



Finance & Audit Committee Update

California High-Speed Rail Authority Board Meeting

August 9, 2016

Sacramento, CA

PRESENTERS

Financial Reporting

- Russell G. Fong, Chief Financial Officer

Audits

- Paula Rivera, Chief Auditor

Project Status

- Gary Griggs, Program Director
- Scott Jarvis, Chief Engineer

Risk Management

- Jon Tapping, Director of Risk Management and Project Controls

ACCOUNTS PAYABLE AGING REPORT

	Prior Year	Current Year	Current Year
	Aug-2015	July-2016	Aug-2016
Total Aged Invoices (\$ millions)	\$5.6	\$0	\$0
Forecast Balance Pending FRA Approval	\$0	\$0	\$0

- Overall expenditures have increased significantly from the previous year. Expenditures for FY 2014-15 (Aug-2015) were \$353M (\$25M for the Administrative Budget and \$328M for the Capital Outlay Budget). Expenditures for FY 2015-16 (Aug-2016) were \$968M (\$32M for the Administrative Budget and \$936M for the Capital Outlay Budget).
- Ten of the last twelve months have had \$0 in aging balance. May-16 had one invoice for \$1.7M, and June-16 had one invoice for \$5.7M.

CASH MANAGEMENT REPORT

(\$ millions)	Prior Year	Current Year	Current Year
	Aug-2015	July-2016	Aug-2016
Prop 1A Bond Fund Ending Cash Balance	\$46	\$33	\$16
Cap and Trade Ending Cash Balance	\$406	\$637	\$772

- The Cap and Trade ending cash balance includes \$400M that is available to the Authority and is currently on loan, but shall be repaid as necessary based on the financial needs of the of the high-speed rail project (Health and Safety Code 39719.1).
- Bond sales for Prop 1A occur in the Spring and the Fall. The Authority received \$56M from the April-2016 bond sale and \$45M from the April-2015 bond sale. The low burn rate for Prop 1A cash is due to a focus on spending Federal Funds first for Project Development. Uses of Prop 1A includes the Administrative Budget and Project Development costs not eligible for Federal Funds such as Phase II and Federal entities.
 - Prop 1A cash balance is \$16M for the Aug-2016 report, compared to \$33M for the July-2016 report. Commercial paper was issued on April 6, 2016 for \$10M. In the event of cash needs, Prop 1A cash needs can be met by commercial paper, which is issued by the State Treasurer's Office (STO) the last week of each month. The requesting agency must request commercial paper from STO at least one week before that last week.
 - The July-2016 Cap and Trade cash balance was \$637M. The Aug-2016 Cap and Trade cash balance of \$772M reflects \$52M in expenditures, \$185M in reimbursements from FRA, and \$3M from the May-2016 sale of credits. Cap and Trade proceeds from the last four auctions total \$457M (Aug-15: \$161M, Nov-15: \$164M, Feb-16: \$129M, May-16: \$3M).
 - Note: The Authority has received approval on an increase in the ARRA funding available for project development costs. As a result, it is anticipated that there will be fewer Prop 1A project development expenditures in the near term as the program focuses on ARRA expenditures. Furthermore, \$31M in Prop 1A project development expenditures are being reallocated to ARRA, which will increase Prop 1A funds by \$31M by Sept-2016.

BUDGET AND EXPENDITURES REPORT

Administrative Budget

	Prior Year	Current Year	Current Year
	Aug-2015	July-2016	Aug-2016
Monthly Expenditures (\$ thousands)	\$2,620	\$2,964	\$4,711
Percentage of Budget Expended Year to Date (YTD)	81%	66%	78%
Percentage of Personal Services Budget Expended YTD	92%	75%	82%
Total Positions Authorized	209	220	220
Vacancy Rate	22.7%	14.1%	13.2%

- For FY 2015-16 (Aug-2016), 78% of the Administrative Budget (Personal Services Budget plus Operating Expenses and Equipment Budget) has been expended with 100% of the Fiscal Year completed, compared to 66% the previous month. This is lower than FY 2014-15's 81% due to an overall lag in submitted invoices for interagency work and the timing of budget increases for new positions.
- The percentage of Personal Services Budget Expended was 82% for FY 2015-16 (Aug-2016), lower than the 92% for FY 2014-15 due to the timing of establishing the new positions.
 - » The Personal Services Budget for FY 2015-16 includes budget for 220 positions (174+35+10+1 positions full year). The Personal Services Budget for FY 2014-15 included 182.8 positions (174+8.8 equivalent positions due to mid-year implementation), although the Authority recognized the full, newly established 35 positions in the position count (174+35=209) in FY 2014-15.
- Vacancy rate history:
 - » Aug-2016 vacancy rate is 13.2% (29 vacant positions out of 220 total positions), which is lower than the statewide vacancy rate of 13.6%; all new positions have been filled.
 - » July-2016 vacancy rate is 14.1% (31 vacant positions out of 220 total positions); all new positions have been filled.
 - » Aug-2015 vacancy rate was 22.7% (47.5 vacant positions out of 209 total positions). The 22.7% vacancy rate was due to the mid-year implementation of the 35 new positions added in March-2015; prior to the new positions, Feb-2015 vacancy rate was 14.9%.
 - » The statewide vacancy rate is 13.6%.
- Note: The FY 2015-16 Administrative Budget closed at 78% of budget with 100% of the Fiscal Year completed due to an overall lag in submitted invoices for interagency work and the timing of budget increases for new positions.
 - » Month over month expenditures increased approximately \$1.7M, from \$3.0M in July-2016 to \$4.7M in Aug-2016, primarily due to a \$950K increase in interagency billing (from \$99K to \$1.05M) and a \$669k increase in expenditures (primarily rent, external contracts, consolidated data centers, and data processing) for fiscal year-end.

ADMINISTRATIVE BUDGET BY OFFICE (FY 2015-16 & FY 2016-17)

(\$ thousands)	FY 2015-16 Budget	FY 2016-17 Budget	FY 2016-17 increase / (decrease) over FY 2015-16	FY 2016-17 % increase / (decrease) over FY 2015-16
Executive Office	\$1,235	\$1,299	\$64	5%
Administration Office ¹	\$9,007	\$10,119	\$1,112	12%
Communications Office	\$1,717	\$1,922	\$205	12%
Financial Office ²	\$8,850	\$6,522	(\$2,328)	-26%
Legal Office	\$2,850	\$3,031	\$181	6%
Program Delivery Office	\$10,181	\$10,735	\$554	5%
Audit Office ³	\$856	\$1,598	\$742	87%
Regional Directors ⁴	\$2,925	\$2,886	(\$39)	-1%
Government Relations Office	\$524	\$539	\$15	3%
Strategic Initiatives Office ⁴	\$0	\$165	\$165	100%
Risk Management and Project Controls Office	\$803	\$873	\$70	9%
Rail Operations and Maintenance Office	\$2,443	\$2,503	\$60	2%
Total ⁵	\$41,391	\$42,190	\$799	2%

1. The Administration Office increase of \$1.1M is due mostly to Data Processing, General Office Expense, Data Centers, Printing, and Travel. Those increases were partially offset by reductions in Rent (Tenant Improvements), Interdepartmental Contracts, and External Contracts.
2. The Financial Office decrease of \$2.3M is due to a decrease in External Contracts (\$2.75M), which was partially offset by an increase in Personal Services (\$398K).
3. The Audit Office increase of \$742k is due to six new positions plus related expenses.
4. The Regional Directors Budget for FY 2016-17 is \$39K lower than FY 2015-16 due to the redirection of resources to establish the Strategic Initiatives Office.
5. Other increases are due to position reclassifications, merit salary increases for eligible employees, and other increases to general office, training, and travel. Total budget for FY 2016-17 does not include \$103K in Cap and Trade.

ADMINISTRATIVE BUDGET BY LINE ITEM (FY 2015-16 & FY 2016-17)

	FY 2015-16 Budget	FY 2016-17 Budget	FY 2016-17 increase / (decrease) over FY 2015-16	FY 2016-17 % increase / (decrease) over FY 2015-16
Salaries and Wages	\$20,134,477	\$21,706,600	\$1,572,123	8%
Benefits	\$9,191,962	\$9,599,900	\$407,938	4%
TOTAL PERSONAL SVCS ¹	\$29,326,439	\$31,306,500	\$1,980,061	7%
GENERAL OFFICE EXPENSE	\$278,660	\$494,200	\$215,540	77%
BOARD COSTS ²	\$109,000	\$175,600	\$66,600	61%
PRINTING ³	\$16,000	\$113,000	\$97,000	606%
COMMUNICATIONS	\$185,980	\$204,000	\$18,020	10%
POSTAGE	\$15,000	\$20,000	\$5,000	33%
TRAVEL, IN-STATE ⁴	\$245,000	\$722,800	\$477,800	195%
TRAVEL, OUT-OF-STATE ⁵	\$76,600	\$74,800	(\$1,800)	-2%
TRAINING	\$100,000	\$221,200	\$121,200	121%
RENT - BUILDING AND GROUNDS ⁶	\$2,086,455	\$1,759,900	(\$326,555)	-16%
INTERDEPARTMENTAL CONTRACTS	\$3,519,140	\$3,568,400	\$49,260	1%
EXTERNAL CONTRACTS ¹	\$4,535,536	\$1,696,500	(\$2,839,036)	-63%
CONSOLIDATED DATA CENTERS	\$224,800	\$356,300	\$131,500	58%
DATA PROCESSING ⁷	\$672,390	\$1,476,800	\$804,410	120%
TOTAL OP EXP & EQUIP	\$12,064,561	\$10,883,500	(\$1,181,061)	-10%
TOTALS	\$41,391,000	\$42,190,000	\$799,000	2%

1. Personal Services increased \$1.98M year over year due to six new Audit positions, reclassification of positions, and a merit salary increase for eligible employees. External Contracts budget was redirected to partially fund the increase to Personal Services.
2. Board costs increased due to additional services to meet Authority needs (video streaming, CHP contract).
3. Printing has increased 606%, from \$16k to \$113k, to reflect increased outreach efforts and printing costs.
4. Travel, In-State has been increased 195%, from \$245k to \$723k to reflect increased construction activity levels.
5. In FY 2015-16, the Authority spent \$35k on Travel, Out-of-State. The FY 2016-17 Travel, Out-of-State budget is \$2k less than the FY 2015-16 budget of \$77k due to fewer approved trips.
6. Rent decreased due to fewer planned tenant improvements in FY 2016-17.
7. Data Processing budget increased 120% (from \$672k to \$1.5M) to meet Authority IT infrastructure needs.

AUTHORIZED POSITIONS BY OFFICE (FY 2015-16 & FY 2016-17)

	FY 2015-16 Budget	FY 2016-17 Budget	FY 2016-17 increase / (decrease) over FY 2015-16	FY 2016-17 % increase / (decrease) over FY 2015-16
Executive Office	5	5	0	0%
Administration Office	31	31	0	0%
Communications Office	11	11	0	0%
Financial Office	49	49	0	0%
Legal Office	9	10	1	11%
Program Delivery Office	65	65	0	0%
Audits Office 1	7	13	6	86%
Regional Directors	21	20	(1)	-5%
Government Relations Office	4	4	0	0%
Strategic Initiatives Office 2	0	1	1	100%
Risk Management and Project Controls Office	4	4	0	0%
Rail Operations and Maintenance Office	14	13	(1)	-7%
Total	220	226	6	3%

1. The six new positions for Audits reflect the approved positions: four Associate Management Auditors, one Staff Services Management Auditor, and one Staff Management Auditor.
2. The Strategic Initiatives Office position was newly established in FY 2015-16 and was resourced with one position beginning FY 2016-17.

CAPITAL OUTLAY AND EXPENDITURES REPORTS

	Prior Year Aug-2015	Current Year July-2016	Current Year Aug-2016
Budget (Fiscal Year) (\$ millions)	\$479	\$1,875	\$1,875
Monthly Expenditures (\$ millions)	\$55	\$151	\$175
Percentage of Budget Expended Year to Date	68%	41%	50%

- Capital Outlay expenditures are \$175M for August-2016 which includes Project Development (\$20M), Right of Way (\$33M), Design Build Contract Work (\$110M), Third Party Contract Work (\$2M), and other expenses (\$10M).
- The Capital Outlay Budget for FY 2015-16 is \$1.875B (Aug-2016), compared to the \$479M budget for FY 2014-15 (Aug-2015).
- Note: At 100% of the Fiscal Year complete, the Authority expended 50% of the Capital Outlay Budget due to delays in Right of Way acquisition which impacted construction schedules. Mitigation measures are in place to prioritize critical parcels required for major construction work. As a result, spending is accelerating due to the ongoing acquisition of Right of Way and as construction continues to increase.

CAP OUTLAY: FY 2015-16 & FY 2016-17

	FY 2015-16 Budget	FY 2016-17 Budget	FY 2016-17 \$ increase / (decrease) over FY 2015-16	FY 2016-17 % increase / (decrease) over FY 2015-16
Bond Fund (Prop 1A) - Phase I 1	\$63,973,800	\$178,814,464	\$114,840,664	180%
Bond Fund (Prop 1A) - Phase II 1	\$16,100,000	\$12,643,527	(\$3,456,473)	-21%
Federal Trust Fund (ARRA) 1	\$39,962,107	\$81,000,688	\$41,038,581	103%
PROJECT DEVELOPMENT SUBTOTAL 1	\$120,035,907	\$272,458,678	\$152,422,771	127%
Bond Fund (Prop 1A) 2	\$0	\$0	\$0	0%
Federal Trust Fund (ARRA/FY10) 3	\$1,755,090,298	\$820,985,310	(\$934,104,988)	-53%
CONSTRUCTION SUBTOTAL	\$1,755,090,298	\$820,985,310	(\$934,104,988)	-53%
Cap and Trade 4	\$0	\$614,289,214	\$614,289,214	100%
TOTAL	\$1,875,126,205	\$1,707,733,202	(\$167,393,003)	-9%

1. Project Development Budget has increased 127% for the FY 2016-17 budget as the Authority focuses on achievement of planned Record of Decision (ROD). This includes planned expenditure of all ARRA funding and an increase in Prop 1A project development expenditures.
2. Construction Budget from Prop 1A has not been allocated. This funding source is subject to a funding plan per Streets & Highways Code Section 2704.08 (d).
3. With the expiration of the ARRA grant in Sept-2017, the balance of the grant is budgeted to be fully expended.
4. Cap and trade funding will be used to complete planned construction activities in the event access to Prop 1A construction funds is not available (subject to the funding plan approval as noted).

Note: The \$1.7B FY 2016-17 budget is based on the priorities, including: existing Authority commitments for Phase I, planned construction and project development activities between Madera to Poplar, planned Phase I Project Development activities pre-ROD, and existing Authority commitments for Phase II. During FY 2015-16, the Authority spent \$936M, representing 50% of the budgeted \$1.875B. This included \$87M of Project Development expenditures (representing 72% of the budgeted \$120M for those activities) and \$849M of Construction expenditures (representing 48% of the budgeted \$1.755B for those activities).

CAP OUTLAY: TOTAL PROGRAM FY 2015-16 & FY 2016-17

	Total Program Budget as of FY 2015-16	Total Program Budget as of FY 2016-17	FY 2016-17 \$ increase / (decrease) over FY 2015-16	FY 2016-17 % increase / (decrease) over FY 2015-16
Bond Fund (Prop 1A) - Phase I	\$430,424,476	\$524,667,793	\$94,243,317	22%
Bond Fund (Prop 1A) - Phase II	\$127,298,500	\$50,136,433	(\$77,162,067)	-61%
Federal Trust Fund (ARRA)	\$438,661,000	\$438,661,000	\$0	0%
PROJECT DEVELOPMENT SUBTOTAL	\$996,383,976	\$1,013,465,226	\$17,081,250	2%
Bond Fund (Prop 1A)	\$2,579,130,472	\$2,609,076,000	\$29,945,528	1%
Federal Trust Fund (ARRA/FY10)	\$3,037,561,834	\$3,041,385,000	\$3,823,166	0%
CONSTRUCTION SUBTOTAL	\$5,616,692,306	\$5,650,461,000	\$33,768,694	1%
Cap & Trade	\$750,000,000	\$1,185,443,989	\$435,443,989	58%
Local Assistance (Bookends)	\$0	\$1,100,000,000	\$1,100,000,000	100%
TOTAL	\$7,363,076,282	\$8,949,370,215	\$1,586,293,933	22%

Total Program Budget for FY 2016-17 has increased by \$1.586BN mainly due to the inclusion of Local Assistance (Bookends) funding of \$1.1BN (subject to a (d) plan Streets & Highways Code Section 2704.08). In addition the FY 2016-17 Total Program Budget has been updated to align with the 2016 Business Plan.

Note: The Total Program Budget is aligned with the 2016 Business Plan and as a result only Phase II activities that the Authority is currently committed to have been included in the budget. Remaining planned Phase II activities have not been included at this time. In addition, the Construction Subtotal includes scope as defined in the ARRA grant including Madera to Poplar, and does not include systems, communications, and stations.

TOTAL PROJECT EXPENDITURES WITH FORECAST

Program Total by Fund Type	2006-2016
State Funds ¹	\$705
Federal Funds ²	\$1,342
TOTAL	\$2,047

(\$ millions)

State Match to ARRA (Federal Funds)	
FY2010 - FY2013 ³	\$102
FY2014 - FY2015 ⁵	\$171
FY2015-FY2016	\$6
TOTAL (to date) ⁴	\$280

(\$ millions)

State Match Liability	
Federal Funds	\$1,342
State Match to ARRA	\$280
Tapered Federal Funds ⁶	\$1,062

(\$ millions)

- The Federal Funds total for Aug-2016 is \$1.342B, an increase of \$70M from the \$1.272B for July-2016. As a result, Tapered Federal Funds increased from \$992M in July-2016 to \$1.062B in Aug-2016.

Note: The ARRA Grant expires 9/30/2017. 53% of the ARRA grant (\$1.34B of \$2.55B total) has been approved and paid by FRA.

- An additional 12% (\$309M of \$2.55B total) is pending FRA approval, accruals, and Work In Progress. A total of 65%(\$1.651B of \$2.55B) of the ARRA grant has been paid, pending, accruals, or Work in Progress.

¹ Prop 1A, Public Transportation Account (PTA), and State Highway funds 1996-2009

² Federal funds since FY 2010-11

³ The State Match to ARRA total for FY 2010-13 is \$102M

⁴ State-match to ARRA funds

⁵ The State Match to ARRA total for FY2014-FY2015 is \$171M

⁶ Tapered Federal Funds is the amount that the state will expend to meet the ARRA grant match requirement. This will be satisfied with Proposition 1A and Cap and Trade expenditures.

CONTRACTS & EXPENDITURES REPORT

	Prior Year Aug-2015	Current Year July-2016	Current Year Aug-2016
Number of Contracts	211	278	279
Total Value of Contracts (\$ millions)	\$4,573	\$4,611	\$4,633
Small Business Utilization Rate	20.6%	19.0%	15.7%

- The Authority has a small business utilization goal of 30% per the Small and Disadvantaged Business Enterprise Policy from August-2012. Since then, all eligible contracts and amendments include the 30% small business goal. Non eligible contracts such as third party utilities, interagency agreements, governmental entities and leveraged procurements are excluded.
- The Small Business Utilization Rate percentage represents the total dollar amount that has been paid to small businesses divided by the total dollar value of the invoices. Small business utilization percentages reflect invoices received to date.
- The Small Business Utilization Rate was 16.19% in Feb-2015, which was the start of Small Business Utilization Rate reporting.
- The Small Business Utilization Rate decreased from 19.0% from the July-2016 report to 15.7% for the Aug-2016 report due to the expiration of several contracts (i.e. Financial Advisor and expert witness). Over time, the small business utilization rate is expected to increase as construction activity progresses.

PROJECTS AND INITIATIVES REPORT

	Prior Year Aug-2015	Current Year July-2016	Current Year Aug-2016
■ Satisfactory	5	13	14
◆ Caution	1	18	17
● Escalate	0	0	0
★ On hold	1	1	1
Total	7	32	32

- The Projects and Initiatives Report previously focused on Finance, HR, and IT projects. In July, the number of Projects and Initiatives increased from 13 to 32 to include additional Divisions' projects.
- The Asset Management System – Maximo Project timeline has been upgraded from Caution to Satisfactory as it is now achieving interim schedule milestones.
- The Hiring and Staffing Project has been updated to reflect six new Audit positions and the hiring schedule for FY 16-17.
- The Enterprise Document Management System Project go-live date has been updated from 7/1/16 to 10/3/16.

FINANCE & AUDIT COMMITTEE

Audits

REPORTS ISSUED

Design-Build Stipend and Alternative Technical Concepts

- Determine if the Authority paid Design-Build Stipends in accordance with the RFP and review the process used to accept, deny, and value Alternative Technical Concepts.
 - Invoices submitted for payment of three of four stipends for Construction Package 1 did not fully document costs as required.
 - Authority does not currently have an internal process to value net cost savings of accepted Alternative Technical Concepts.

Preaward Reviews

- Are contractor proposed costs reasonable and in accordance with federal regulations?
 - Findings included misstated labor, overhead, and other direct cost rates.
 - Environmental Services for Merced to Fresno Project Section, issued June 3, 2016 and Environmental Services for Fresno to Bakersfield Project Section, issued June 6, 2016.

REPORTS ISSUED

Contract Management Follow-Up

- Is the Authority managing contracts effectively and in accordance with the State Contract Manual and the Authority's Contract Manager Handbook?
 - Findings included:
 - » Lack of a consistently applied structured management process in the oversight of contract managers.
 - » Responsibility for contract management not always well coordinated.
 - » Lack of procedures to ensure complete contract files are transferred.
 - » Contract managers have not consistently considered what constitutes rework.
 - » Not all contract managers are managing contract insurance provisions.

AUDITS IN PROGRESS

Design-Build Oversight

- Review processes and practices in place to assure risk model of design-build is maintained with Authority's role of design acceptance and oversight.

Right of Way

- Continuous auditing of the right-of-way acquisition reporting process.
 - Review sub-sets of the acquisition process to determine if data accumulation and reporting is accurate and supported.

Incurred Cost Contract Audit

- Were costs billed and reimbursed reasonable, allowable, and in compliance with federal regulations and contract terms?

AUDITS IN PROGRESS

Small Business Follow Up Review

- Were prior findings addressed and corrective actions implemented?
 - Have corrective actions implemented allowed evaluation of utilization data to assess consistency and accuracy in reporting?

Year-End Close Process

- Is the year-end close process adequate to ensure there are no material misstatements in the financial statements?

Oversight of Construction Materials

- Are processes and procedures adequate to assure construction materials meet standards and specifications?

AUDITS IN PROGRESS

Valley Fever Mitigation and Oversight

- Review processes in place to determine if the Valley Fever Mitigation and Oversight processes are functioning as intended.

Preaward Review

- Are contractor proposed costs reasonable and in accordance with federal regulations?
 - » Right of Way Engineering and Surveying, HSR 15-129

Procurement Follow-Up

- Were prior findings addressed and corrective actions implemented?

AUDIT PLAN – FISCAL YEAR 2016/17

- Design Refinement Process
- Third Party Estimating
- Right of Way Critical Parcel Acquisition
- Project Controls
- Records Management
- Human Resources
- Incurred Cost Contract Audits
- Preaward Reviews
- Contract Management Follow-Up
- Board of Directors Travel Expense Review
- IT General Controls

Program Delivery Status

PROGRAM DELIVERY AREAS

Work is progressing with heavy construction in the Central Valley and advancement of environmental work for the entire Phase I program. This report is focused on:

- » Right-of-Way
- » Environmental Clearances
- » Third Party Agreements
- » Construction

RIGHT-OF-WAY (ROW)

- **Construction Package 1**

- » 496 parcels (65%) have been delivered allowing additional construction to start at multiple locations.
- » Ten construction locations have been prioritized with the DB for ROW acquisition and construction.

- **Construction Package 2-3**

- » Significant ROW acquisition progress continues, 223 parcels (40%) being delivered.
- » A proposed rebaselined ROW Acquisition Plan has been submitted to the DB that will allow early construction activity.

- **Construction Package 4**

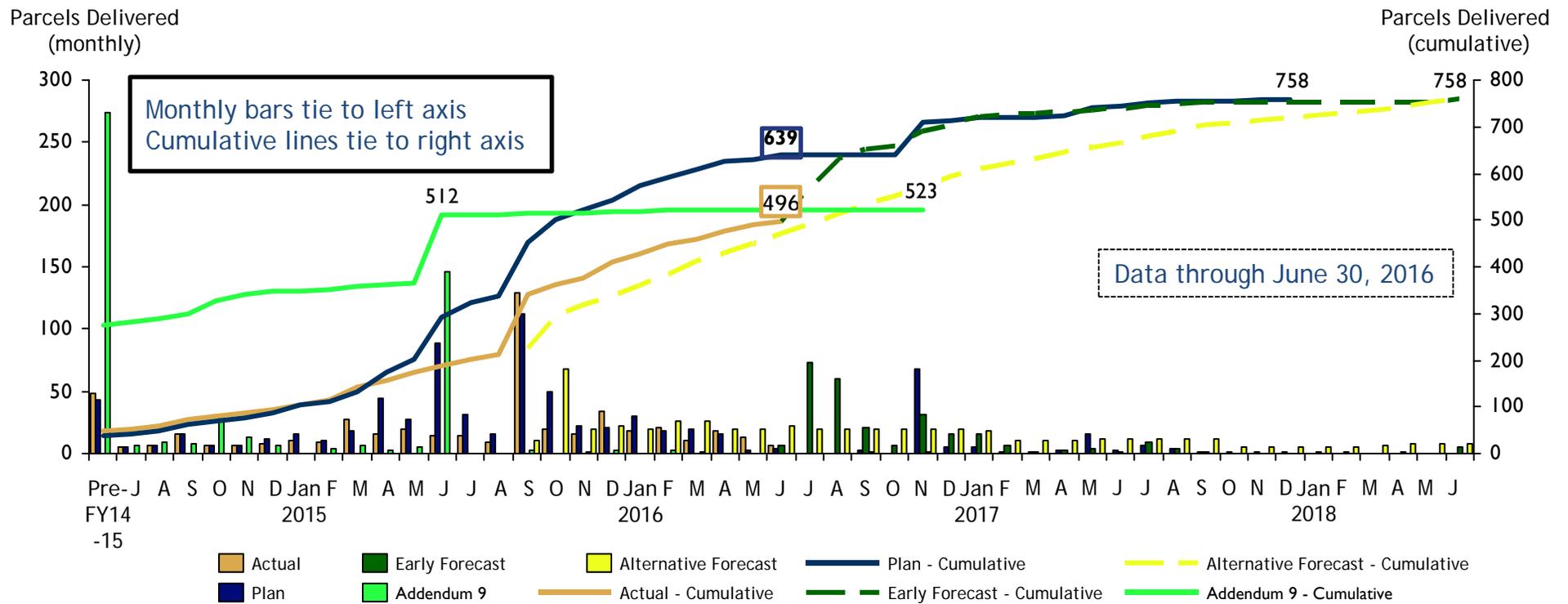
- » A rebaselining of the ROW Acquisition Plan will be done in the coming quarter as the contractor finalizes their construction sequencing and design refinements.
- » The ROW risk analysis will be updated in the next quarter to update the risks associated in ROW delivery.

Source: July 8, 2016 ROW Weekly Report

ROW – CP 1ABC PARCELS DELIVERED TO DESIGN-BUILD BY MONTH

PLAN VS. ACTUAL VS. FORECAST

CP 1ABC - Delivered to DB
(number of parcels)



Notes:

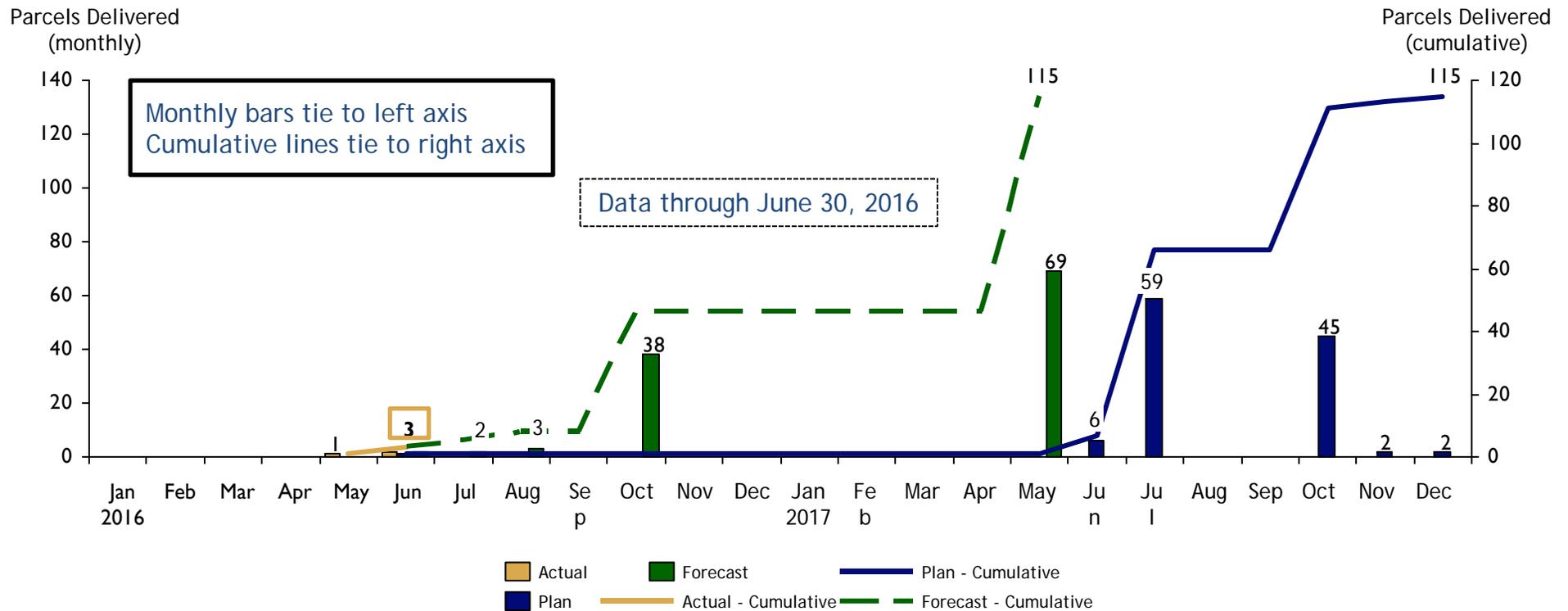
1. "Plan": Negotiated schedule as of December 2014 plus public parcels, design changes and new parcels. Addition of new parcels extend Plan full delivery to later date.
2. "Early Forecast" and "Alternative Forecast": Early forecast is continually refined based on expected delivery schedule. The Alternative Forecast reflects potential delays.
3. CP 1ABC total parcels continually updated as design changes are approved.
4. "Addendum 9" refers to original contract schedule. The "Plan" superseded Addendum 9, thus it has not been updated to reflect the additional public parcels
5. Does not include CP1 D (North Extension) parcels.

Source: July 8, 2016 ROW Weekly Report

ROW – CP 1D PARCELS DELIVERED TO DESIGN-BUILD BY MONTH

PLAN VS. ACTUAL VS. FORECAST

CP 1D - Delivered to DB
(in number of parcels)



Notes:

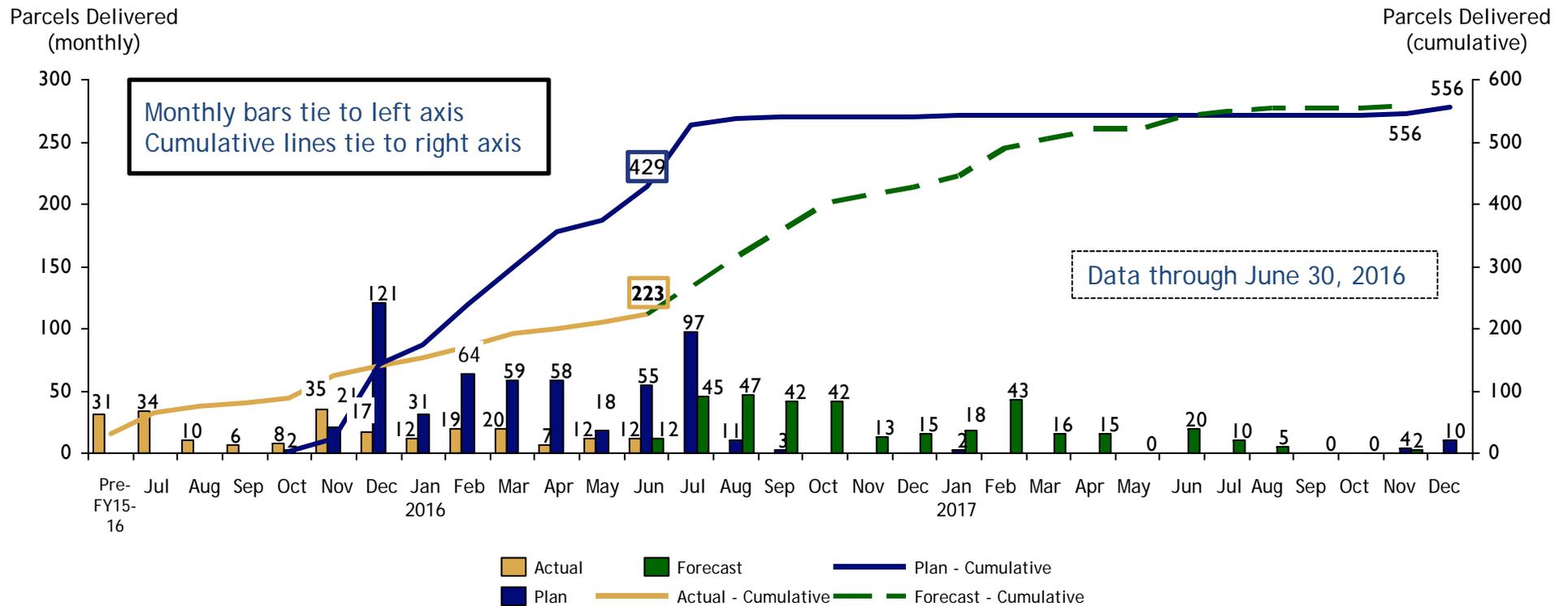
1. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized.
2. "Forecast": Continually refined based on expected delivery.
3. Total number of parcels will be updated as design changes are approved.

Source: July 8, 2016 ROW Weekly Report

ROW – CP 2-3 PARCELS DELIVERED TO DESIGN-BUILD BY MONTH

PLAN VS. ACTUAL VS. FORECAST

CP 2-3 - Delivered to DB
(in number of parcels)



Notes:

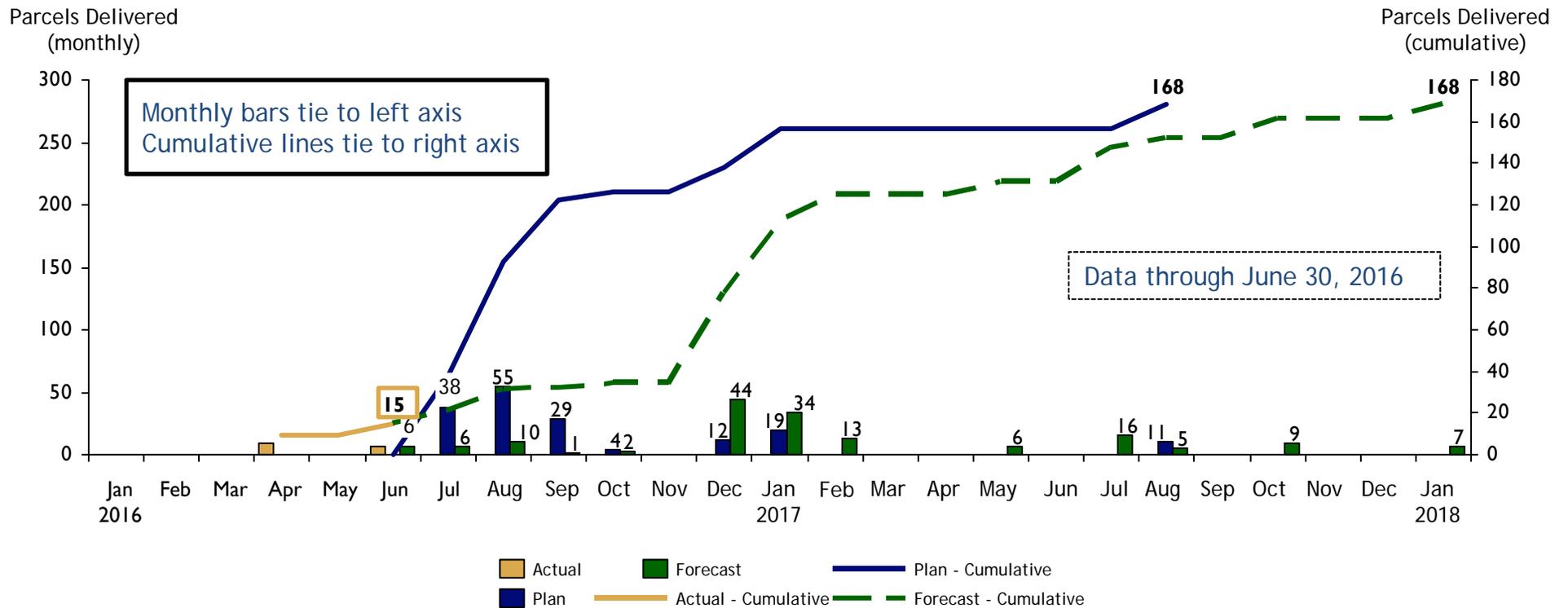
1. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized. Addition of new parcels extend Plan full delivery to later date.
2. "Forecast": Continually refined based on expected delivery.
3. Total number of parcels will be updated as design changes are approved.

Source: July 8, 2016 ROW Weekly Report

ROW – CP 4 PARCELS DELIVERED TO DESIGN-BUILD BY MONTH

PLAN VS. ACTUAL VS. FORECAST

CP 4 - Delivered to DB
(in number of parcels)



Notes:

1. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized.
2. "Forecast": Continually refined based on expected delivery.
3. Total number of parcels will be updated as design changes are approved.

Source: July 8, 2016 ROW Weekly Report

ENVIRONMENTAL CLEARANCES

- **Accomplishments to date**
 - » Two major clearances achieved (both are under supplemental EIR/EIS process):
 - Merced to Fresno
 - Fresno to Bakersfield
 - » Established framework for Federal and State high level working group for coordination to expedite reviews and clearance
- **Aggressive goal established to clear the ten Environmental Sections/Projects by December 2017**

ENVIRONMENTAL MILESTONES SCHEDULE (TO ROD)

INFORMATION THROUGH JUNE 2016¹

	Segment	Progress	Complete Purpose & Need Statement		Complete Alternatives Analysis		Board Selection of Preliminary Preferred Alternative for Draft EIR/EIS		Publish Draft EIR/EIS		Publish Final EIR/EIS and Obtain ROD		Date EIR/EIS To Be Completed	
			Due Dates	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Original Target
1	Merced to Fresno	Plan Forecast % Complete	-	Feb-11	-	Jun-11	-	N/A	-	Aug-11	-	Sep-12	-	Sep-12
2	Fresno to Bakersfield	Plan Forecast % Complete	-	Feb-11	-	Jun-11	-	N/A	-	Jul-12	-	Jun-14	-	Jun-14
3	San Francisco to San Jose	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Jul-16 Nov-16 7%	Jul-16 Nov-16 11%	Jan-17 Feb-17 7%	Jan-17 Feb-17 7%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
4	San Jose to Merced	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-16 Dec-16 10%	Sep-16 Dec-16 11%	Feb-17 Mar-17 10%	Feb-17 Mar-17 10%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
5	Central Valley Wye (M-F) ^{2, 3}	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-15 May-17 60%	Sep-15 May-17 60%	Feb-16 Feb-17 0%	Feb-16 Feb-17 0%	Dec-16 Dec-17 0%	Dec-16 Dec-17 0%	Dec-16	Dec-17
6	CV Electrical Interconnections	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Jul-16 Aug-16 90%	Jul-16 Aug-16 90%	Nov-16 Nov-16 0%	Nov-16 Nov-16 0%	Oct-17 Oct-17 0%	Oct-17 Oct-17 0%	Oct-17	No Change
7	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%	May-17 May-17 0%	May-17 May-17 0%	May-17	No Change
8	Bakersfield F St. Alignment (F-B) ⁴	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	May-16 May-16 69%	Complete Complete 100%	Jul-16 Oct-16 5%	Jul-16 Oct-16 5%	Dec-16 Jan-17 0%	Dec-16 Jan-17 0%	Dec-16	Jan-17
9	Bakersfield to Palmdale	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Jan-16 Mar-16 85%	Complete Complete 100%	Oct-16 Dec-16 20%	Oct-16 Dec-16 20%	Feb-17 May-17 10%	Feb-17 May-17 5%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
10	Palmdale to Burbank	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Aug-16 Jan-17 25%	Aug-16 Feb-17 25%	Mar-17 Apr-17 15%	Mar-17 Apr-17 15%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
11	Burbank to LA	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Mar-17 Feb-17 5%	Mar-17 Feb-17 5%	Jun-17 Jul-17 5%	Jun-17 Jul-17 5%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17
12	LA to Anaheim	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Mar-17 Feb-17 15%	Mar-17 Feb-17 15%	Jun-17 Jul-17 5%	Jun-17 Jul-17 5%	Nov-17 Dec-17 0%	Nov-17 Dec-17 0%	Nov-17	Dec-17

1. Dates identified in red indicate change from previous month.
2. Purpose and Need and the Alternatives Analysis were achieved as part of the Merced to Fresno EIR/EIS, completed in September 2012.
3. Because of ongoing stakeholder/agency coordination issues, selection of a preferred alternative has been postponed to occur after circulation of the Draft EIR/EIS.
4. Purpose and Need and the Alternatives Analysis were achieved as part of the Fresno to Bakersfield EIR/EIS, completed in June 2014.

ENVIRONMENTAL CLEARANCES

- **Northern California**
 - » San Francisco to San Jose
 - » San Jose to Merced
 - » Hired task order based Engineering and Environmental Consultant team

- **Central Valley**
 - » Central Valley Wye (Merced to Fresno supplemental EIR/EIS)
Administrative Draft EIR/EIS being written
 - » Central Valley Electrical Interconnections
Coordinating with PG&E
 - » Heavy Maintenance Facility
Approach is under review
 - » Bakersfield F Street Alignment
Continue with public outreach and input
Administrative Draft EIR/EIS being written

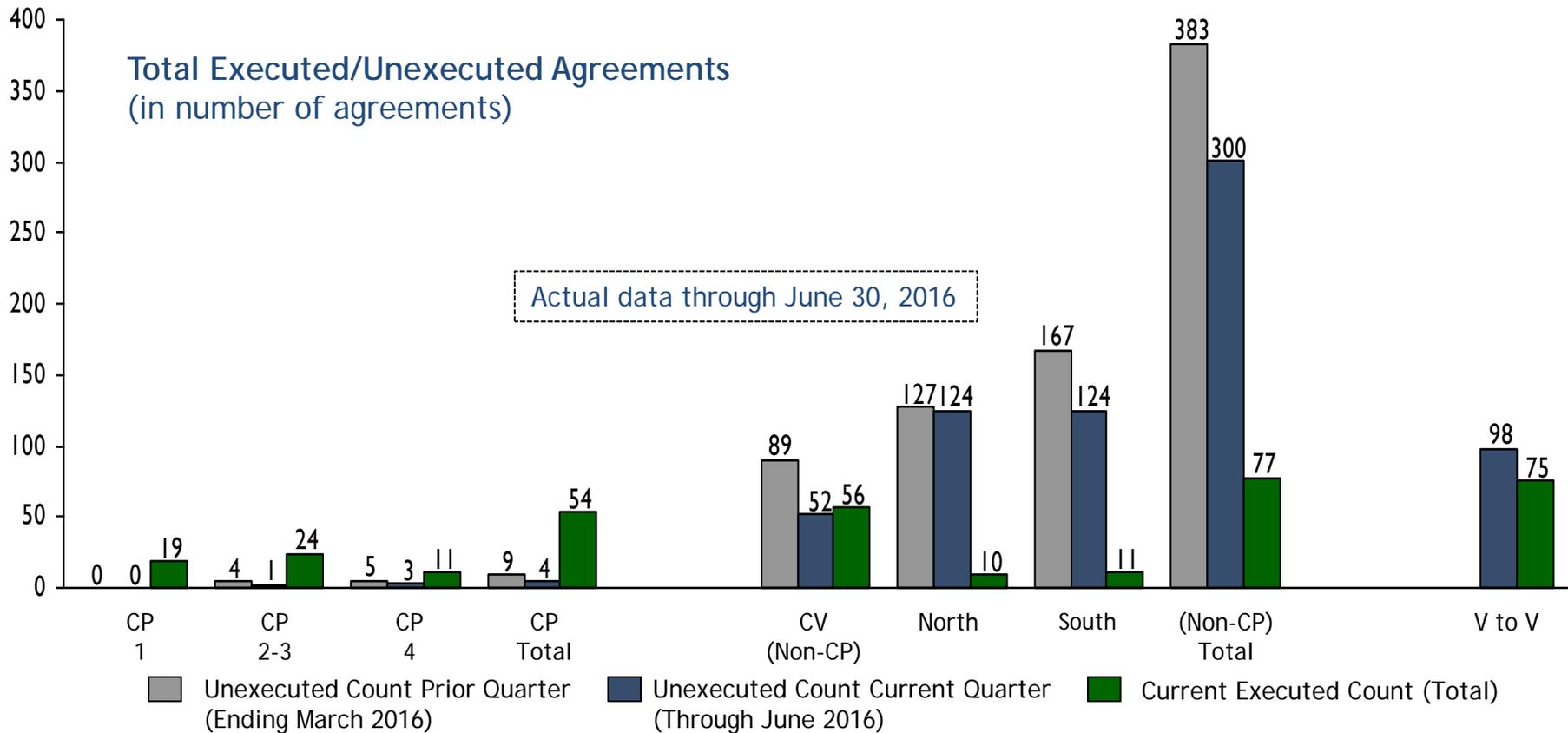
ENVIRONMENTAL CLEARANCES

- **Southern California**
 - » Bakersfield to Palmdale
Supplemental Alternatives Analysis completed
 - » Palmdale to Burbank
Supplemental Alternatives Analysis completed
Refinement approach under development
 - » Burbank to Los Angeles
Supplemental Alternatives Analysis completed
 - » Los Angeles to Anaheim
Supplemental Alternatives Analysis completed

THIRD PARTY AGREEMENTS

- » Utility Estimates for Excluded Utility/Third Parties and Provisional sums for CP 1 and CP 2-3 have been re-evaluated.
- » The responsibility of successfully managing and coordinating the utility relocation work remains with the design-builders.
- » Progress has continued towards execution of the master and cooperative agreements that are the Authority's responsibility.
- » North, South, Central Region (Non-CP) and Valley to Valley agreement execution has been added for progress tracking.

CP 1, CP 2-3, CP 4, CENTRAL VALLEY (NON-CP), NORTH AND SOUTH EXECUTED AND UNEXECUTED AGREEMENTS



Notes:

1. 28 total CP 2-3 agreements were previously expected to be executed. Kings County, Angiola Water District, and Deer Creek Storm Water District agreements not expected to be executed and are cancelled.
2. 15 total CP 4 agreements were previously expected to be executed. Kern County agreement not expected to be executed and is cancelled.
3. Some Agreements are counted more than once because they are required for more than one section.
4. CP 1, CP 2-3, CP 4 and CP Total counts only include Master/Cooperative Agreements
5. Central Valley (Non-CP), North, South and (Non-CP) Total counts include Master/Cooperative Agreements and Reimbursement Agreements for environmental coordination and project development.

CONSTRUCTION

- **Construction Package 1**

- » Construction progress has increased in recent months with the Authority and the contractor starting and maintaining construction at critical and near critical path structure locations, including: Fresno River Viaduct, Cottonwood Creek, Fresno Trench (between Belmont & SR 180), Tuolumne Street Overcrossing, Downtown Fresno Viaduct (North Avenue and SR 99).
- » Significant construction has been completed at the Fresno River Viaduct. Continued temporary formwork and structural concrete construction, removing temporary formwork where structural concrete work is complete.
- » Tuolumne Street Bridge is ongoing including the placement of precast girders and superstructure work.

CP 1: CURRENT WORK SITES

- » Cedar Viaduct
- » Cottonwood Creek Bridge
- » Fresno River Viaduct
- » Fresno Trench and SR 180 Crossing
- » San Joaquin Viaduct
- » State Route 99 Realignment
- » Tuolumne Street Bridge

CONSTRUCTION

- **Construction Package 2-3**

- » The contractor has mobilized and is completing work planning activities, including design and construction plans.
- » Meetings with third parties are ongoing to understand their design requirements. Preparation for demolition activities is ongoing.
- » Field work has begun with clearing & grubbing, demolition, geotechnical exploration, and utility location activities.
- » Plans are being developed for construction beginning in 2016, including embankment construction and local street improvements.

- **Construction Package 4**

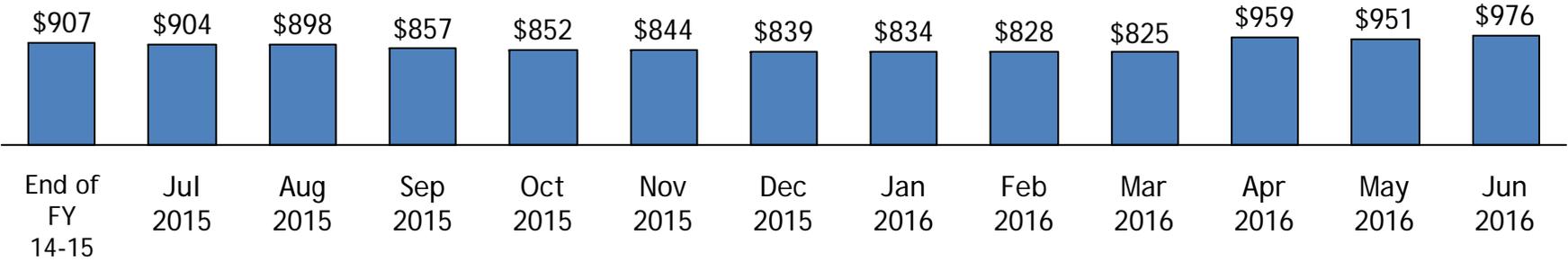
- » The contractor has continued mobilization and preliminary design activities, including planning for environmental re-examinations, updating the risk register and early development of the right of way acquisition plan.

CP 2-3: CURRENT WORK ACTIVITIES

- Mobilization & Design advancing
- Property Acquisition Advancing
- Geotechnical exploration and environmental surveys being conducted
- Demolition work has begun at Willow Avenue, Selma and the Ponderosa community

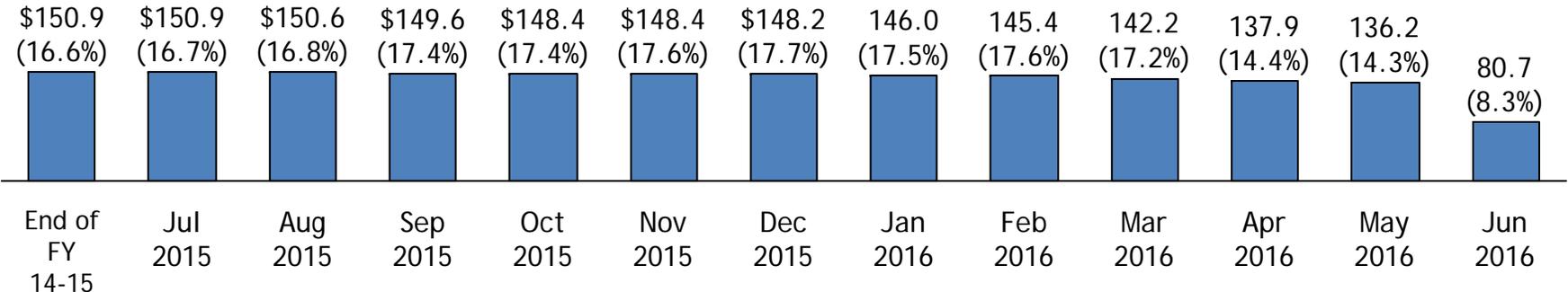
CP 1 CONTRACT MANAGEMENT – CONTINGENCY VALUE

CP 1 - Contract Balance Remaining¹
(in millions \$)



If remaining contingency against amount of contract / work left falls below 10%, corrective action may be necessary.

CP 1 - Contingency Balance Remaining
(millions \$)
(% of contract balance remaining)



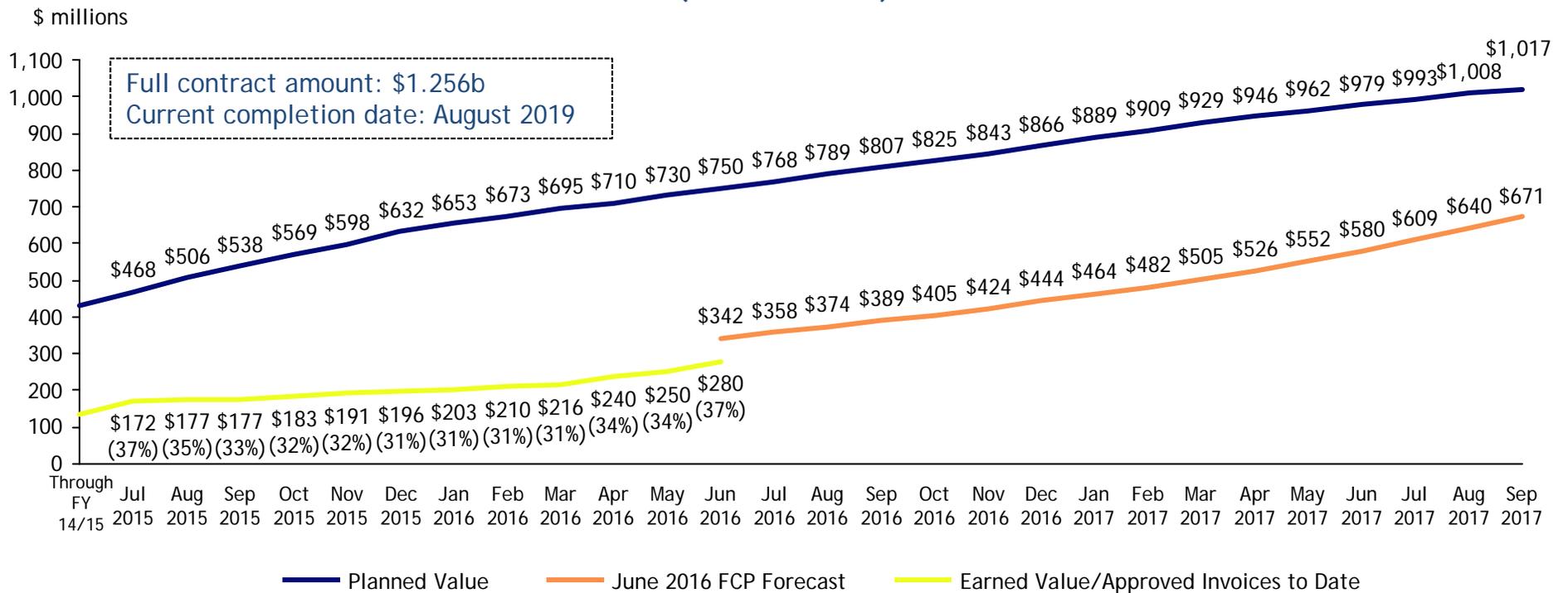
Notes:

1. Remaining Contract Value = [Revised DB Contract Amount] - [Authority Approved Invoices to Date]. Revised DB contract amount, increased to \$1,256M from the original contract amount of \$1,023M, due to executed change orders (including North Extension).
2. Contract balance only accounts for approved invoices in determining contract balance, so this number may not reconcile with "earned value" in schedule performance index metric.
3. Based upon the amount of CP 1 work remaining, both the remaining contingency balance and the contingency. Percentage, measured against the contract balance remaining, fall within the established contingency envelope of the project.

Source: June 30, 2016
CP 1 Performance Metric Report

CP 1 CONTRACT MANAGEMENT – SCHEDULE PERFORMANCE INDEX

CP 1 Schedule - Total Planned Value of Contract Earned
(in millions \$)



Notes:

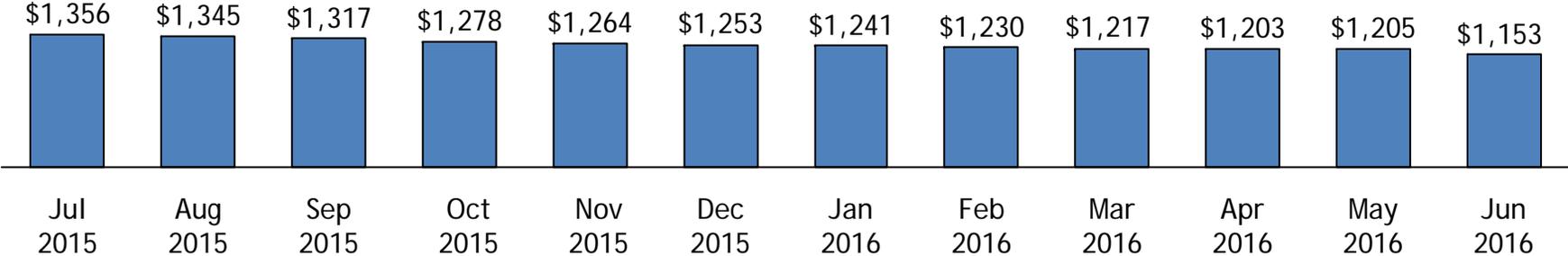
1. Full contract amount includes bid amount, provisional sums and executed change order amounts.
2. Earned value flat from August to September 2015 because data reporting date was moved up in October 2015 creating a short period between data reporting dates in September and October 2015.
3. CP 1 DB contract forecast expenditures from Jan 2016 to June 2017 will be 100% ARRA funded, until full ARRA drawdown.
4. FCP forecast includes North Extension costs.

Sources:

1. Planned Value: CP1 Baseline Schedule
2. FCP Forecast: Funding Contribution Plan, June 2016
3. Earned Value/Approved Invoices to Date: June 30, 2016 CP 1 Performance Metric Report
4. FCP Forecast will be updated based on quarterly Funding Contribution Plan.

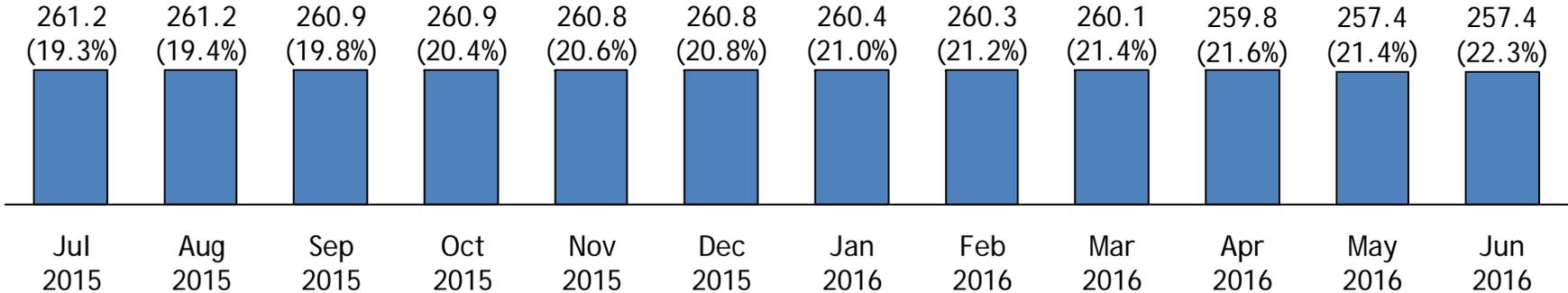
CP 2-3 CONTRACT MANAGEMENT – CONTINGENCY VALUE

CP 2-3 - Contract Balance Remaining
(in millions \$)



If remaining contingency against amount of contract / work left falls below 10%, corrective action may be necessary.

CP 2-3 - Contingency Balance Remaining
(millions \$)
(% of contract balance remaining)

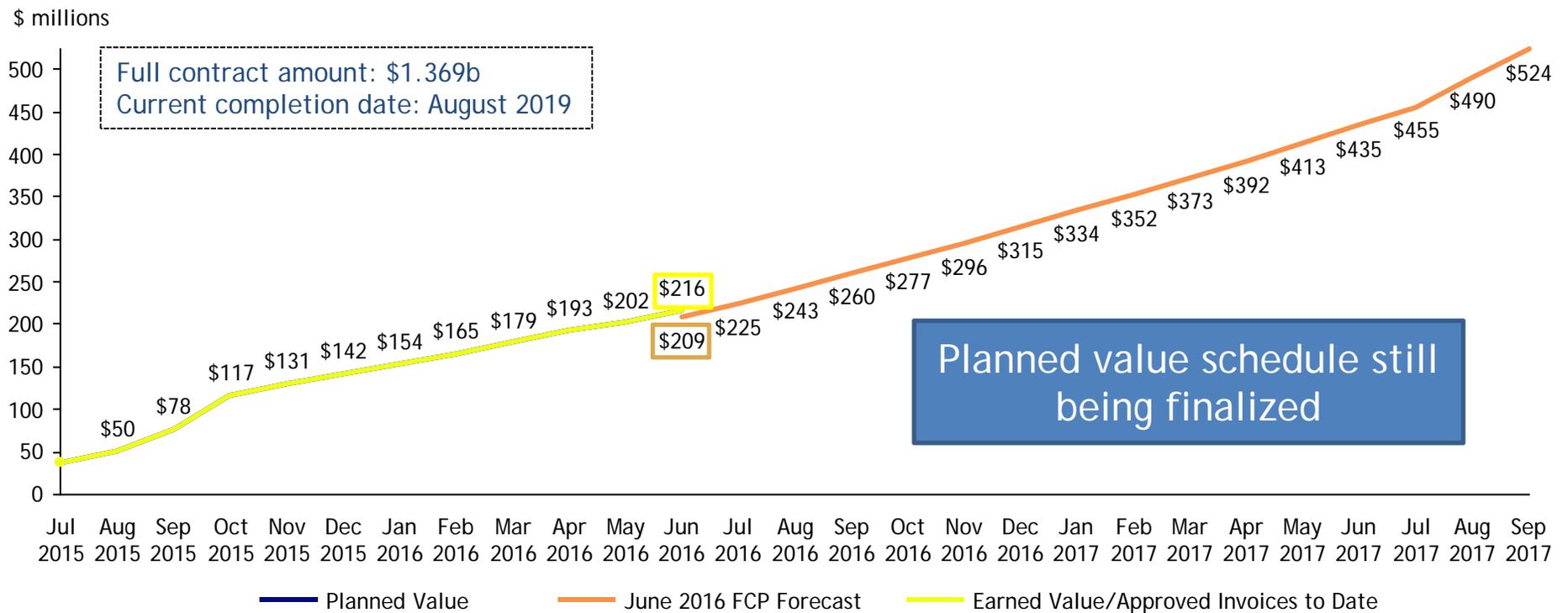


Notes: Contract balance only accounts for approved invoices in determining contract balance, so this number may not reconcile with "earned value" in schedule performance index metric

Source: June 30, 2016
CP 2-3 Performance Metric Report

CP 2-3 CONTRACT MANAGEMENT – SCHEDULE PERFORMANCE INDEX

CP 2-3 Schedule - Total Planned Value of Contract Earned
(in millions \$)



Notes:

1. Full contract amount includes bid amount, provisional sums and executed change order amounts.
2. Total amount earned refers to progress on the schedule, not approved contract invoices.
3. CP 2-3 DB contract forecast expenditures from Jan 2016 to June 2017 will be 100% ARRA funded, until full ARRA drawdown.

Sources:

1. FCP Forecast: Funding Contribution Plan, June 2016
2. Earned Value/Approved Invoices to Date: June 30, 2016 CP 2-3 Performance Metric Report
3. FCP Forecast will be updated based on quarterly Funding Contribution Plan.

CP 4 CONTRACT MANAGEMENT – CONTINGENCY VALUE

CP 4 - Contract Balance Remaining
(in millions \$)



If remaining contingency against amount of contract / work left falls below 10%, corrective action may be necessary.

CP 4 - Contingency Balance Remaining
(millions \$)
(% of contract balance remaining)

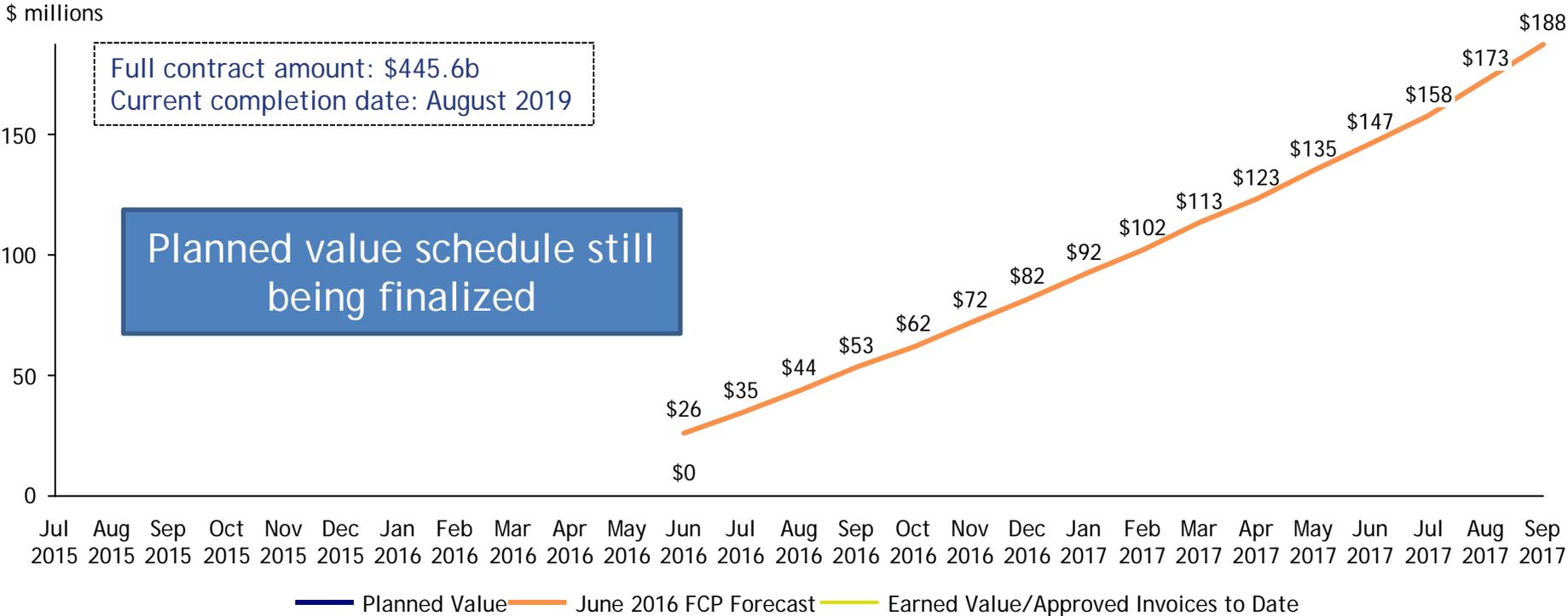


Notes: Contract balance only accounts for approved invoices in determining contract balance, so this number may not reconcile with "earned value" in schedule performance index metric

Source: June 30, 2016
CP 4 Monthly Status Report

CP 4 CONTRACT MANAGEMENT – SCHEDULE PERFORMANCE INDEX

CP 4 Schedule - Total Planned Value of Contract Earned
(in millions \$)



Notes:

1. Full contract amount includes bid amount, provisional sums and executed change order amounts.
2. Total amount earned refers to progress on the schedule, not approved contract invoices.
3. CP 4 DB contract forecast expenditures from Jan 2016 to June 2017 will be 100% ARRA funded, until full ARRA drawdown.

Sources:

1. FCP Forecast: Funding Contribution Plan, June 2016
2. Earned Value/Approved Invoices to Date: June 30, 2016 CP 4 Monthly Status Report
3. FCP Forecast will be updated based on quarterly Funding Contribution Plan.

OVERALL SUMMARY

- Construction progress is accelerating with activity underway at multiple sites.
- An improved project management structure for each CP has been implemented to focus on completing the pre-construction tasks.
- Focusing on successfully delivering the entire Central Valley construction program as a building block for the Silicon Valley to Central Valley line.
- Using risk management principles to mitigate risks and resolve challenges that contribute to pressure on budgets and schedules.

FINANCE & AUDIT COMMITTEE

Risk Management

RISK MANAGEMENT PROGRAM: THE BEST TOOL FOR AN INTEGRATED APPROACH

RISK MANAGEMENT PLAN

FINANCIAL PERFORMANCE

AUDITS & REVIEWS

CONTRACTS PERFORMANCE

SB 1029 REQUIREMENTS

- A process by which identified risks will be quantified in financial terms
- Development documents that will be used to track identified risks and related mitigation steps
- Plans for regularly updating its estimates of capital and support costs
- Plans for regularly reassessing its reserves for potential claims and unknown risks, incorporating information related to risks identified and quantified through its risk assessment processes
- Plans for regularly integrating estimates for capital, support costs, and contingency reserves in required reports

RISK MANAGEMENT PROGRAM OBJECTIVES

- 1 Systematize the process by which the Authority manages circumstances that could increase the cost or significantly delay or halt the Program
- 2 Increase transparency regarding challenges to project plans and objectives
- 3 Capture project opportunities
- 4 Satisfy legal and regulatory requirements - meet the needs and expectations of other stakeholders
- 5 Rationalize allocation of resources including cost and schedule contingencies
- 6 Receive external validation of risk management approach (from Peer Review Group, Professor Flyvbjerg)

STATE-OF-THE-ART APPROACH VETTED BY LEGISLATIVE PEER REVIEW GROUP



Prepare and collect data
Identify all risks

Quantify
Correlate
Document

Select method
Sensitivity Analysis
MC Simulations
Panel Review

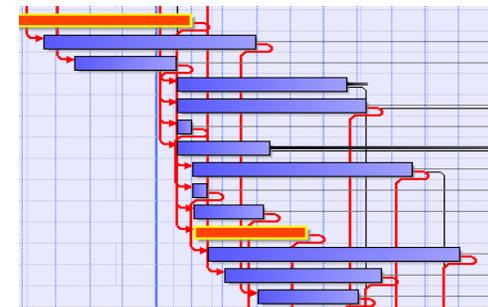
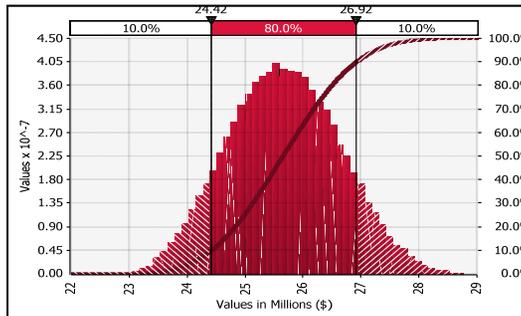
Primary mitigation
Allocation
Contingency Analysis
Secondary Mitigation

Feedback Loop

Threat Impact Level	Cost Increase	Schedule Increase
Very High (5)	> \$ 100 M	6 Months and above
High (4)	\$ 50 M to \$ 100 M	4 to 6 Months
Medium (3)	\$ 10 M to \$ 50 M	2 to 4 Months
Low (2)	\$ 1M to \$10 M	1 to 2 Months
Very Low (1)	< \$ 1M	1 Week to 1 Month

RISK	Design-Build		
	Owner	Shared	Design Builder
Construction			
DBE compliance			
Safety			
Construction Quality/Workmanship			
Schedule			
Materials Quality			
Materials documentation			
Material availability			
Initial performance requirements of QC/QA Plan			
Final Construction/Materials QC/QA Plan			
Construction/Materials QA			
Construction QC			
Construction QA Oversight			
Construction IA testing/inspection			
Construction Staking			
Erosion Control			
Spill Prevention			
Accidents within work zone			
Damage within work zone			
Third Party Damages			
Operations and Maintenance During Construction			

Risk Number	Risk Title
7.1	Delays caused by the inability to relocate utilities because of Buy America Requirements
1	ROW acquisition delays or failure to acquire ROW impacts construction operations.
8	Delay associated with RR agreements, design exceptions (clear-span of property), review and approval delays, or other issues during construction (lack of flaggers)
12	Changed/Differing Site Conditions
11	Direct costs associated with intrusion protection
35	Class 1 and 2 Hazardous materials
29	SJVRR Spurs in the vicinity of Dry Creek Canal



RISK MANAGEMENT – CURRENT ACTIVITIES

- **CP1 Cost Risk Update**
 - Complete; February 2016
- **CP 4 Risk-informed Contingency Analysis**
 - Complete; contingency approved at the April 2016 Board Meeting
- **CP 1-4 Third Party Costs Risk-informed Contingency Analysis**
 - Complete; presented at May 2016 F&A Committee Meeting
- **Ridership & Revenue, O&M, Lifecycle, and Breakeven Risk Analysis**
 - Complete; Final 2016 Business Plan issued on May 1, 2016
- **Updated ROW Schedule Risk Analysis**
 - Planned completion August 2016

RISK MANAGEMENT – CURRENT ACTIVITIES

- **CP 1 and CP 2-3 Contingency Draw-down Update**
 - Planned completion September 2016
- **CP 4 Contingency Draw-down**
 - Planned completion September 2016
- **Rolling Stock contract Early Procurement Decision-tree Analysis**
 - Planned completion September 2016
- **Updated CP 1 Risk-informed Contingency Analysis**
 - Planned completion October 2016
- **Updated CP 2-3 Risk-informed Contingency Analysis**
 - Planned completion November 2016
- **Valley to Valley Programmatic Risk Analysis**
 - Planned completion December 2016

SUMMARY

- The Authority has an integrated Finance and Audit Team in place that reports directly and is accountable to the Finance and Audit Committee.
- The Authority's Finance and Audit Team consists of the Chief Financial Officer, Chief Auditor, Program Director, Chief Engineer, and Director of Risk Management and Project Controls, and has implemented a robust project monitoring and controls program.
- Project monitoring and controls are in place that provide early identification of program trends and inform risk-driven decision making.

THANK YOU

Headquarters

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