



Finance & Audit Committee

CENTRAL VALLEY STATUS REPORT

February 2023 Report (data through December 2022)

Executive Summary

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

- December 2022 Expenditures totaled \$48.5M:
 - Construction Package 1 (Page 14) - Expenditures totaled \$19.7M.
 - Construction Package 2-3 (Page 23) - Expenditures totaled \$23.5M.
 - Construction Package 4 (Page 34) - Expenditures totaled \$5.3M.
- Total CP Cumulative Actual Expenditures (Pages 13, 22, and 31) – \$4,385.1M.
- Total Cumulative Current Contract Amount (Pages 13, 22, and 31) – \$6,624.1M.

Change Orders

- Executed Change Orders this period – 18 for a total of (\$28.7M): Negative total due to execution of a Change Order for the CP2-3 Hanford Viaduct.
 - Construction Package 1 (Page 15) – Six for a total of \$3.2M.
 - Construction Package 2-3 (Page 24) – Eight for a total of (\$41.0M).
 - Construction Package 4 (Page 35) – Four for a total of \$9.1M.

Risk Contingency ([Page 6](#))

- Approved Contingency – \$4,000.7M budgeted contract contingency. Contingency balance is \$357.6M as of December 31, 2022.
 - Construction Package 1 (Page 16) – \$1,944.5M budgeted contract contingency. Contingency balance is \$249.7M as of December 31, 2022.
 - Construction Package 2-3 (Page 25) – \$1,638.4M budgeted contract contingency. Contingency balance is \$61.2M as of December 31, 2022.
 - Construction Package 4 (Page 36) – \$417.8M budgeted contract contingency. Contingency balance is \$46.6M as of December 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](#))

- December 2022, Average Daily Site Workers (by Week) (Page 7) – 964 workers. A decrease of 257 workers from the previous period (from 1,221):
 - Construction Package 1 (Page 17) – 251 workers. A decrease of 7 workers from the previous month (258).
 - Construction Package 2-3 (Page 26) – 549 workers. A decrease of 182 workers from the previous month (731).
 - Construction Package 4 (Page 37) – 164 workers. A decrease of 68 workers from the previous month (232).
- 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. No change 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. No change 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: 977 (53%); In Progress: 356 (19%); Approved to Start: 44 (2%); Not Started: 459 (25%); Total: 1,836. A total of 23 relocated in December 2022. 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: 458 (46%); In Progress: 308 (31%); Approved to Start: 0 (0%); Not Started: 226 (23%); Total: 992.
 - Construction Package 2-3 – Relocated: 422 (60%); In Progress: 31 (4%); Approved to Start: 28 (4%); Not Started: 220 (31%); Total: 701.
 - Construction Package 4 – Relocated: 97 (68%); In Progress: 17 (12%); Approved to Start: 16 (11%); Not Started: 13 (9%); Total: 143.

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

- Total Parcels Delivered to Date – 2,208 parcels compared to an estimated 2,300 parcels needed.
- Parcels Delivered to Design-Builder (DB) – 41 parcels in December 2022.
- Construction Packages 1-4 – Zero parcels added, and five parcels removed due to design refinement reducing impacts to real property. 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 – 137 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 667 land right conveyances.

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

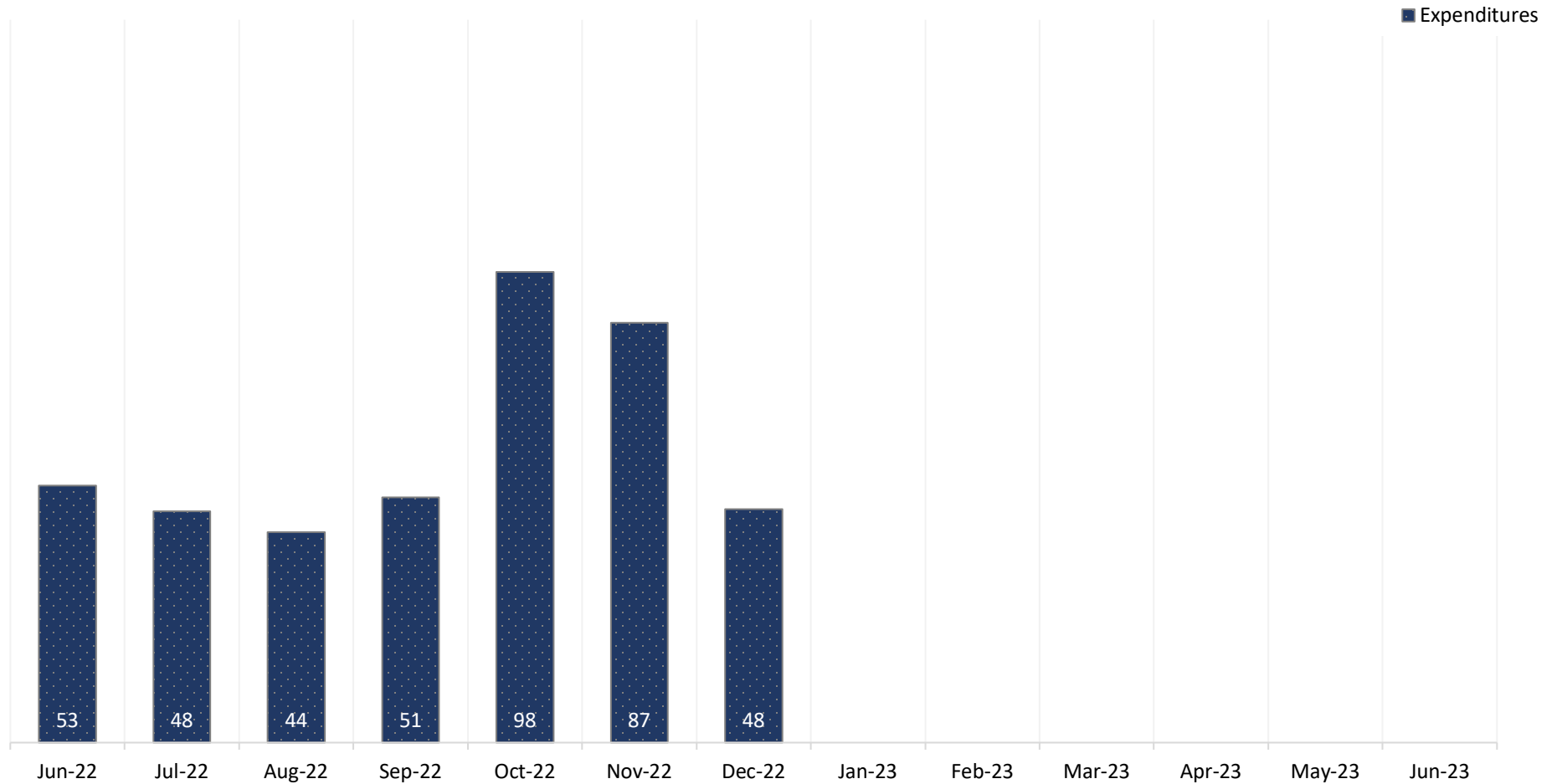
- San Francisco to San Jose – Work through NOD/ROD has been completed. Staff continues to assemble the Administrative Record.
- San Jose to Merced – Work through NOD/ROD has been completed. Staff continues to assemble the Administrative Record.
- Bakersfield to Palmdale – Work through NOD/ROD has been completed. Continued meeting with key stakeholders, including the Center for Biological Diversity.
- Palmdale to Burbank – The Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) was released to the public on September 2, 2022. The public comment period was extended from 60 days to 90 days and closed on December 1, 2022. Continued to coordinate with the Regional Consultant to prepare responses to comments received on the Draft EIR/EIS.
- 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) – Stantec Inc., under Agreement HSR 22-02, continues to make progress on the early actions of this Project, including submittal of various draft documents such as the Project Management Plan-Draft.
- 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.

CP 1-4 – Design-Build Expenditures

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

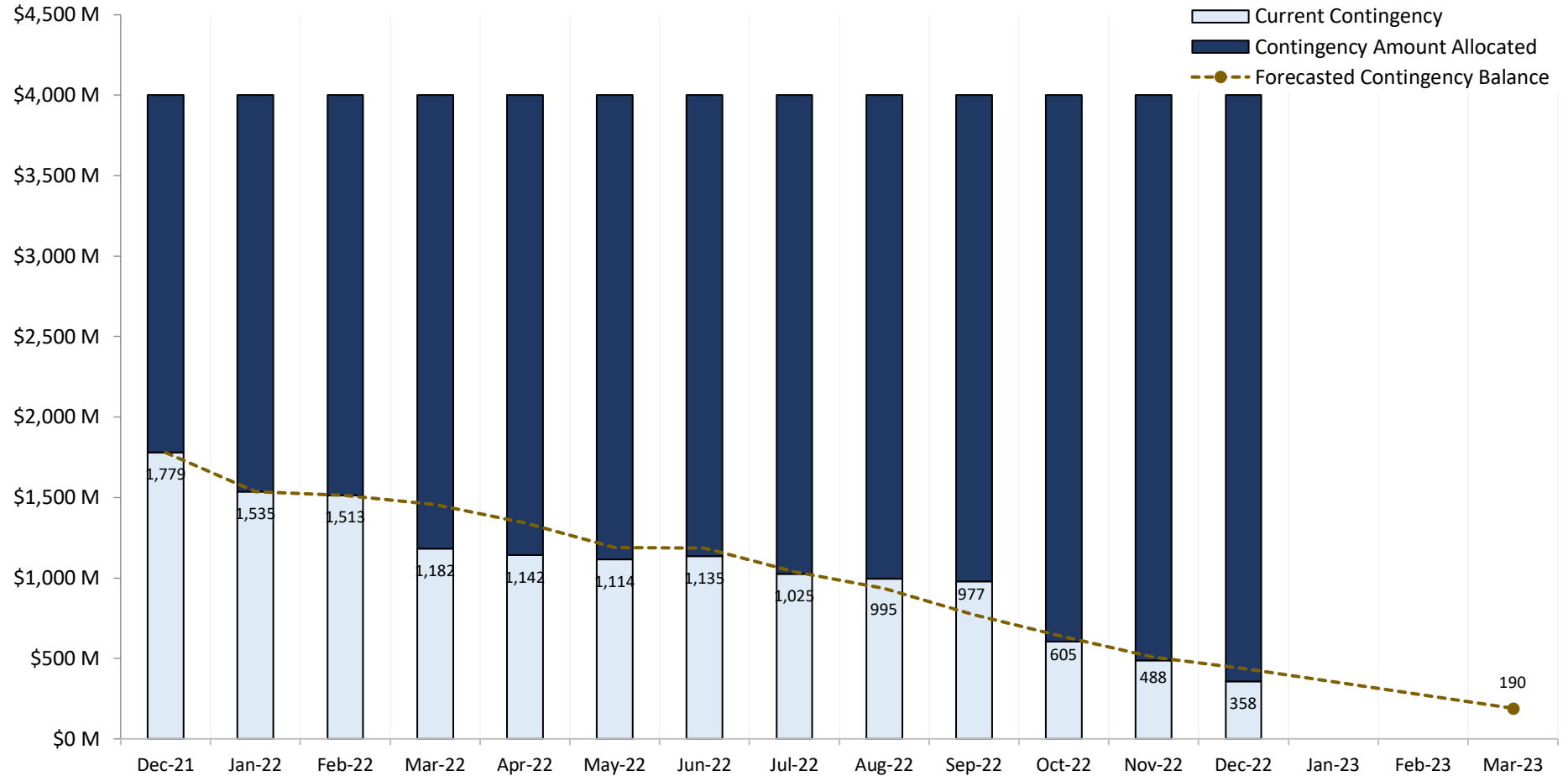


Notes:

1. Expenditures in the chart above are specific to the Design-Builder production and based on the Capital Outlay and Expenditure Report.
2. December 2022 Expenditures totaled \$48.5M:
 - a. Construction Package 1 – Expenditures totaled \$19.7M.
 - b. Construction Package 2-3 – Expenditures totaled \$23.5M.
 - c. Construction Package 4 – Expenditures totaled \$5.3M.

CP 1-4 – Risk Contingency

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

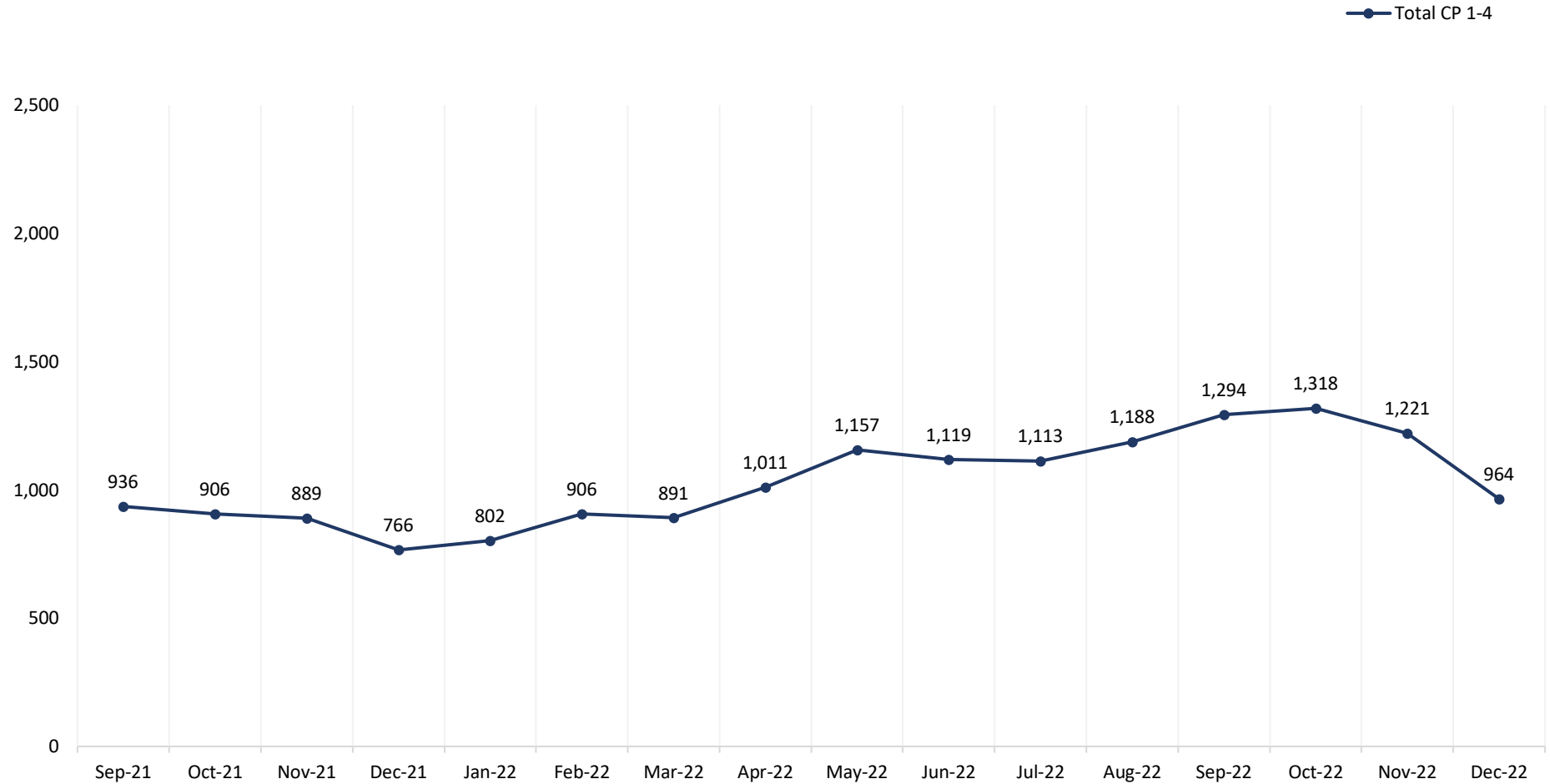


Notes:

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

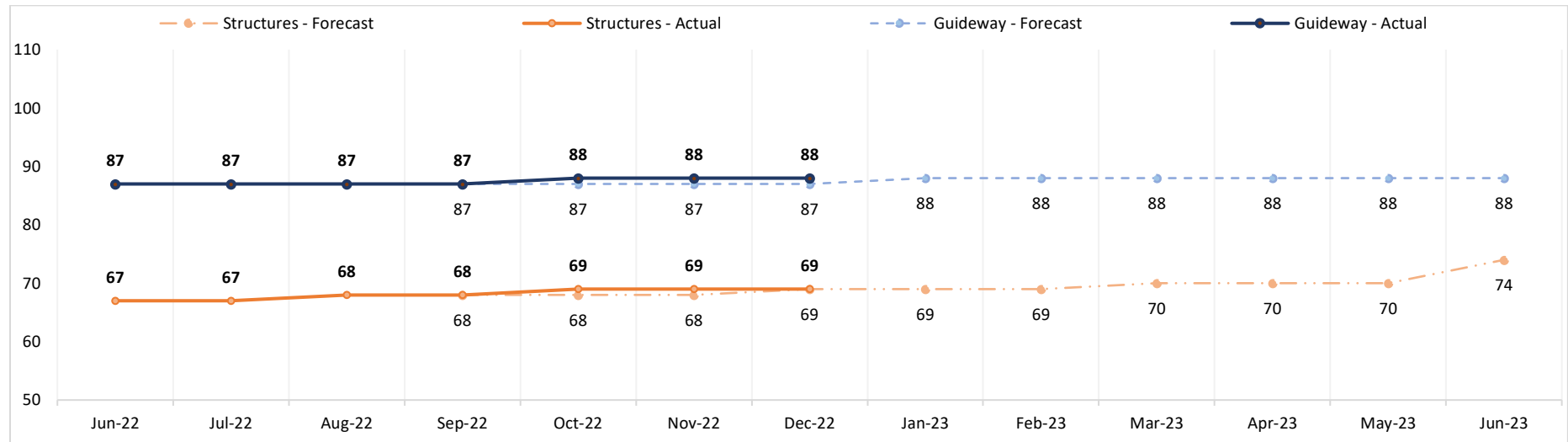
CP 1-4 – Monthly Construction Workforce Total – Actual (FTE)



- 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. December 2022, Average Daily Site Workers (by week) – 964 workers. A decrease of 257 workers from the previous period (from 1,221): Decrease in labor numbers due to Holidays and rain events.
 - a. Construction Package 1 (Page 17) – 251 workers. A decrease of 7 workers from the previous month (258).
 - b. Construction Package 2-3 (Page 26) – 549 workers. A decrease of 182 workers from the previous month (731).
 - c. Construction Package 4 (Page 37) – 164 workers. A decrease of 68 workers from the previous month (232).

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	5	6	33	36	69
Guideway	16	2	15	33	8	14	39	49	88

Notes:

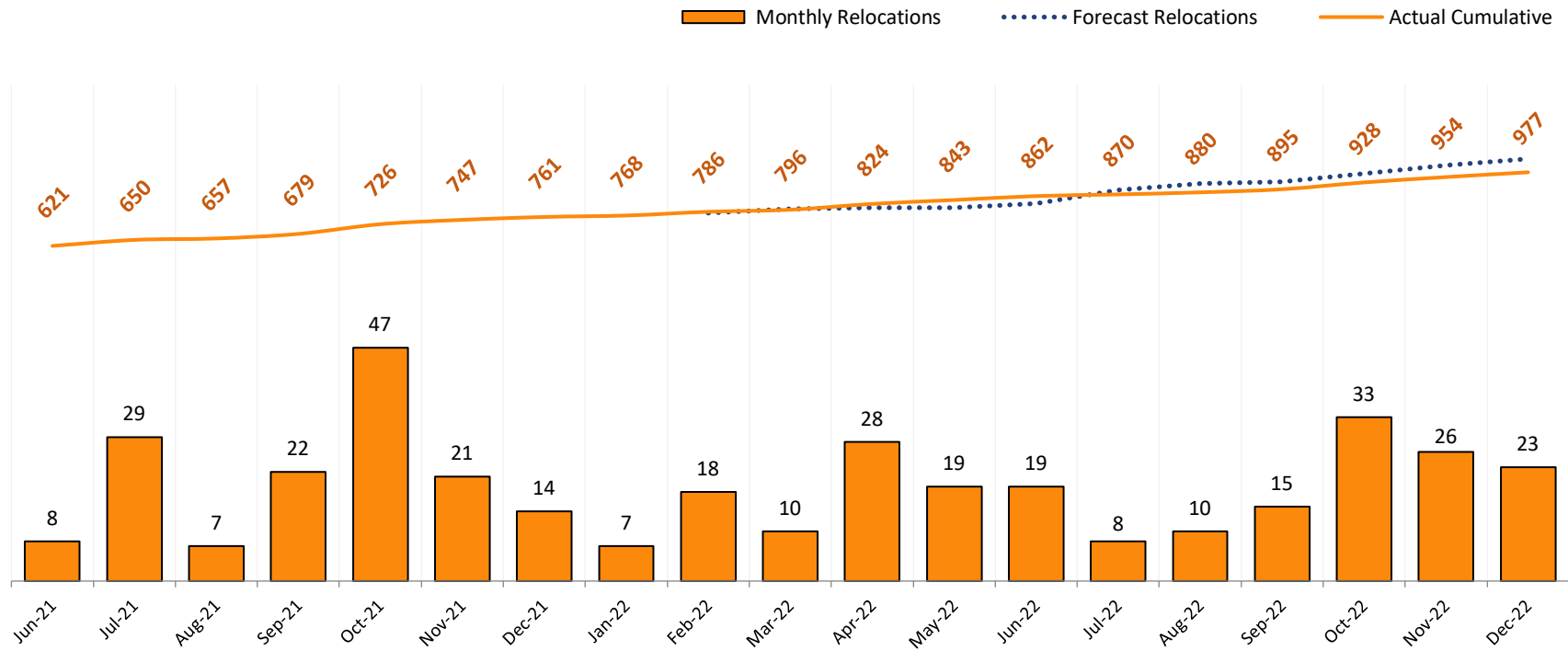
- The chart above incorporates provisional forecast numbers as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.
- Construction Complete definition:
 - Structure Completion – all concrete work is complete.
 - Guideway Completion – earthworks complete with rough grading.
- Total Structures: 93
- Structures – 69 underway/construction complete compared to 93 structures total. (74%). No change from the previous period.
 - CP 1 – 26 structures underway/construction complete.
 - CP 2-3 – 32 structures underway/construction complete.
 - CP 4 – 11 structures underway/construction complete.
- Total Guideway: approximately 119 miles
- Guideway – 88 miles underway/construction complete compared to 119 miles total. (74%). No change from the previous period.
 - CP 1 – 18 miles underway/construction complete.
 - 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 December 30, 2022	Total Utilities Relocated to Date December 30, 2022	Remaining Utility Relocations December 30, 2022
CP 1	992	458	534
CP 2-3	701	422	279
CP 4	143	97	46
Total	1,836	977	859

CP 1-4 – Utility Relocation Status Summary-Monthly



Notes:

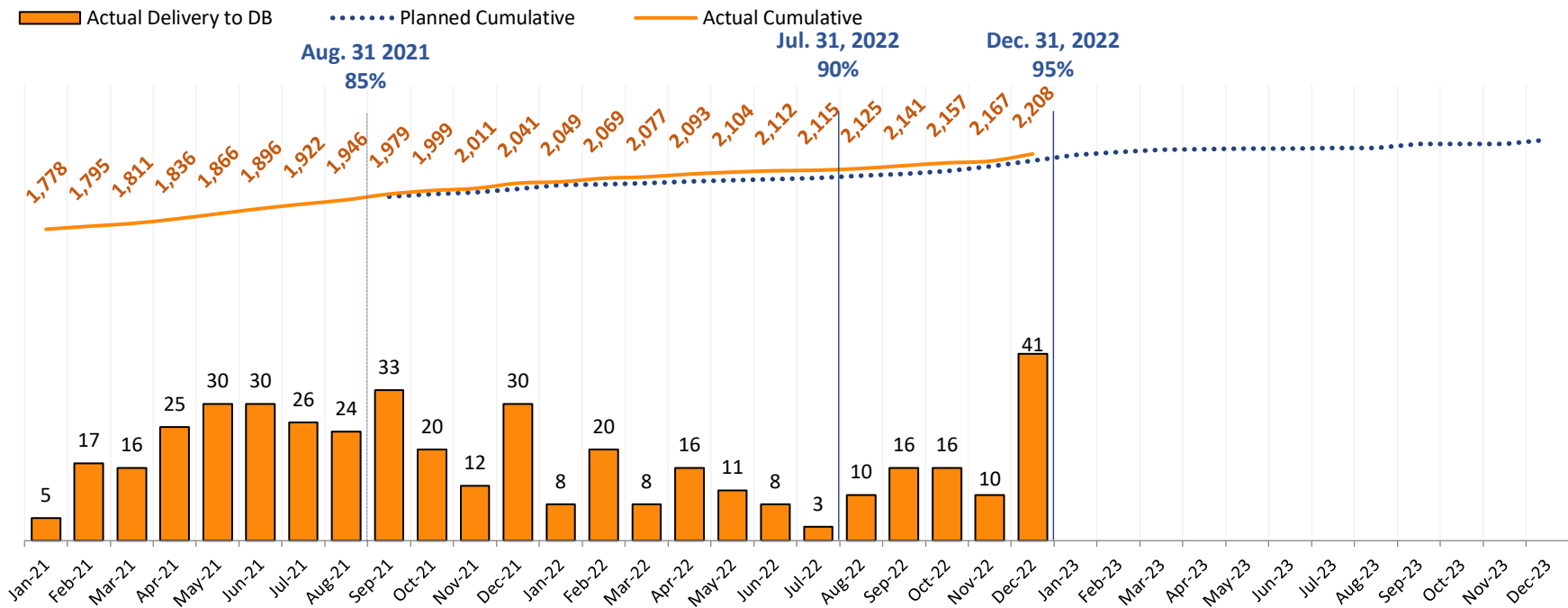
1. In Progress 356 (19%).
2. Approved to start 44 (2%).
3. Not Started 459 (25%).

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

CP 1-4 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels December 31, 2022	Total Parcels Delivered to Date December 31, 2022	Remaining Parcels to be Delivered December 31, 2022
CP 1	1,083	1,053	30
CP 2-3	986	935	51
CP 4	231	220	11
Total	2,300	2,208	92

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



Notes:

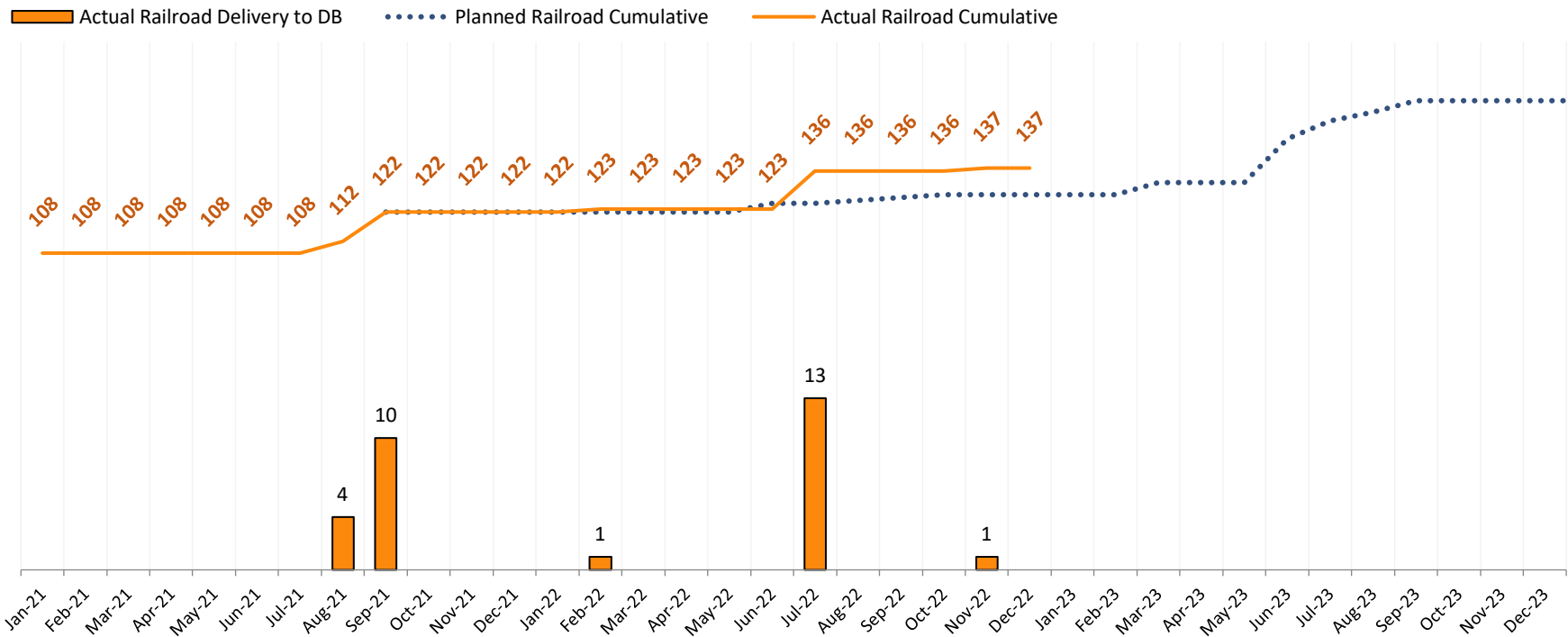
1. This reflects the actual parcels delivered to the Design-Builders by month compared to the planned delivery schedule which identifies 90% and 95% milestone completion for CP 1-4. The 90% and 95% milestone completion does not include any additional parcels that may be added.
2. Delivery to Design Builder 90% milestone completion was achieved for CP 1-4 in March 2022.
3. Real Property delivered 41 parcels in December 2022 which brings the total percentage of parcels delivered to 96%, surpassing their goal of 95% by the end of December 2022.
4. Total Parcels Needed was reduced by five parcels due to design refinement reducing impacts to real property

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 December 31, 2022	Total Railroad Parcels Delivered to Date December 31, 2022	Remaining Railroad Parcels to be Delivered December 31, 2022
CP 1	83	57	26
CP 2-3	58	51	7
CP 4	29	29	0
Total	170	137	33

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



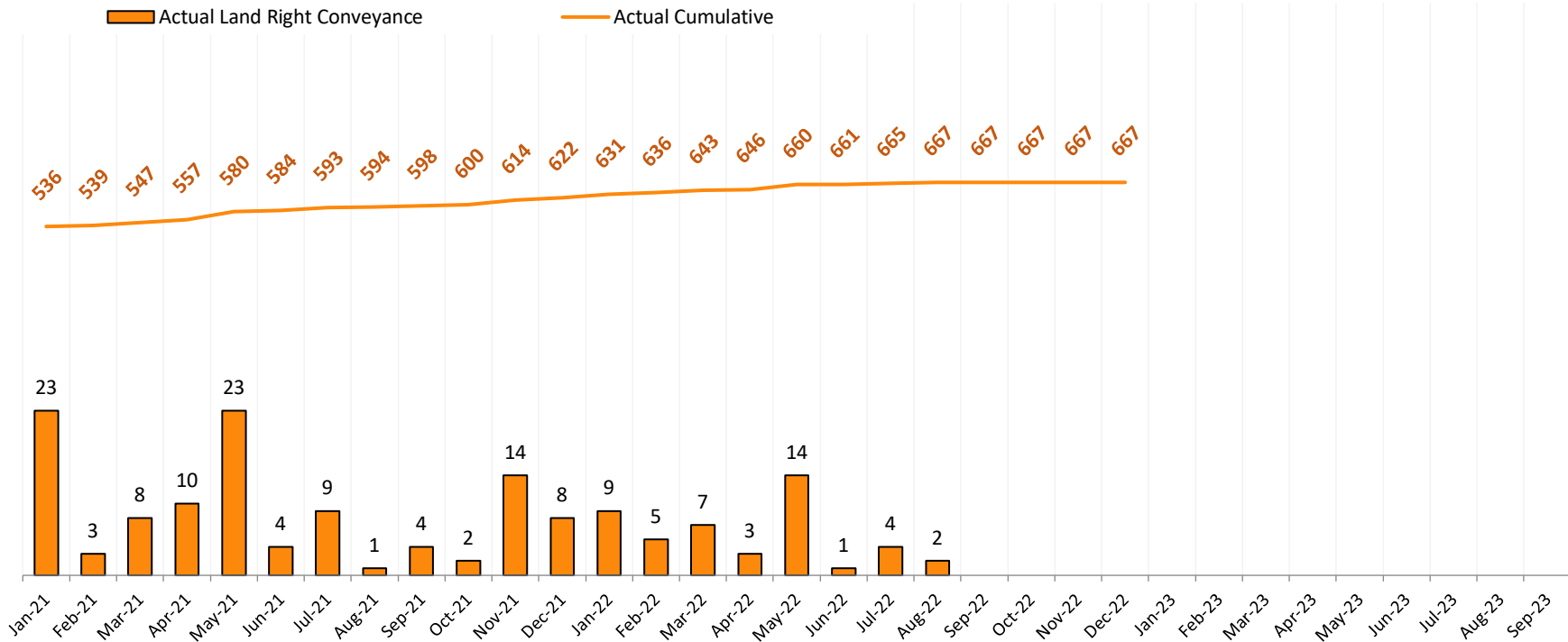
- Notes:**
1. The Planned Cumulative line for Railroad Parcel Delivery reflects provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.
 2. Two Railroad parcel delivery dates are being reforecast, not impacting the critical 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 December 31, 2022	Total Land Right Conveyances Approved ⁽²⁾ December 31, 2022	Remaining Land Right Conveyances to be Approved December 31, 2022
CP 1	393	344	49
CP 2-3	433	280	153
CP 4	68	43	25
Total	894	667	227

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⁾ :	03/05/2026 ⁽⁵⁾
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:	\$2,012,893,822.76
Current Contract Amount ⁽⁴⁾ :	\$3,035,881,822.76
Approved Invoices to Date:	\$1,912,000,016.81
Remaining Contract Balance:	\$1,123,881,805.95

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 12/31/2022):	3,364

Expended to Date

Description	Percentage
Time ⁽³⁾ :	75.4%
Dollars ⁽⁴⁾ :	63.0%

Growth Percentage

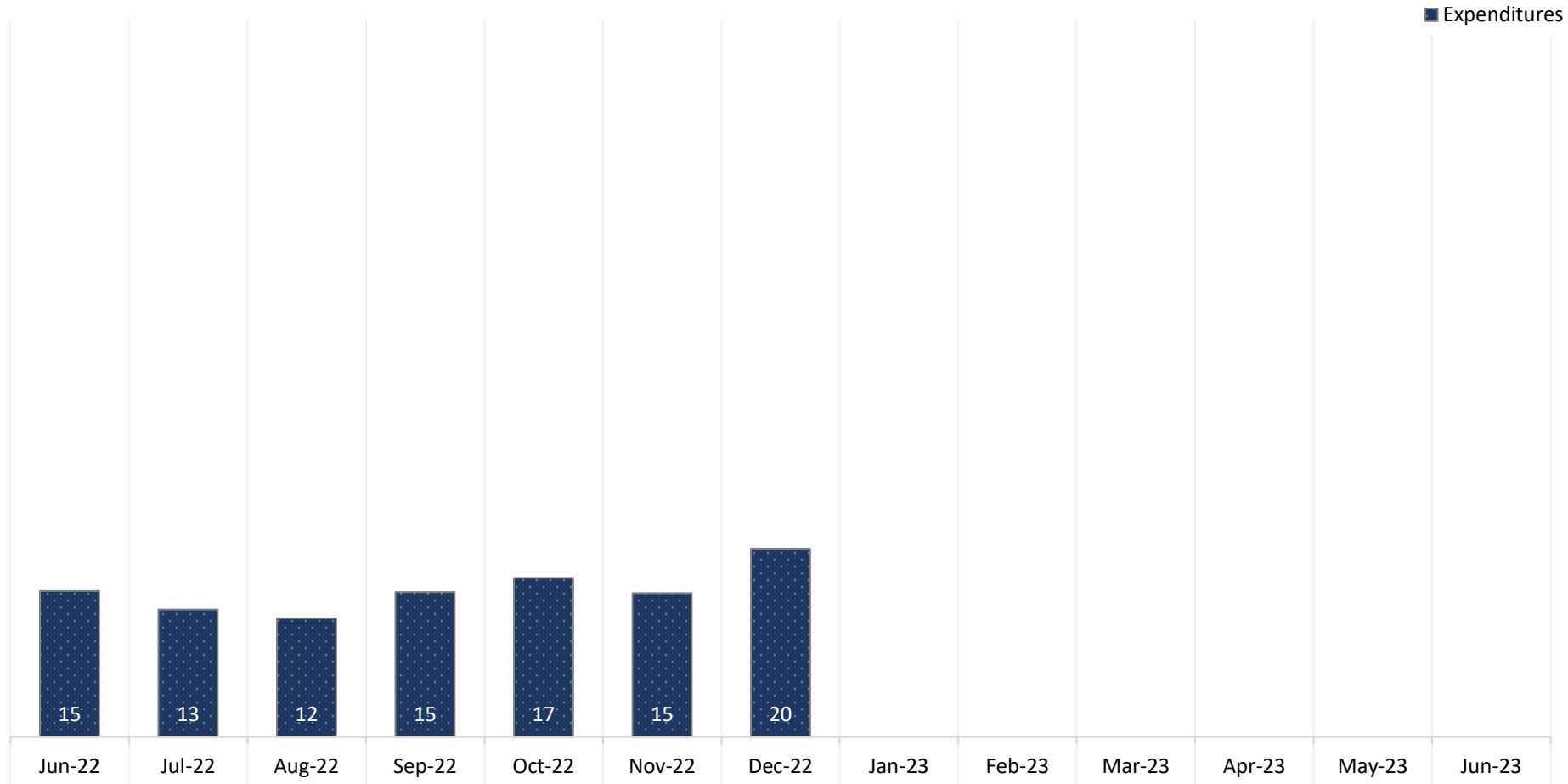
Description	Percentage
Time ⁽³⁾ :	174.0%
Dollars ⁽⁴⁾ :	196.8%

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.
- Date adjusted to account for Holidays.

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 \$19.7M.

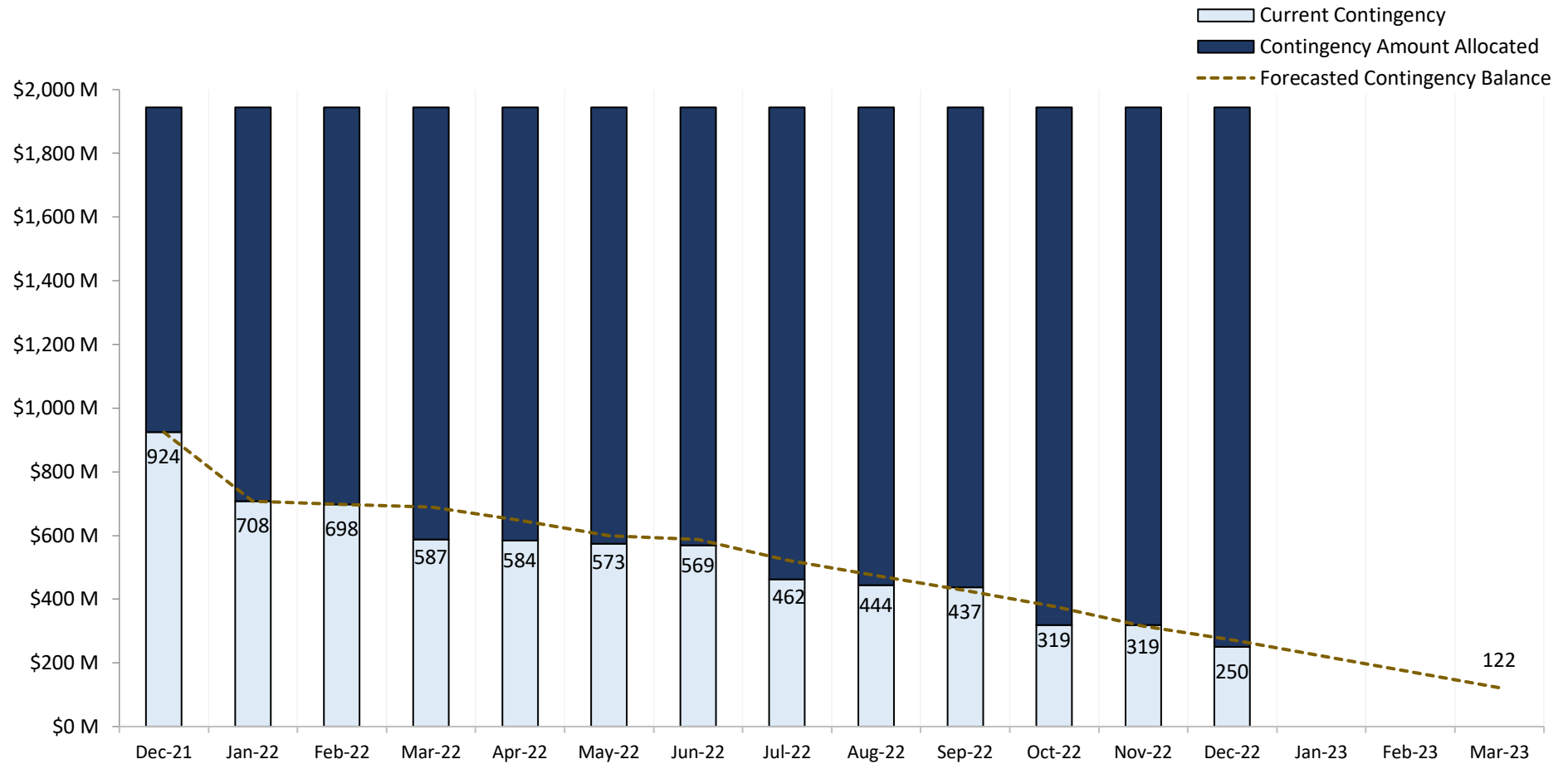
CP 1 – Change Orders (CO)

CP 1 – Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
00473	Access Roads to Additional System Sites - Design	Executed	\$179,212.00	12-07-22
00470	MVWC Task 3.1 Waterline on Road 27 - Design	Executed	\$34,116.00	12-07-22
00474	UPS Private Storm Drain Connection - Design	Executed	\$44,387.00	12-16-22
00477	Expiring PVC Pipe Material	Executed	\$2,585,314.00	12-18-22
00010.2	DL-00018 Weed Abatement Supplemental	Executed	\$300,000.00	12-19-22
00475	Private Drainage System Removal along Re-Aligned GSB North and Barstow Ave	Executed	\$30,237.00	12-20-22
TOTAL			\$3,173,266.00	

CP 1 – Risk Contingency

CP 1 – Risk Contingency Status (\$ Millions)

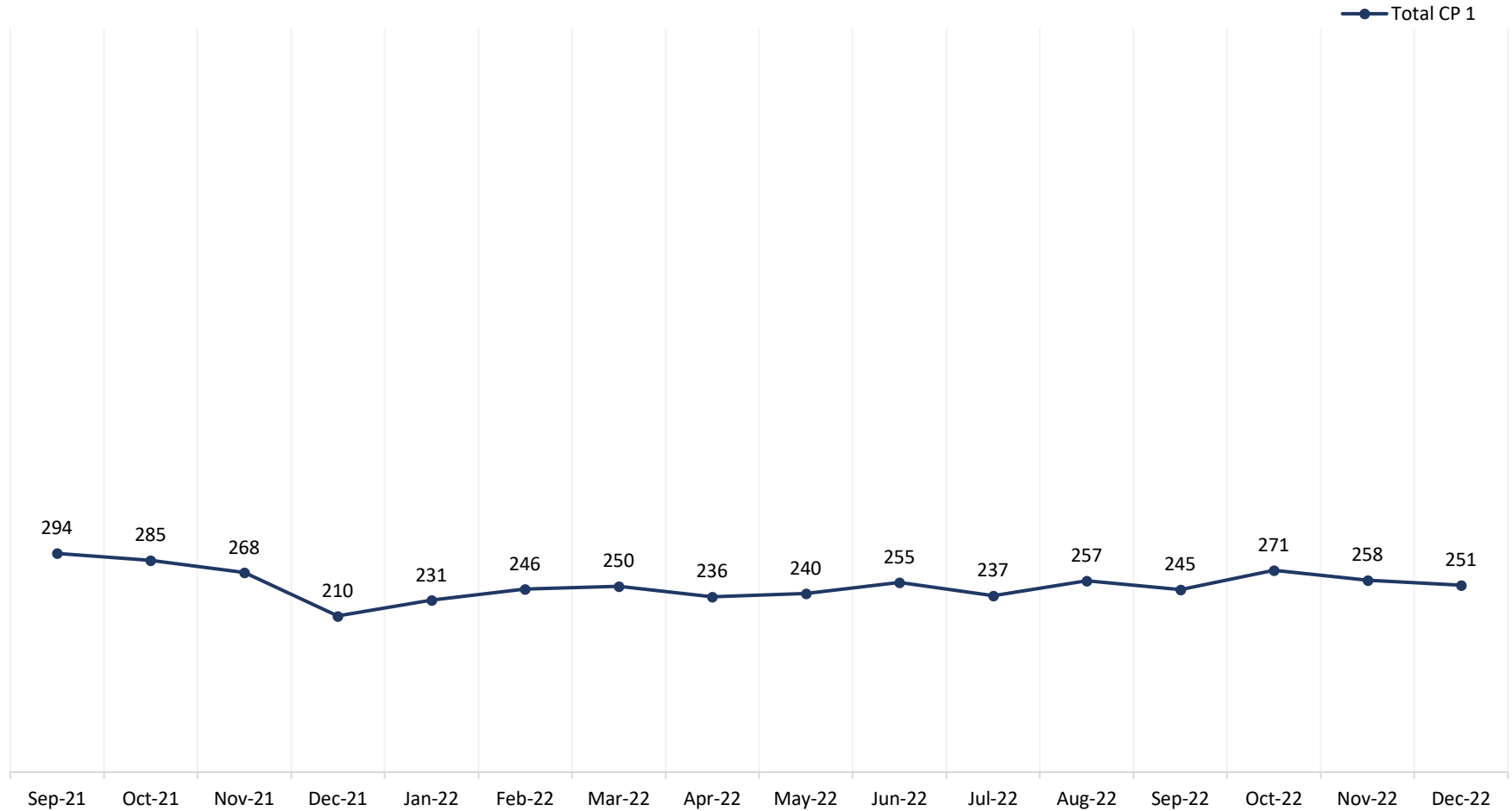


Notes:

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)

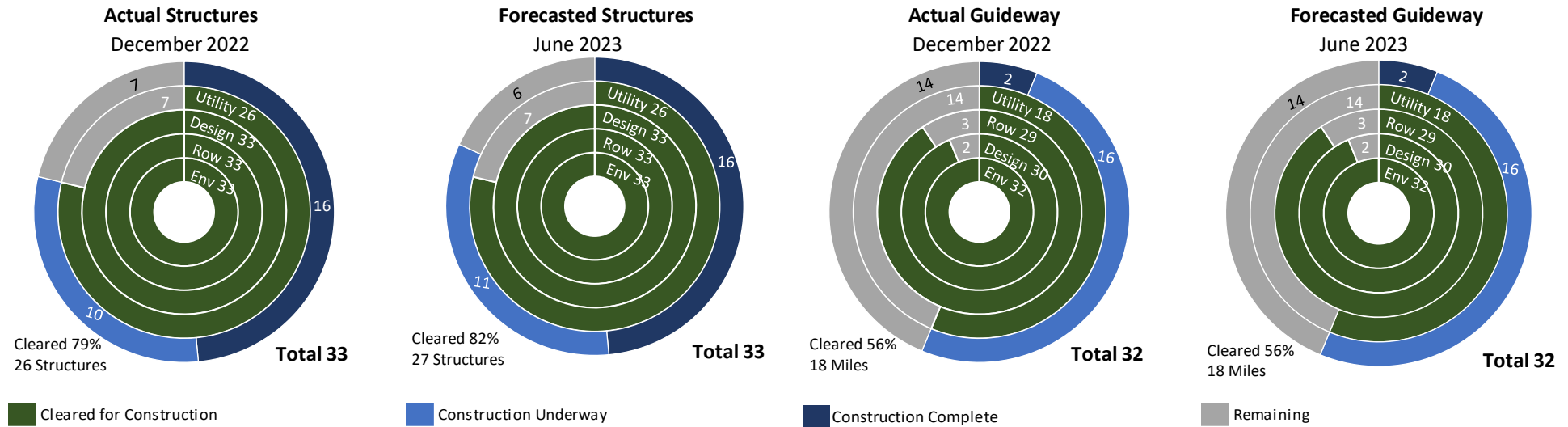


Notes:

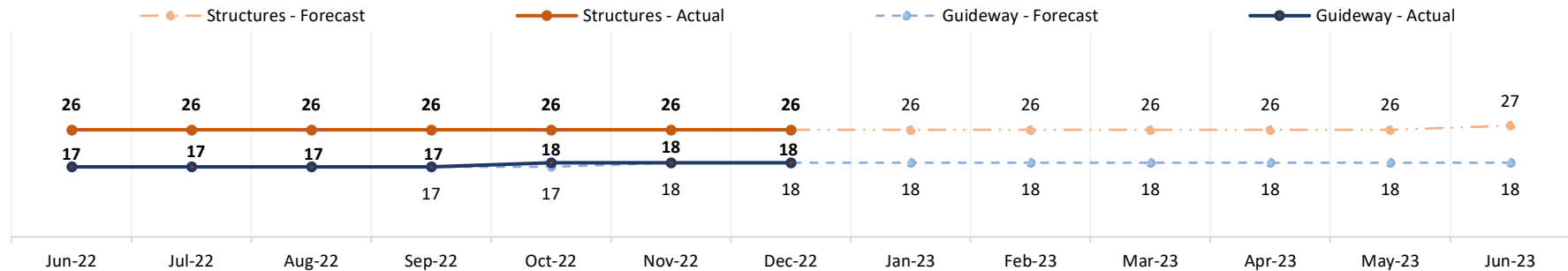
1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).
2. A decrease of 7 workers from the previous month (258).

CP 1 – Construction Progress

CP 1 – Construction Progress



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



Notes:

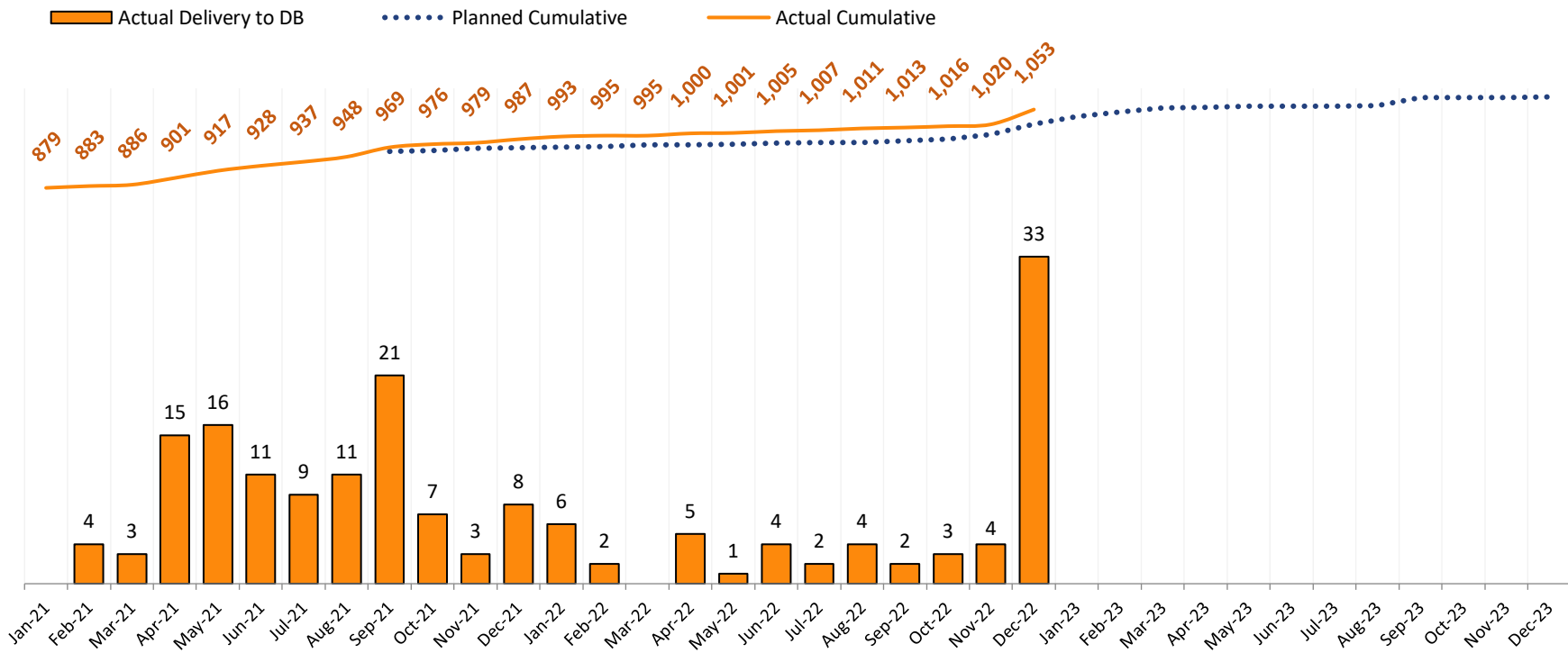
1. The circle charts above incorporate Revised Baseline Schedules (RBS) Revision 4 data as of September 2022, pending final approval.
2. The line chart above incorporates provisional forecast numbers as of September 2022, pending final approval of RBS Revision 4.
3. Construction Complete definition:
 - a. Structure Completion – all concrete work is complete.
 - b. Guideway Completion – earthworks complete with rough grading.
4. Total Structures: 33:
 - a. 26 structures underway/construction complete.
5. Total Guideway: 32 miles:
 - a. 18 miles underway/construction complete.
6. 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).
7. Late finish dates are being used to estimate forecast numbers.

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

CP 1 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels December 31, 2022	Total Parcels Delivered to Date December 31, 2022	Remaining Parcels to be Delivered December 31, 2022
CP 1	1,083	1,053	30

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



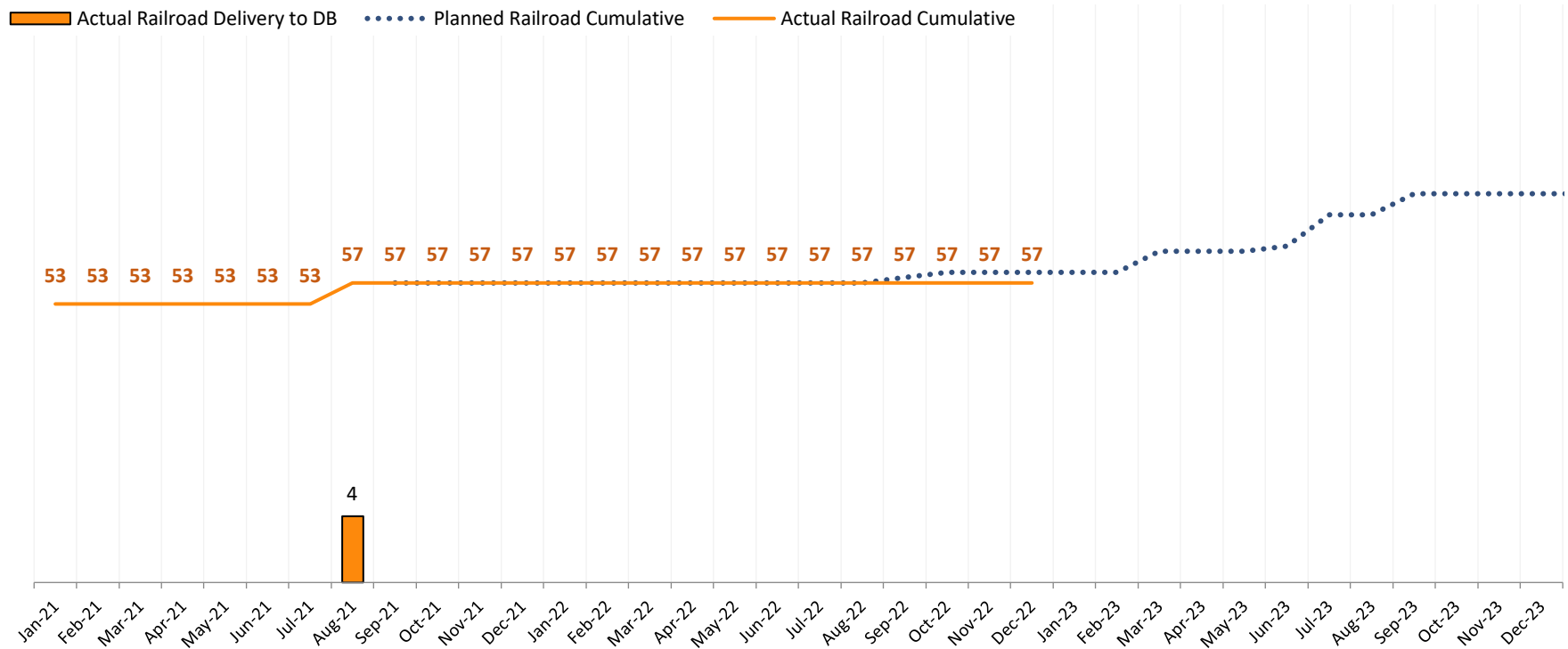
- Notes:**
- This reflects the actual parcels delivered to the Design-Builder by month and provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.

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

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

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

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



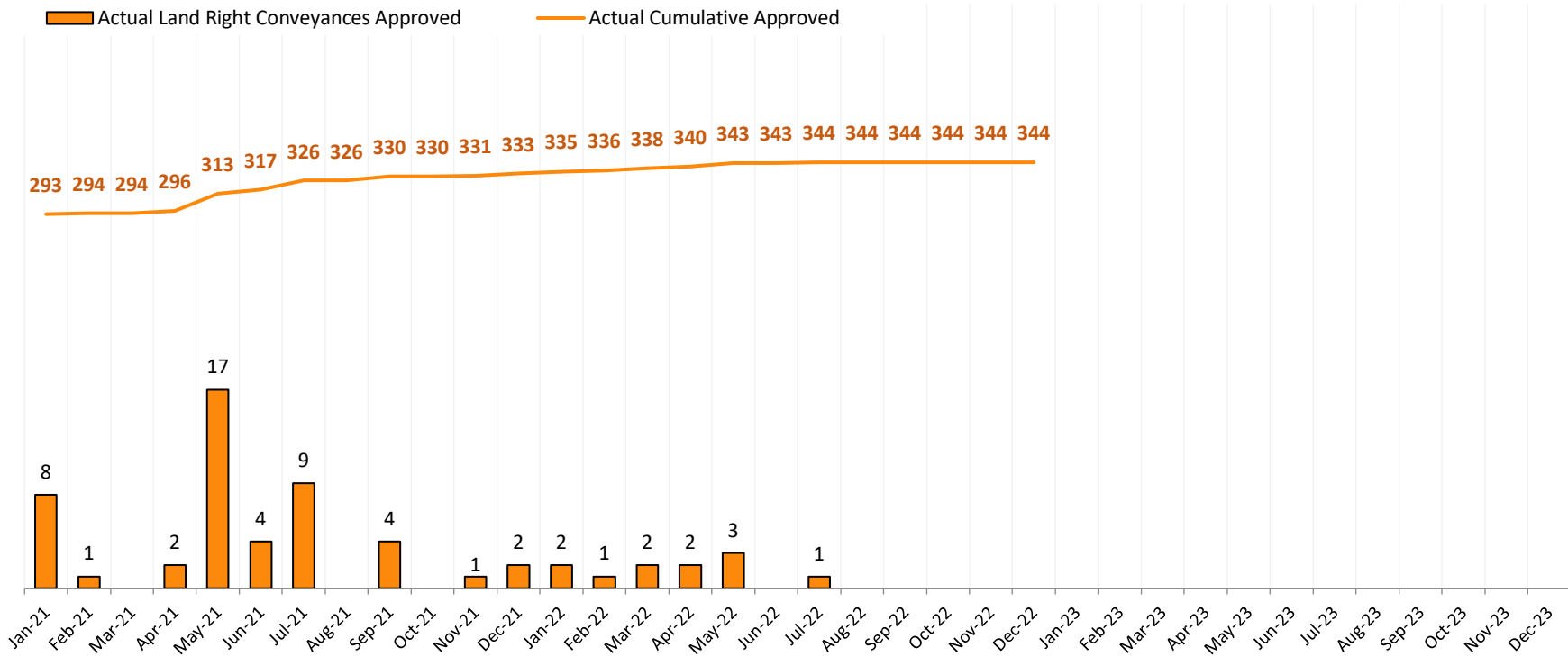
- Note:**
1. The Planned Cumulative line for Railroad Parcel Delivery reflects provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.
 2. Two Railroad parcel delivery dates are being reforecast, not impacting the critical 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 December 31, 2022	Total Land Right Conveyances Approved ⁽²⁾ to Date December 31, 2022	Remaining Land Right Conveyances to be Approved December 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:	\$1,504,727,493.59
Current Contract Amount ⁽⁴⁾ :	\$2,870,063,383.59
Approved Invoices to Date:	\$1,843,846,076.45
Remaining Contract Balance:	\$1,026,217,307.14

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 12/31/2022):	2,716

Expended to Date Percentage

Description	Percentage
Time ⁽³⁾ :	69.8%
Dollars ⁽⁴⁾ :	64.2%

Growth Percentage

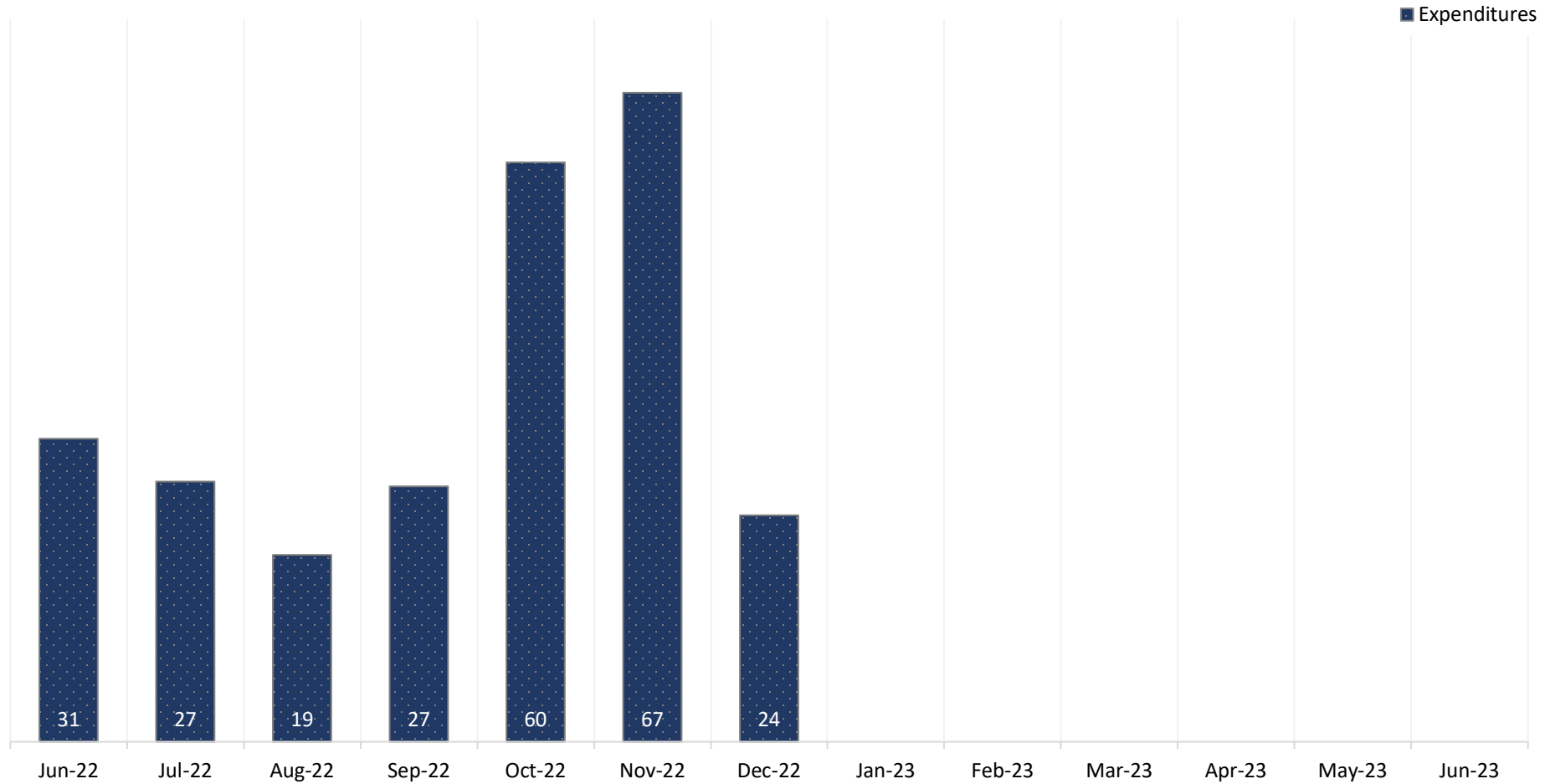
Description	Percentage
Time ⁽³⁾ :	161.9%
Dollars ⁽⁴⁾ :	110.2%

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 \$23.5M.

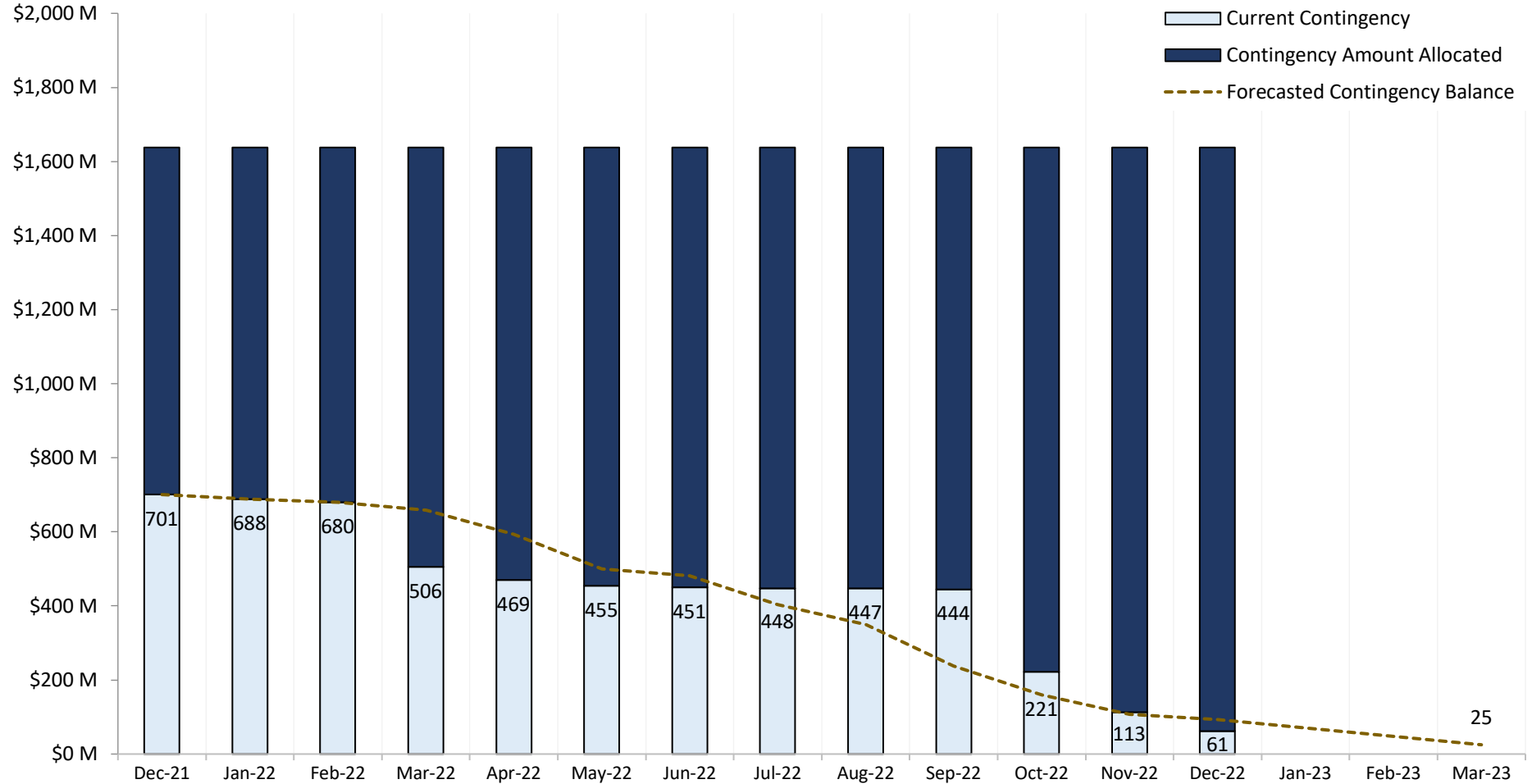
CP 2-3 – Change Orders (CO)

CP 2-3 – Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
00045.36	Escalation Costs - August 2022	Executed	\$898,994.00	12-22-22
00045.35	Escalation Costs - July 2022	Executed	\$999,898.00	12-22-22
00045.34	Escalation Costs - June 2022	Executed	\$696,131.00	12-22-22
00045.33	Escalation Costs - May 2022	Executed	\$973,957.00	12-15-22
00335	Additional SCE Costs at Fargo Avenue	Executed	\$390,550.00	12-15-22
00168.8	Dudek’s Prolonged Environmental Costs and Tribal Monitoring Costs	Executed	\$5,012,692.00	12-05-22
00334	FID Design Changes and Settlement of Dispute 80	Executed	\$34,240.00	12-05-22
00148.1	Hanford Viaduct Superstructure - Time and Materials Change Order	Executed	(\$50,000,000.00)	12-24-22
TOTAL			(\$40,993,538.00)	

CP 2-3 – Risk Contingency

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

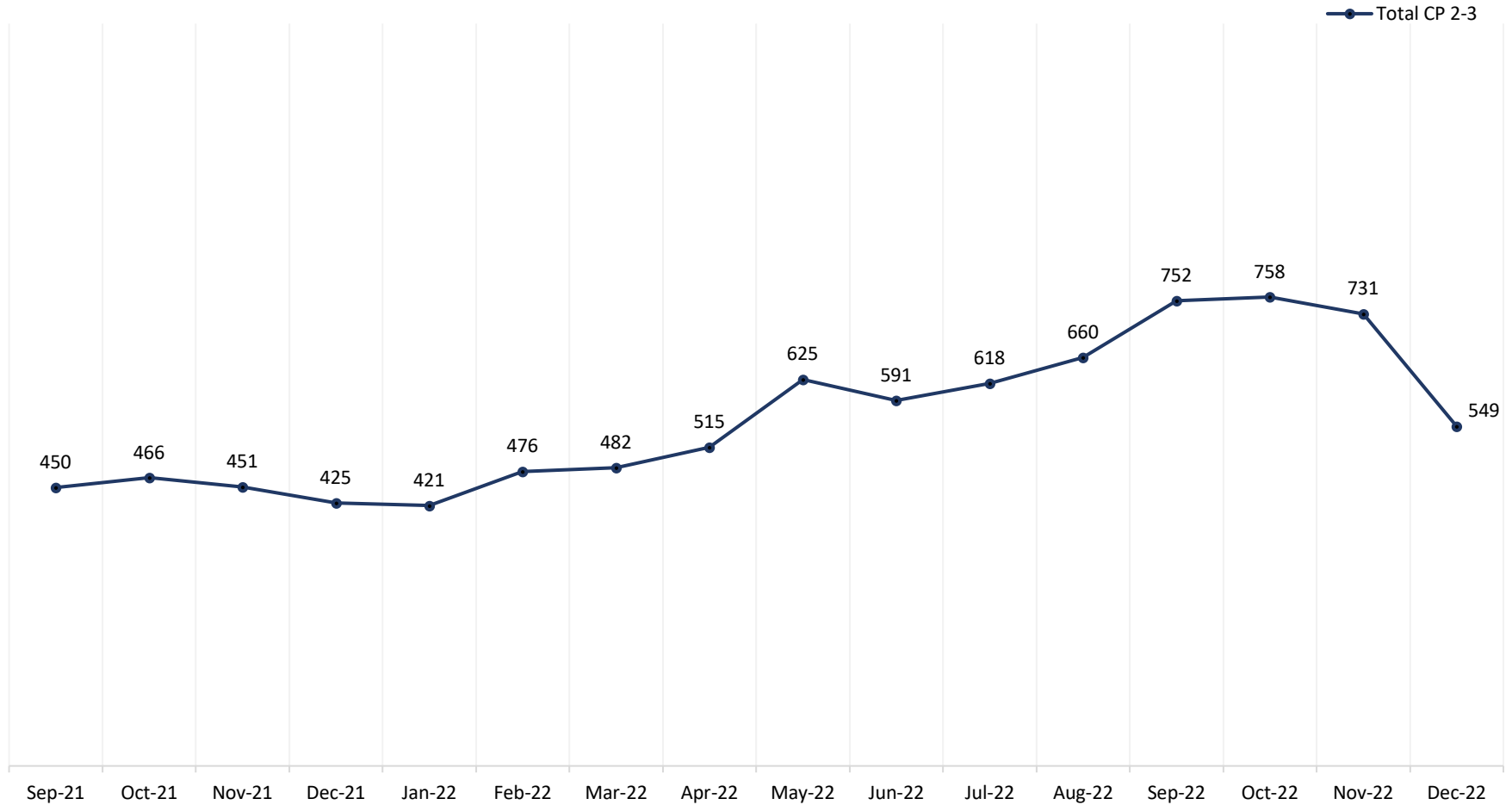


Notes:

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)

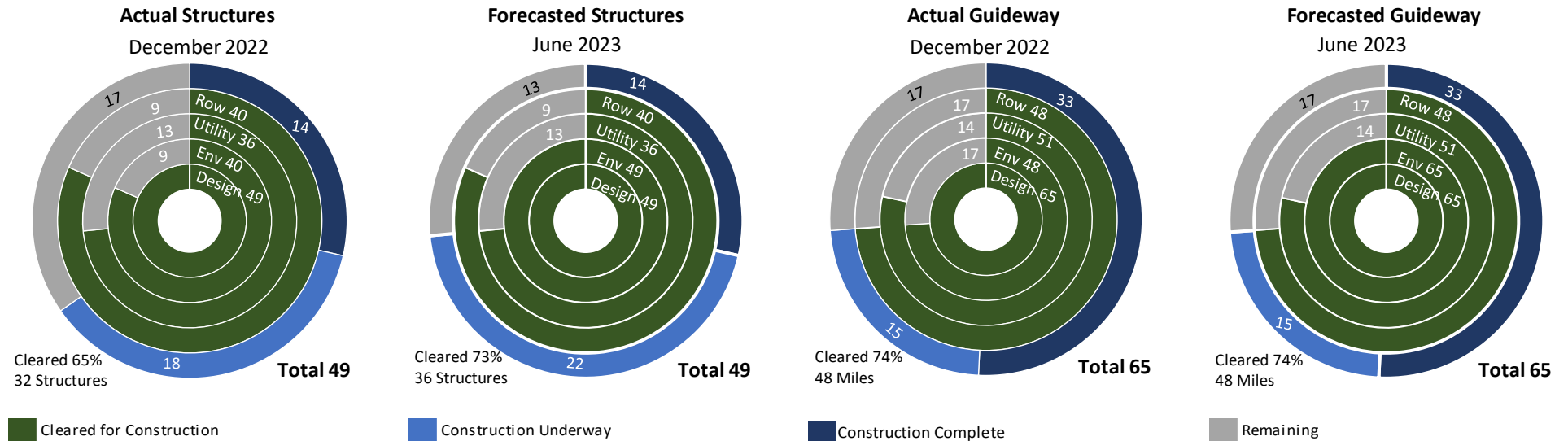


Notes:

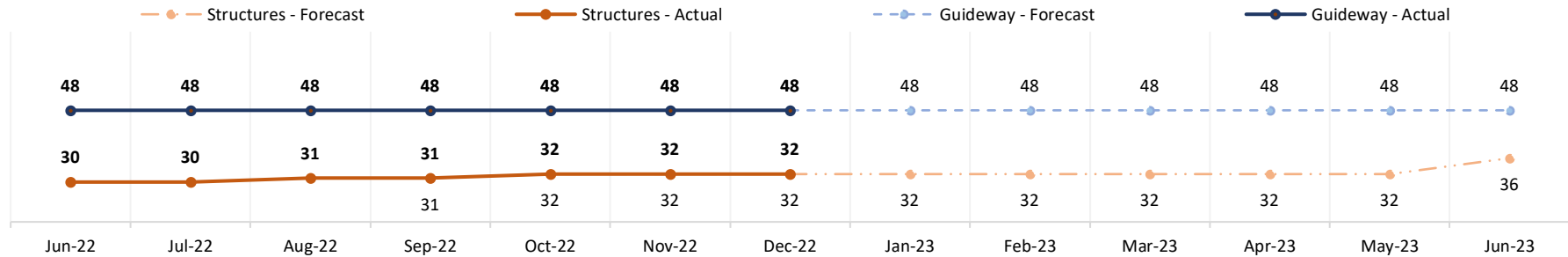
1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).
2. A decrease of 182 workers from the previous month (731).

CP 2-3 – Construction Progress

CP 2-3 – Construction Progress



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



Notes:

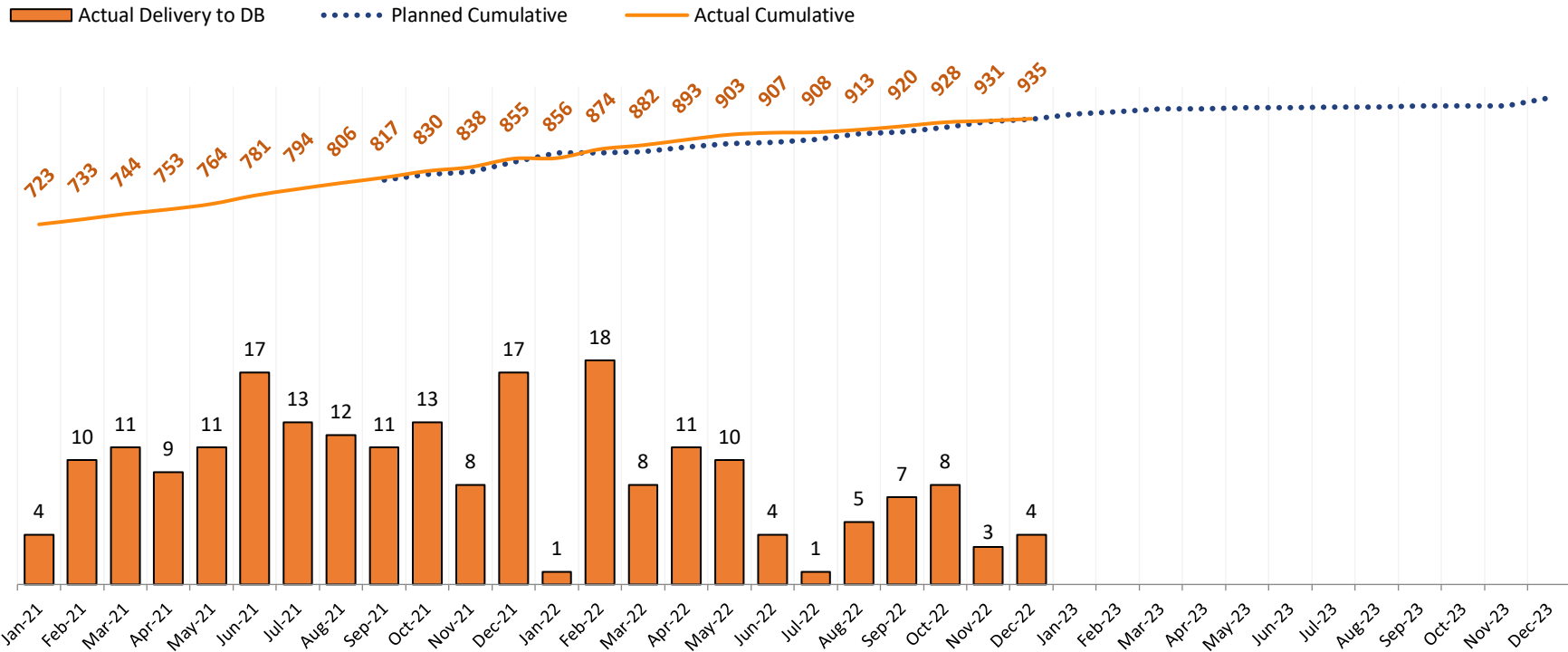
- The circle charts above incorporate Revised Baseline Schedules (RBS) Revision 4 data as of September 2022, pending final approval.
- The line chart above incorporates provisional forecast numbers as of September 2022, pending final approval of RBS Revision 4.
- Construction Complete definition:
 - Structure Completion – all concrete work is complete.
 - Guideway Completion – earthworks complete with rough grading.
- Total Structures: 49:
 - 32 structures underway/construction complete.
- Total Guideway: 65 miles:
 - 48 miles underway/construction complete.
- Late finish dates are being used to estimate forecast numbers.

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

CP 2-3 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels December 31, 2022	Total Parcels Delivered to Date December 31, 2022	Remaining Parcels to be Delivered December 31, 2022
CP 2-3	986	935	51

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



Notes:

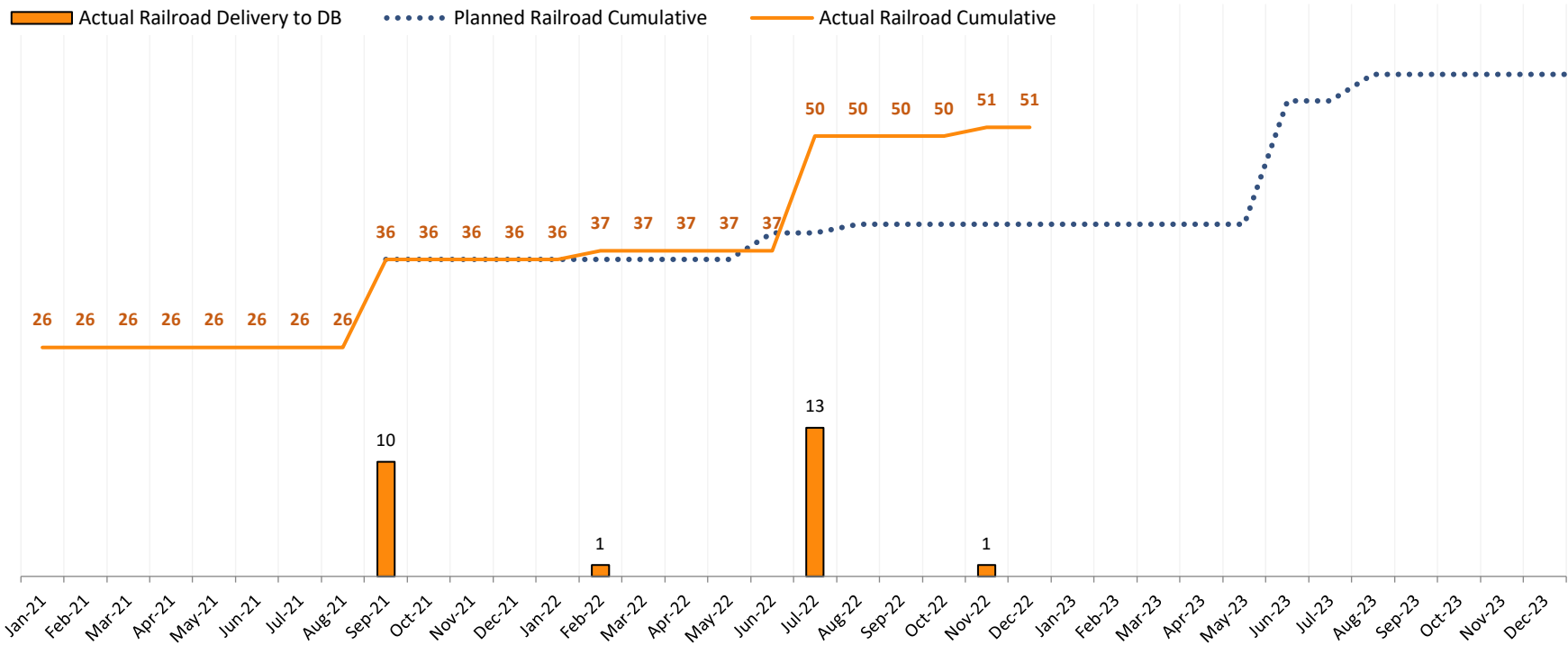
1. This reflects the actual parcels delivered to the Design-Builder by month and provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.
2. Total Parcels Needed was reduced by five parcels due to design refinement reducing impacts to real property.

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 December 31, 2022	Total Railroad Parcels Delivered to Date December 31, 2022	Remaining Railroad Parcels to be Delivered December 31, 2022
CP 2-3	58	51	7

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



Notes:

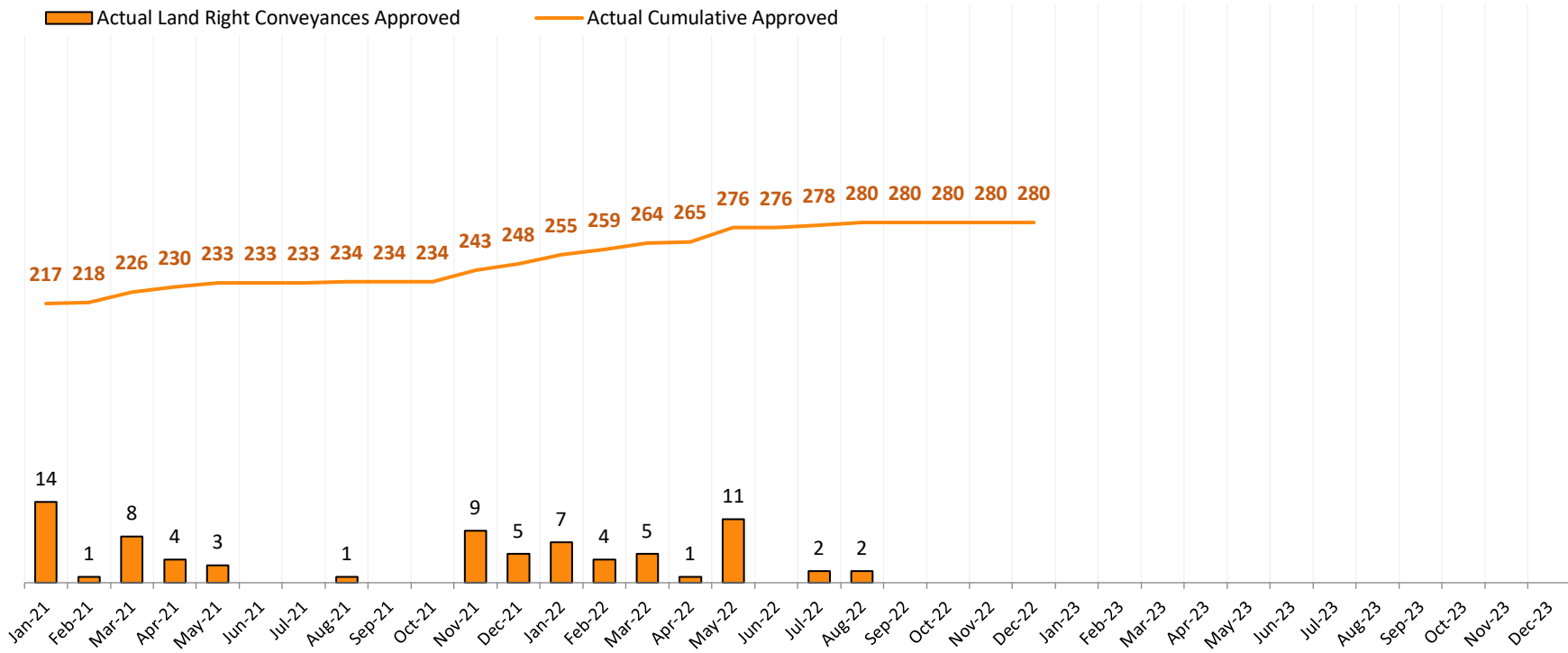
1. The Planned Cumulative line for Railroad Parcel Delivery reflects provisional forecasts as of September 2022 pending final approval of Revised Baseline Schedules (RBS) Revision 4 for CP 1 and CP 2-3.

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 December 31, 2022	Total Land Right Conveyances Approved ⁽²⁾ to Date December 31, 2022	Remaining Land Right Conveyances to be Approved December 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:	\$273,880,104.18
Current Contract Amount:	\$718,127,104.18
Approved Invoices to Date:	\$629,266,736.50
Remaining Contract Balance:	\$88,860,367.68

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 12/31/2022):	2,451

Expended to Date

Description	Percentage
Time:	97.6%
Dollars:	87.6%

Growth Percentage

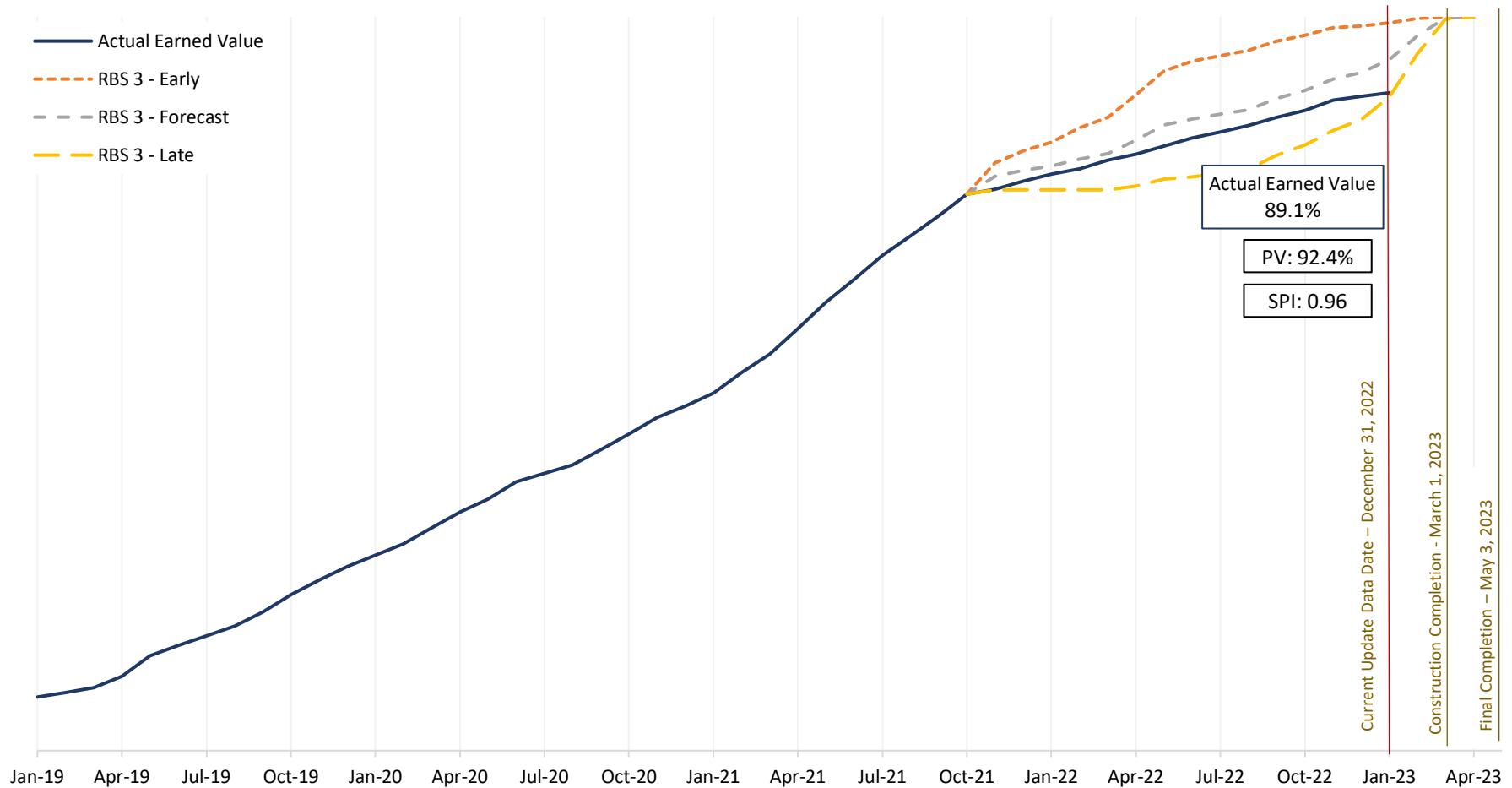
Description	Percentage
Time:	119.5%
Dollars:	61.7%

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 (%)

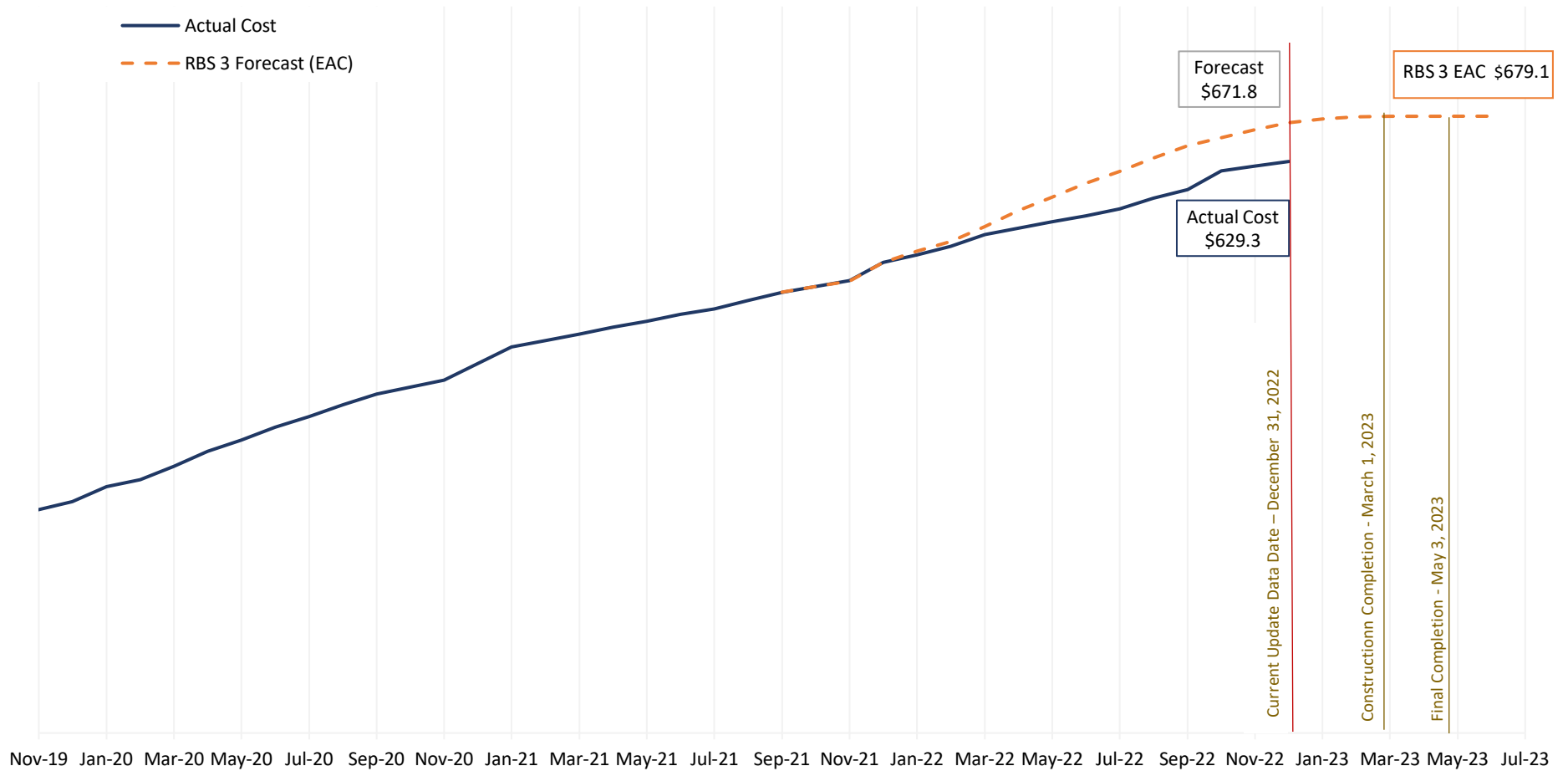


Notes:

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 December 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)

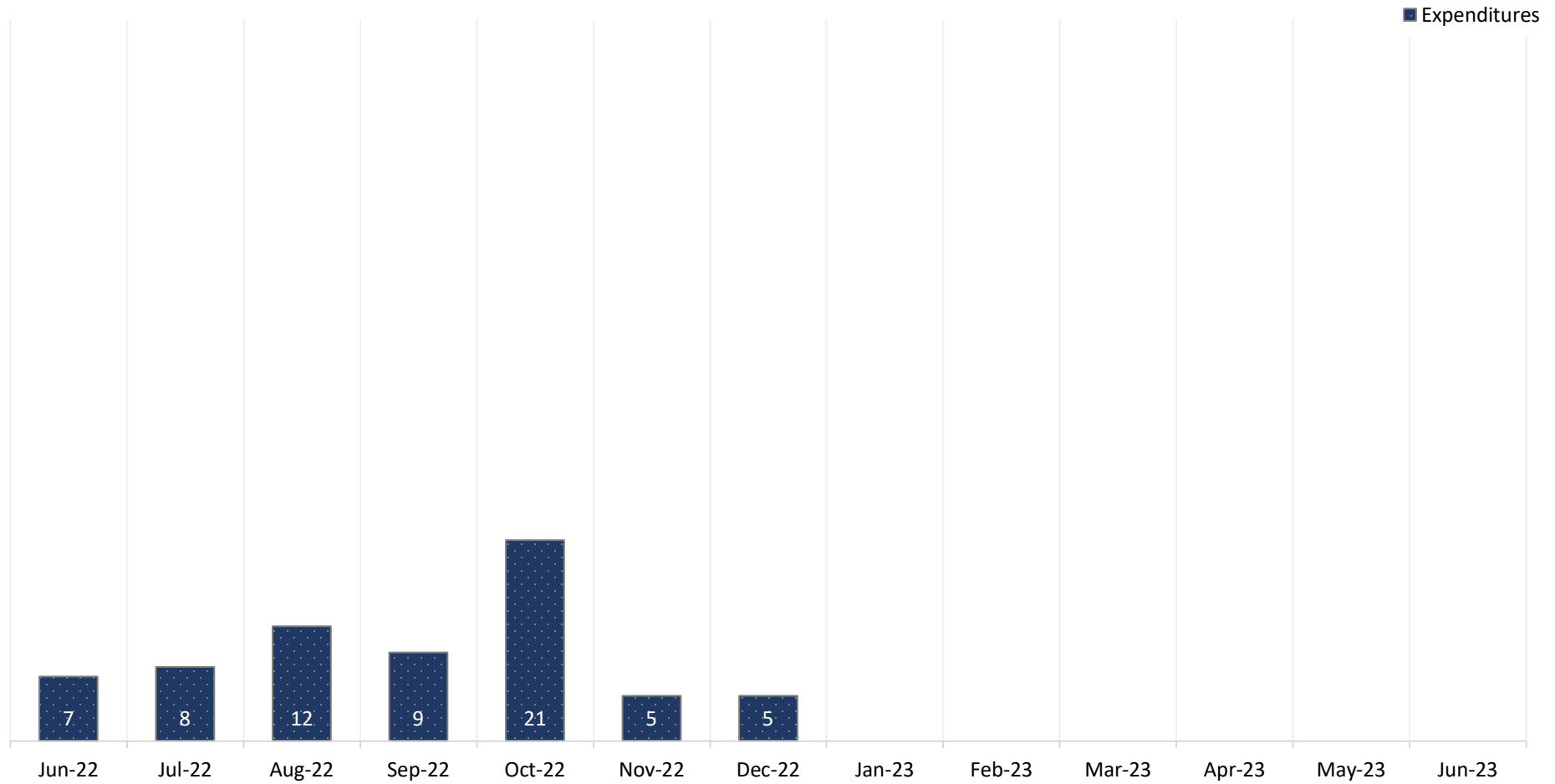


Notes:

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 \$5.3M.
3. California Rail Builders (CRB) is unable to proceed with embankment work currently held back by completion of necessary utility relocations.

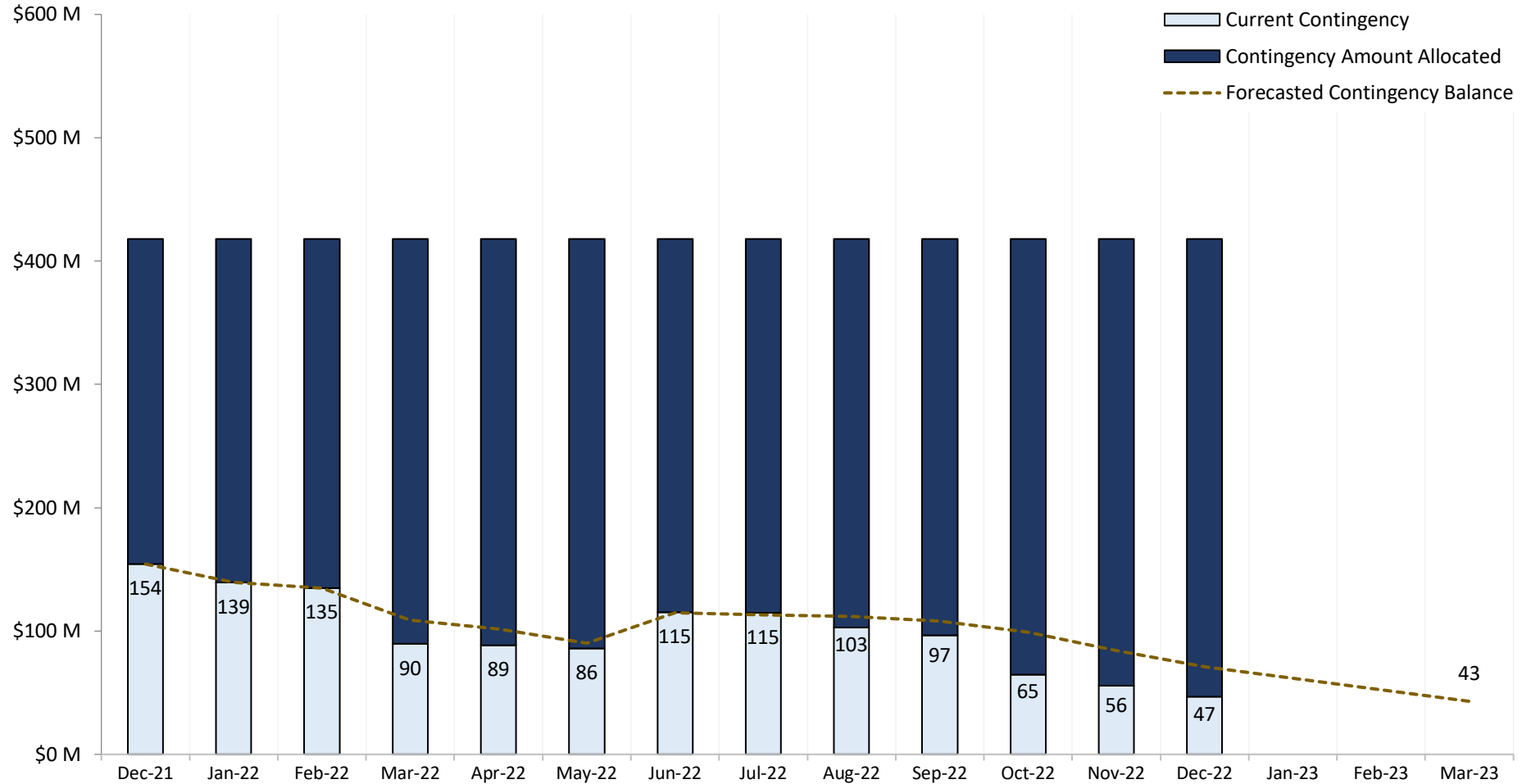
CP 4 – Change Orders (CO)

CP 4 – Change Order Status

CO Number	Title	Change Status	Amount	Executed Date
165	Semitropic Facilities - Construction Costs	Executed	\$7,500,000.00	12-22-22
166	Environmental Monitoring Additional Costs - June 2022-July 2022	Executed	\$410,730.21	12-13-22
18.6	Additional Environmental Survey & Investigations	Executed	\$1,000,000.00	12-12-22
118.1	Ceiling Increase for Continued Wasco Ave Detour	Executed	\$216,937.19	12-07-22
TOTAL			\$9,127,667.40	

CP 4 – Risk Contingency

CP 4 – Risk Contingency Status (\$ Millions)

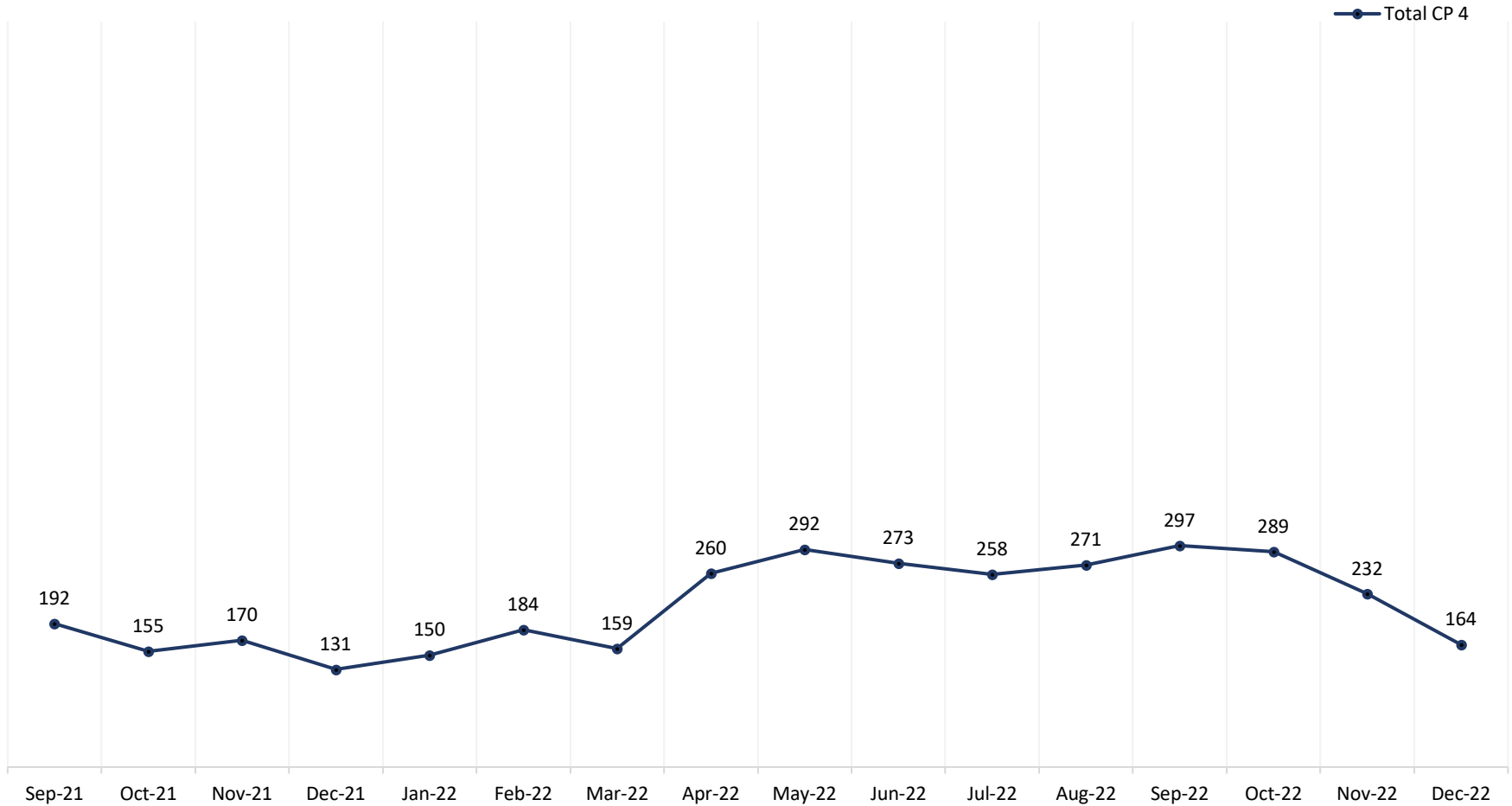


Notes:

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

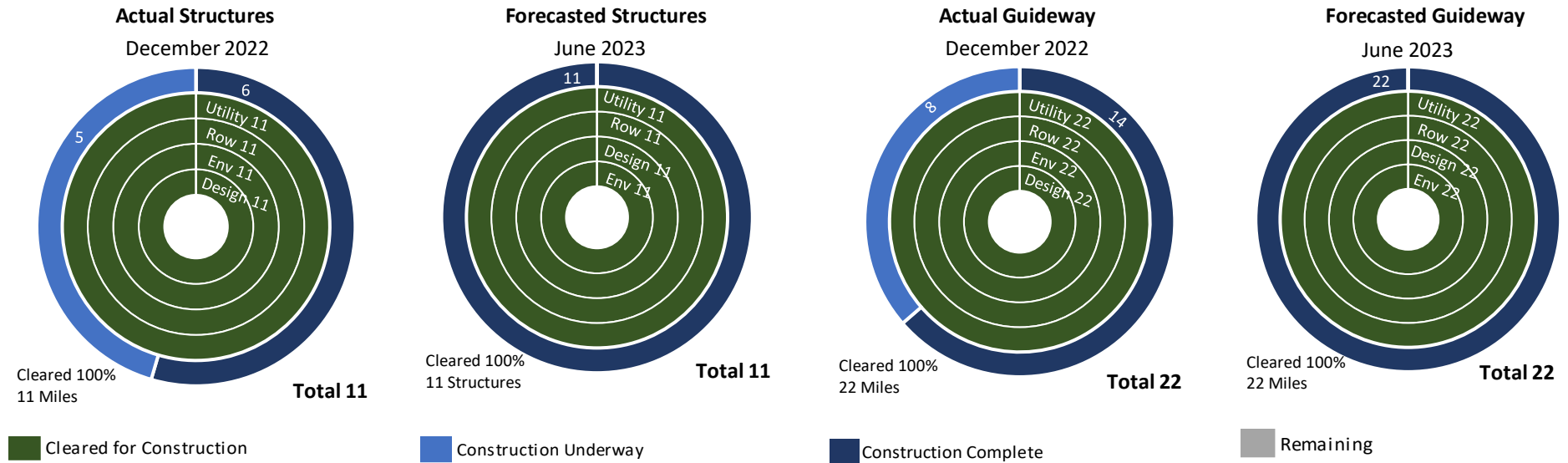
CP 4 – Monthly Construction Workforce Total – Actual (FTE)



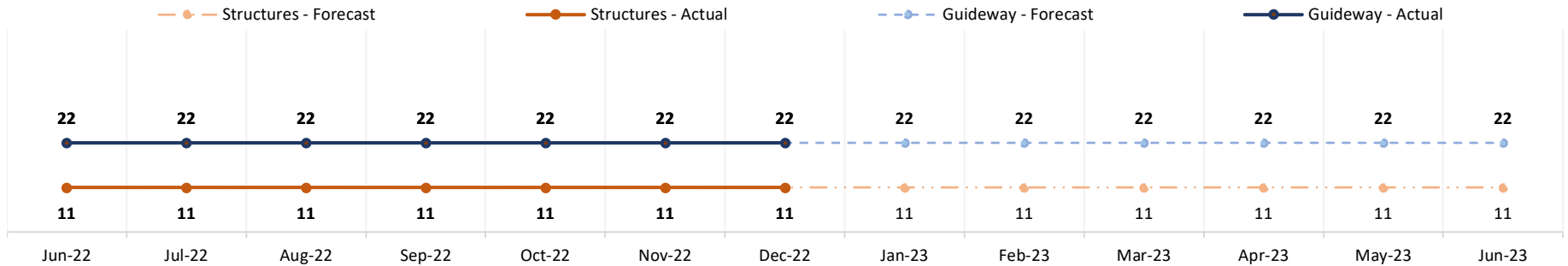
- Notes:**
1. The construction labor numbers (full-time employees) are based on the weekly totals divided by the number of weeks within the working calendar month and represents the Average Daily Site Workers (by week).
 2. A decrease of 68 workers from the previous month (232).

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.

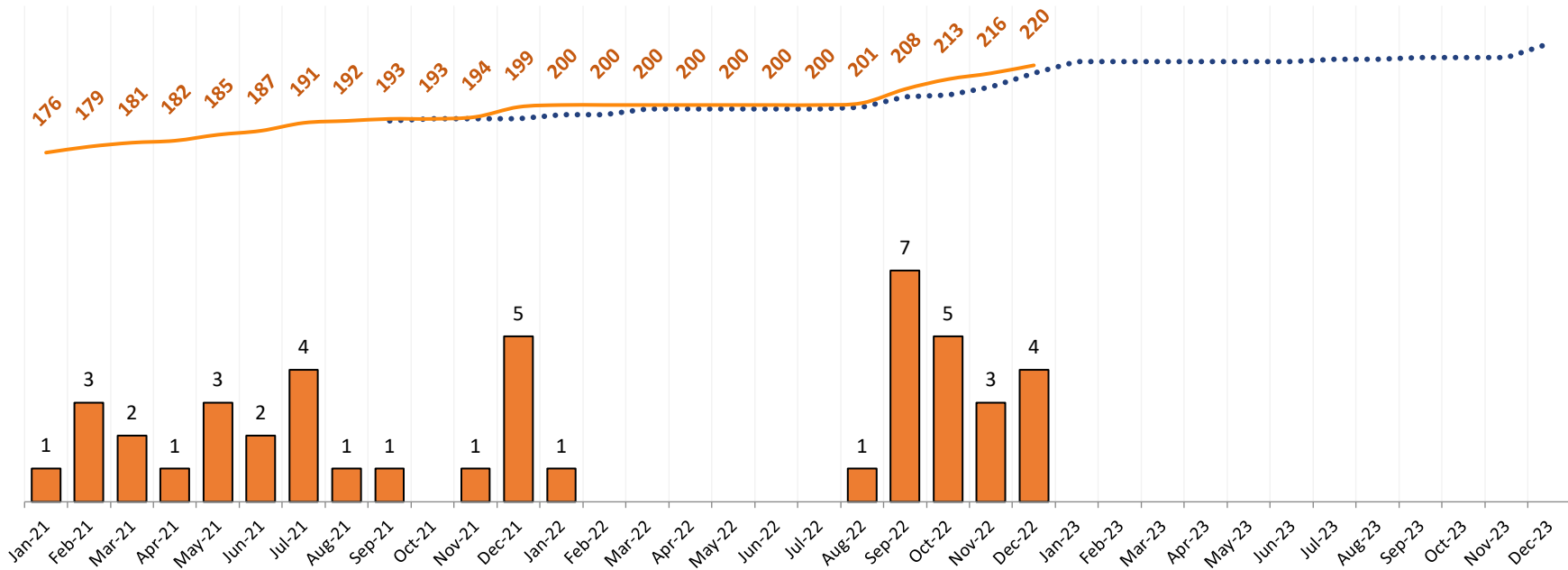
CP 4 – Real Property/Right-of-Way (ROW)

CP 4 – Right-of-Way (ROW) Summary

Construction Package	Total Needed Parcels December 31, 2022	Total Parcels Delivered to Date December 31, 2022	Remaining Parcels to be Delivered December 31, 2022
CP 4	231	220	11

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

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



Notes:

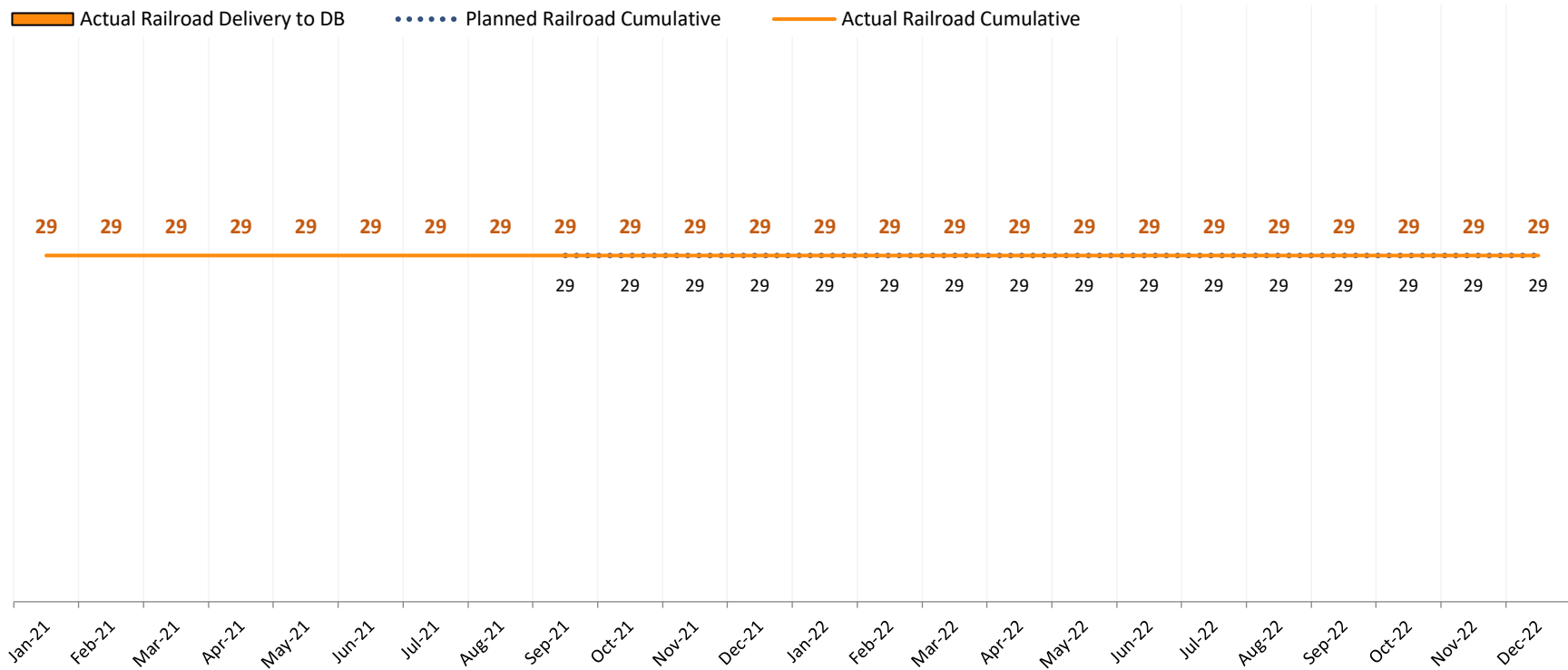
1. This reflects the actual parcels delivered to the Design-Builder by month compared to the Revised Baseline Schedule (RBS) Revision 3.

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

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

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

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

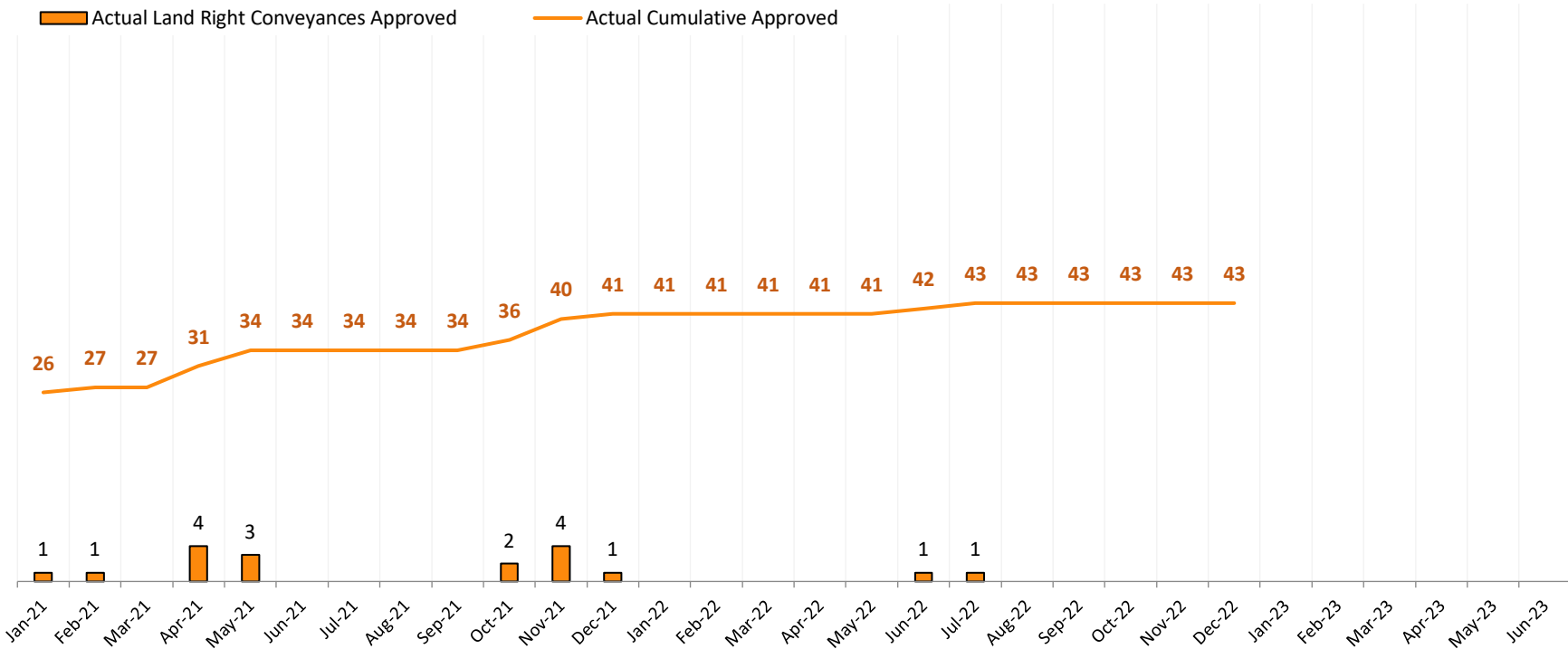


CP 4 – Tier 1 Land Right Conveyances Required Prior to Construction (PG&E, SCE, FID, FMFCD)

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

Construction Package	Total Needed Land Right Conveyances December 31, 2022	Total Land Right Conveyances Approved ⁽²⁾ to Date December 31, 2022	Remaining Land Right Conveyances to be Approved December 31, 2022
CP 4	68	43	25

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 Jul-23 89%	May-23 Aug-23 90%	Jun-24 Aug-24 0%	Jun-24 Sep-24 ¹ 0%	Aug-24	Sep-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 8%	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:

- 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 schedule change of 3 months has been incurred since that time due to delay in receipt of BNSF deliverables.
- 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. The public comment period closed on December 1, 2022.

Project Development – Key Actions

Project Development (Environmental Clearance) – Key Actions Summary

Project Section	Key Actions
San Francisco to San Jose	Environmental Clearance activities complete. The Rail Development Partners (RDP) is supporting the Authority litigation activities.
San Jose to Merced	Environmental Clearance activities complete. The RDP is participating in post-ROD coordination with external stakeholders such as the Transportation Authority of Monterey County, Grasslands Water District, City of San Jose, and others.
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 closed on December 1, 2022. Continued to coordinate with the Regional Consultants to prepare responses to comments received on the Draft EIR/EIS.
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)	Stantec Inc. under agreement HSR 22-02, continues to make progress on the early actions of this Project, including submittal of various Draft documents such as the Project Management Plan-Draft.
Fresno to Bakersfield Locally Generated Alternative (LGA)	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.