builder (DB) Summary



Notes:

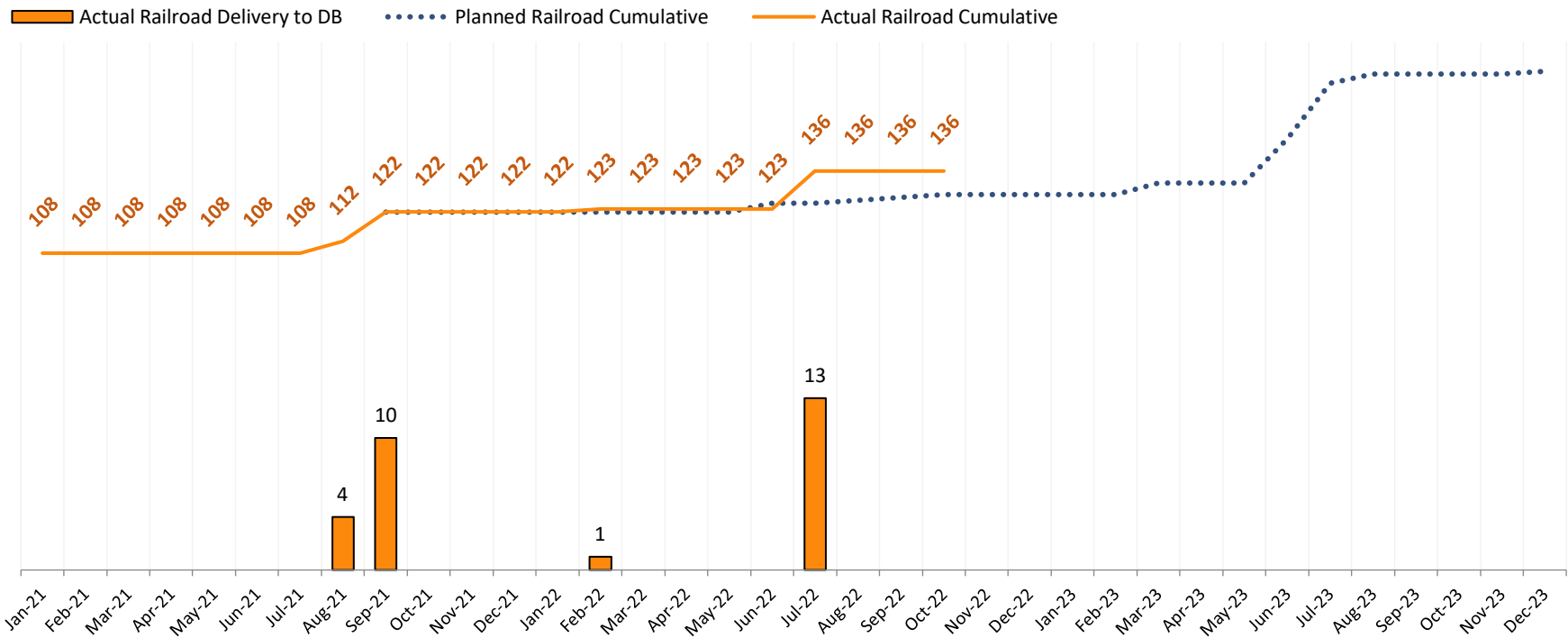
1. This reflects the actual parcels delivered to the Design-Builder by month compared to the planned delivery schedule which identifies 90% and 95% milestone completion for CP 1-4. The 90% and 95% milestone completion does not include any additional parcels that may be added.
2. Delivery to Design Builder 90% milestone completion was achieved for CP 1-4 in March 2022.
3. Total Needed Parcels increased by four parcels added to meet Third Party design requirements.

CP 1-4 – Real Property/Right-of-Way (ROW) Railroad

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

Construction Package	Total Needed Railroad Parcels October 31, 2022	Total Railroad Parcels Delivered to Date October 31, 2022	Remaining Railroad Parcels to be Delivered October 31, 2022
CP 1	83	57	26
CP 2-3	58	50	8
CP 4	29	29	0
Total	170	136	34

CP 1-4 – Railroad Parcel Delivery to Design-Builder (DB) Summary



Notes:

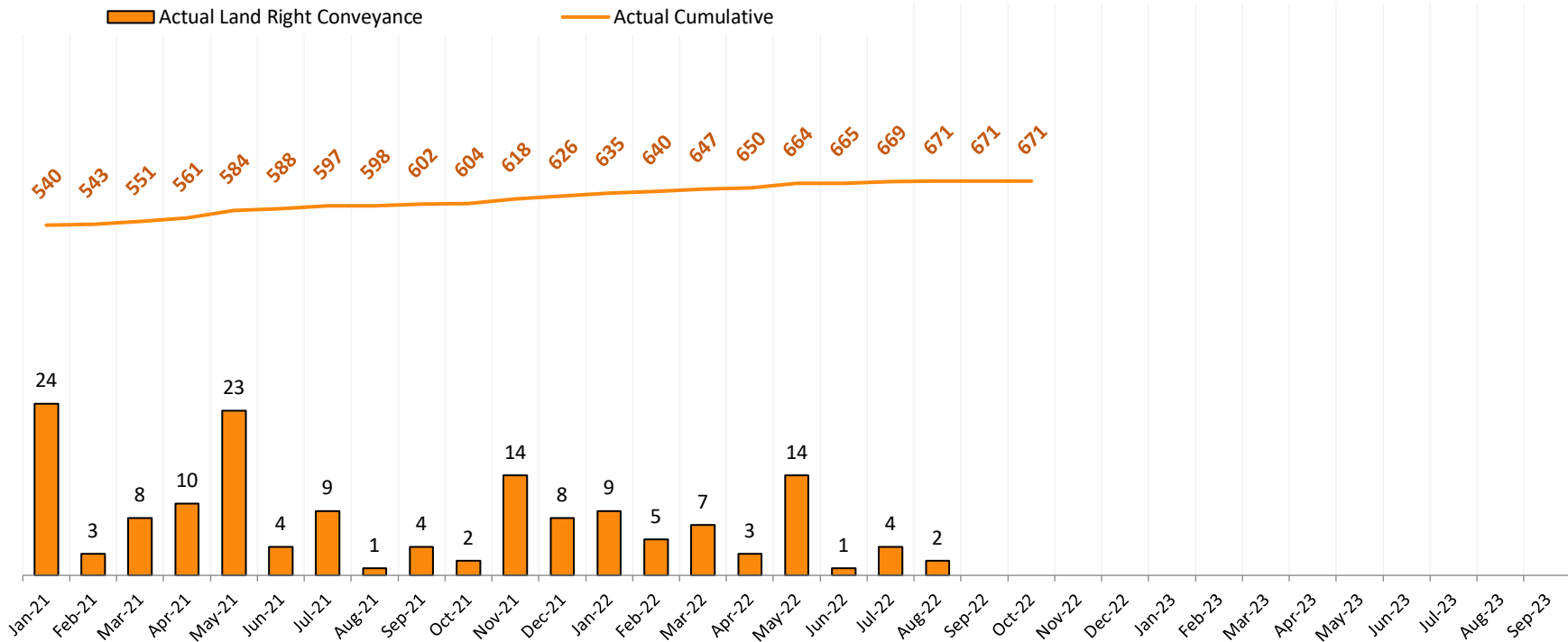
1. The Planned Cumulative line for Railroad Parcel Delivery reflects provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.
2. Two Railroad parcel delivery dates are being reforecast, not impacting the critical path.

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

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

Construction Package	Total Needed Land Right Conveyances October 31, 2022	Total Land Right Conveyances Approved ⁽²⁾ October 31, 2022	Remaining Land Right Conveyances to be Approved October 31, 2022
CP 1	393	344	49
CP 2-3	433	280	153
CP 4	88	47	41
Total	914	671	243

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



Notes:

1. The Planned Cumulative line for Land Right Conveyances is being adjusted to reflect Revised Baseline Schedule (RBS) Revision 4 and will be reflected in a subsequent report.
2. The term "Approved" is defined as land right conveyances with Director of Real Property for signature, PG&E for signature, or recorded.

CONSTRUCTION PACKAGE 1 (CP 1) OVERVIEW

CP 1 – Design-Build Contract Summary⁽¹⁾

Milestones

Milestone	Date
Request for Quote (RFQ) Date:	11/15/2011
Statement of Qualification (SOQ) Date:	12/19/2011
Request for Proposal (RFP) Date:	03/22/2012
Proposal:	01/18/2013
Bid Open Date:	04/13/2013
Award Date:	08/16/2013
Notice to Proceed (NTP) 1 Date:	10/15/2013
Notice to Proceed (NTP) 2 Date:	11/22/2013
Notice to Proceed (NTP) 3 Date:	07/11/2014
Original Completion Date:	03/31/2018
Current Forecast Contract Completion Date ⁽²⁾ :	02/28/2026
Current Forecast Construction Completion Date⁽²⁾:	12/31/2025

Contract Value

Description	Amount
Fixed Bid Price:	\$969,988,000.00
Provisional Sums:	\$53,000,000.00
Original Contract Price:	\$1,022,988,000.00
Executed Change Orders:	\$1,908,045,256.76
Current Contract Amount ⁽⁴⁾ :	\$2,931,033,256.76
Approved Invoices to Date:	\$1,877,315,779.62
Remaining Contract Balance:	\$1,053,717,477.14

Contract Time Status

Description	Duration
Original Contract Days:	1,628
Extension of Time Awarded ⁽³⁾ :	2,832
Current Forecast Contract Days ⁽³⁾ :	4,460
Calendar Days Worked (thru 10/31/2022):	3,303

Expended to Date

Description	Percentage
Time ⁽³⁾ :	74.1%
Dollars ⁽⁴⁾ :	64.0%

Growth Percentage

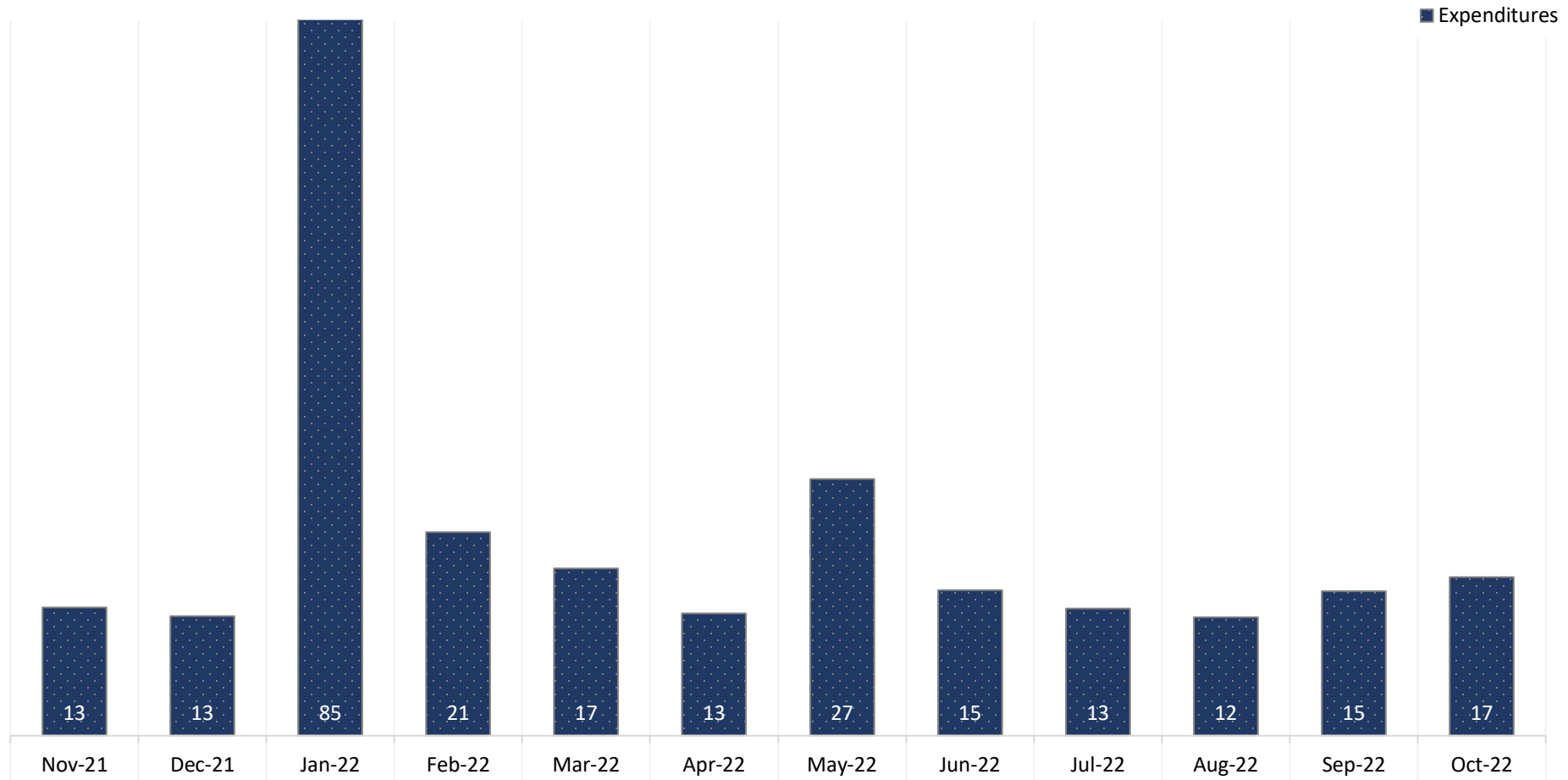
Description	Percentage
Time ⁽³⁾ :	174.0%
Dollars ⁽⁴⁾ :	186.5%

Notes:

- Information in this section is coming from data provided by the PCM – Monthly Status Report.
- Updated per the conditionally accepted Revised Baseline Schedule (RBS) Revision 4.
- Contract Time Status (Extension of Time Awarded and Current Contract Days) Expended to Date (Time), and Growth Percentage (Time) calculation is based on the Current Forecast Construction Completion Date.
- Contract value will be updated to reflect RBS Revision 4 once the cost loaded schedule is received and agreed with the contractor.

CP 1 – Design-Build Expenditures

CP 1 – Monthly Expenditures (\$ Millions)



Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the Capital Outlay and Expenditure Report.
2. Expenditures totaled \$16.6M.

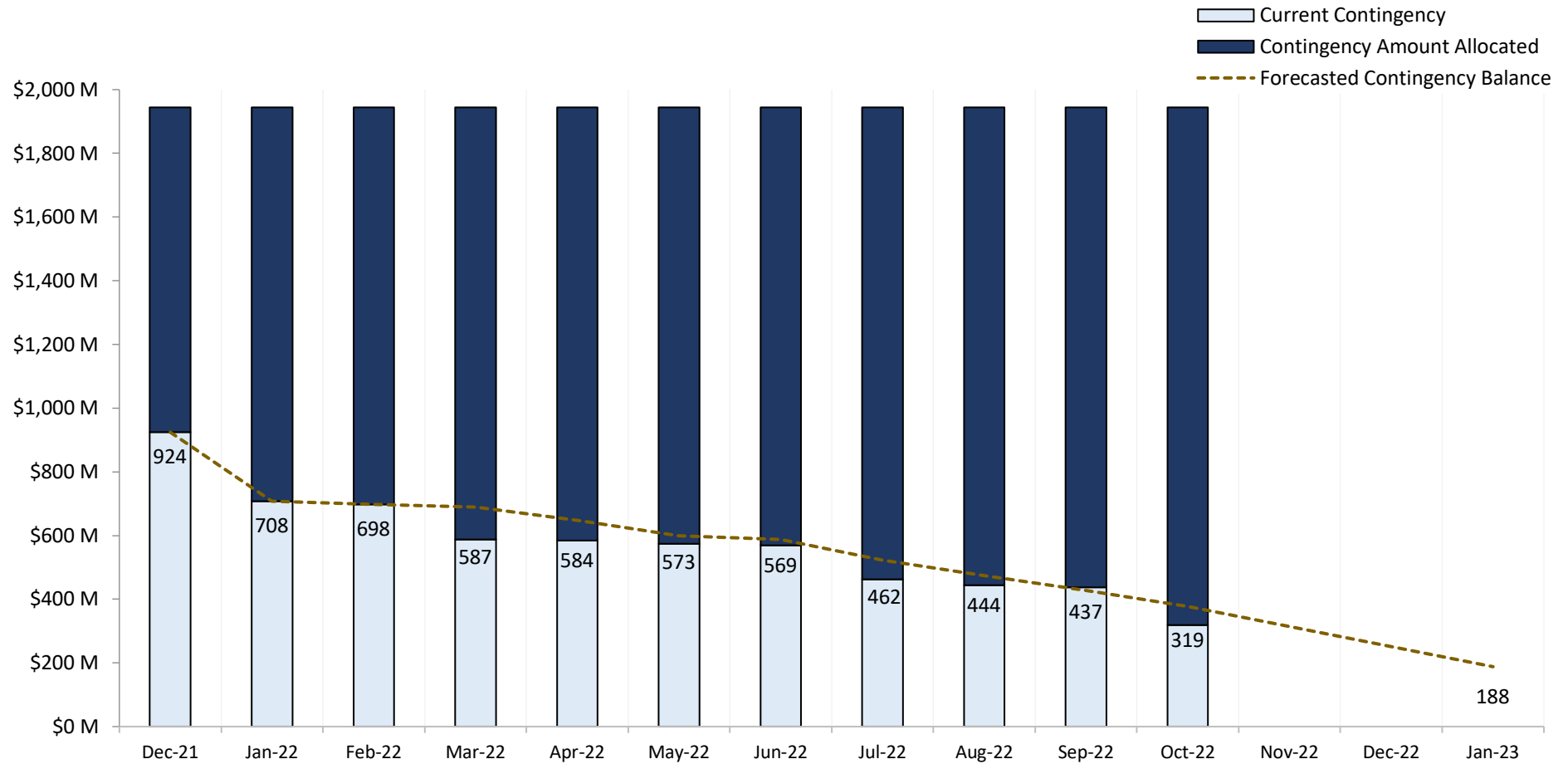
CP 1 – Change Orders (CO)

CP 1 – Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
00408	DL-191 Construction V&V and Quality Milestone Data Pack (QMDP) Format and Content	Executed	\$2,500,000.00	10-31-22
TOTAL			\$2,500,000.00	

CP 1 – Risk Contingency

CP 1 – Risk Contingency Status (\$ Millions)

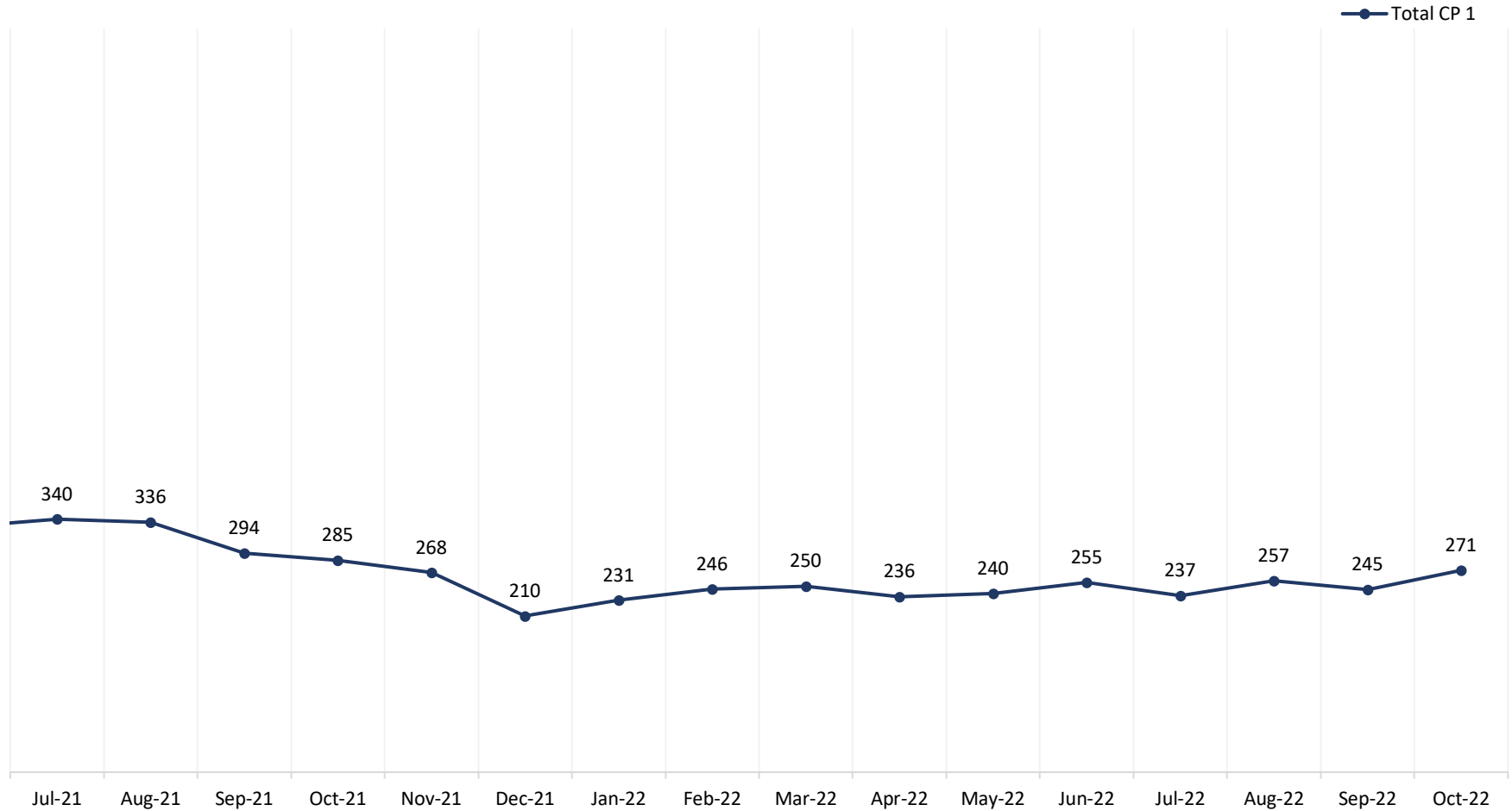


Notes:

1. Program baseline is \$1,945M.
2. Contingency balance updated to reflect the Board’s adoption of Resolution #HSR21-11 (Expenditure Authorization Increase).
3. Contingency Amount Allocated reflects executed change orders and Business Oversight Committee (BOC) approved items.
4. The Forecasted Contingency Balance drawdown curve is based only on agreed change orders expected to be executed within the three-month window. Due to change order negotiations and dispute resolution, timing and value of Forecasted Contingency Balance is uncertain.

CP 1 – Monthly Construction Labor

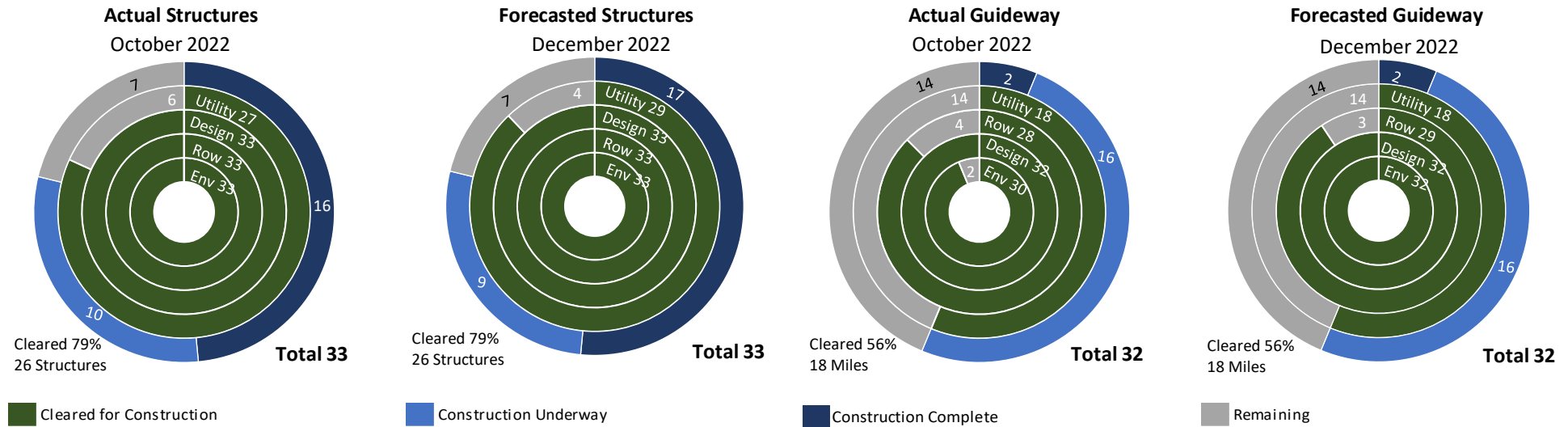
CP 1 – Monthly Construction Workforce Total – Actual (FTE)



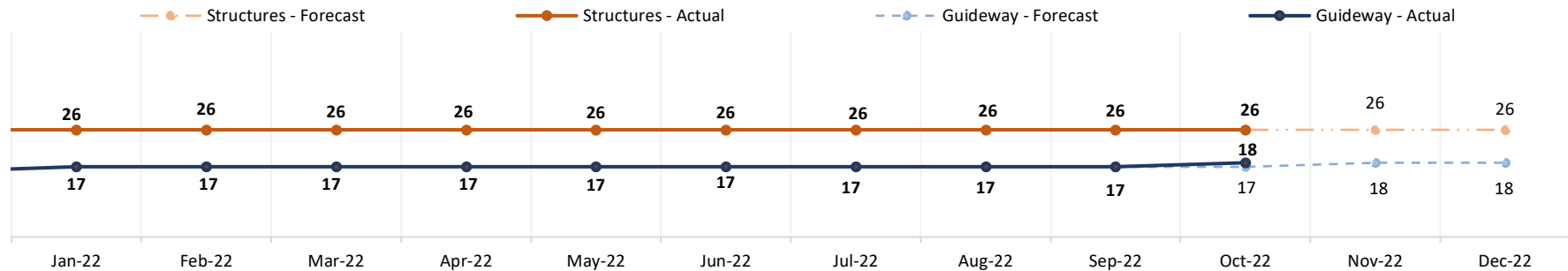
- Notes:**
1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).
 2. An increase of 26 workers from the previous month (245).

CP 1 – Construction Progress

CP 1 – Construction Progress



CP 1 – Structures and Guideway Progress – Forecast vs. Actual



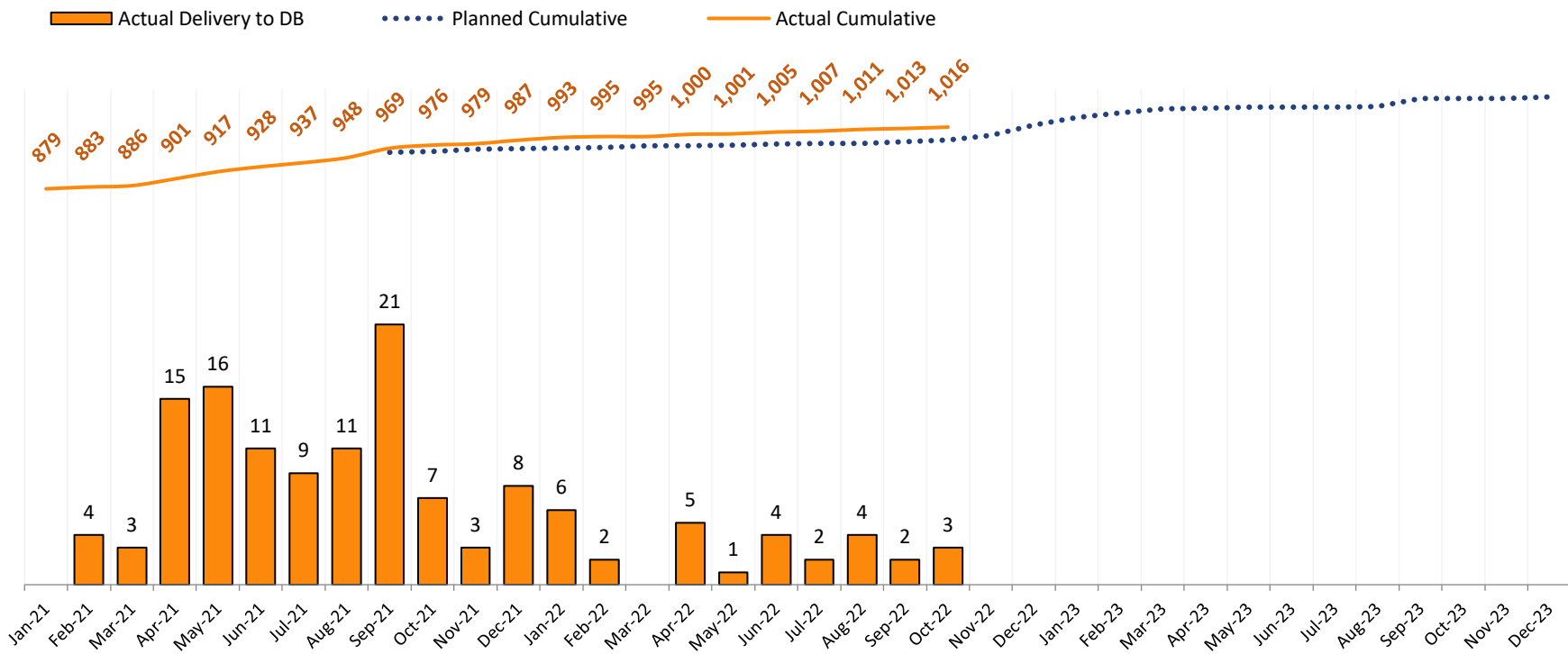
- Notes:**
- The circle charts above incorporate Revised Baseline Schedules (RBS) Revision 4 data as of September 2022, pending final approval.
 - The line chart above incorporates provisional forecast numbers as of September 2022, pending final approval of RBS Revision 4.
 - Construction Complete definition:
 - Structure Completion – all concrete work is complete.
 - Guideway Completion – earthworks complete with rough grading.
 - Total Structures: 33:
 - 26 structures underway/construction complete.
 - Total Guideway: 32 miles:
 - 18 miles underway/construction complete. An increase of one from the previous period. Location North of Fresno River Viaduct towards Avenue 17 (0.9 miles).
 - The 40 design submissions included 33 Structure packages, 6 packages covering the 32 miles of guideway and one for Sweeper Package designs for viaducts and trenches at various locations (hence term "Sweeper") to include stairways, walkways, duct trenches and various other advance Track and Systems requirements. 33 Structure packages approved by the Authority, but only 30 approved by third parties. There are 32 miles of guideway approved by the Authority, but 2.5 miles (Caltrans section) has not been approved by Union Pacific Railroad (UPRR).

CP 1– Real Property/Right-of-Way (ROW)

CP 1 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels October 31, 2022	Total Parcels Delivered to Date October 31, 2022	Remaining Parcels to be Delivered October 31, 2022
CP 1	1,083	1,016	67

CP 1 – Parcel Delivery to Design-Builder (DB) Summary



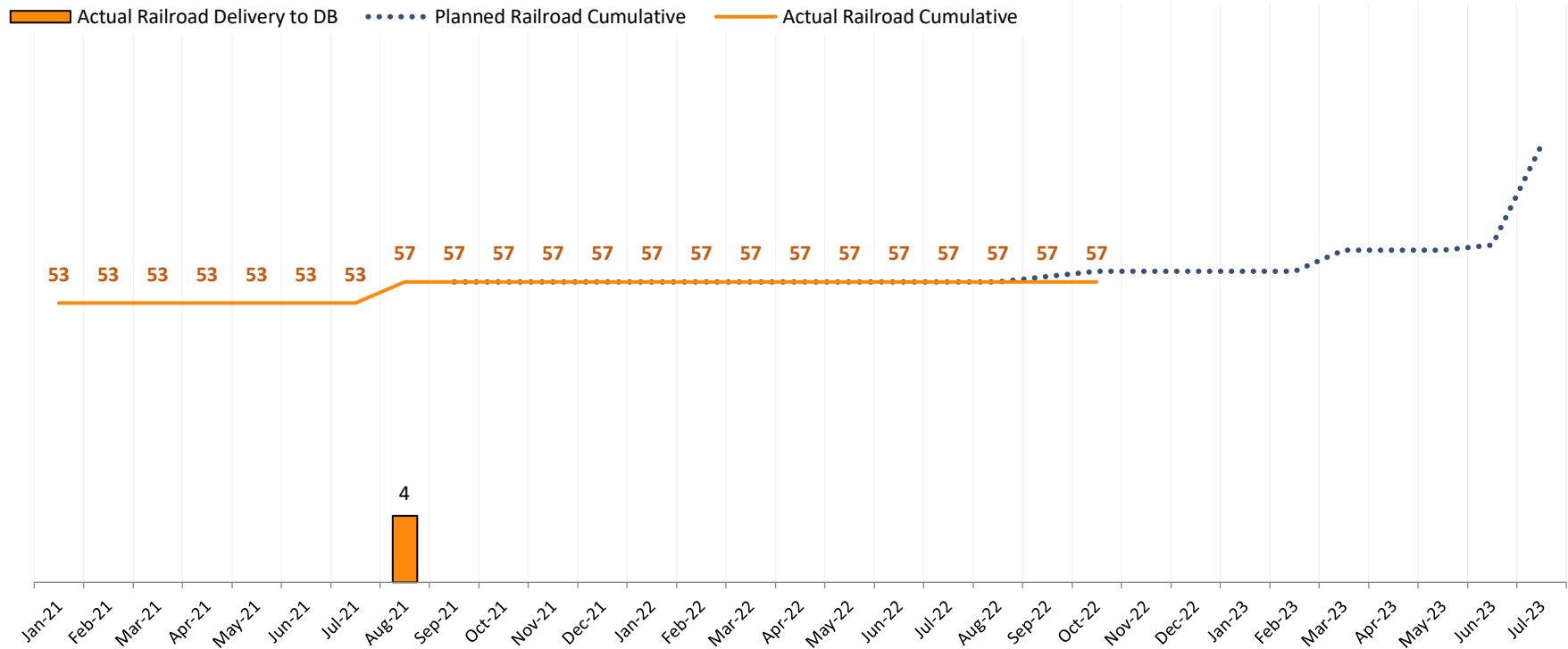
- Notes:**
1. This reflects the actual parcels delivered to the Design-Builder by month and provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.
 2. Total Needed Parcels increased by one parcel added to meet Third Party design requirements.

CP 1 – Real Property/Right-of-Way (ROW) Railroad

CP 1 – Right-of-Way (ROW) Railroad Summary

Construction Package	Total Needed Railroad Parcels October 31, 2022	Total Railroad Parcels Delivered to Date October 31, 2022	Remaining Railroad Parcels to be Delivered October 31, 2022
CP 1	83	57	26

CP 1 – Railroad Parcel Delivery to Design-BUILDER (DB) Summary



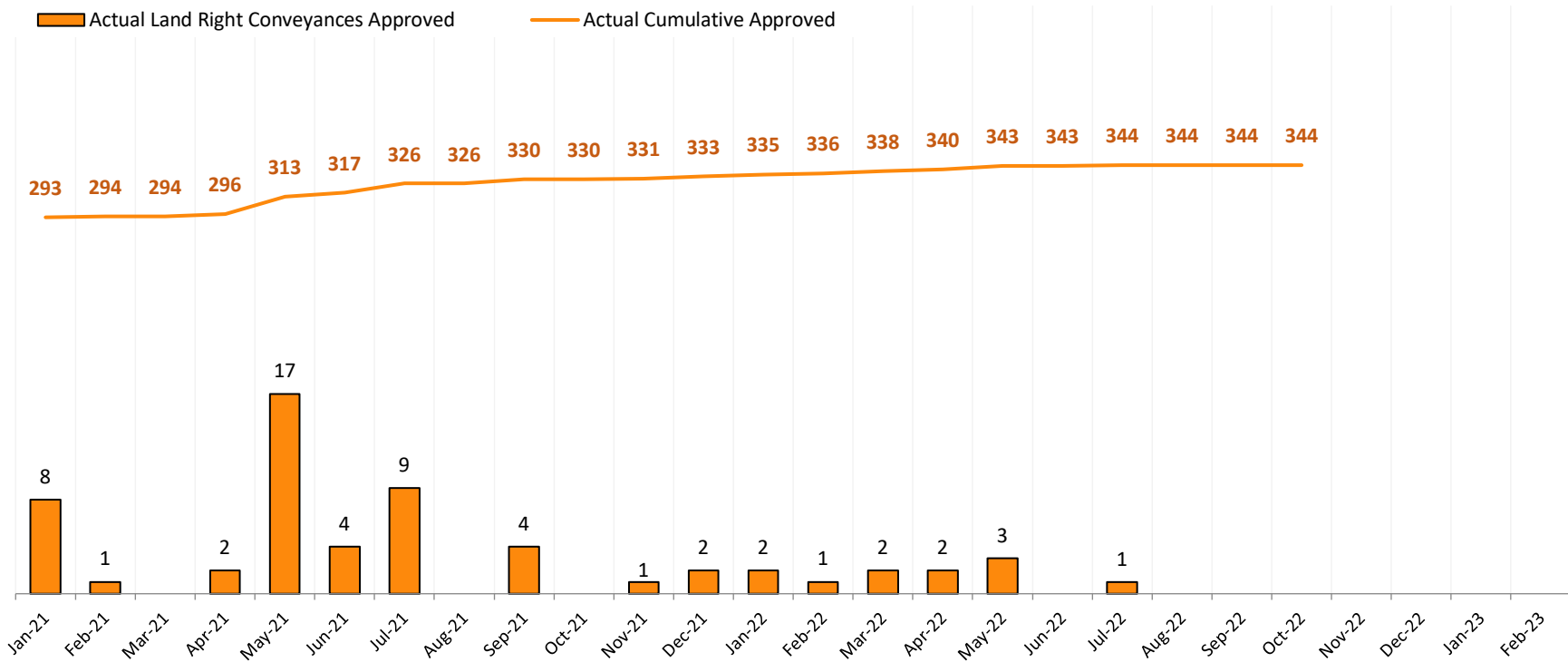
- Note:**
1. The Planned Cumulative line for Railroad Parcel Delivery reflects provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.
 2. Two Railroad parcel delivery dates are being reforecast, not impacting the critical path.

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

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

Construction Package	Total Needed Land Right Conveyances October 31, 2022	Total Land Right Conveyances Approved ⁽²⁾ to Date October 31, 2022	Remaining Land Right Conveyances to be Approved October 31, 2022
CP 1	393	344	49

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



Notes:

1. The Planned Cumulative line for Land Right Conveyances is being adjusted to reflect Revised Baseline Schedule (RBS) Revision 4 and will be reflected in a subsequent report.
2. The term "Approved" is defined as land right conveyances with Director of Real Property for signature, PG&E for signature, or recorded.

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

CP 2-3 – Design-Build Contract Summary⁽¹⁾

Milestones

Milestone	Date
Request for Quote (RFQ) Date:	10/09/2013
Statement of Qualification (SOQ) Date:	12/13/2013
Request for Proposal (RFP) Date:	04/03/2014
Proposal:	10/30/2014
Bid Open Date:	12/11/2014
Award Date:	06/10/2015
Late Notice to Proceed (LNTP) Date:	06/12/2015
Notice to Proceed (NTP) Date:	07/25/2015
Original Completion Date:	08/19/2019
Current Forecast Contract Completion Date ⁽²⁾ :	05/21/2026
Current Forecast Construction Completion Date⁽²⁾:	03/21/2026

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:	\$1,339,803,741.42
Current Contract Amount ⁽⁴⁾ :	\$2,705,139,631.42
Approved Invoices to Date:	\$1,752,988,659.70
Remaining Contract Balance:	\$952,150,971.72

Contract Time Status

Description	Duration
Original Contract Days:	1,486
Extension of Time Awarded ⁽³⁾ :	2,406
Current Forecast Contract Days ⁽³⁾ :	3,892
Calendar Days Worked (thru 10/31/2022):	2,655

Expended to Date Percentage

Description	Percentage
Time ⁽³⁾ :	68.2%
Dollars ⁽⁴⁾ :	64.8%

Growth Percentage

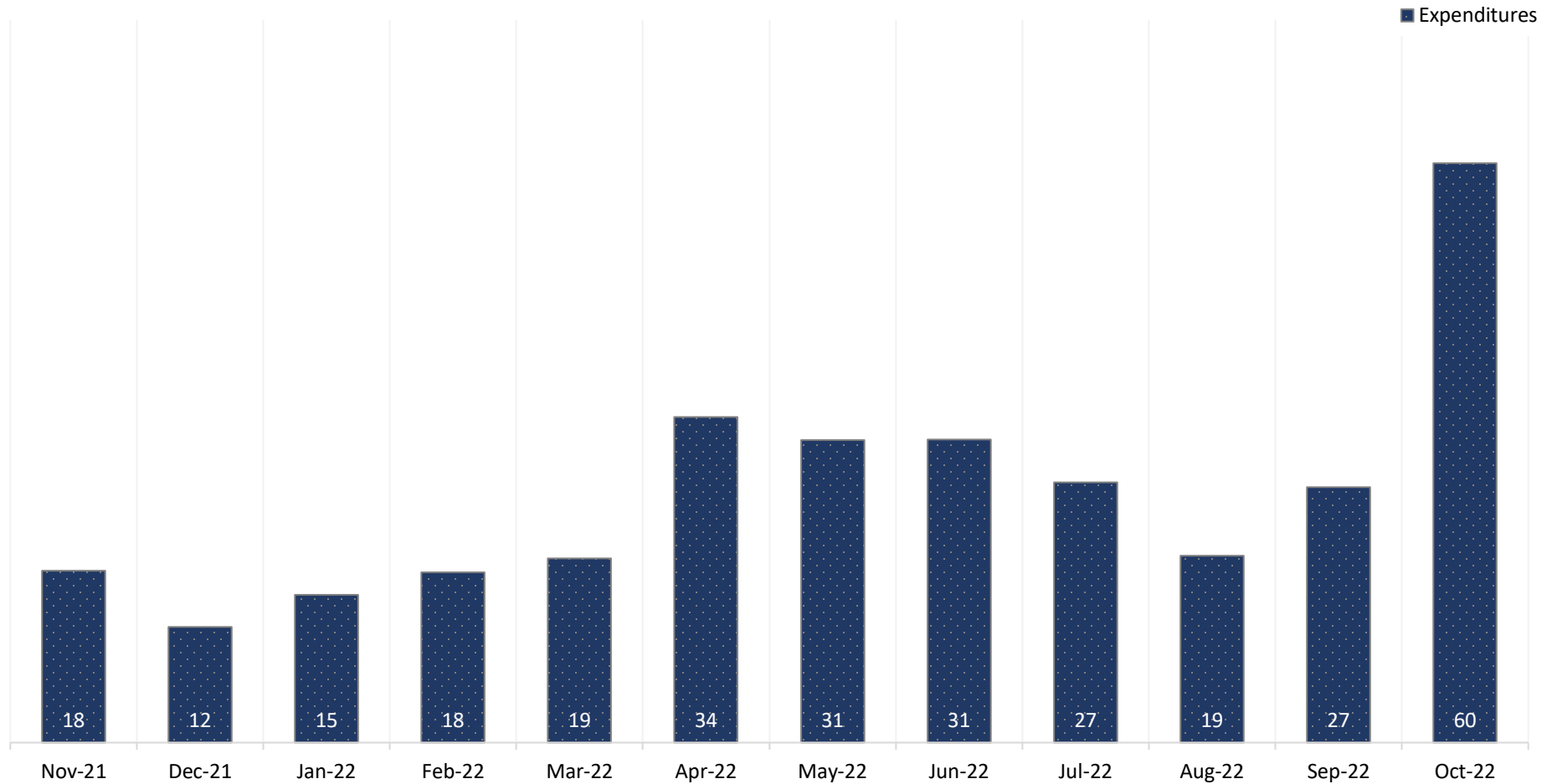
Description	Percentage
Time ⁽³⁾ :	161.9%
Dollars ⁽⁴⁾ :	98.1%

Notes:

- Information in this section is coming from data provided by the PCM – Monthly Status Report.
- Updated per the conditionally accepted Revised Baseline Schedule (RBS) Revision 4.
- Contract Time Status (Extension of Time Awarded and Current Contract Days) Expended to Date (Time), and Growth Percentage (Time) calculation is based on the Current Forecast Construction Completion Date.
- Contract value will be updated to reflect RBS Revision 4 once the cost loaded schedule is received and agreed with the contractor.

CP 2-3 – Design-Build Expenditures

CP 2-3 – Monthly Expenditures (\$ Millions)



Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the Capital Outlay and Expenditure Report.
2. Expenditures totaled \$60.1M. Large increase due to work at Hanford Viaduct Superstructure that was accumulated for the past several months.

CP 2-3 – Change Orders (CO)

CP 2-3 – Change Order Status

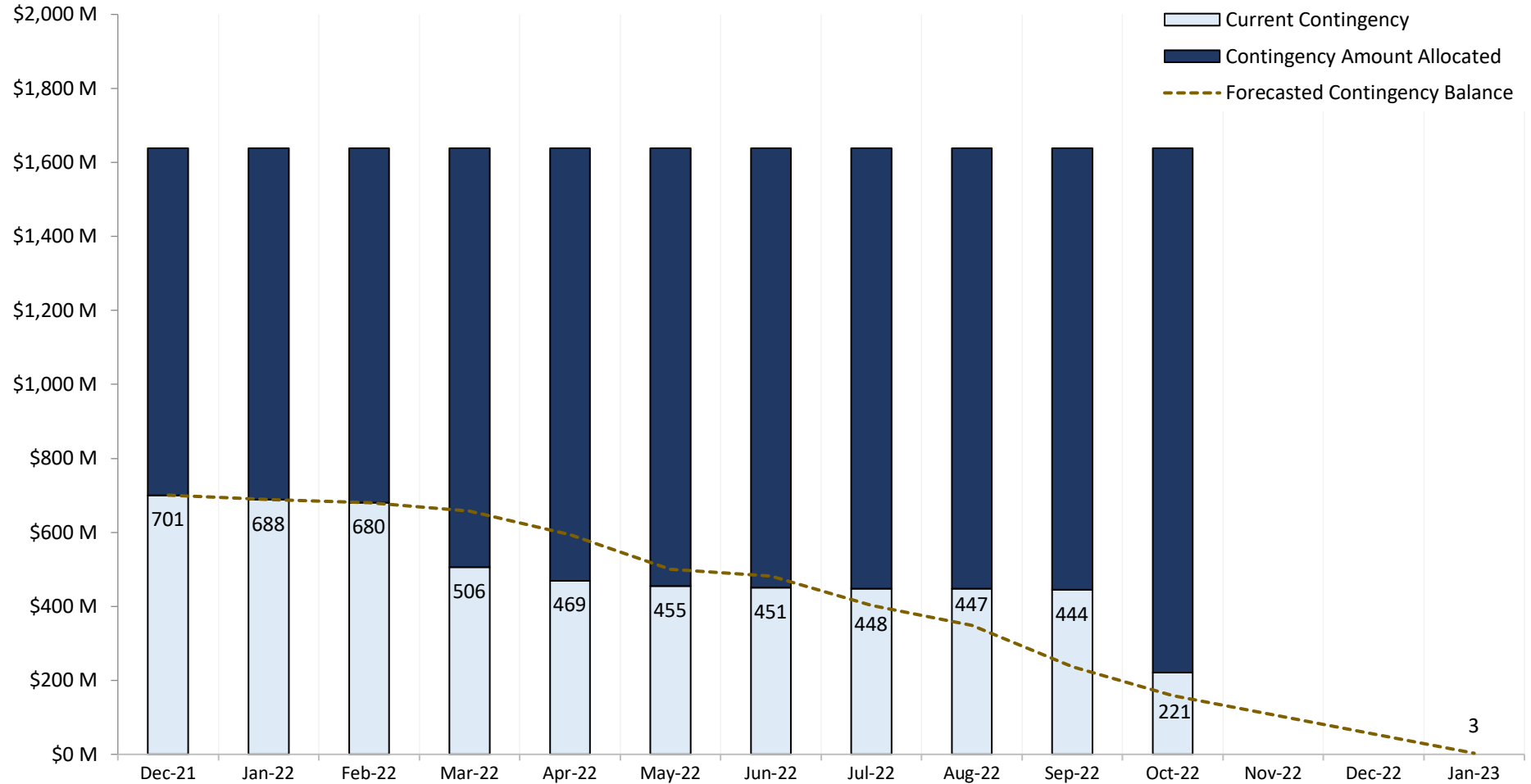
CO Number	Title	Change Status	Amount	Executed Date
00148.2	Hanford Viaduct - Superstructure	Executed	\$242,073,679.00	10-31-22
00312.1	Interim Time Extension	Executed	\$17,860,945.00	10-31-22
00337	SENER Engineering-Time and Delay Related Impacts	Executed	\$2,422,307.00	10-25-22
00330	Redesign of FID Storey No. 237 and Oleander 19 – DESIGN ONLY	Executed	\$106,611.00	10-25-22
00329	Redesign of FID Oleander 17, Oleander 18, Washington Colony, and Wilson 230 - T & M	Executed	\$167,470.00	10-25-22
00231.2	Revise Overhead Widths at Flint, Fargo, and Idaho Aves. (Type 2 Structures) DL No. 99-Civil Work	Executed	\$408,155.00	10-20-22
00323	Project Floodplain Limit Increases (GBR-C)	Executed	\$10,124,011.00	10-04-22
TOTAL			\$273,163,178.00	

Notes:

1. A \$50M change order was executed in October 2021 for the Hanford Viaduct Superstructure. In October 2022, an HSR Governance Action of an additional \$192M for the Hanford Viaduct Superstructure was approved. This brought the total approved changes for the Hanford Viaduct Superstructure up to the targeted amount of \$242M. The executed change order listed above for \$242M will be followed by executing a rescission of the October 2021 change order. This rescission is expected to occur in November or December of 2022.

CP 2-3 – Risk Contingency

CP 2-3 – Risk Contingency Status (\$ Millions)

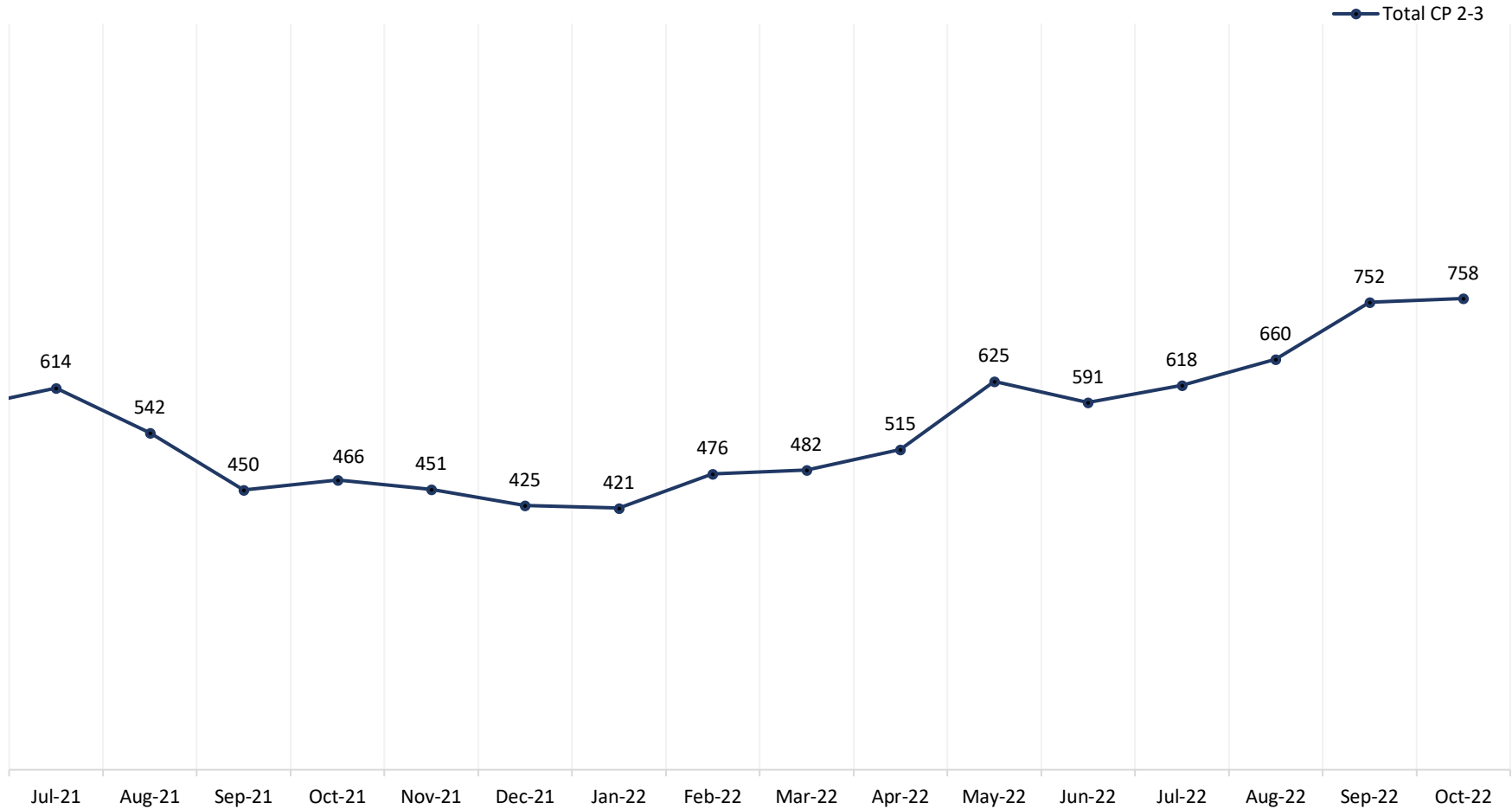


Notes:

1. Program baseline is \$1,638M.
2. Contingency balance updated to reflect the Board’s adoption of Resolution #HSR21-11 (Expenditure Authorization Increase).
3. Contingency Amount Allocated reflects executed change orders and Business Oversight Committee (BOC) approved items.
4. The Forecasted Contingency Balance drawdown curve is based only on agreed change orders expected to be executed within the three-month window. Due to change order negotiations and dispute resolution, timing and value of Forecasted Contingency Balance is uncertain.

CP 2-3 – Monthly Construction Labor

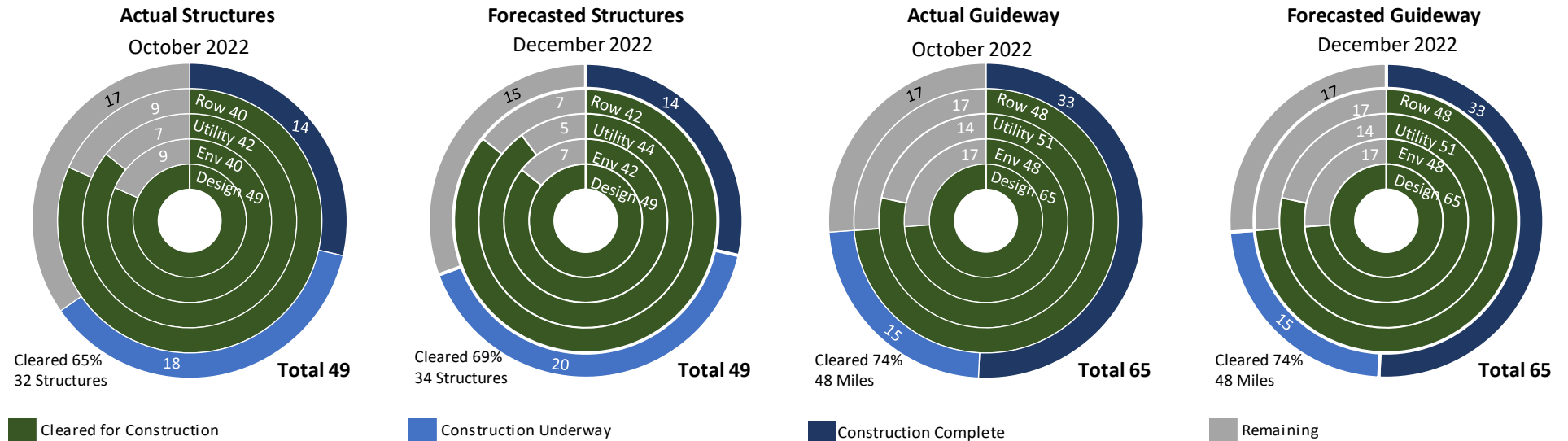
CP 2-3 – Monthly Construction Workforce Total – Actual (FTE)



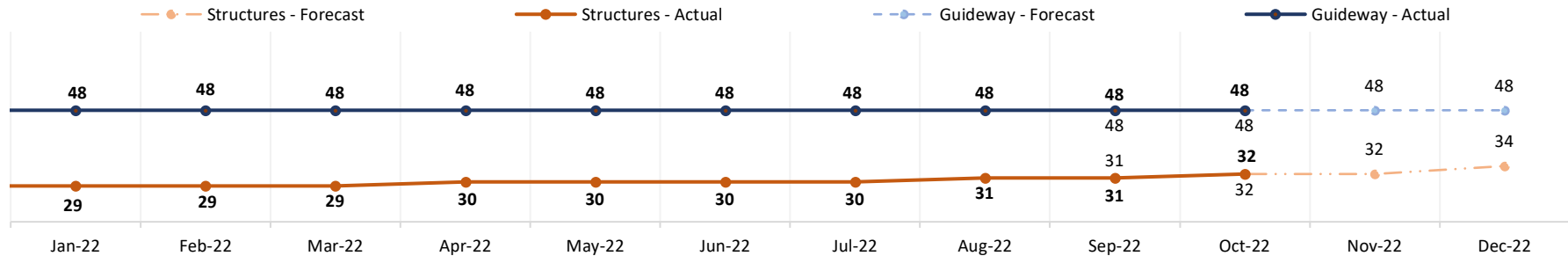
- Notes:**
1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).
 2. An increase of 6 workers from the previous month (752).

CP 2-3 – Construction Progress

CP 2-3 – Construction Progress



CP 2-3 – Structures and Guideway Progress – Forecast vs. Actual



Notes:

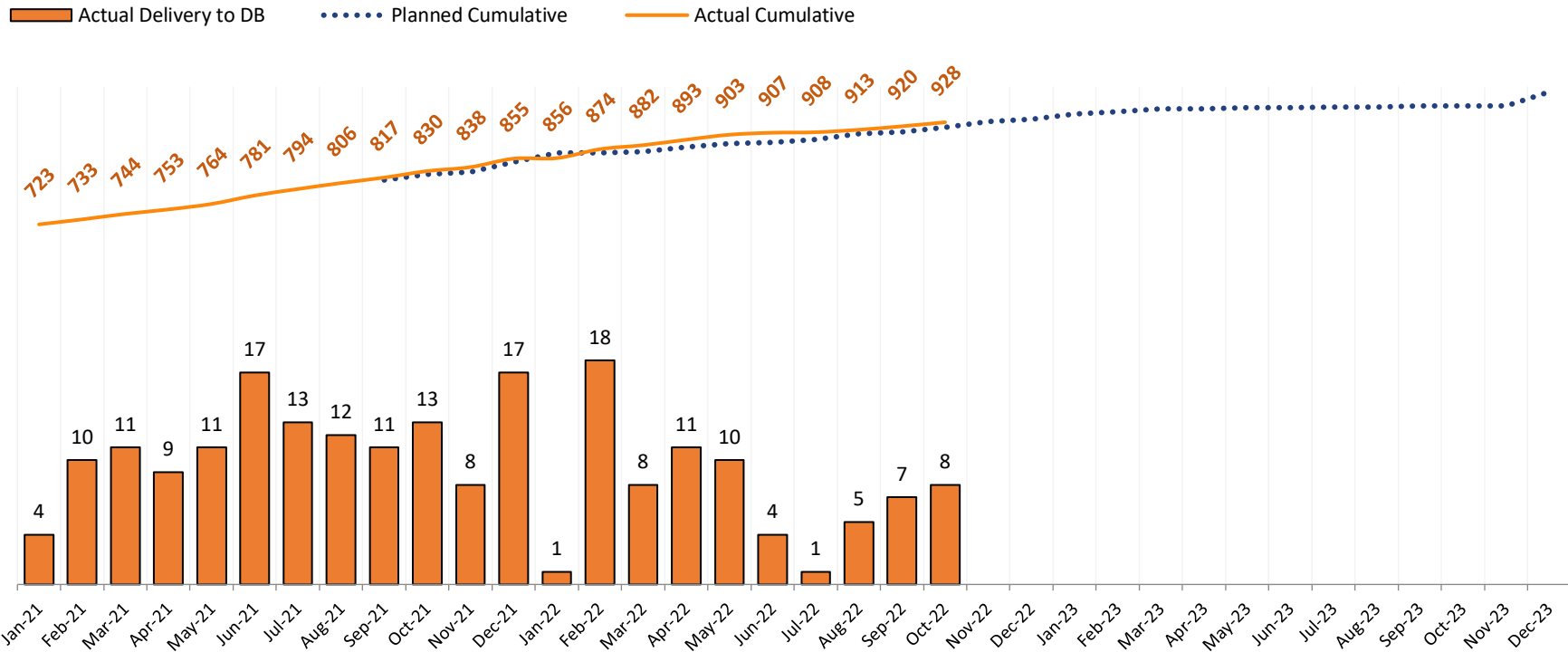
- The circle charts above incorporate Revised Baseline Schedules (RBS) Revision 4 data as of September 2022, pending final approval.
- The line chart above incorporates provisional forecast numbers as of September 2022, pending final approval of RBS Revision 4.
- Construction Complete definition:
 - Structure Completion – all concrete work is complete.
 - Guideway Completion – earthworks complete with rough grading.
- Total Structures: 49:
 - 32 structures underway/construction complete. An increase of one from the previous period at Deer Creek Viaduct.
- Total Guideway: 65 miles:
 - 48 miles underway/construction complete.
- The 109 design submissions included 50 Structures (split submission at Tulare Viaduct), 6 submissions covering the 65 miles of guideway, 41 for roadways and access roads with the corridor with the remaining 12 for IPB Packages, special foundation designs and Alpaugh Pond.

CP 2-3 – Real Property/Right-of-Way (ROW)

CP 2-3 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels October 31, 2022	Total Parcels Delivered to Date October 31, 2022	Remaining Parcels to be Delivered October 31, 2022
CP 2-3	991	928	63

CP 2-3 – Parcel Delivery to Design-BUILDER (DB) Summary



Notes:

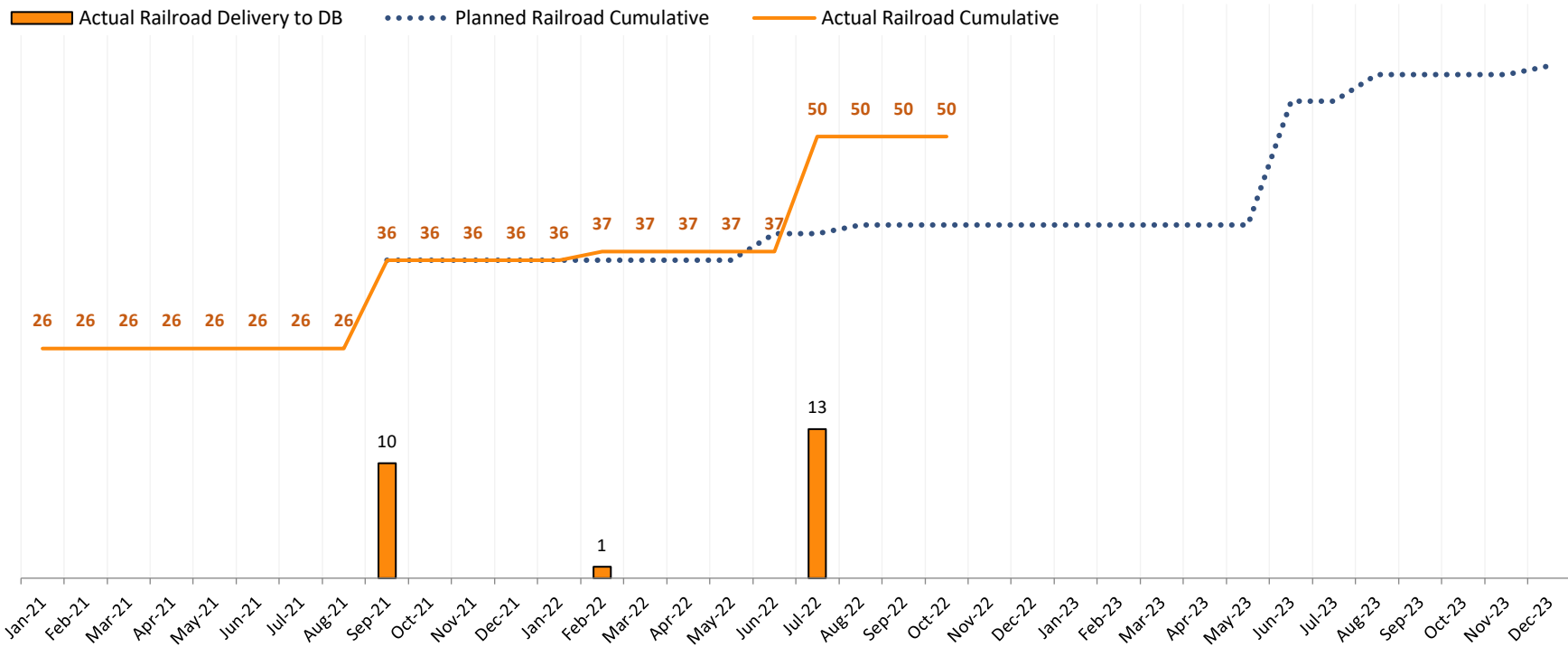
1. This reflects the actual parcels delivered to the Design-BUILDER by month and provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.
2. Total Needed Parcels increased by three parcels added to meet Third Party design requirements.

CP 2-3 – Real Property/Right-of-Way (ROW) Railroad

CP 2-3 – Right-of-Way (ROW) Railroad Summary

Construction Package	Total Needed Railroad Parcels October 31, 2022	Total Railroad Parcels Delivered to Date October 31, 2022	Remaining Railroad Parcels to be Delivered October 31, 2022
CP 2-3	58	50	8

CP 2-3 – Railroad Parcel Delivery to Design-Builder (DB) Summary



Notes:

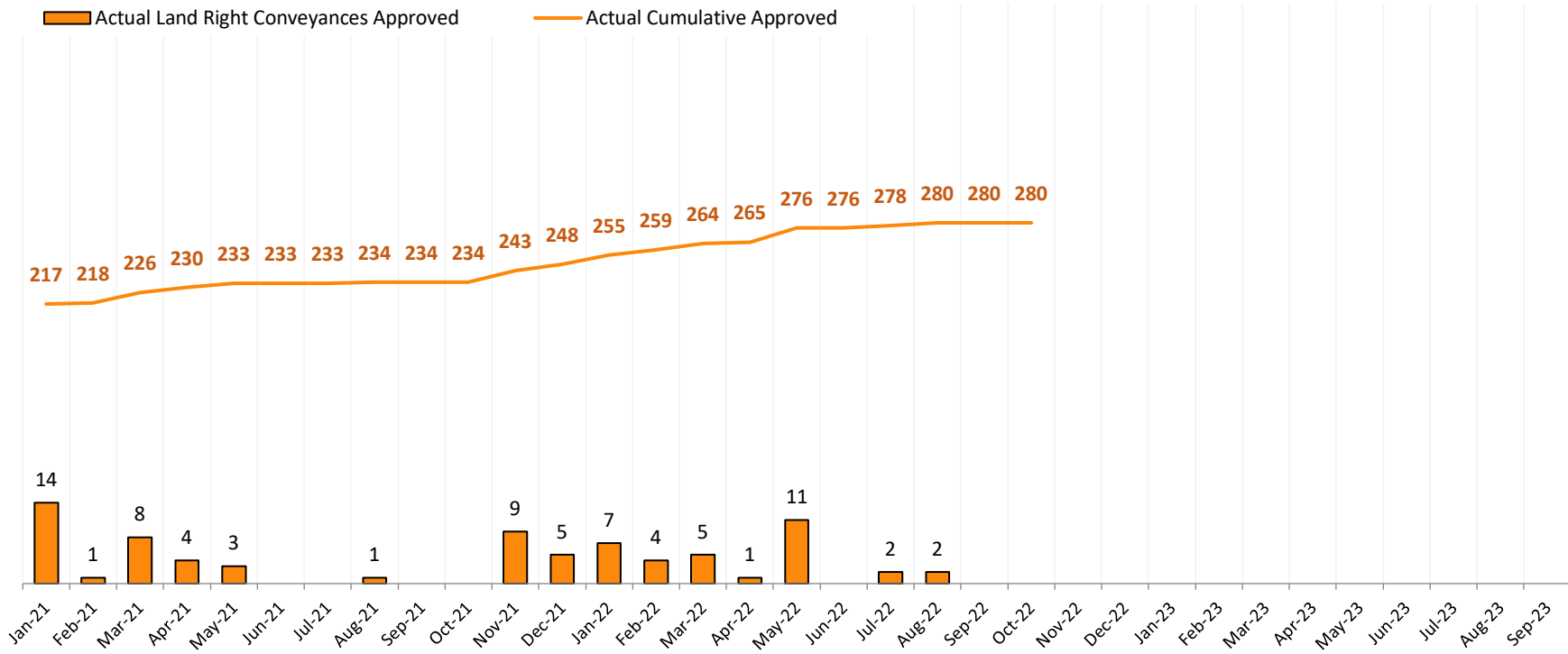
1. The Planned Cumulative line for Railroad Parcel Delivery reflects provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.

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

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

Construction Package	Total Needed Land Right Conveyances October 31, 2022	Total Land Right Conveyances Approved ⁽²⁾ to Date October 31, 2022	Remaining Land Right Conveyances to be Approved October 31, 2022
CP 2-3	433	280	153

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



Notes:

1. The Planned Cumulative line for Land Right Conveyances is being adjusted to reflect Revised Baseline Schedule (RBS) Revision 4 and will be reflected in a subsequent report.
2. The term "Approved" is defined as land right conveyances with Director of Real Property for signature, PG&E for signature, or recorded.

CONSTRUCTION PACKAGE 4 (CP 4) OVERVIEW

CP 4 – Design-Build Contract Summary⁽¹⁾

Milestones

Milestone	Date
Request for Quote (RFQ) Date:	11/20/2014
Statement of Qualification (SOQ) Date:	01/30/2015
Request for Proposal (RFP) Date:	05/27/2015
Proposal:	11/25/2015
Bid Open Date:	01/05/2016
Award Date:	02/29/2016
Late Notice to Proceed (LNTP) Date:	03/01/2016
Notice to Proceed (NTP) Date:	04/15/2016
Original Completion Date:	06/03/2019
Current Forecast Contract Completion Date ⁽²⁾ :	05/03/2023
Current Forecast Construction Completion Date⁽³⁾:	03/01/2023

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:	\$264,732,634.90
Current Contract Amount:	\$708,979,634.90
Approved Invoices to Date:	\$619,233,914.65
Remaining Contract Balance:	\$89,745,720.25

Current Time Status

Description	Duration
Original Contract Days:	1,144
Extension of Time Awarded:	1,367
Current Forecast Contract Days:	2,511
Calendar Days Worked (thru 10/31/2022):	2,390

Expended to Date

Description	Percentage
Time:	95.2%
Dollars:	87.3%

Growth Percentage

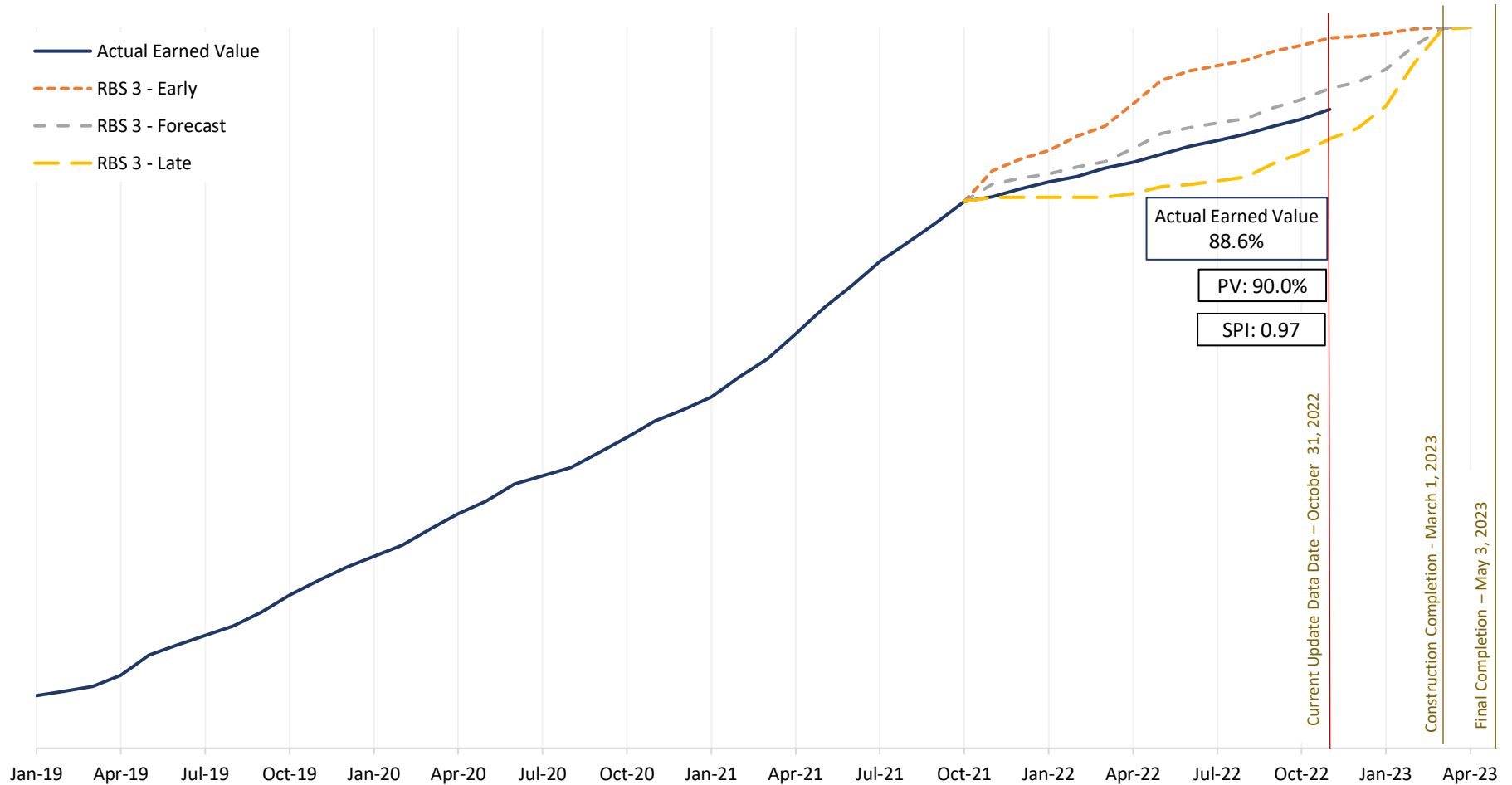
Description	Percentage
Time:	119.5%
Dollars:	59.6%

Notes:

- Information in this section is coming from data provided by the PCM – Monthly Status Report.
- Updated to align with Current Forecast Contract Completion Date based on Expenditure Authorization.
- Expenditure Authorization Current Forecast Construction Completion Date of March 1, 2023.
- Contract Time Status (Extension of Time Awarded and Current Forecast Contract Days) Expended to Date (Time), and Growth Percentage (Time) calculation is based on the Current Construction Completion Date.

CP 4 – Earned Value

CP 4 – Earned Value Summary (%)

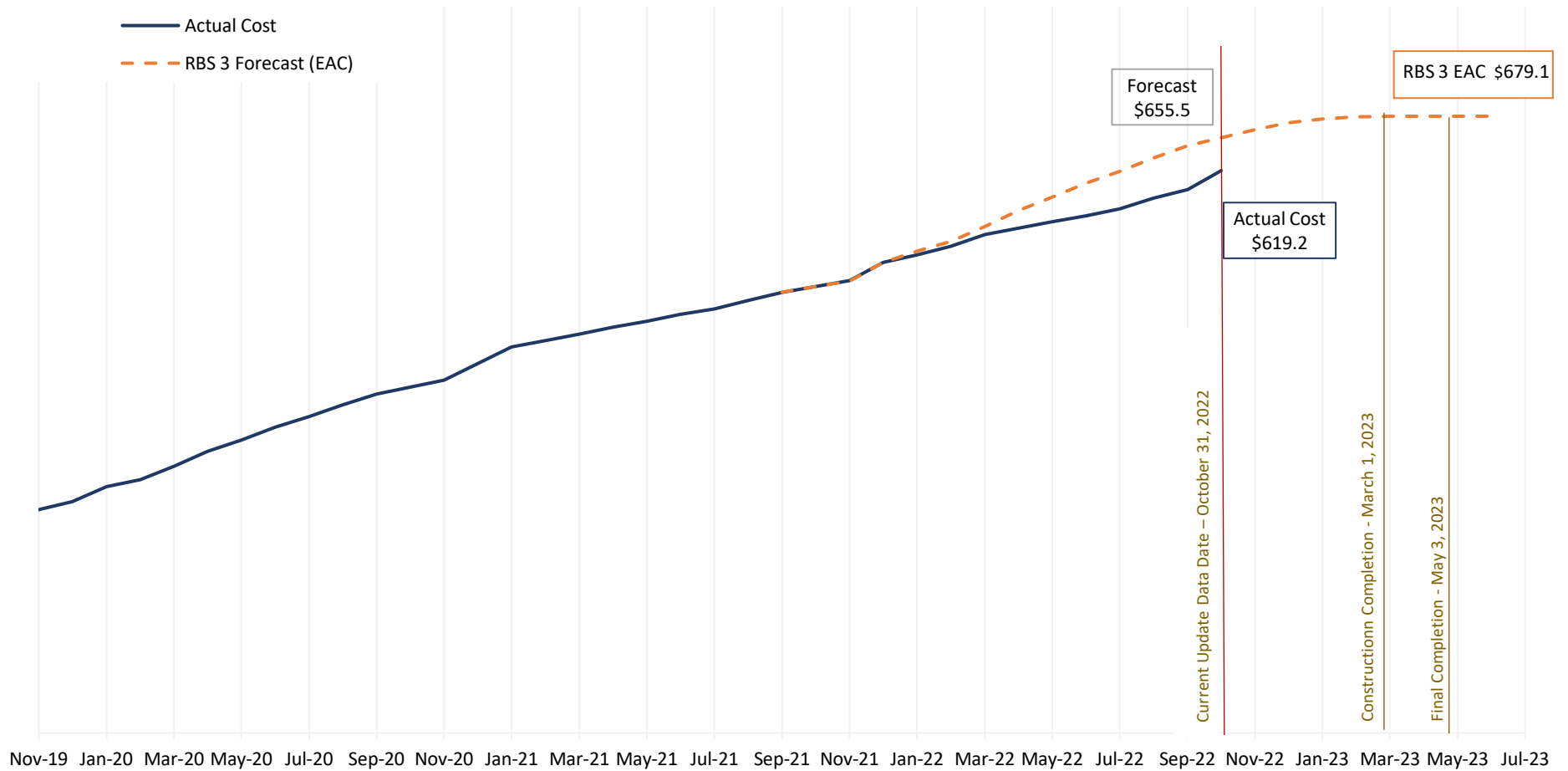


Notes:

1. The plan graphs are based on RBS Revision 3, which has a data date of October 1, 2021 and a construction completion date of March 1, 2023. Actual graph is as of October 31, 2022.
2. Earned Value represents physical progress of site activities, which is based on project team verification of site progress measurements.
3. The early dates graph is optimistic and assumes activities will take place on the schedule early dates.
4. Average graph assumes non-critical path activities are taking place mid-way of early and late dates.
5. The late dates graph assumes activities will take place on the schedule late dates. If actuals fall below late graph, it indicates schedule slippage. To provide contingency, the Schedule Performance Index (SPI) is measured against the average graph.
6. Time contingency is not included in these forecasts. This is Authority owned contingency.
7. The schedule update received shows Substantial Completion on November 13, 2023; a mitigated schedule has been received bringing completion back to April 21, 2023; further mitigation measures are being implemented with the intent to bring the completion date back to March 1, 2023.

CP 4 – Cost Trend

CP 4 – Cost Trend Summary (\$ Millions)

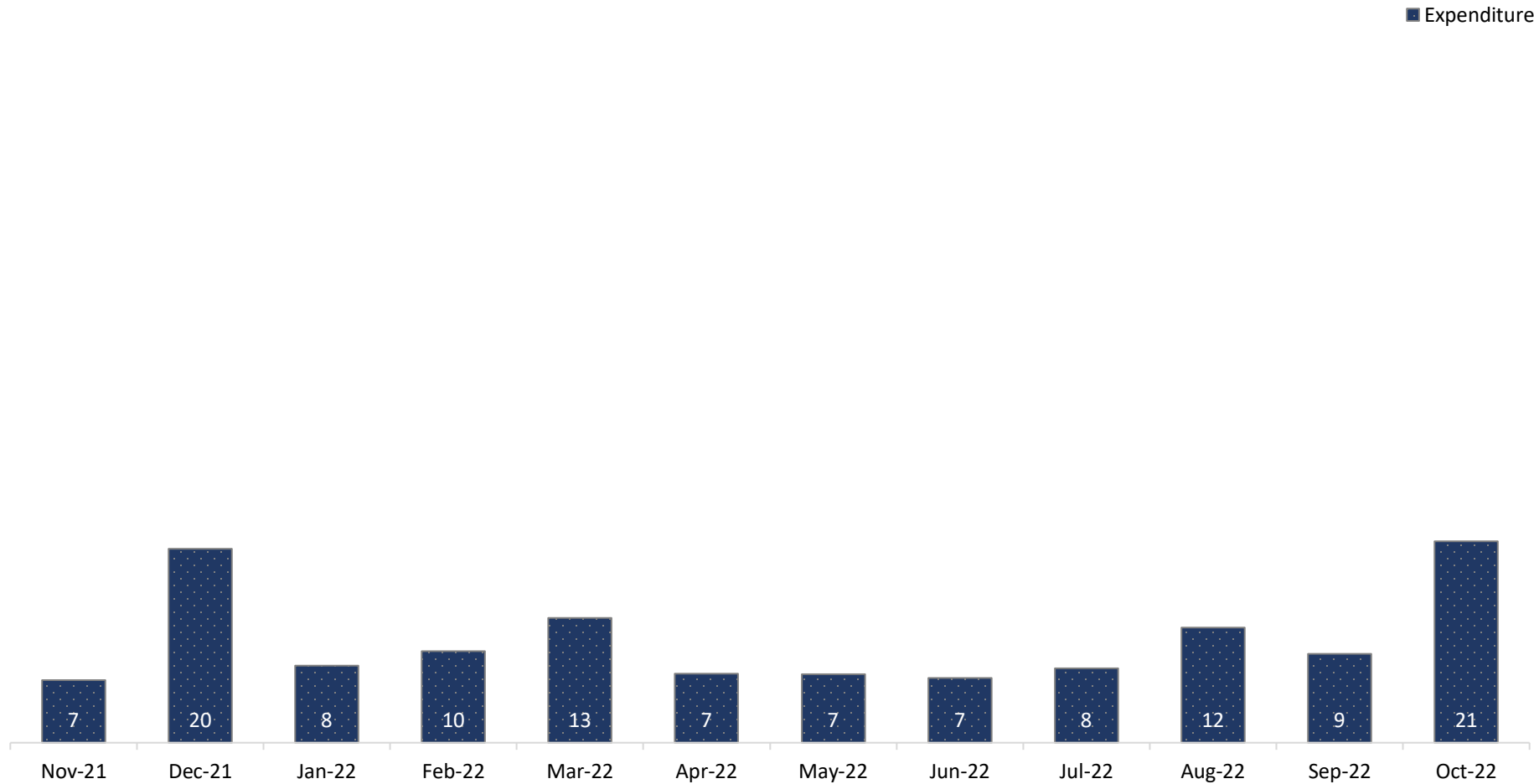


Notes:

1. The graph provides a comparison of the project actual cost performance against the target RBS3 Estimate at Completion (EAC).
2. The target EAC forecast is based on the contract value and the estimated cost of expected change orders.
3. The schedule update received shows Substantial Completion on November 13, 2023; a mitigated schedule has been received bringing completion back to April 21, 2023; further mitigation measures are being implemented with the intent to bring the completion date back to March 1, 2023.

CP 4 – Design-Build Expenditures

CP 4 – Monthly Expenditures (\$ Millions)



Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the Capital Outlay and Expenditure Report.
2. Expenditures totaled \$20.9M.

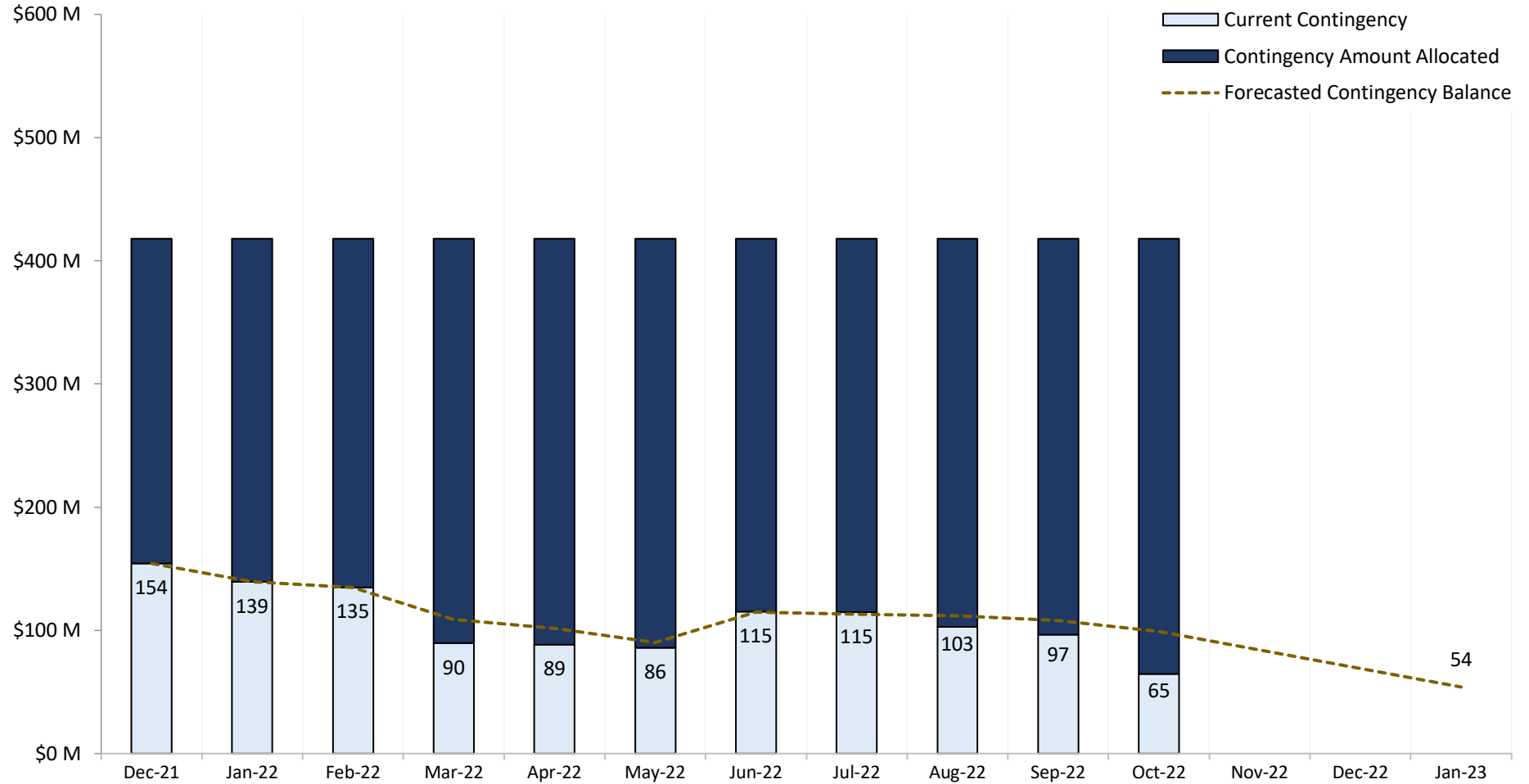
CP 4 – Change Orders (CO)

CP 4 – Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
162	Southern California Gas (Sempra) Additional Costs - CWA 6th Street Phase II Reauthorization	Executed	\$1,129,269.14	10-31-22
164	Additional Insurance Premium Costs resulting from Contract Extension of Time - TIA #13 - 2nd Submission	Executed	\$13,456,829.39	10-31-22
160	Environmental Monitoring Costs-May 2022 to June 2022	Executed	\$348,251.60	10-31-22
161	Environmental Monitoring Costs-April 2022 to May 2022	Executed	\$387,854.34	10-31-22
TOTAL			\$15,322,204.47	

CP 4 – Risk Contingency

CP 4 – Risk Contingency Status (\$ Millions)

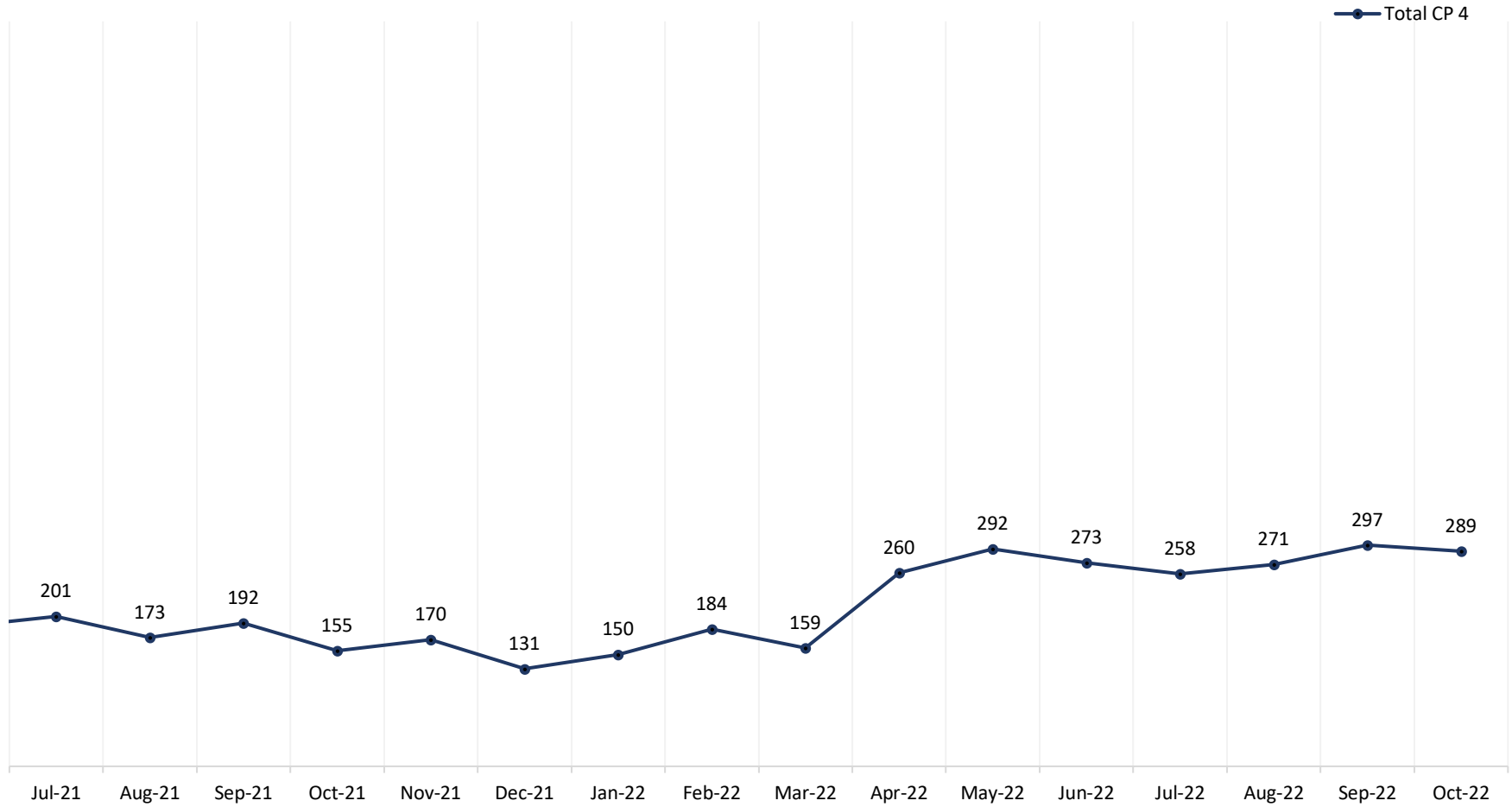


Notes:

1. Program baseline is \$418M.
2. Contingency balance updated to reflect the Board’s adoption of Resolution #HSR21-11 (Expenditure Authorization Increase).
3. Contingency Amount Allocated reflects executed change orders and Business Oversight Committee (BOC) approved items.
4. The Forecasted Contingency Balance drawdown curve is based only on agreed change orders expected to be executed within the three-month window. Due to change order negotiations and dispute resolution, timing and value of Forecasted Contingency Balance is uncertain.
5. June 2022 increases due to \$31M Business Oversight Committee approved transfer of Utility Provisional Sum from contract to contingency.

CP 4 – Monthly Construction Labor

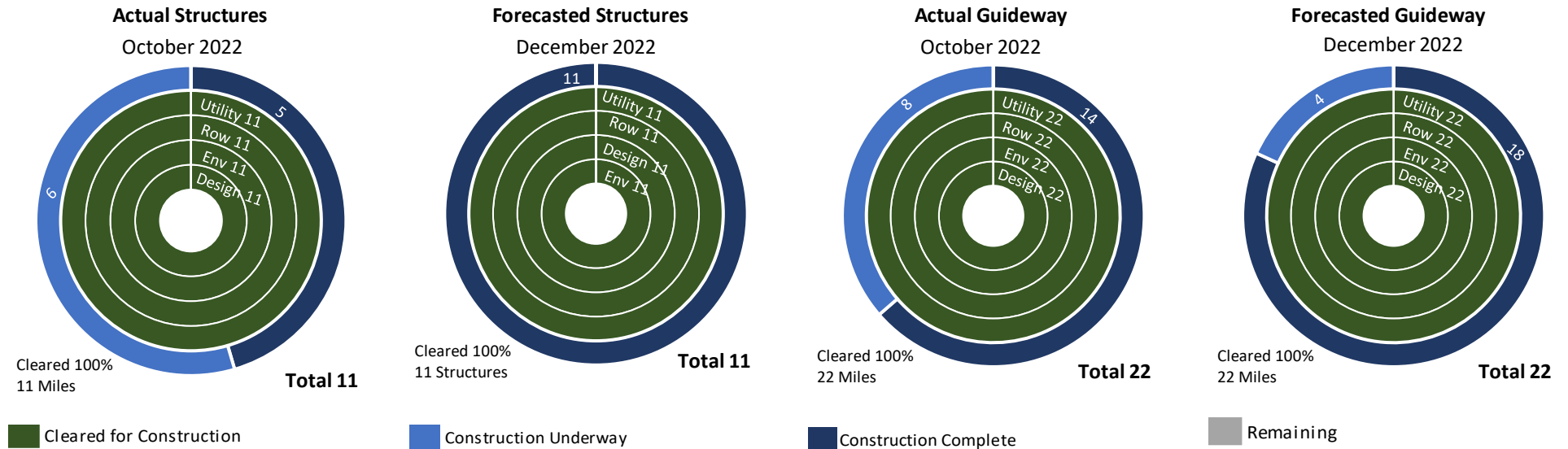
CP 4 – Monthly Construction Workforce Total – Actual (FTE)



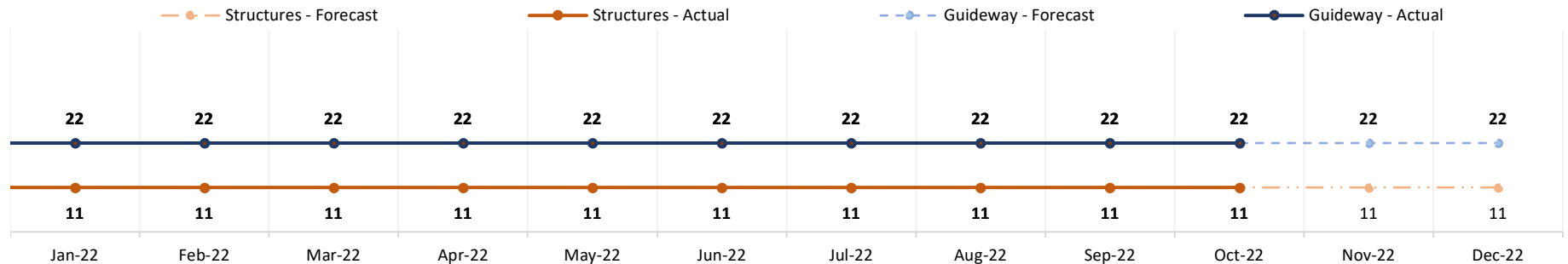
- Notes:**
1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).
 2. A decrease of 8 workers from the previous month (297).

CP 4 – Construction Progress

CP 4 – Construction Progress



CP 4 – Structures and Guideway Progress – Forecast vs. Actual



Notes:

1. The circle charts above incorporate Revised Baseline Schedules (RBS3) approved schedule.
2. Construction Complete definition:
 - a. Structure Completion – all concrete work is complete.
 - b. Guideway Completion – earthworks complete with rough grading.
3. Total Structures: 11:
 - a. 11 structures underway/construction complete.
4. Total Guideway: 22 miles. The actual miles for CP 4 are 21.5 miles but rounded to 22 miles for consistency in reporting:
 - a. 22 miles underway/construction complete.

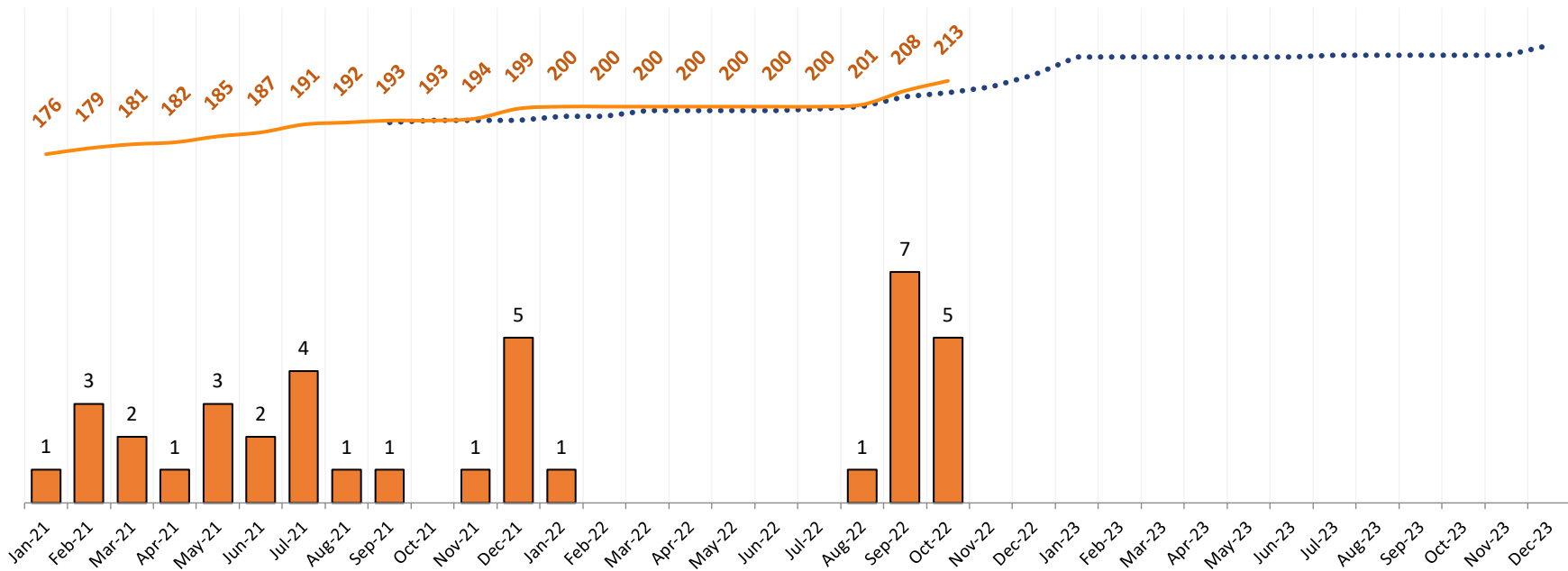
CP 4 – Real Property/Right-of-Way (ROW)

CP 4 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels October 31, 2022	Total Parcels Delivered to Date October 31, 2022	Remaining Parcels to be Delivered October 31, 2022
CP 4	231	213	18

CP 4 – Parcel Delivery to Design-Builder (DB) Summary

■ Actual Delivery to DB
 ●●●●● Planned Cumulative
 — Actual Cumulative



Notes:

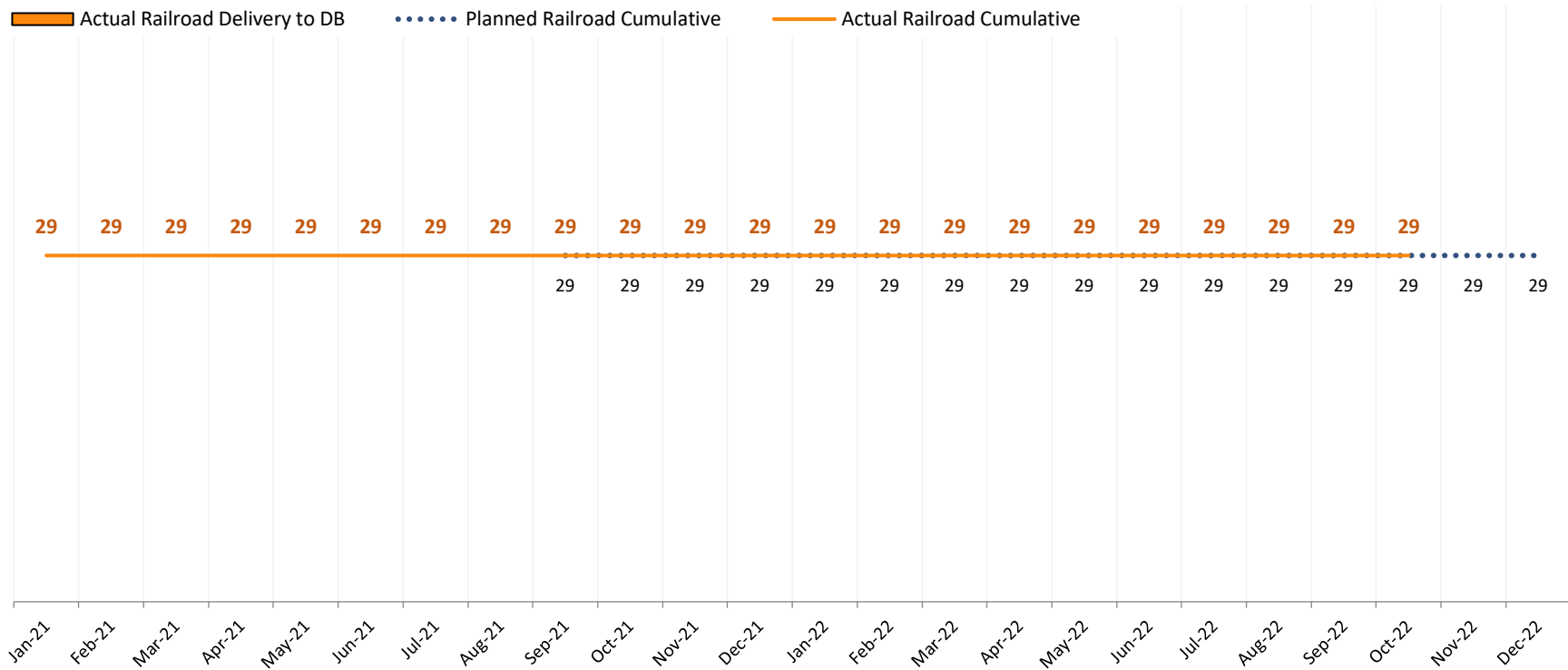
- This reflects the actual parcels delivered to the Design-Builder by month compared to the Revised Baseline Schedule (RBS) Revision 3.

CP 4 – Real Property/Right-of-Way (ROW) Railroad

CP 4 – Right-of-Way (ROW) Railroad Summary

Construction Package	Total Needed Railroad Parcels October 31, 2022	Total Railroad Parcels Delivered to Date October 31, 2022	Remaining Railroad Parcels to be Delivered October 31, 2022
CP 4	29	29	0

CP 4 – Railroad Parcel Delivery to Design-Builder (DB) Summary

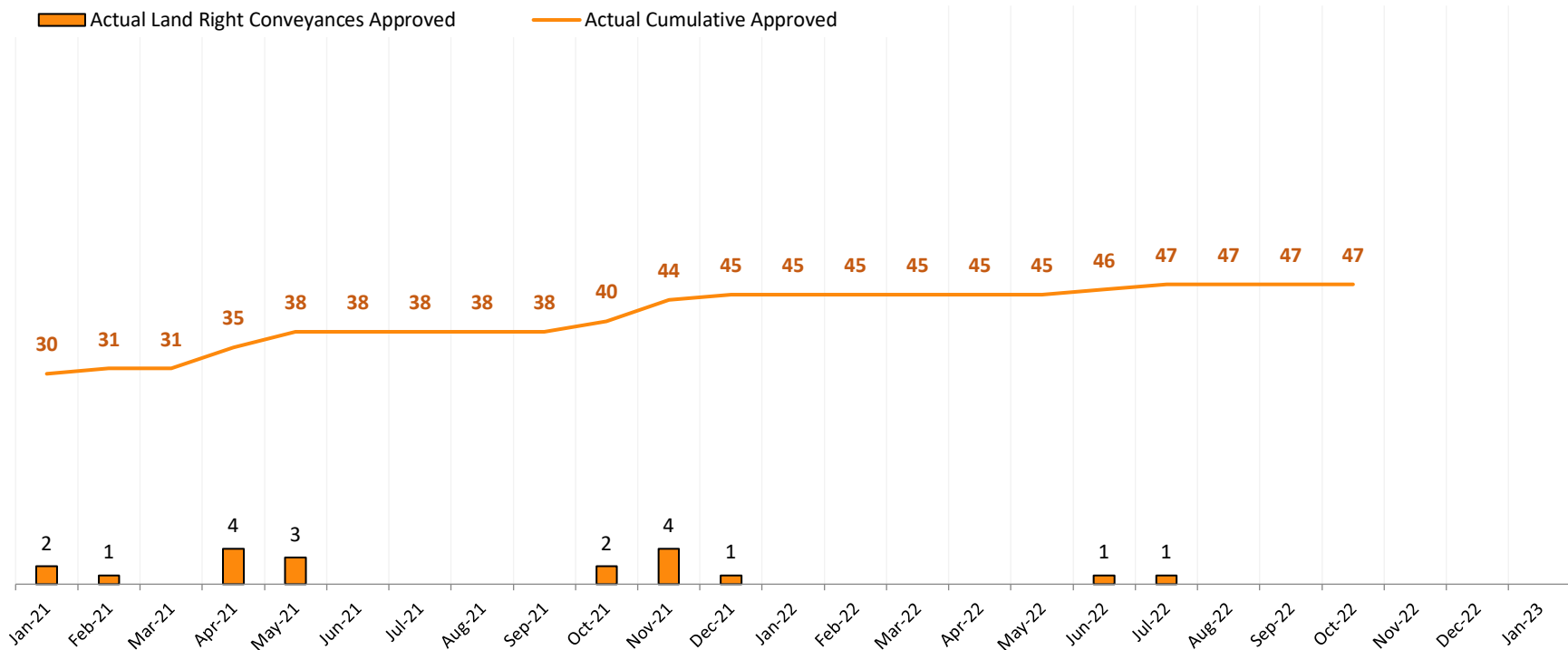


CP 4 – Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD)

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

Construction Package	Total Needed Land Right Conveyances October 31, 2022	Total Land Right Conveyances Approved ⁽²⁾ to Date October 31, 2022	Remaining Land Right Conveyances to be Approved October 31, 2022
CP 4	88	47	41

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



Notes:

1. The Planned Cumulative line for Land Right Conveyances is being adjusted to reflect Revised Baseline Schedule (RBS) Revision 3 and will be reflected in a subsequent report.
2. The term "Approved" is defined as land right conveyances with Director of Real Property for signature, PG&E for signature, or recorded.

Project Development Schedule (Environmental Clearance) – Record of Decision (ROD)

Project Development Schedule (to ROD)

Number	Segment	Progress	Complete Purpose and Need Statement		Complete Alternatives Analysis		Board Concurrence of Preliminary Preferred Alt. Draft EIR/EIS		Publish Draft EIR/EIS		Publish Final EIS and Obtain ROD		Date EIR/EIS To Be Completed	
			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 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	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%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Bakersfield to Palmdale	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	Burbank to Los Angeles	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	San Jose to Merced	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
Document Complete	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%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%
1	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%	May-23 May-23 87%	May-23 Jun-23 88%	Jun-24 Jun-24 0%	Jun-24 Jul-24 ¹ 0%	Jun-24	Jul-24
2	Palmdale to Burbank	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Aug-22 Sep-22 100%	Aug-22 Sep-22 ² 100%	Sep-23 Nov-23 0%	Sep-23 Nov-23 0%	Nov-23	Nov-23
3	Heavy Maintenance Facility (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

Notes:

1. The Los Angeles to Anaheim project segment completion dates were extended in February 2022 due to additional discussions with various stakeholders such as Burlington Northern Santa Fe Corporation (BNSF), the City of Colton, and the Lenwood community. An additional 1-month schedule change has been incurred since that time due to delay in receipt of BNSF deliverables.
2. The Palmdale to Burbank Draft EIR/EIS was released to the public on September 2, 2022. On September 20, 2022, the Authority extended the public comment period from 60 days to 90 days.

Project Development – Key Actions

Project Development (Environmental Clearance) – Key Actions Summary

Project Section	Key Actions
San Francisco to San Jose	The Authority Board certified the Final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) on August 18, 2022. The High-Speed Rail Authority’s Chief Executive Officer (CEO) signed the National Environmental Policy Act (NEPA) Record of Decision (ROD) on October 14, 2022. The Limitation of Claims was posted to the Federal Register on November 10, 2022. The Authority and Rail Development Partners (RDP) completed the Administrative Records collection.
San Jose to Merced	The Final ROD was signed by the Authority’s CEO on June 1, 2022. Administrative Record being assembled and organized. Third batch of materials was submitted on August 31, 2022.
Central Valley Wye	Conducted monthly progress meeting with County of Madera on Fairmead mitigation projects. Environmental Clearance activities complete. Transition to Merced Extension (Merced to Madera).
Locally Generated Alternative	Environmental Clearance activities complete. Transition to Bakersfield Extension (LGA).
Bakersfield to Palmdale	Work through Notice of Determination/Record of Decision (NOD/ROD) has been completed. The Authority has continued to meet with key stakeholders (e.g., Center for Biological Diversity, City of Palmdale) as necessary.
Palmdale to Burbank	The Draft EIR/EIS was released to the public on September 2, 2022. The public comment period was extended from 60 days to 90 days and closes on December 1, 2022.
Burbank to Los Angeles	Work through NOD/ROD has been completed. Project closeout activities are ongoing.
Los Angeles to Anaheim	Continued integrating additional revised environmental deliverables from Burlington Northern Santa Fe Corporation (BNSF) pertaining to the Colton and Lenwood project components into the assembled Administrative Draft EIR/EIS.

Project Development (Post-ROD) – Key Actions Summary

Project Section	Key Actions
Merced Extension (Merced to Madera)	<p>The California High-Speed Rail Authority executed an Agreement (HSR 22-02) with Stantec on October 04, 2022 for \$41M, followed by the issuance of Notice to Proceed – 01 (NTP-1) on October 05, 2022 to perform Configuration Footprint design services. Task Order – 01 was executed on October 11, 2022 that defines the scope of work for the Project Management Plan, Annual Work Program, and other early actions for the first three months of work to be performed by Stantec and their subconsultants.</p>
Fresno to Bakersfield Locally Generated Alternative (LGA)	<p>The HNTB Corporation (HNTB), under agreement HSR 22-01, continues to make progress on the early actions of this Project, including submittal of various Draft documents such as the Project Management Plan - Draft.</p>