

California High-Speed Rail: Operations Report

FY14-15, FY15-16, FY16-17 and Program Metrics

Agenda

- Operations Report Metrics
 - Executive Summary
 - Right-of-Way (ROW)
 - Project Development
 - Third Party Agreements
 - Contract Management
 - Finance/Budget
 - ARRA Schedule
 - Risk



ROW Acquisition

The current report presents ROW acquisition progress relative to CPI thru CP4 through December 31, 2016. As of that date, the Authority has secured legal possession of 984 parcels, with 962 delivered to the design-builder (DB). There were 18 parcels delivered in CP1ABC, 15 parcels delivered in CP1D, 5 parcels delivered in CP2-3 and 2 parcels delivered in CP4 for a total delivery of 40 parcels during the month of December. The total parcels and percentage delivered to date are as follows:

Section	Delivered to DB	# of Parcels	% Delivered to DB
CPIABC	585	766	76%
CPID	37	110	34%
CP2-3	305	572	53%
CP4A	35	167	21%
Total	962	1,615	60%

- The California High-Speed Rail Authority (Authority) continues to focus on delivery of key early construction parcels through utilization of the Settlement Teams and partnering with the DB. Partnering efforts continue to identify key parcels needed for meaningful construction. There were 9 critical parcels delivered in CP IABCD, 3 critical parcels in CP 2-3, and 3 Critical parcels in CP 4 during December.
- The Authority has submitted a proposed rebaselining schedule for CP2-3 parcels and are awaiting a response from the DB. Once agreed, the rebaseline will set new delivery dates for new or modified parcel acquisition limits per the provisions of the contract. If agreement cannot be reached, the Authority will unilaterally establish a new baseline that reflects all the changed contractual delivery dates.
- The CP4 rebaselining effort per the requirements of the contract is underway. ATC approved design changes are triggering adjustments to the appraisal mapping for a large percentage of parcels. Delivery dates for the affected parcels will be established when the appraisal mapping is complete.



Project Development

- Working with FRA on process improvements for review and completion of the environmental documents, including reaching decisions on 16 critical programmatic issues necessary to process our EIR/EIS documents through public agency circulation.
- Completed environmental review sessions with each regional team to identify and discuss potential environmental impacts to key resources within the context of CEQA and NEPA.
- Continuing work to prepare program-level responses to comments in anticipation of numerous draft EIR/EISs to undergo public and agency circulation in 2017.
- Working with FRA to address its review comments on the Administrative Draft EIR/EIS for the Locally Generated Alternative (F-B).
- Preparing an Administrative Draft EIR/EIS for the Central Valley Wye (M-F).
- Continuing work among the Authority, FRA, US Fish and Wildlife Service, CA Department of Fish and Wildlife, and resource agencies on a statewide regional conservation approach to meet future permitting requirements.
- Confirming the project footprints and preparing technical reports needed for the EIR/EISs for Bakersfield to Palmdale, Palmdale to Burbank, Burbank to Los Angeles, and Los Angeles to Anaheim project sections.



Third Party Agreement Execution				
•	The current report presents Third Party Agreement execution progress relative to the Valley to Valley and agreement execution progress relative to Central Valley (Non-CP), North and South through December 31, 2016.			
•	The plan for agreement execution within the Valley to Valley section is based on the respective environmental clearance and construction procurement schedules and is updated monthly to reflect changes in the respective schedule.			



Contract Management

- CPI Construction activities continue to increase. TPZP continues to progress construction at multiple locations throughout the project. The following provides a summary of the major structure activities by location: Fresno River Viaduct completed the installation of temporary formwork and continuing with structural concrete construction for the bridge superstructure; Cottonwood Creek completed bridge related work will resume remaining work in the spring; Fresno Trench continued foundation work; State Route 180 continued installation of temporary shoring and completed a traffic shift to allow for continued construction; Tuolumne Street Overcrossing completed concrete barrier on half of the bridge, continuing with constructing the concrete barriers on the other half of the bridge superstructure, continuing with construction of abutment; Downtown Fresno Viaduct (North Avenue & SR-99) continued constructing bridge columns, began installation of temporary formwork for the bridge superstructure; San Joaquin River Viaduct (SR-99 On-Ramp) continued with foundation work; Avenue 8 continued the construction of embankments; Thorne Creek continued utility work at this location; and Road 27 continued with foundation work. The Authority and TPZP continue to jointly plan to maximize construction work at critical and near critical path structure locations in the coming months.
- **CP 2-3** The Joint Venture of Dragados/Flatiron continues to mobilize and plan the work, including developing and submitting various design and construction plans, meeting with third parties to understand their design requirements, and continuing building demolition activities. Field work continues with geotechnical exploration, utility location activities, and installation of delineators to identify the environmental footprint. Tulare County resurfacing is continuing along with site work between East Manning Avenue and East Springfield Avenue. Other early start activities are being planned for, including clearing & grubbing and embankment construction in the north area of the project.
- ▶ **CP 4** CRB continues to mobilize and plan the work, including continuing with design activities, planning for environmental reexaminations, utility identification work, meeting with third parties and acquiring right-of-way.
- > SR-99 Realignment Construction work on the Early Work Package is nearing completion, and the Main Package work is continuing. Main Package includes retaining walls, utilities, grading and paving at various locations such as on State Route 99 (SR-99) mainline, McKinley Avenue, Shields Avenue, Clinton Avenue and Princeton Avenue.



Finance

- Total ARRA Expenditures are \$2.241B or 87.8% of the \$2.553B grant as of January 17, 2017 including FRA paid, approved, and pending invoices plus invoices pending submittal to FRA, invoices received by HSRA, and Work-in-Progress.
- Capital outlay expenditures were \$136.4M for December-2016 as reported in the Capital Outlay report for February-2017, compared to \$58.5M for February-2016. Total ARRA expenditures are \$2.229B or 87.3% of the \$2.553B grant as of December 31, 2016 including FRA paid, approved, and pending invoices plus invoices pending submittal to FRA, invoices received by HSRA, and Work-in-Progress.
- Mitigation measures are in place to prioritize critical parcels required for major construction work. An analysis has been performed to verify that ARRA Federal Funds will not be at-risk even by using the Alternative Forecast.



Agenda

- Operations Report Metrics
 - Executive Summary
 - Right-of-Way (ROW)
 - Project Development
 - Third Party Agreements
 - Contract Management
 - Finance/Budget
 - ARRA Schedule
 - Risk



ROW Metrics - Context

- The following slides track parcels delivered to **design-builder (DB)**, which is the last step of the ROW process
 - Four metrics related to "delivered to DB" are tracked:
 - <u>Plan</u>: For CPI, the negotiated schedule of parcel delivery as of December 2014 plus additional public parcels and design changes; for CP2-3, planned delivery is currently a placeholder and will be rebaselined once the design builder completes the revised appraisal mapping for the proposed changes.
 - Actual: Actual parcels delivered each month.
 - <u>Early Forecast</u>: Refined every month based on future expected delivery.
 - <u>Alternative Forecast</u>: Forecast that anticipates additional delays for elements outside the control of the Authority and reflects rates more in line with historic delivery. Forecast is locked as of September 2015, except when new parcels are added due to design changes.
- Forecasts are based on inputs from the ROW Consultants and the Authority
- The total number of parcels needed for delivery has changed over time for two main reasons:
 - The number of public property parcels were based upon 15% designs; as the ROW Transfer Agreements were completed with the local agencies, the number of parcels has been refined.
 - As the DB refines the design, the ROW needs may also be changed. The number of parcels to be acquired can fluctuate up or down. In some cases, additional ROW may be required from previously completed acquisitions.
- For ROW expenditure analysis, this report presents:
 - Actual expenditures: reported each month.
 - Forecast: adjusted quarterly based on the Funding Contribution Plan.

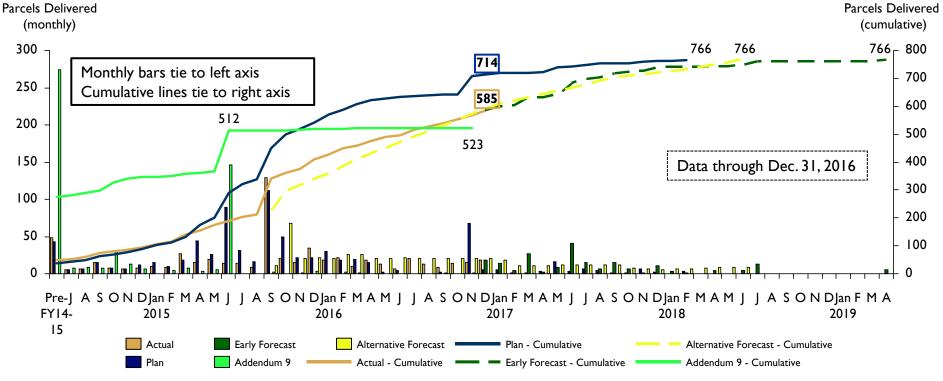


ROW - CP1ABC Parcels Delivered to DB by Month

Plan vs. Actual vs. Forecast

CPIABC - Delivered to DB

(number of parcels)

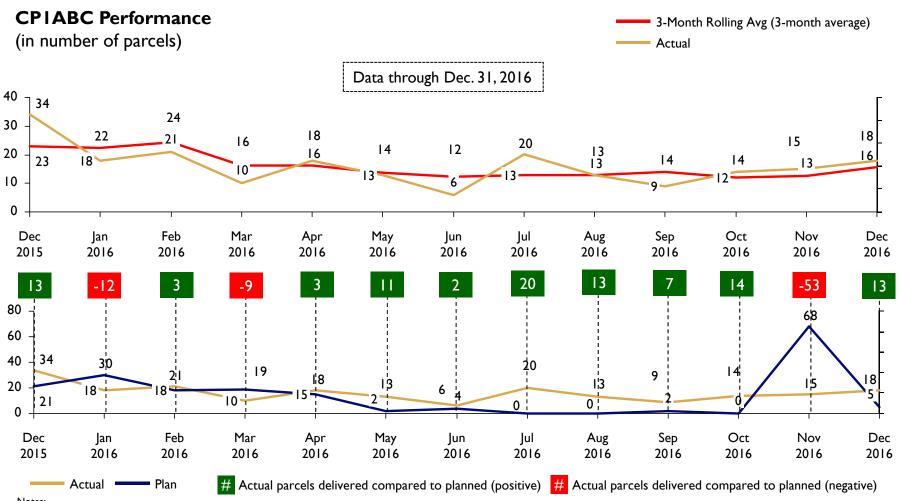


Notes:

- 1. "Plan": Negotiated schedule as of December 2014 plus public parcels, design changes and new parcels. Addition of new parcels extend full Plan 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. CPIABC 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 CPID (North Extension) parcels.



ROW - CP1ABC Historic Performance



Notes:

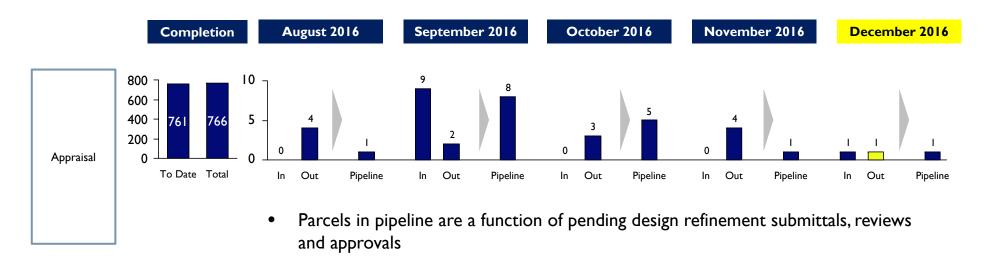
I. "Plan": Negotiated schedule as of December 2014

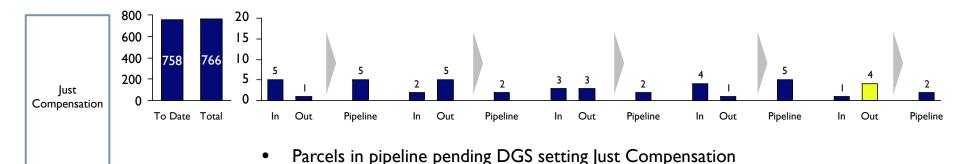
2. Design changes and lag in data entry can cause slight changes to plan and actual counts



ROW - CP1ABC Pipeline by Process (1 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



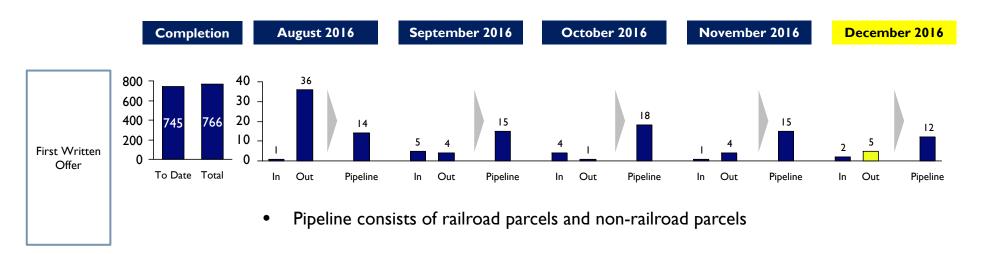


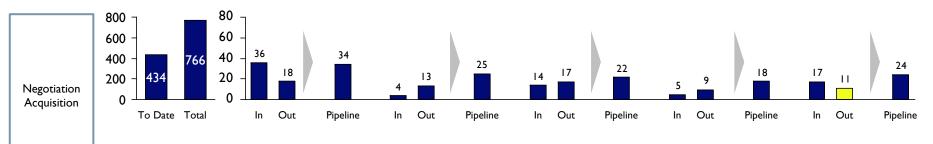
Note: Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline



ROW - CP1ABC Pipeline by Process (2 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline





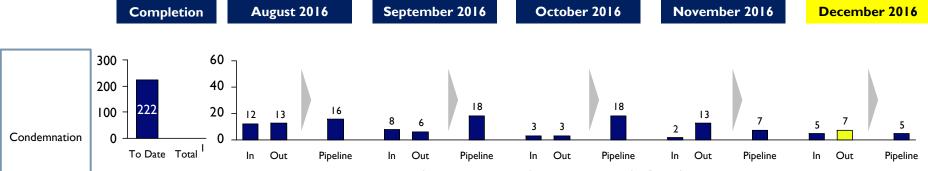
• Pipeline consists of signed agreements being processed through escrow, pending offers at property owners' decision to sign or enter condemnation and pending revised First Written Offer (FWO).

Note: Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline

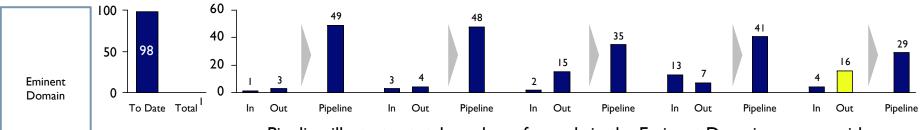


ROW - CP1ABC Pipeline by Process (3 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



 Pipeline comprised of Resolution of Necessities (RONs) being processed by the Authority and ROW consultants and awaiting adoption by the Public Works Board (PWB). Also includes parcels being prepared by the Authority to transfer to Caltrans Legal.



Pipeline illustrates total number of parcels in the Eminent Domain process with Caltrans legal and have lawsuits filed. An Ordered of Possession (OP) is the next step if a settlement is not reached.

- 1. Total number of parcels that may take the condemnation route is unknown
- 2. Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline

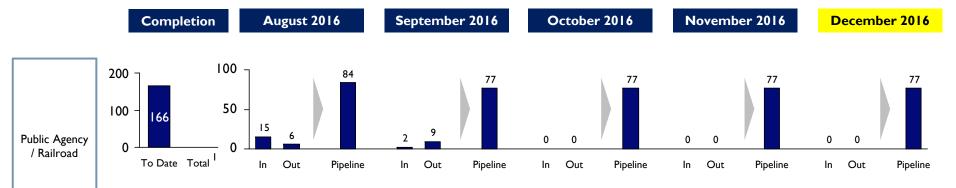
Source: January 6, 2017 ROW Weekly Report



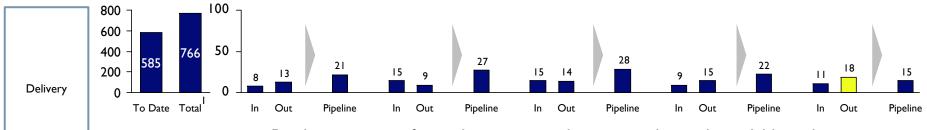
Notes:

ROW - CP1ABC Pipeline by Process (4 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



Comprised of railroad parcels and public parcels. Public parcels are being processed
with Master Agreements before proceeding to individual utility relocations and
acquisitions. Most railroad parcels are dependent on the DB completing designs so
the railroad issues a construction and maintenance agreement.



 Pipeline consists of parcels requiring relocation and parcels available to be transferred to DB.

Notes:

- 1. Total number of pubic parcels to be identified
- 2. Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline

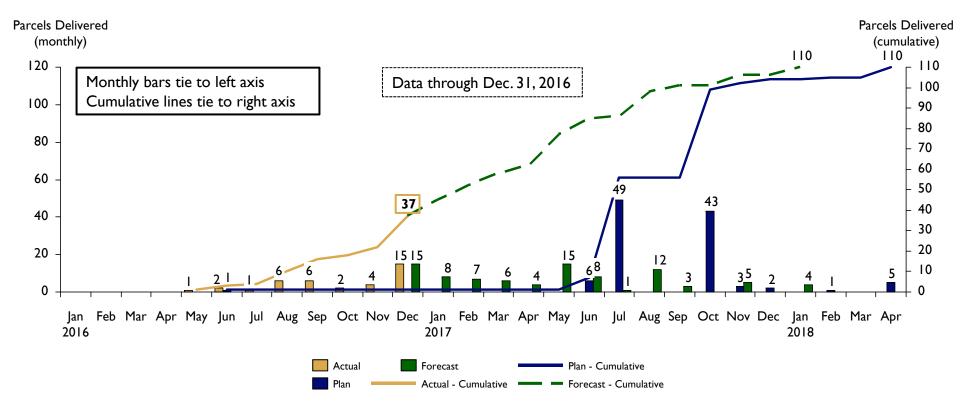


ROW - CP1D Parcels Delivered to Design-Build by Month

Plan vs. Actual vs. Forecast

CPID - Delivered to DB

(in number of parcels)



Notes:

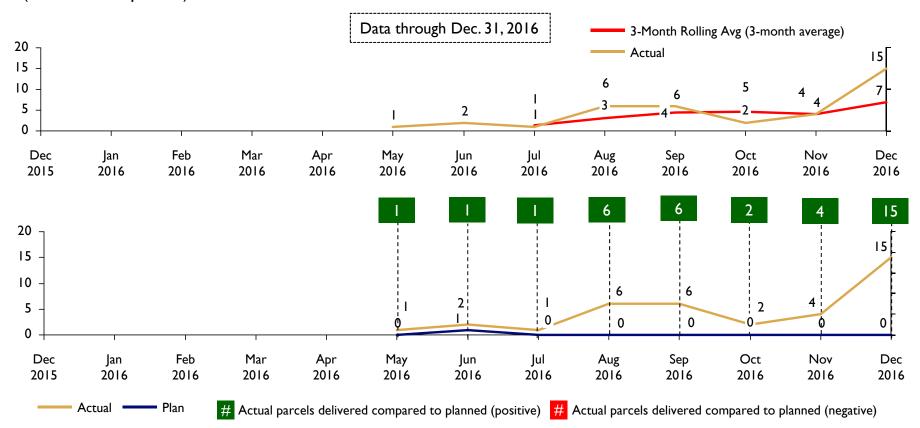
- 1. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized.
- 2. "Forecast": Continually refined based on expected delivery.
- 3. Total number of parcels will be updated as design changes are approved.



ROW - CP1D Historic Performance

CPID Performance

(in number of parcels)



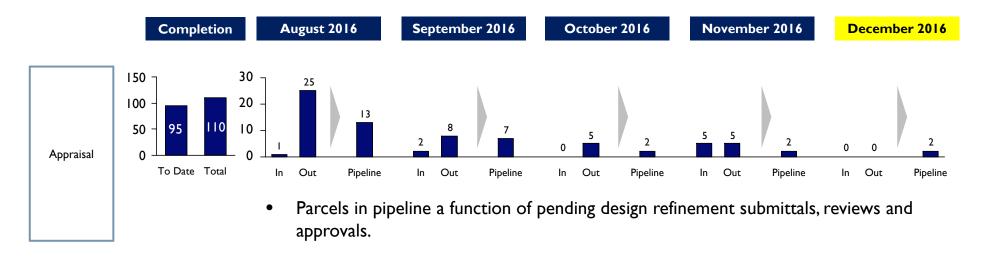
Notes:

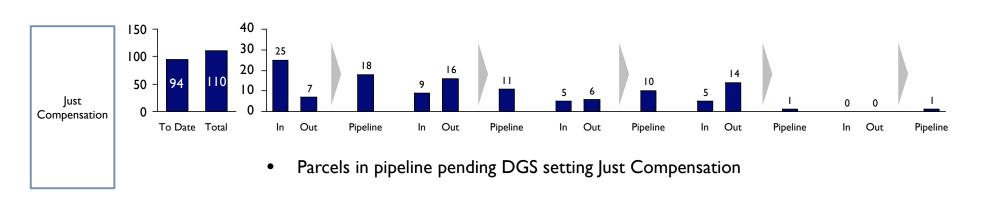
- I. Per contract, "planned" to be rebaselined.
- 2. Contract executed in June 2015; 31 parcels delivered after contract execution
- 3. Design changes and lag in data entry can cause slight changes to plan and actual counts.



ROW - CP1D Pipeline by Process (1 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



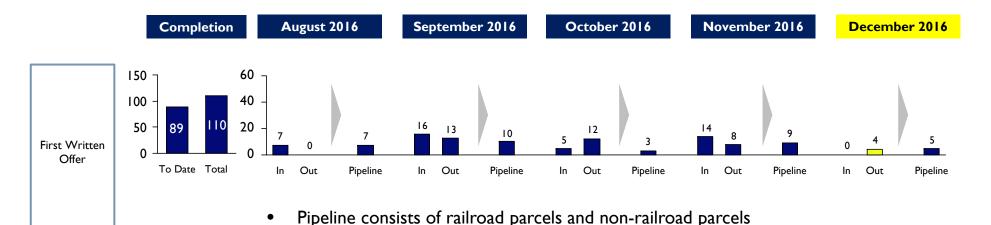


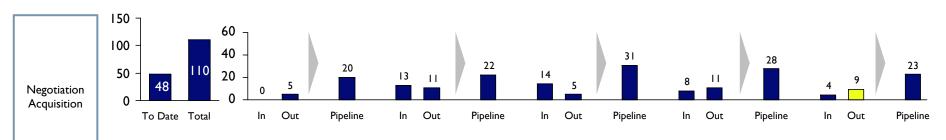
Note: Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline



ROW - CP1D Pipeline by Process (2 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline





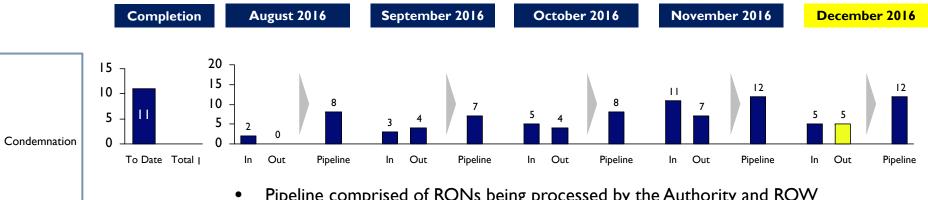
 Pipeline consists of signed agreements being processed through escrow, pending offers at property owners' decision to sign or enter condemnation and pending revised First Written Offer (FWO)

Note: Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline

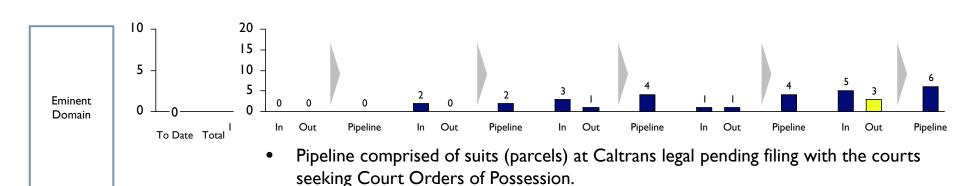


ROW - CP1D Pipeline by Process (3 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



 Pipeline comprised of RONs being processed by the Authority and ROW consultants and awaiting adoption by PWB.



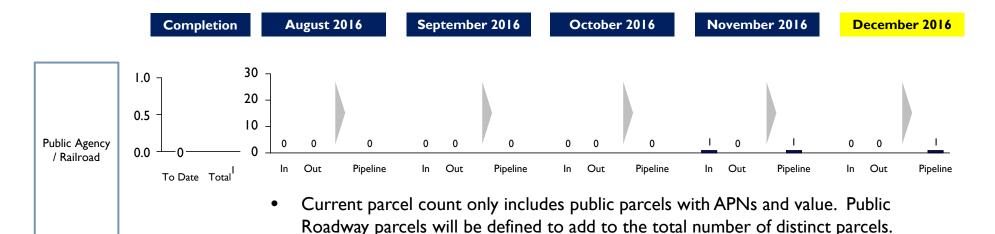
Notes:

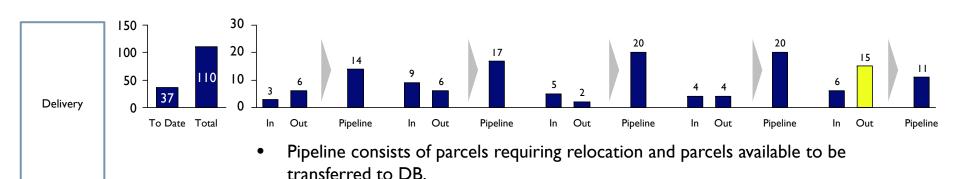
- 1. Total number of parcels that may take the condemnation route is unknown
- 2. Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline



ROW - CP1D Pipeline by Process (4 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline





Notes:

- I. Total number of pubic parcels to be identified
- 2. Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline

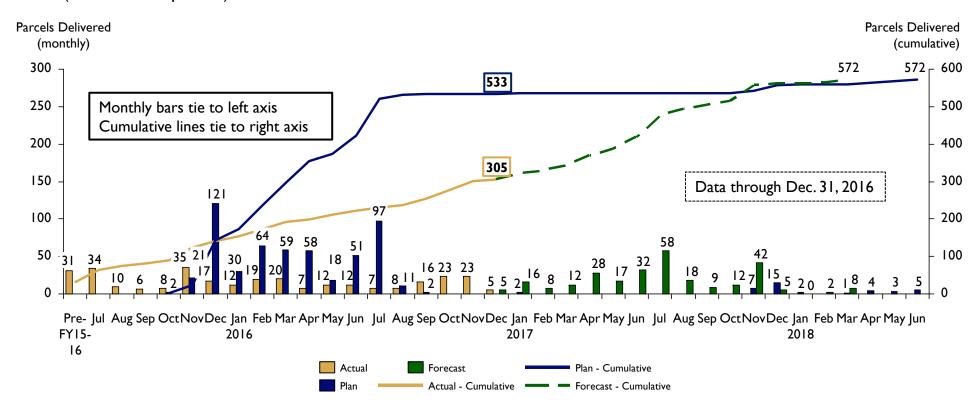


ROW - CP2-3 Parcels Delivered to DB by Month

Plan vs. Actual vs. Forecast

CP2-3 - Delivered to DB

(in number of parcels)



Notes:

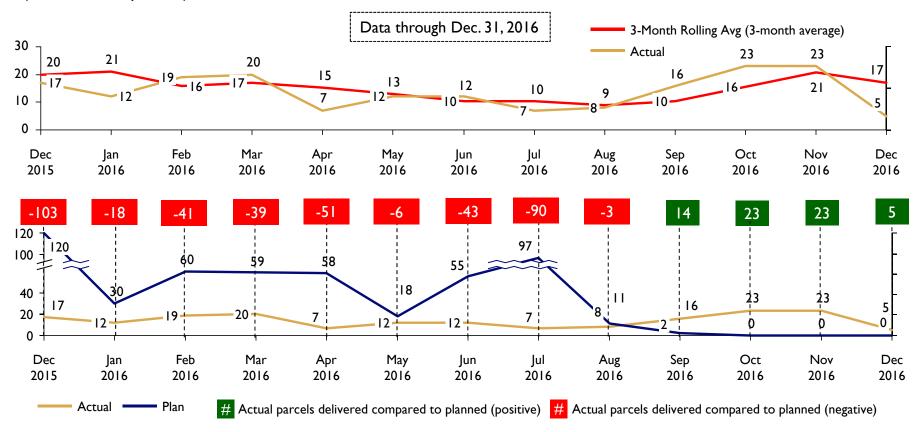
- 1. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized. Addition of new parcels extend Plan full delivery to later date.
- 2. "Forecast": Continually refined based on expected delivery.
- 3. Total number of parcels will be updated as design changes are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



ROW - CP2-3 Historic Performance

CP2-3 Performance

(in number of parcels)



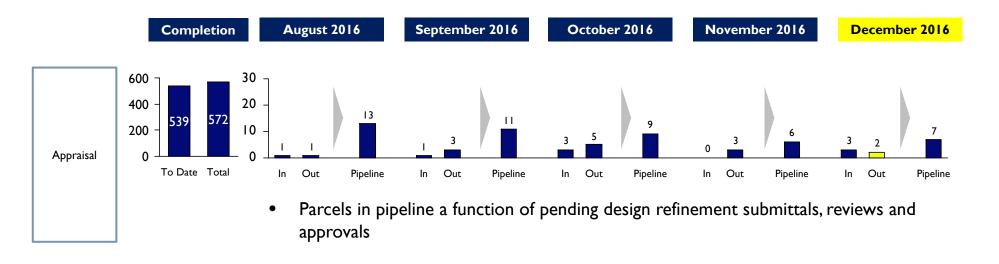
Notes

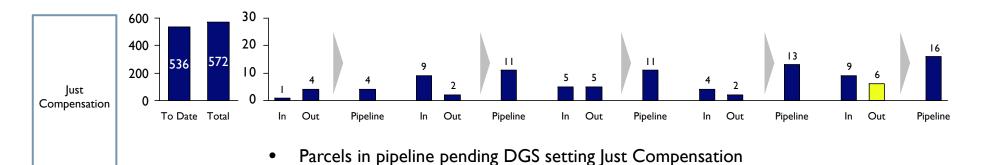
- I. Per contract, "planned" to be rebaselined.
- 2. Contract executed in June 2015; 31 parcels delivered after contract execution
- 3. Design changes and lag in data entry can cause slight changes to plan and actual counts.



ROW - CP2-3 Pipeline by Process (1 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



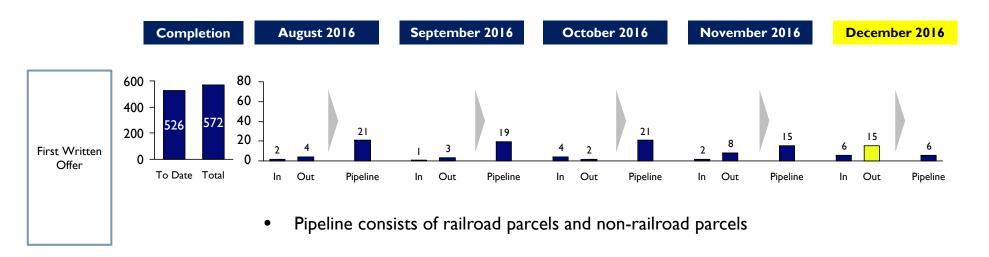


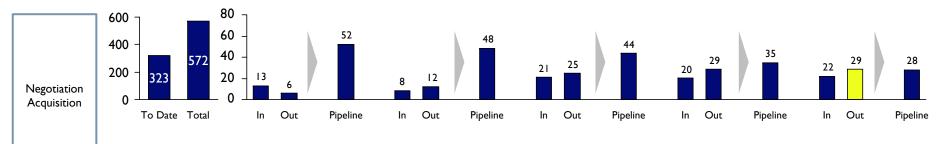
Note: Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline



ROW - CP2-3 Pipeline by Process (2 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline





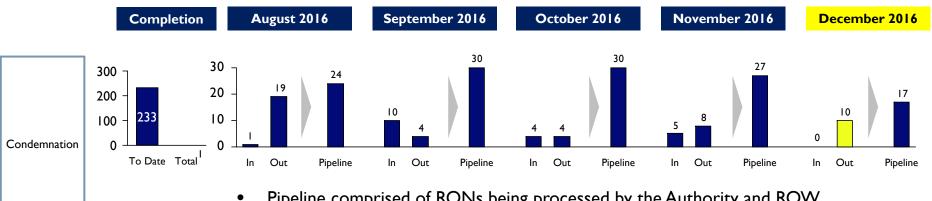
 Pipeline consists of signed agreements being processed through escrow, pending offers at property owners' decision to sign or enter condemnation and pending revised First Written Offer (FWO)

Note: Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline

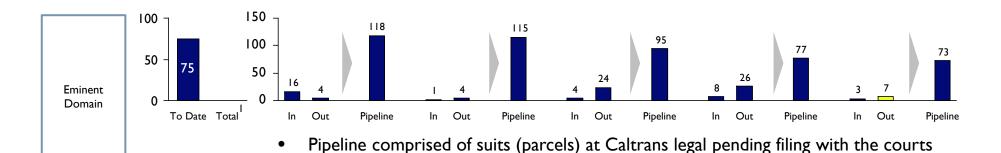


ROW - CP2-3 Pipeline by Process (3 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



 Pipeline comprised of RONs being processed by the Authority and ROW consultants and awaiting adoption by PWB.



seeking Court Orders of Possession.

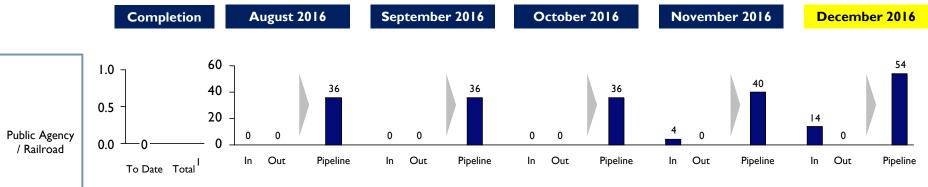
Notes:

- 1. Total number of parcels that may take the condemnation route is unknown
- 2. Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline

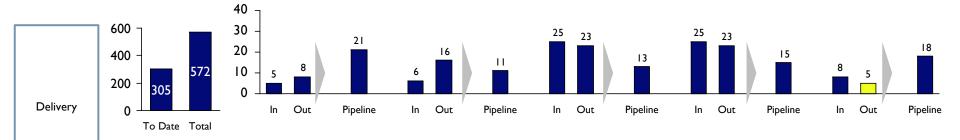


ROW - CP2-3 Pipeline by Process (4 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



 Current parcel count only includes public parcels with APNs and value. Public Roadway parcels will be defined to add to the total number of distinct parcels.



 Pipeline consists of parcels requiring relocation and parcels available to be transferred to DB.

Notes:

- 1. Total number of pubic parcels to be identified
- 2. Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline

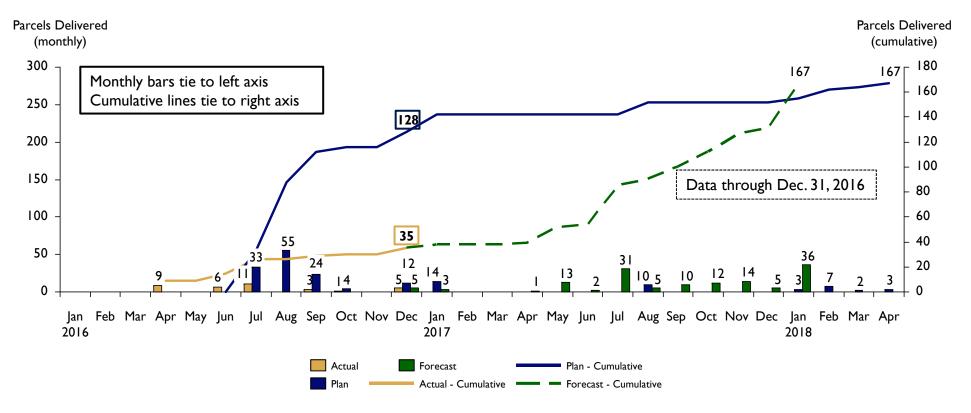


ROW - CP4 Parcels Delivered to DB by Month

Plan vs. Actual vs. Forecast

CP4 - Delivered to DB

(in number of parcels)



Notes:

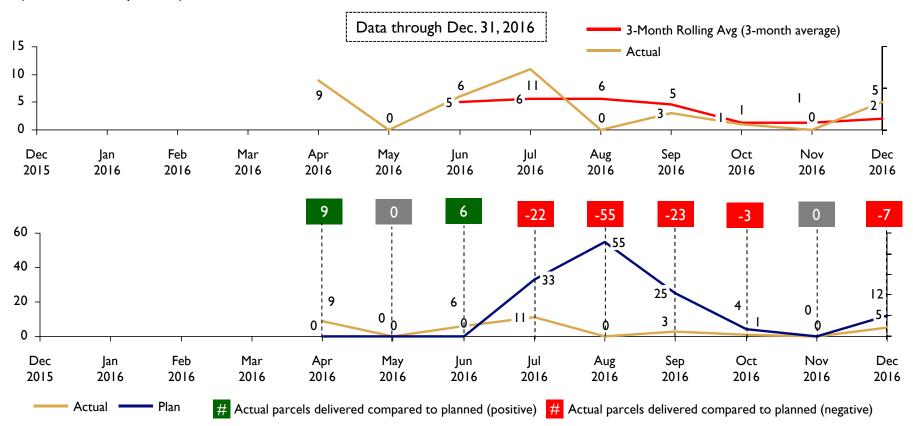
- I. The "Plan" numbers have been developed as a placeholder until acquisition plan with DB is finalized.
- 2. "Forecast": Continually refined based on expected delivery.
- 3. Total number of parcels will be updated as design changes are approved.



ROW - CP4 Historic Performance

CP4 Performance

(in number of parcels)



Notes:

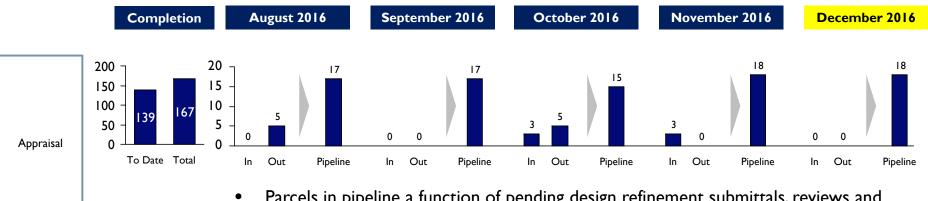
I. Per contract, "planned" to be rebaselined.

2. Design changes and lag in data entry can cause slight changes to plan and actual counts.

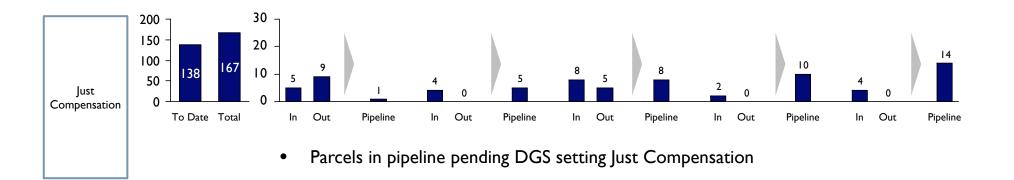


ROW - CP4 Pipeline by Process (1 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



 Parcels in pipeline a function of pending design refinement submittals, reviews and approvals

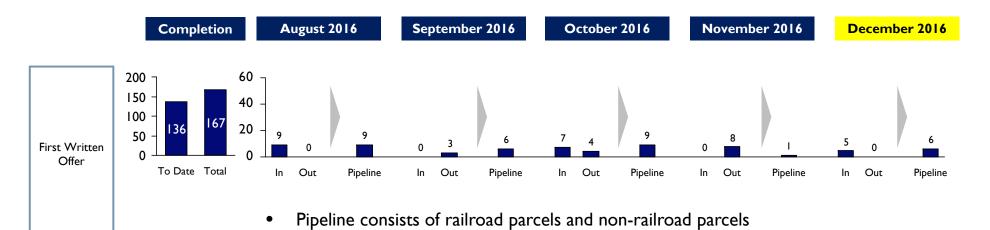


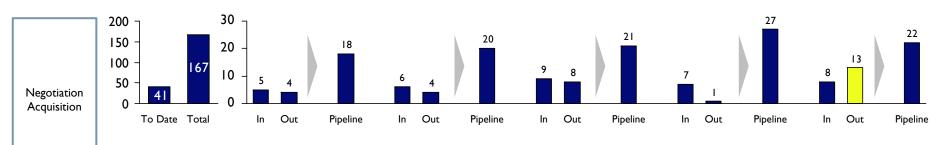
Note: Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline



ROW - CP4 Pipeline by Process (2 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline





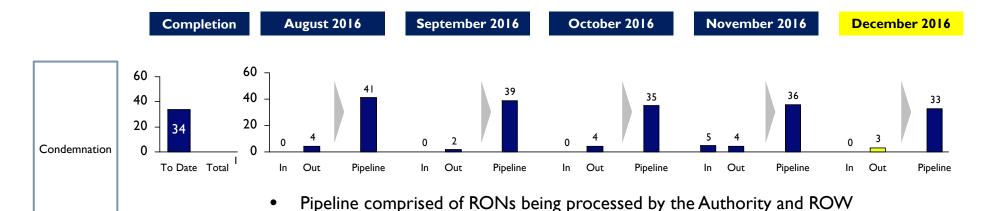
 Pipeline consists of signed agreements being processed through escrow, pending offers at property owners' decision to sign or enter condemnation and pending revised First Written Offer (FWO)

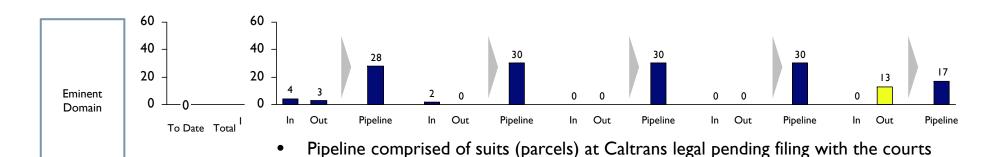
Note: Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline



ROW - CP4 Pipeline by Process (3 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline





consultants and awaiting adoption by PWB.

seeking Court Orders of Possession.

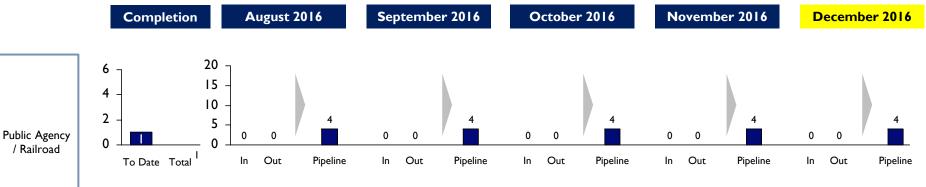
Notes:

- 1. Total number of parcels that may take the condemnation route is unknown
- 2. Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline

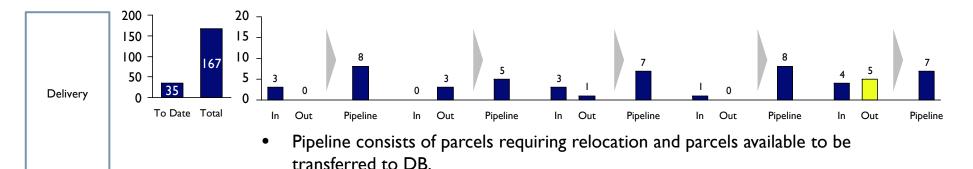


ROW - CP4 Pipeline by Process (4 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline



 Current parcel count only includes public parcels with APNs and value. Public Roadway parcels will be defined to add to the total number of distinct parcels.



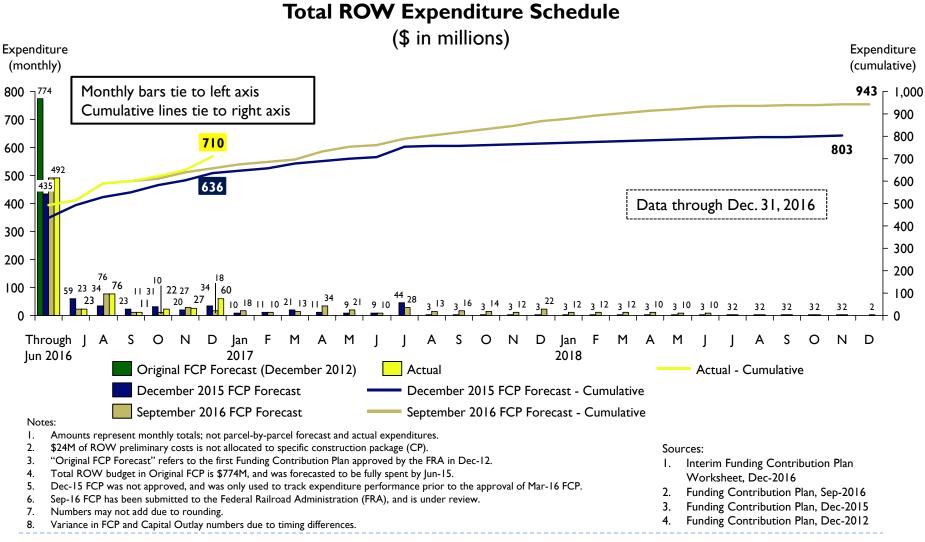
Notes:

- I. Total number of pubic parcels to be identified
- 2. Lag in data entry and parcel count changes due to design refinements may create month-to-month variances in the parcel flow pipeline



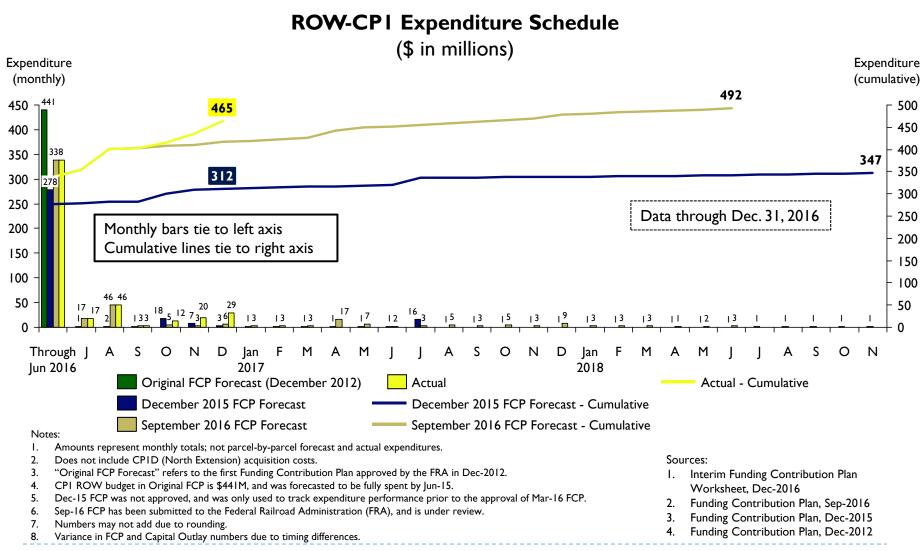
Total ROW Expenditure by Month

Forecast vs. Actual



ROW-CP1 Expenditure by Month

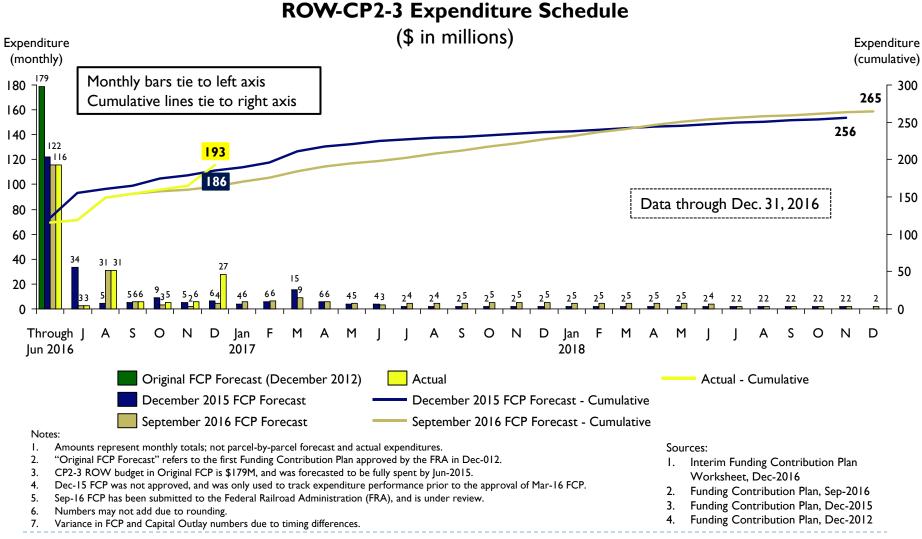
Forecast vs. Actual





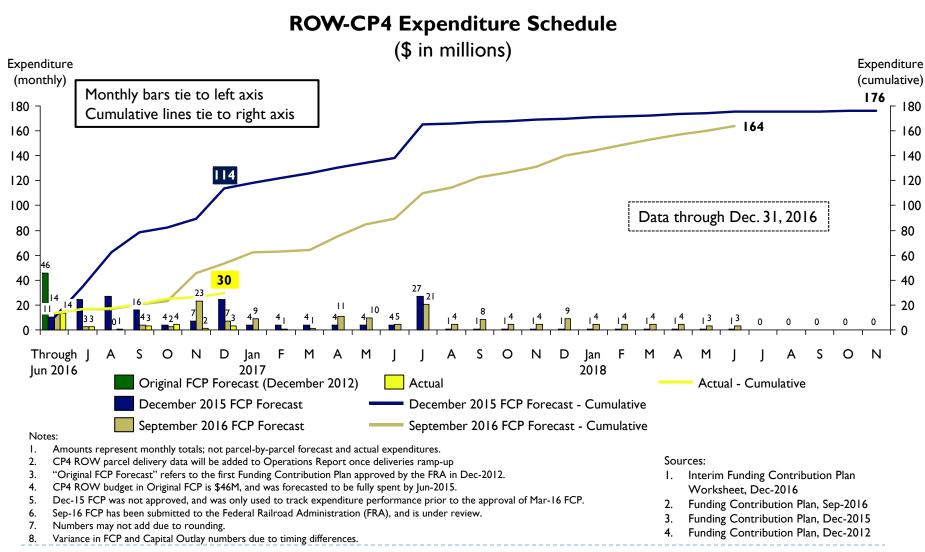
ROW-CP2-3 Expenditure by Month

Forecast vs. Actual



ROW-CP4 Expenditure by Month

Forecast vs. Actual





Agenda

- Operations Report Metrics
 - Executive Summary
 - Right-of-Way (ROW)
 - Project Development
 - Third Party Agreements
 - Contract Management
 - Finance/Budget
 - ARRA Schedule
 - Risk



Project Development Clearance Metrics - Context

- ▶ The following slides track several metrics for each Project Development project section/project related to:
 - Schedule and physical percent complete.
 - Key milestones.
 - Actual, planned and forecasted costs-to-completion dates:
 - As of July 2015, cost projections were rebaselined.
 - Starting in September 2015, forecasted costs were based on performance and trends, with planned costs remaining set.
 - Actual costs come from invoices the Authority receives.
 - Future costs to be revised to take into account more comprehensive Preliminary Engineering for Procurement (PE4P) and non-biological mitigation measures.
 - Project Development Milestone Schedule (page 44) provides an overview of key upcoming milestones across all project development project sections and projects.

Note: The Project Development budgets in this Operations Report include all funding sources (Prop IA, ARRA, and Cap and Trade). This report differs from the Funding Contribution Plan (FCP) since it is limited to the scope of the ARRA grant and state match requirements.



Environmental Milestones Schedule (to ROD)

Information through December 2016¹

Segment	Progress to Date	Next Steps
San Francisco to San Jose	 Briefed FRA on process, schedule, design development, outreach, and Checkpoint B status. Conducted project environmental justice outreach meeting with the Bayview Citizens' Advisory Committee. Continued stakeholder consultation on station and station planning issues. 	 Maintain stakeholder outreach. Lock down the project description and advance preliminary design (including alignment, passing tracks, station improvements, and terminal/ storage facilities) and environmental technical studies (including traffic and cultural resources analysis).
San Jose to CV Wye	 Met with San Jose city staff to discuss station and alignment issues. Conducted a webinar on alignments for the CA Dept. of Fish and Wildlife. Met with the Pajaro River Watershed Flood Prevention Authority to discuss alignment and design issues. 	 Complete definition of end-to-end project alternatives, Conduct analysis of refined alternative elements for an addendum to Checkpoint B. Advance preliminary design for established alignments.
Central Valley Wye (M-F)	 Received concurrence from USACE and EPA on Checkpoint B Addendum. Prepared draft materials for January Board meeting to identify preliminary preferred alternative. Continued to help prepare administrative draft EIR/EIS for submittal to the Authority in early January. 	 Complete draft and submit Checkpoint C Summary Report to USACE and EPA. Prepare publication plan for future release and public circulation of supplemental draft EIR/EIS. Obtain Biological Opinion from the USFWS.
Central Valley Interconnections	 Remaining Central Valley Interconnection work (Sites 6 and 7) included as part of Central Valley Wye analysis. 	 Continue to coordinate with PG&E on electrical interconnections and upgrades.
HMF	 Environmental clearance approach on hold. Environmental screening criteria and clearance approach still under discussion. 	 Assess schedule performance once screening criteria and approach are finalized.
Locally- Generated Alternative (F-B) ²	 Provided technical guidance to the regional consultant in responding to FRA comments on the administrative draft supplemental EIR/EIS. Continued to help prepare publication plan for future release and public circulation of supplemental EIR/EIS. 	 Conduct review of the administrative record for the draft EIR/EIS. Continue to update CommentSense for the future response s to comments on draft EIR/EIS documents. Providing on-going assistance to design/build contractor and project construction manager on environmental and permitting issues.

Text identified in red indicate change from previous month.

² Previously referred to as the Bakersfield F Street Station Alignment



Project Development Milestones Schedule (to ROD)

*Information through December 2016*¹

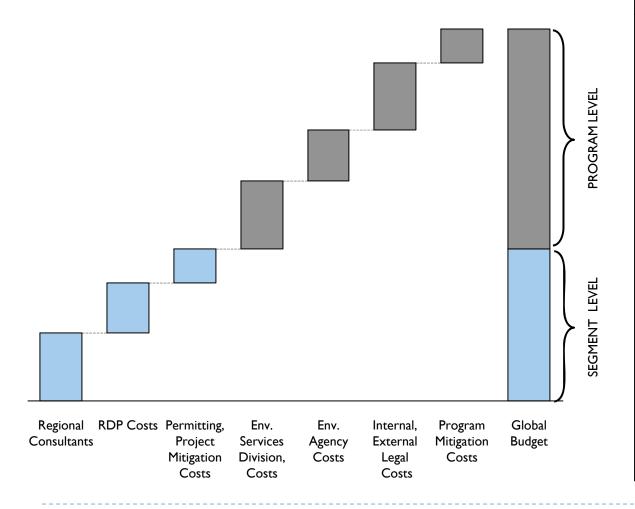
Segment	Progress to Date	Next Steps
Bakersfield to Palmdale	 Conducted 4(f) consultations with owners of protected resources (e.g., Chavez Center, Pacific Crest Trail, etc.). Developed draft materials for future identification of a preliminary preferred alternative. Continued to review "in progress" documents. 	 Conduct stakeholder meetings and community open houses in early 2017. Continue coordination with the resource agencies, particularly under Section 402 of the Clean Water Act. Complete remaining technical reports and EIR/EIS chapters and sections. Develop regional approach for biological mitigation.
Palmdale to Burbank	 Conducted 4(f) consultations with owners of protected resources (e.g., Pacific Crest Trail, Hammack Activity Center, Robert St. Clair Parkway, etc.). Discussed Santa Clara River crossing alignment issues with CDFW and USFWS. Continued to review "in progress" documents. 	 Complete the preliminary engineering for project definition in February 2017. Carry on coordination activities with the USFS and other resource agencies. Develop regional approach for biological mitigation.
Burbank to LA	 Held four stakeholder working group meetings and four public open houses. Refining draft project description for FRA review. Reviewing "in progress" documents. Continued coordination with Link US on refinements at Los Angeles Union Station. 	 Complete final preliminary engineering for project definition. Continue discussions with USEPA and USACE regarding permitting strategy under the Clean Water Act. Evaluate parking strategies at LA Union Station. Coordinate with Metro and Metrolink on LA Union Station strategies.
LA to Anaheim	 Continued to refine draft project description for FRA review. Refined Los Angeles-Anaheim project design/track layout to address stakeholder input. Continued design refinement process as technical studies progress. 	 Complete final preliminary engineering for project definition. Continue discussions with USEPA and USACE regarding permitting strategy under the Clean Water Act. Define project footprint for environmental evaluation.

^{1.} Text identified in red indicate change from previous month.



Global Project Development Budget includes activities involved in the scope at the program and segment levels

Cost Categories for Scope and Budget Definition

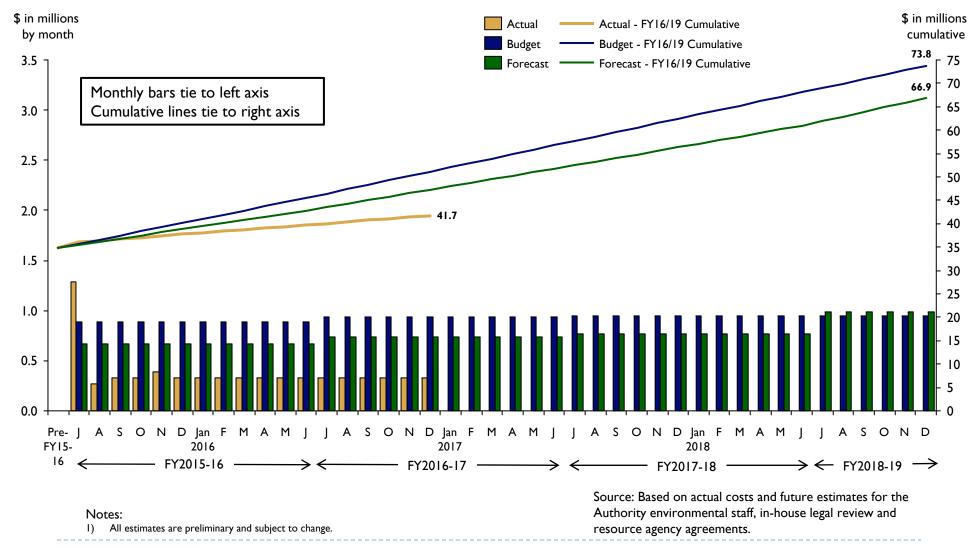


Cost Categories

- Regional consultants' and Engineering and Environmental consultants' costs include project management, outreach, planning, engineering and environmental activities.
- RDP costs include management, coordination, and technical reviews.
- Permitting and project mitigation costs include obtaining permits required for construction and implementing project-level mitigation commitments.
- Authority costs reflect management and staff costs for overseeing project development program delivery.
- Environmental agency costs are costs for agency staff to attend meetings, review technical reports, and provide technical guidance.
- Legal costs are costs associated with inhouse and outside legal reviews.
- Program mitigation costs for costs associated with implementing EIR/EIS program-level mitigation commitments.



Program Level Budget (Non-Section Specific Costs)





Environmental Milestones Schedule (to ROD) - Information through December 20161

Segment	Progress		Purpose & atement		Alternatives alysis	Prelimina Altern	ncurrence of ry Preferred ative for EIR/EIS		blish EIR/EIS		nal EIR/EIS cain ROD		EIR/EIS ompleted
	Due Dates	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Original Target	Revised Target
Merced to Fresno	Plan Forecast % Complete	- - -	Feb-II	-	Jun-I I	- - -	N/A	-	Aug-II	-	Sep-12	-	Sep-12
Fresno to Bakersfield	Plan Forecast % Complete	- - -	Feb-II	-	Jun-I I	-	N/A	-	Jul-12	-	Jun-14		Jun-14
CV Electrical Interconnections	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete I 00%	Complete Complete 100%	Jul-16 Aug-16 95%	Jul-16 Sep-16 100%	Nov-16 Nov-16 0%	Nov-16 Sep-16 100%	Oct-17 Oct-17 0%	Oct-17 Sep-16 100%	Oct-17	Sep-16
San Francisco to San Jose ⁵	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Jul-16 Apr-17 18%	Jul-16 Aug-17 18%	Jan-17 Jul-17 9%	Jan-17 Oct-17 12%	Nov-17 Dec-17 0%	Nov-17 Jul-18 0%	Nov-17	Jul-18
San Jose to Merced	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-16 Apr-17 15%	Sep-16 Aug-17 16%	Feb-17 Jul-17 10%	Feb-17 Nov-17 14%	Nov-17 Dec-17 0%	Nov-17 Aug-18 0%	Nov-17	Aug-I
Central Valley Wye (M–F) ²	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Sep-15 Jan-17 75%	Sep-15 Jan-17 75%	Feb-16 Apr-17 43%	Feb-16 Jun-17 50%	Dec-16 Dec-17 0%	Dec-16 Feb-18 0%	Dec-16	Feb-I
Locally Generated Alternative (F–B) ³	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Jul-16 Apr-17 92%	Jul-16 Apr-17 92%	Dec-16 Jan-18 0%	Dec-16 Jan-18 0%	Dec-16	Jan-18
Bakersfield to Palmdale ⁵	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Jan-16 Mar-16 85%	Complete Complete 100%	Oct-16 Dec-16 50%	Oct-16 Jun-17 60%	Feb-17 May-17 20%	Feb-17 Jul-17 20%	Nov-17 Dec-17 0%	Nov-17 Mar-18 0%	Nov-17	Mar-I
Palmdale to Burbank ⁵	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Aug-16 Mar-17 40%	Aug-16 Sep-17 45%	Mar-17 Jun-17 18%	Mar-17 Dec-17 18%	Nov-17 Dec-17 0%	Nov-17 Sep-18 0%	Nov-17	Sep-I
Burbank to LA ⁵	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Mar-17 Feb-17 15%	Mar-17 Jun-17 25%	Jun-17 Jul-17 12%	Jun-17 Aug-17 20%	Nov-17 Dec-17 0%	Nov-17 May-18 0%	Nov-17	May-I
LA to Anaheim ⁵	Plan Forecast % Complete	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Complete Complete 100%	Mar-17 Feb-17 20%	Mar-17 Jun-17 30%	Jun-17 Jul-17 12%	Jun-17 Sep-17 20%	Nov-17 Dec-17 0%	Nov-17 Jun-18 0%	Nov-17	Jun-18
HMF⁴	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 Cha

[.] Dates identified in red indicate change from previous month. Green cells indicates that the EIR/EIS has been completed.

^{5.} Schedule update pending further coordination with FRA.



^{2.} Purpose and Need and the Alternatives Analysis were achieved as part of the Merced to Fresno EIR/EIS, completed in September 2012.

^{3.} Purpose and Need and the Alternatives Analysis were achieved as part of the Fresno to Bakersfield EIR/EIS, completed in June 2014.

^{4.} Environmental clearance approach on hold and under review

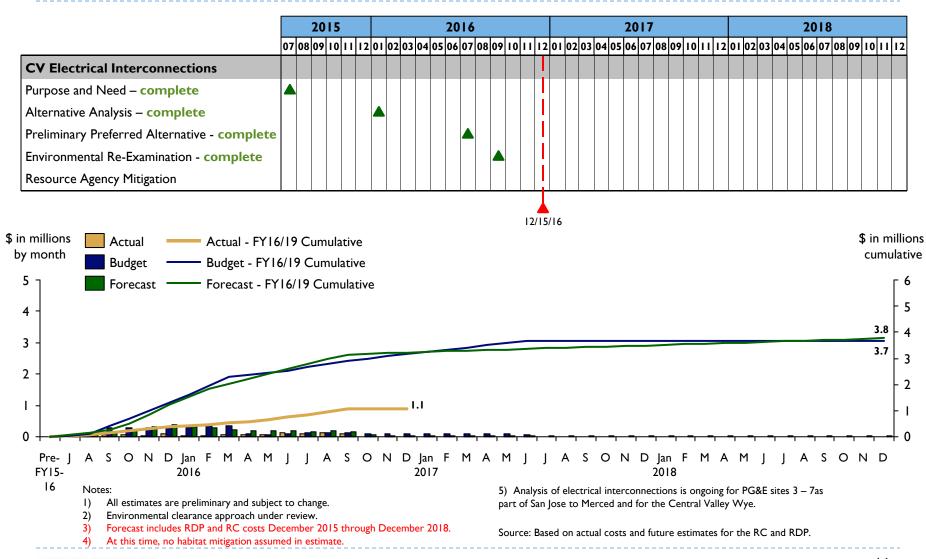
Environmental Milestones Schedule (to ROD) - Information through December 20161

Segment	Schedule Status and Mitigation Strategies
Merced to Fresno	EIR certified and project approval May 2012; FRA ROD issued September 2012
Fresno to Bakersfield	EIR certified and project approval May 2014; FRA ROD issued June 2014
CV Electrical Interconnections	Environmental Evaluation Has Been Completed Using an environmental re-examination process, it was determined that the electrical interconnection and network upgrades for PG&E sites 8 through 12 do not require preparation of a supplemental environmental document. As a result, the environmental review has been completed, shaving a year off the schedule.
San Francisco to San Jose ²	Schedule update pending further coordination with FRA.
San Jose to Merced ²	Dates for Draft and Final EIR/EIS and ROD have been updated to reflect the revised process schedule, agreed upon with the FRA. The schedule continues to be reviewed to identify opportunities for compressing activities and other efficiencies.
Central Valley Wye (M–F) ²	Dates for Draft and Final EIR/EIS and ROD have been updated to reflect the revised process schedule, agreed upon with the FRA. The schedule continues to be reviewed to identify opportunities for compressing activities and other efficiencies.
Locally Generated Alternative (F–B)	Dates for Draft and Final EIR/EIS and ROD have been updated to reflect the revised process schedule, agreed upon with the FRA. The schedule continues to be reviewed to identify opportunities for compressing activities and other efficiencies.
Bakersfield to Palmdale ²	Schedule update pending further coordination with FRA.
Palmdale to Burbank ²	Schedule update pending further coordination with FRA.
Burbank to LA ²	Schedule update pending further coordination with FRA.
LA to Anaheim ²	Schedule update pending further coordination with FRA.
HMF	Environmental clearance approach on hold and under review; dates are subject to change pending Authority decision regarding type of environmental clearance documentation needed.

- I. Text identified in red indicate change from previous month.
- 2. Schedule update pending further coordination with FRA.

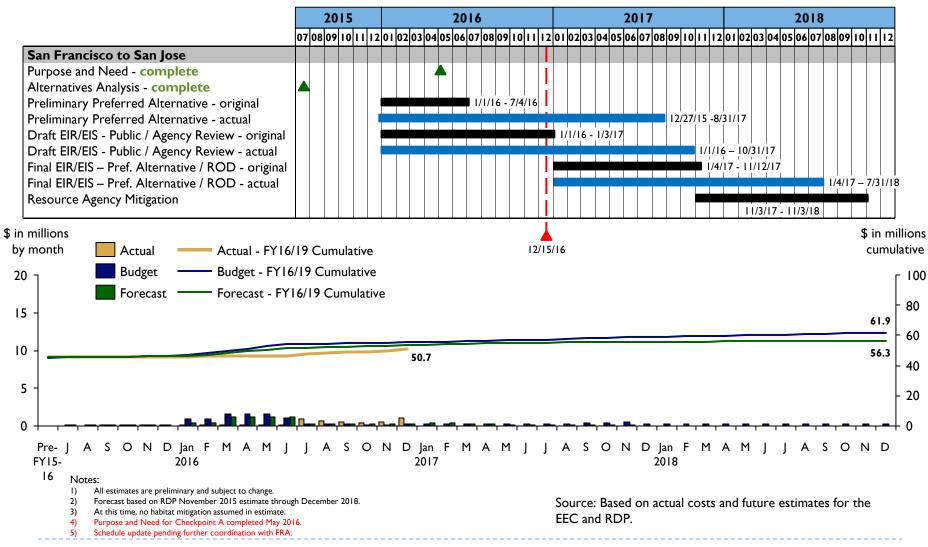


Oentral Valley Electrical Interconnections



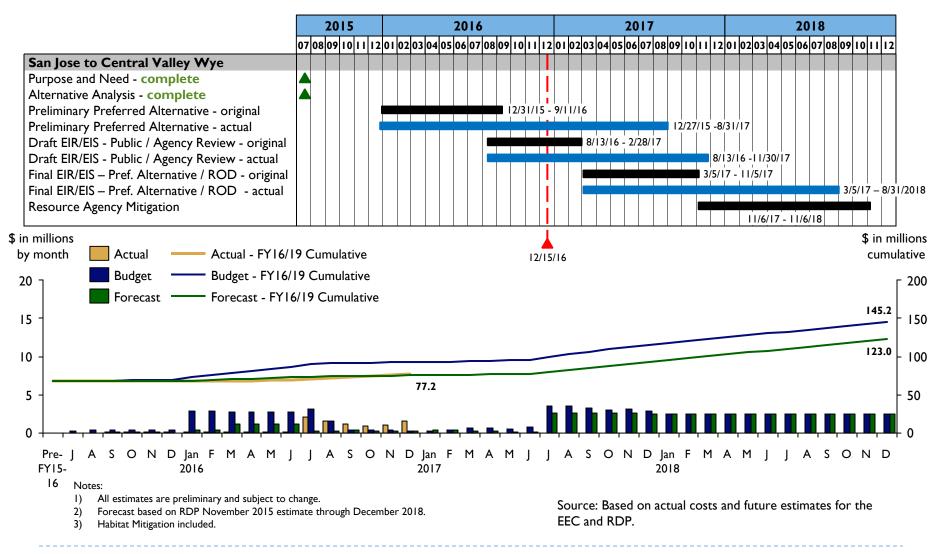


San Francisco to San Jose



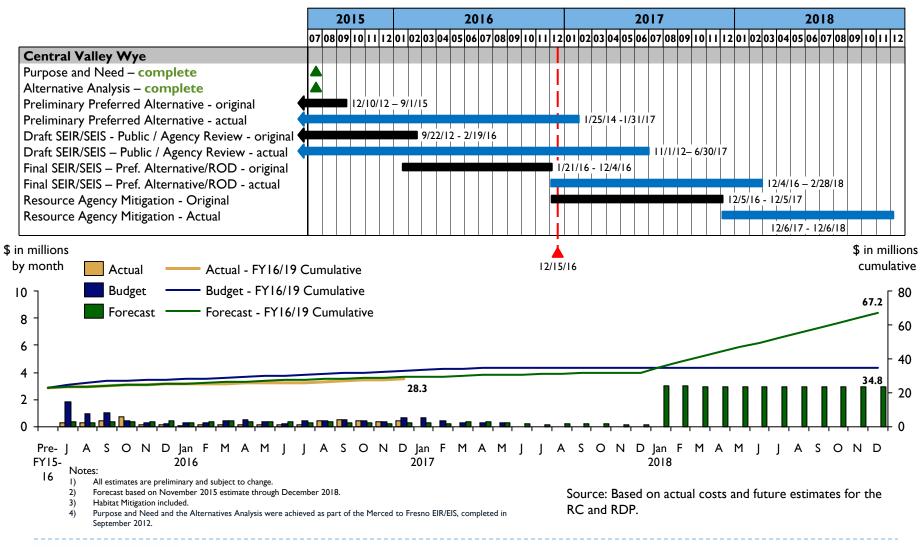


San Jose to Merced



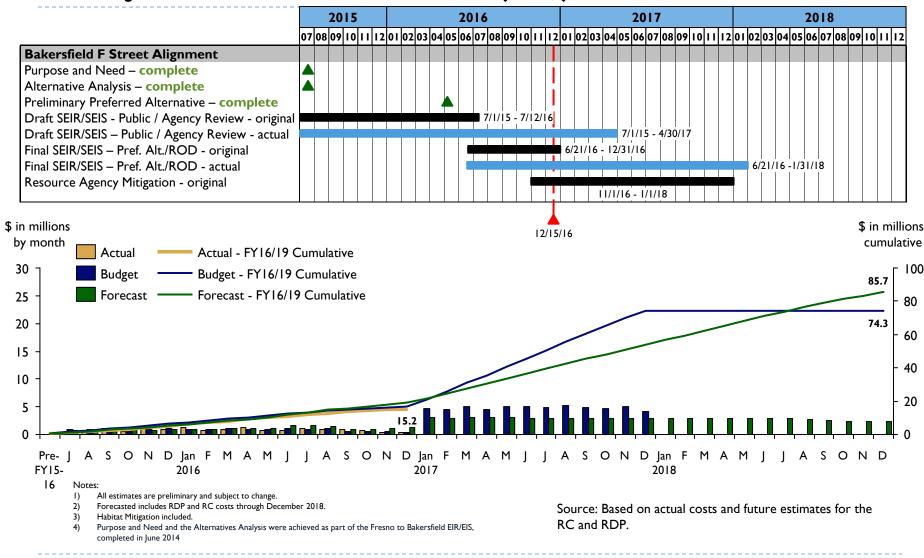


Ocentral Valley Wye (M-F)



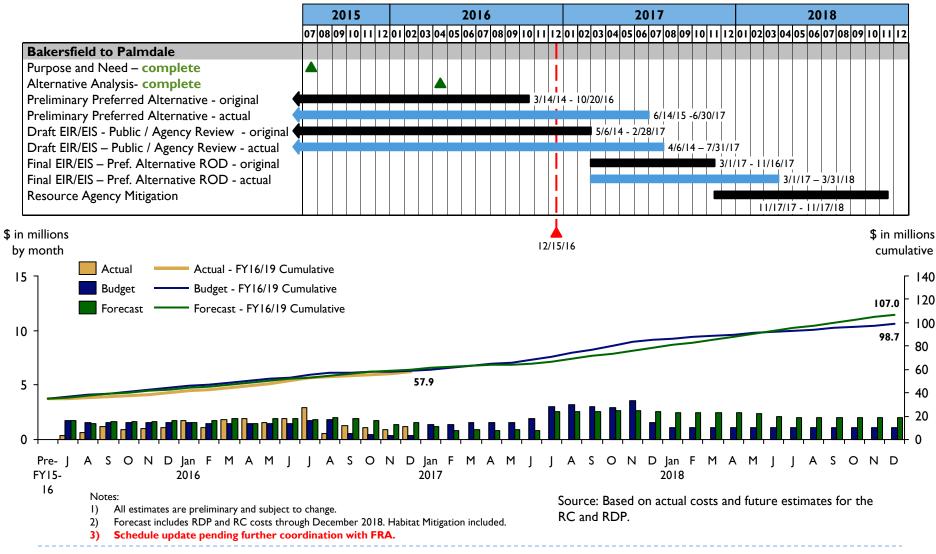


Locally Generated Alternative (F-B)



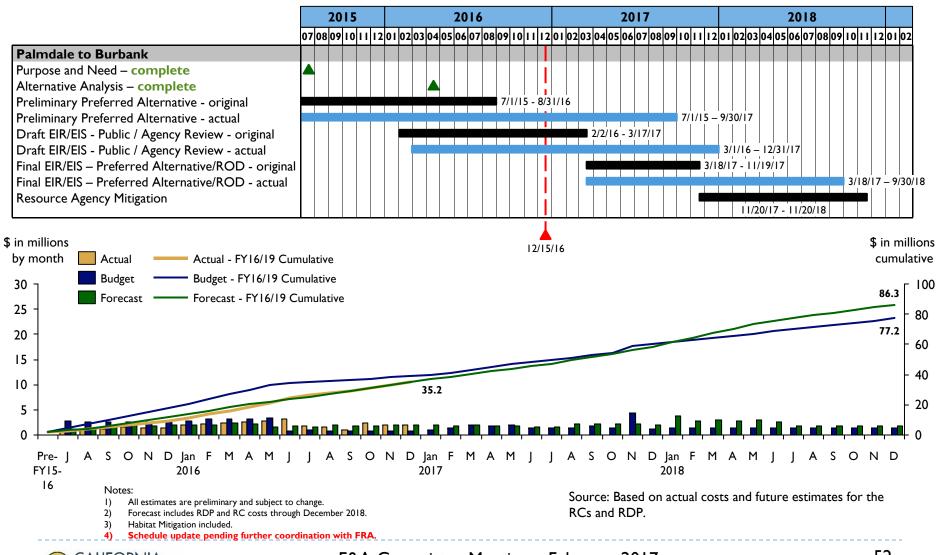


Bakersfield to Palmdale

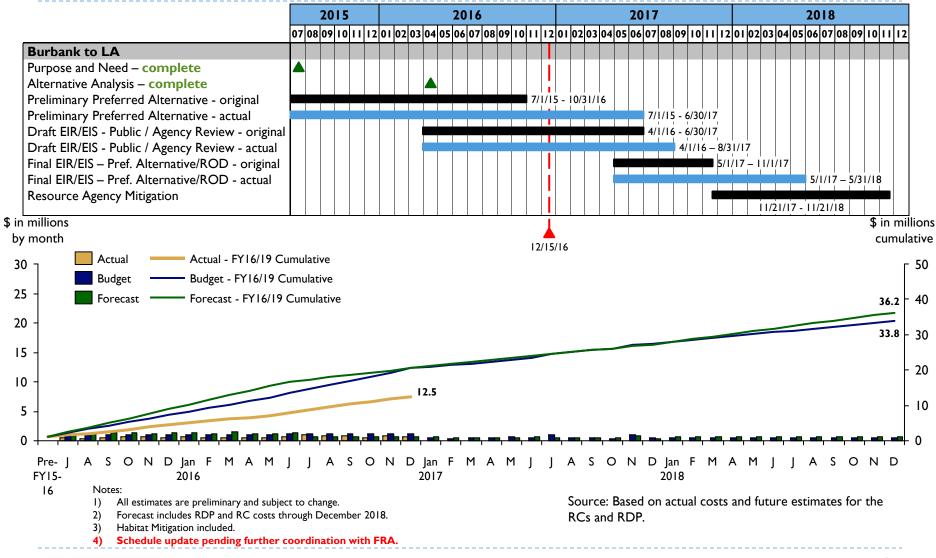




Palmdale to Burbank

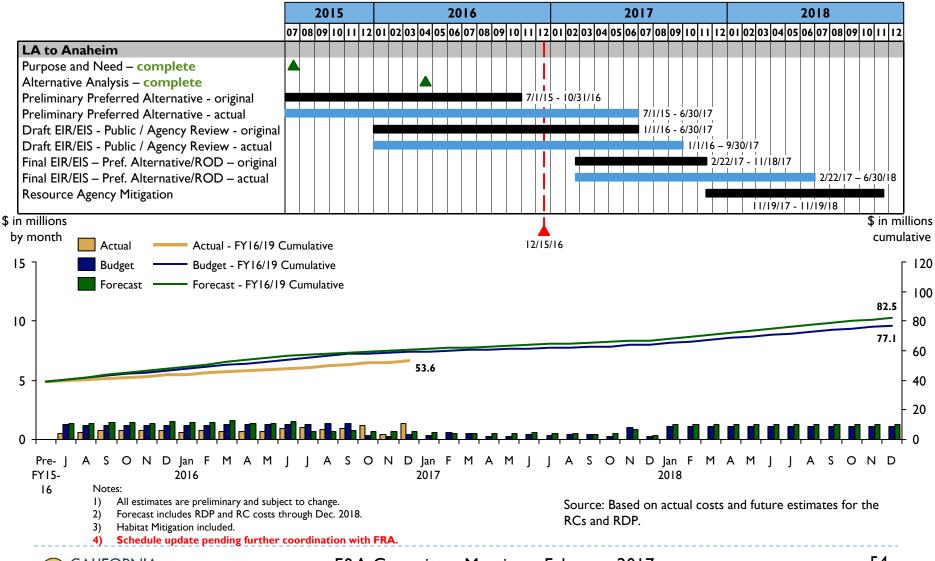


Burbank to LA

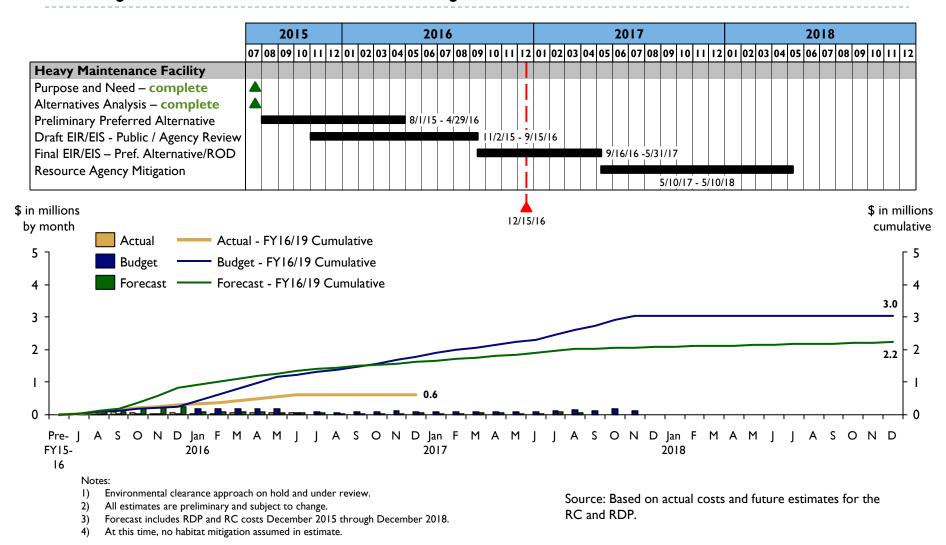




LA to Anaheim



Heavy Maintenance Facility¹





Four-month look ahead - milestones and other key deliverables, all sections/projects: Information through December 2016¹

Milestone	Project Section	Due Date	% Completion	Status
Obtain Checkpoint B concurrence for addition of SR 152 (North) to Road 11 Wye Alternative	Central Valley Wye	December 2016	100%	Completed
Checkpoint C pre-submittal meeting with FRA, USACE, EPA, and STB	Central Valley Wye	December 2016	100%	Completed
Public meeting to present all four Wye Alternatives	Central Valley Wye	December 2016	100%	Completed
Submit Checkpoint B, Range of Alternatives, to agencies	Palmdale to Burbank	January 2017	80%	On Target
Resolve Clean Water Act nationwide permit approval and MOU with signatory agencies	Burbank to Los Angeles and Los Angeles to Anaheim	January 2017	80%	Delayed
Footprint Validation	San Jose to Merced	January 2017	60%	Delayed
Submit Admin. Draft Supplemental EIR/EIS to FRA	Central Valley Wye	January 2017	95%	On Target
Obtain Checkpoint B concurrence	San Francisco to San Jose	March 2017	45%	On Target
Checkpoint B Addendum	San Jose to Merced	March 2017	25%	On-Target

Notes:

² A delay has occurred because of continuing work to complete project definition.



¹ Text and dates identified in red indicate change from previous month.

Four-month look ahead - milestones and other key deliverables, all sections/projects: Information through December 2016¹

Milestone	Segment	Due Date	% Completion	Status
Complete preliminary engineering for project definition	San Francisco to San Jose	May 2017	40%	On Target
Recommendation of preliminary preferred alternative to Board	San Francisco to San Jose	April 2017	25%	On-Target
Draft preliminary engineering for project definition	San Jose to Merced	April 2017	35%	On-Target
Recommendation of preliminary preferred alternative to Board	San Jose to Merced	April 2017	15%	On-Target
Publish Draft Supplemental EIR/EIS for public review	Locally Generated Alternative (F-B)	April 2017	92%	On-Target
Conclude record set preliminary engineering for project definition	Bakersfield to Palmdale	April 2017	80%	On Target
Complete record set preliminary engineering for project definition	liminary engineering for and Los Angeles to Anaheim		65%	On Target

Notes:

² A delay has occurred because of continuing work to complete project definition.



¹ Text and dates identified in red indicate change from previous month.

Agenda

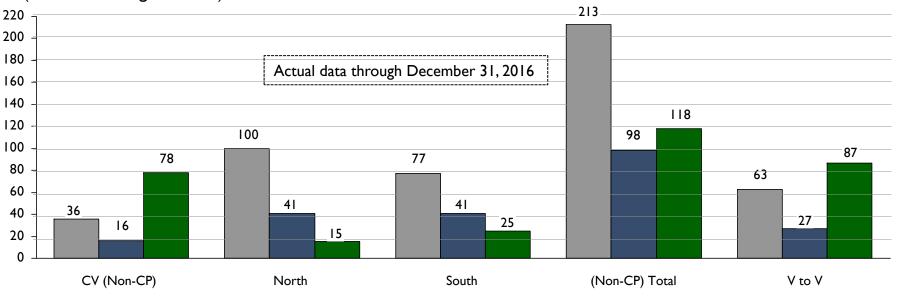
- Operations Report Metrics
 - Executive Summary
 - Right-of-Way (ROW)
 - Project Development
 - Third Party Agreements
 - Contract Management
 - Finance/Budget
 - ARRA Schedule
 - Risk



Central Valley (Non-CP), North, South, (Non-CP), and Valley to Valley Executed and Unexecuted Agreements

Total Executed/Unexecuted Agreements

(in number of agreements)



- Unexecuted Count Prior Quarter (Ending September 2016)
- Current Executed Count (Total)
- Unexecuted Count Current Quarter (Through December 2016)

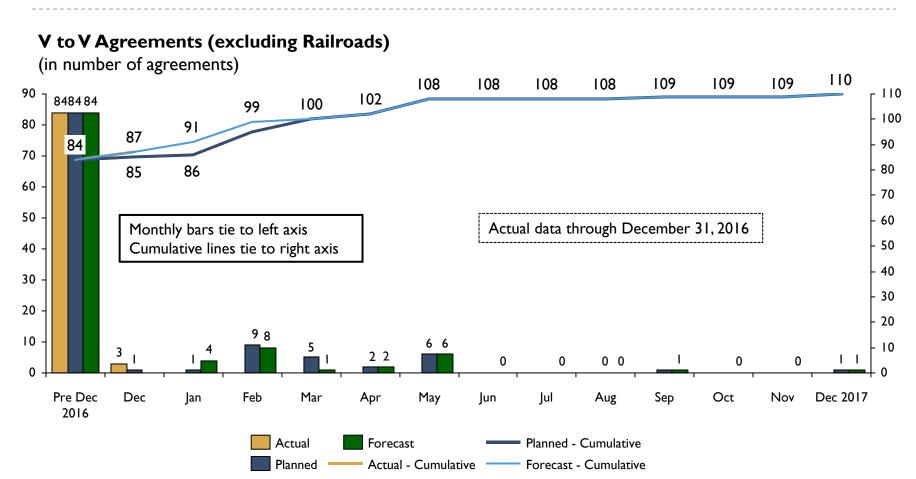
Notes:

- I. Some Agreements are counted more than once because they are required for more than one section.
- 2. Central Valley (Non-CP), North, South, (Non-CP) total counts include Master/Cooperative Agreements and Reimbursement Agreements for environmental coordination and project development.
- 3. V to V count is a subset of the agreements already represented.
- 4. The count for the agreements may change regularly due to changes in alignments; new information as investigations continue; agreements being combined; mergers, acquisitions, spin-offs, and other transactions; identification of different legal entities as asset owners and operators; etc.



Valley to Valley Agreements by Month

Plan vs. Actual vs. Forecast



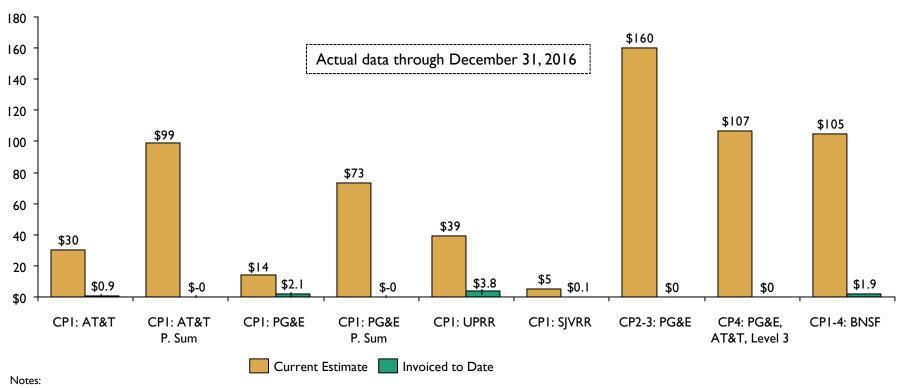
Notes:

1. Some Agreements are counted more than once because they are required for more than one section.



AT&T, PG&E, Level 3, & Railroads

Current Invoiced Amounts and May 2016 Estimate (\$ in millions)



- I. Third Party Agreements are agreements that enable the design and construction of the CA High-Speed Rail System. These agreements are for the relocation, modification, reconstruction, and/or protection of utilities, irrigations facilities, and roadways that are in physical conflict with the proposed alignment.
- 2. As the project progresses, the Authority will be in a better position to quantify the estimates.
- 3. May 2016 estimates for CPI are due to a better understanding of utility impacts as part of physical ground and underground surveys required for design.
- 4. May 2016 estimates for CP2-3 and CP4 are based on most current information available and have not been verified by physical ground and underground surveys required for design.
- 5. All estimates do not include contingency. See risk overlay slides for added contingency.
- 6. Amounts shown for each Third Party agreement are inclusive of funds shown in both the project budget and Third Party budget line items.
- 7. Amounts expended by the DB's for this work will be reported as received.

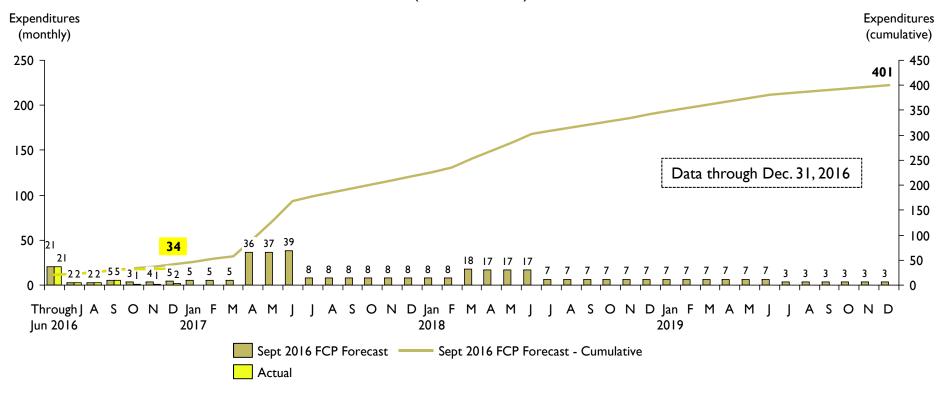


Total Other Expenditure by Month

Forecast vs. Actual

Total Other Expenditure Schedule

(\$ in millions)



Notes:

- 1. Original FCP Forecast (December 2012) did not have task level detail for other expenditures.
- 2. Other costs include utilities, railroads, local municipalities, irrigation districts and resource agency support.
- 3. Sep-16 FCP has been submitted to the Federal Railroad Administration (FRA), and is under review.
- 4. Numbers may not add due to rounding.
- 5. Variance in FCP and Capital Outlay numbers due to timing differences.

Sources:

- Interim Funding Contribution Plan Worksheet, Dec-2016
- 2. Funding Contribution Plan, Sep-2016



Agenda

- Operations Report Metrics
 - Executive Summary
 - Right-of-Way (ROW)
 - Project Development
 - Third Party Agreements
 - Contract Management
 - Finance/Budget
 - ARRA Schedule
 - Risk



Contract Management Metrics - Context

- ▶ There are 2 contract management metrics included:
 - Contingency Value
 - This value is based on remaining contingency as a percentage of the remaining contract balance
 - Expenditure Schedule
 - Earned Value (EV) = Percent Complete x Budget at Completion (BAC)
 - Planned Value (PV) = Approved Baseline Schedule
 - Funding Contribution Plan (FCP) forecast value refers to forecasted Design-Build Contract expenditure in quarterly Funding Contribution Plan
- Contract management metrics for CP1, CP2-3, CP4, and SR-99 are included
 - For the SR-99 realignment project contract the Authority is in an oversight role, with Caltrans directly managing the project
- Updates to the report will be made monthly
 - In October 2015, cut-off date for data reporting was adjusted to the end of the prior month



CP1 Contract Management - Contingency Value



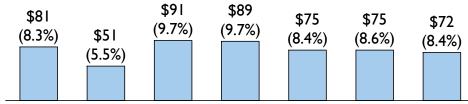


End of FY2015-16 Jul 2016 Aug 2016 Sep 2016 Oct 2016 Nov 2016 Dec 2016 Jan 2017 Feb 2017 Mar 2017 Apr 2017 May 2017 Jun 2017

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

CPI – Contingency Balance Remaining

(\$ in millions)
(% of contract balance remaining)



End of FY2015-16 Jul 2016 Aug 2016 Sep 2016 Oct 2016 Nov 2016 Dec 2016 Jan 2017 Feb 2017 Mar 2017 Apr 2017 May 2017 Jun 2017

Notes:

- I. Remaining Contract Value = [Revised DB Contract Amount] [Authority Approved Invoices to Date]. Revised DB contract amount, increased to \$1,308M from the original contract amount of \$1,023M, due to executed change orders (including North Extension).
- 2. Contract balance only accounts for 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 CPI 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: December 31, 2016 CPI Performance Metric Report



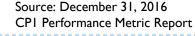
CP1 Contract Management Raw Data: Contingency Value

CPI – Contingency (\$ in millions)

	End of FY15-16	July 2016	Aug 2016	Sept 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017
Contract Balance Remaining	\$976.4M	\$943.2M	\$931.5M	\$920.8M	\$894.7M	\$874.8M	\$853.7M						
Contingency	\$160M	\$160M	\$160M	\$160M	\$160M	\$160M	\$160M						
Change Orders (from contingency)	\$79.3M	\$29.2M	-\$39.1M See Note 2	\$1.4M	\$13.6M	\$0	\$3.7M						
Contingency Balance Remaining	\$80.7M	\$51.5M	\$90.5M	\$89.1M	\$75.5M	\$75.5M	\$71.8M						
Contingency %	8.3%	5.5%	9.7%	9.7%	8.4%	8.6%	8.4%						

Note:

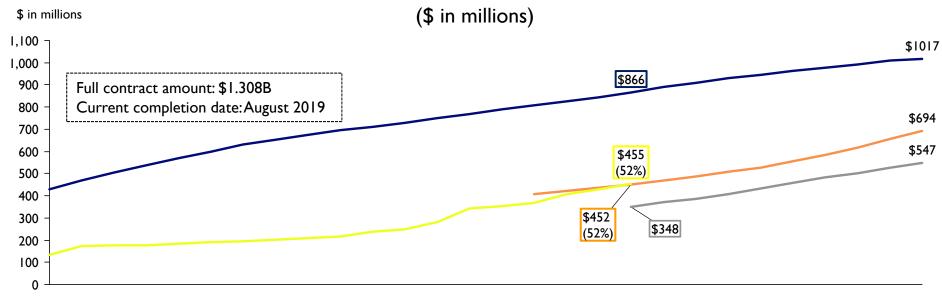
- I. Contract Balance Remaining is the sum of the previous month's Contract Balance Remaining less the monthly approved invoice amount plus change orders (from contingency).
- 2. \$39.1M of change orders executed from contingency was reclassified and funded through budget transfers.





CP1 Contract Management – Schedule Performance Index

CPI Schedule - Total Planned Value of Contract Earned



Planned Value Earned Value/Approved Invoices to Date
September 2016 FCP Forecast Revised Planned Values

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.
- CPI DB contract forecast expenditures from January 2016 to June 2017 will be 100% ARRA funded, until full ARRA drawdown.
- 4. The Planned Value line shown above is shown for historical reference. The Revised Planned Values shown are from the accepted mid-point Planned Value curve from the recently approved baseline schedule.

Sources:

- I. Planned Value: CPI Baseline Schedule
- 2. FCP Forecast: Funding Contribution Plan, Sept-2016
- Earned Value/Approved Invoices to Date: December 31, 2016 CPI Performance Metric Report
- 4. FCP Forecast will be updated based on quarterly Funding Contribution Plan.



CP1 Contract Management Raw Data: Schedule Performance Index

FY2016-17 CPI - Schedule (\$ in millions)

	End of FY2015-16	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Sept 2016 FCP Forecast Value	\$342.2M	\$358.2M	\$373.9M	\$389.4M	\$420.2M	\$435.5M	\$452.0M						
Earned Value/ Invoiced to Date See Note I	\$279.8M	\$342.2M	\$354.0M	\$368.8M	\$409.2M	\$429.IM	\$454.5M						
Planned Value	\$749.8M	\$768.4M	\$788.5M	\$807.0M	\$825.0M	\$842.6M	\$866.0M /\$348.3M See Note 2						
Schedule Performance Index	37%	45%	45%	46%	50%	51%	52% /130% See Note 2						

Notes

- 1. This is the Earned Value taken from Performance Metric Reports
- 2. The first values shown for Planned Value and SPI are based on the original approved baseline schedule. The second values shown for Planned Value and SPI are based on the mid-point planned value curve from the revised baseline schedule that is currently pending approval.

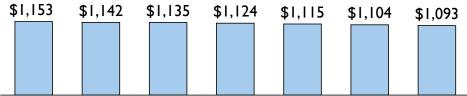
Source: December 31, 2016 CPI Performance Metric Report



CP2-3 Contract Management – Contingency Value

CP2-3 – Contract Balance Remaining

(\$ in millions)



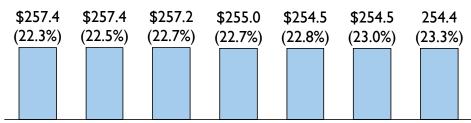
End of Jul 2016 Aug 2016 Sep 2016 Oct 2016 Nov 2016 Dec 2016 Jan 2017 Feb 2017 Mar 2017 Apr 2017 May 2017 Jun 2017 FY2015-16

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

CP2-3 – Contingency Balance Remaining

(\$ in millions)

(% of contract balance remaining)



End of FY2015-16 Jul 2016 Aug 2016 Sep 2016 Oct 2016 Nov 2016 Dec 2016 Jan 2017 Feb 2017 Mar 2017 Apr 2017 May 2017 Jun 2017

Notes:

- I. Remaining Contract Value = [Revised DB Contract Amount] [Authority Approved Invoices to Date].
- 2. Contract balance only accounts for invoices in determining contract balance, so this number may not reconcile with "earned value" in schedule performance index metric.

Source: December 31, 2016 CP2-3 Performance Metric Report



CP2-3 Contract Management Raw Data: Contingency Value

CP2-3 – Contingency (\$ in millions)

	End of FY2015-16	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Contract Balance Remaining	\$1,153M	\$1,142M	\$1,135M	\$1,124M	\$1,115M	\$1,104M	\$1,093M						
Contingency	\$261.2M	\$261.2M	\$261.2M	\$261.2M	\$261.2M	\$261.2M	\$261.2M						
Change Orders (from contingency)	\$4.0M	\$0.0M	\$0.0M	\$2.2M	\$0.5M	\$0	\$0.1M						
Contingency Balance Remaining	\$257.2M	\$257.2M	\$257.2M	\$255.0M	\$254.5M	\$254.5M	254.4M						
Contingency %	22.3%	22.5%	22.7%	22.7%	22.8%	23.0%	23.3%						

Note

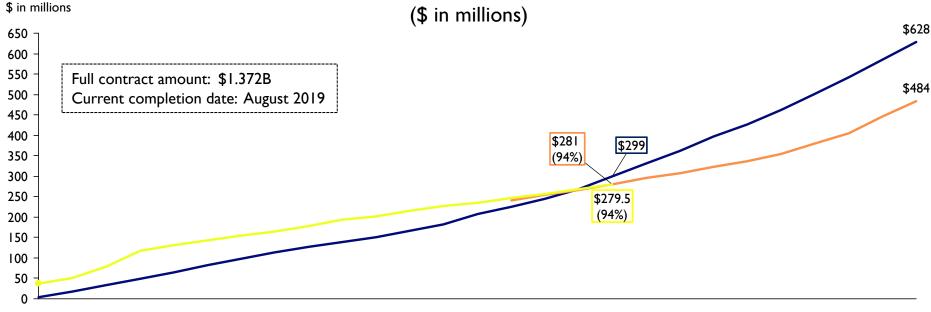
I. Contract Balance Remaining is the sum of the previous month's Contract Balance Remaining less the monthly approved invoice amount plus change orders (from contingency).

Source: December 31, 2016 CP2-3 Performance Metric Report



CP2-3 Contract Management – Schedule Performance Index





Planned Value September 2016 FCP Forecast

Earned Value/Approved Invoices to Date

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.
- CP2-3 DB contract forecast expenditures from January 2016 to June 2017 will be 100% ARRA funded, until full ARRA drawdown.
- 4. The Planned Values shown are from the accepted mid-point Planned Value curve from the approved baseline schedule. Reports from previous months showed a Planned Value curve from the early dates in the approved baseline schedule.

Sources:

- 1. FCP Forecast: Funding Contribution Plan, Jun-2016
- Earned Value/Approved Invoices to Date: December 31, 2016
 CP2-3 Performance Metric Report
- FCP Forecast will be updated based on quarterly Funding Contribution Plan.



CP2-3 Contract Management Raw Data: Schedule Performance Index

FY2016-17 CP2-3 - Schedule (\$ in millions)

	End of FY2015-16	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Sept 2016 FCP Forecast Value	\$208.7M	\$224.7M	\$242.7M	\$260.3M	\$253.6M	\$266.9M	\$280.7M						
Earned Value/ Invoiced to Date See Note I	\$216.3M	\$226.9M	\$234.1M	\$247.5M	\$257.3M	\$267.9M	\$279.5M						
Planned Value See Note 2	\$166.1M	\$182.7M	\$208.3M	\$225.6M	\$244.4M	\$268.9M	\$298.6M						
Schedule Performance Index See Note 2	130%	124%	112%	109%	105%	99%	94%						

Notes

- 1. This is the Earned Value taken from Performance Metric Reports
- 2. The Planned Values shown are from the accepted mid-point Planned Value curve from the approved baseline schedule. Reports from previous months showed a Planned Value curve from the early dates in the approved baseline schedule.

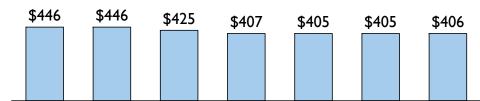
Source: December 31, 2016 CP2-3 Performance Metric Report



CP4 Contract Management – Contingency Value

CP4 – Contract Balance Remaining

(\$ in millions)



End of FY2015-16 Jul 2016 Aug 2016 Sep 2016 Oct 2016 Nov 2016 Dec 2016 Jan 2017 Feb 2017 Mar 2017 Apr 2017 May 2017 Jun 2017

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

CP4 – Contingency Balance Remaining

(\$ in millions)

(% of contract balance remaining)



End of FY2015-16 Jul 2016 Aug 2016 Sep 2016 Oct 2016 Nov 2016 Dec 2016 Jan 2017 Feb 2017 Mar 2017 Apr 2017 May 2017 Jun 2017

- I. Remaining Contract Value = [Revised DB Contract Amount] [Authority Approved Invoices to Date].
- 2. Contract balance only accounts for invoices in determining contract balance, so this number may not reconcile with "earned value" in schedule performance index metric.

Source: December 31, 2016 CP4 Monthly Status Report



Notes:

CP4 Contract Management Raw Data: Contingency Value

CP4 – Contingency (\$ in millions)

	End of FY2015-16	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Contract Balance Remaining	\$445.6M	\$445.6M	\$424.6M	\$407.IM	\$404.8M	\$404.8M	\$405.8M						
Contingency	\$62.0M	\$62.0M	\$62.0M	\$62.0M	\$62.0M	\$62.0M	\$62.0M						
Change Orders (from contingency)	\$1.4M	\$0.0M	\$0.0M	\$0.0M	\$0.0M	\$0.0M	\$0.3M						
Contingency Balance Remaining	\$60.6M	\$60.6M	\$60.6M	\$60.6M	\$60.6M	\$60.6M	\$60.3M						
Contingency %	13.6%	13.6%	14.3%	14.9%	15.0%	15.0%	14.9%						

Note:

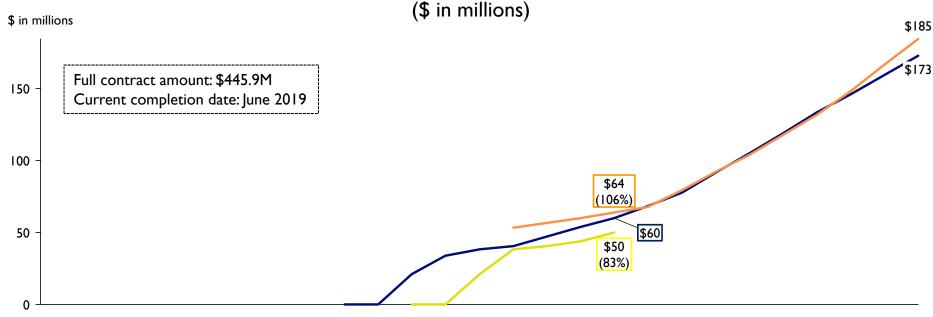
I. Contract Balance Remaining is the sum of the previous month's Contract Balance Remaining less the monthly approved invoice amount plus change orders (from contingency).

Source: December 31, 2016 CP4 Monthly Status Report



CP4 Contract Management – Schedule Performance Index

CP4 Schedule – Total Planned Value of Contract Earned



Planned Value September 2016 FCP Forecast Earned Value/Approved Invoices to Date

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.
- CP4 DB contract forecast expenditures from January 2016 to June 2017 will be 100% ARRA funded, until full ARRA drawdown.
- 4. The Planned Values shown are from the accepted mid-point Planned Value curve from the approved baseline schedule.

Sources:

- 1. FCP Forecast: Funding Contribution Plan, Sep-2016
- Earned Value/Approved Invoices to Date: December 31, 2016
 CP4 Monthly Status Report
- FCP Forecast will be updated based on quarterly Funding Contribution Plan.



CP4 Contract Management Raw Data: Schedule Performance Index

FY2016-17 CP4 - Schedule (\$ in millions)

	End of FY2015 -16	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Sept 2016 FCP Forecast Value	\$26.3M	\$34.7M	\$44.IM	\$53.2M	\$56.5M	\$60.0M	\$63.8M						
Earned Value/ Invoiced to Date See Note 3	\$0.0M	\$0.0M	\$21.1M	\$38.6M	\$40.8M	\$43.7M	\$50.3M						
Planned Value	See Note I	See Note I	See Note I	\$40.8M See Note 2	\$47.5M See Note 2	\$54.1M See Note 2	\$60.3M						
Schedule Performance Index	See Note I	See Note I	See Note I	95% See Note 2	86% See Note 2	81% See Note 2	83%						

Notes:

- 1. Planned Values and SPI calculations were not established and therefore are not reported for these months.
- 2. Planned Values and SPI calculations shown in prior reports were based on an accepted Interim 180 Day Schedule. These were updated based on the accepted mid-point Planned Value curve from the approved baseline schedule.
- 3. This is the Earned Value taken from Performance Metric Reports

Source: December 31, 2016 CP4 Performance Metric Reports



SR-99 Contract Management – Contingency Value

SR-99 - Contract Balance Remaining

(\$ in millions)



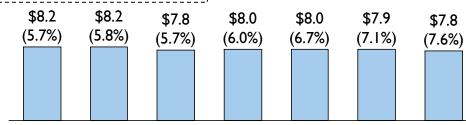
End of Jul 2016 Aug 2016 Sep 2016 Oct 2016 Nov 2016 Dec 2016 Jan 2017 Feb 2017 Mar 2017 Apr 2017 May 2017 Jun 2017 FY2015-16

If remaining contingency against amount of contract / work left falls below 5%, corrective action may be necessary.

SR-99 – Contingency Balance Remaining

(\$ in millions)
(% of contract balance remaining)

The values shown are a sum of the Early Work Plan (EWP) and Main Package (MP) Contingencies.



End of FY2015-16 Jul 2016 Aug 2016 Sep 2016 Oct 2016 Nov 2016 Dec 2016 Jan 2017 Feb 2017 Mar 2017 Apr 2017 May 2017 Jun 2017

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

Source: December 31, 2016 SR-99 Performance Metric Report



SR-99 Contract Management Raw Data: Contingency Value

SR-99 – Contingency (\$ in millions)

	End of FY2015-16	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Contract Balance Remaining	\$144.7M	\$140.9M	\$136.8M	\$133.7M	\$119.3M	\$112.2M	\$103.IM						
Contingency See Note 2	\$9.5M	\$9.5M	\$9.5M	\$9.5M	\$9.5M	\$9.5M	\$9.5M						
Change Orders (from contingency)	\$1.3M	\$0.0M	\$0.4M	-\$0.2M	\$0.0M	\$0.1M	\$0.1M						
Contingency Balance Remaining See Note 2	\$8.2M	\$8.2M	\$7.8M	\$8.0M	\$8.0M	\$7.9M	\$7.8M						
Contingency %	5.7%	5.8%	5.7%	6.0%	6.7%	7.1%	7.6%						

Notes:

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

2. The contingency values shown area combination of the EWP and MP contingency values.

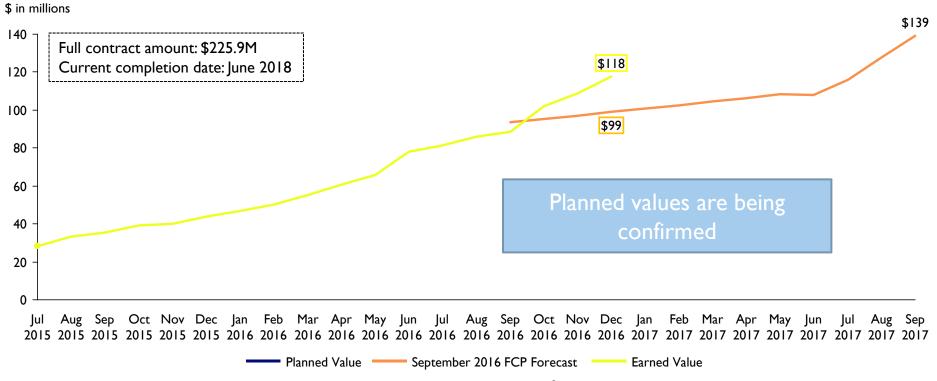
Source: December 31, 2016 SR-99 Performance Metric Report



SR-99 Contract Management – Schedule Performance Index

SR-99 Schedule - Total Planned Value of Contract Earned

(\$ in millions)



Notes:

- 1. Total amount earned refers to progress on the schedule, not approved contract invoices.
- SR-99 contract forecast expenditures from January 2016 to June 2017 will be 100% ARRA funded, until full ARRA drawdown.
- 3. Jun-16 FCP has been submitted to the Federal Railroad Administration (FRA), and is under review.

Sources:

- 1. FCP Forecast: Funding Contribution Plan, Sep-2016
- Earned Value: December 31, 2016 SR-99 Performance Metric Report
- FCP Forecast will be updated based on quarterly Funding Contribution Plan.



SR-99 Contract Management Raw Data: Schedule Performance Index

FY2016-17 SR-99 – Schedule (\$ in millions)

	End of FY2015-16	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Sept 2016 FCP Forecast Value	\$61.7M	\$63.6M	\$65.5M	\$67.4M	\$95.3M	\$97.IM	\$99.0M						
Earned Value ¹	\$78.IM	\$81.3M	\$86.IM	\$88.6M	\$102.IM	\$108.8M	\$117.5M						
Planned Value	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2	See Note 2						
Schedule Performance Index	93%	86%	82%	77%	96%	83% See note 3	85%						

Note:

- 1. SR-99 contract with Caltrans is not a Design-Build contract. Earned value is not necessarily equal to invoice to data/actual cost amount.
- 2. Planned Values are being confirmed.
- 3. The November SPI value was adjusted to align with a revised report.

Source: December 31, 2016 SR-99 Performance Metric Report



Agenda

- Operations Report Metrics
 - Executive Summary
 - Right-of-Way (ROW)
 - Project Development
 - Third Party Agreements
 - Contract Management
 - Finance/Budget
 - ARRA Schedule
 - Risk



Finance/Budget Metrics - Context

- Metrics organized by:
 - Summary of current fiscal environment
 - FY2016-17 finance/budget data, which includes ROW, planning, environmental and construction
- For FY2016-17, this report presents:
 - Budgeted expenditures based on FCP budget
 - Actual expenditures incorporated each month based on invoices received, invoices pending, and accruals, including Work-in-Progress
 - Forecasts will shift each month and align with FY2016-17 forecast from the F&A Capital Outlay Report
- All data shown is at the end of each month:
 - There is a 1-month lag to produce the F&A Capital Outlay Report
 - For example, the January F&A Capital Outlay Report includes financial data through December 31, 2016



As of December 31, 2016, the Authority has spent 35.2% of FY2016-17 budget, 87.3% of the federal ARRA grant, and 81.6% of the FY2014-15 Cap and Trade appropriation ¹

FY2016-17 Expenditures to Date (Data as of December 31, 2016)

Total Appropriation		16-17 Iget	_	oenditures Date	Expenditures - % of Budget			
	Nov-16 Dec-16		Nov-16	Dec-16	Nov-16	Dec-16		
\$9.37B	\$1.72B	\$1.77B	\$0.48B	\$0.62B	28.1%	35.2%		

Total Expenditures to Date (\$ in billions)

ARRA expenditures are	(Data as of December 31, 2016)										
87.3% of federal ARRA grant funds and 24.5% of \$9.10B total budget	тс	TAL		Planning	Construction						
Ψ7.10B total budget	Budget Expended		Budget	Expend to Date	Budget	Expend to Date					
ARRA Grant 2	\$2.55 \$2.23		\$0.44	\$0.41	\$2.11	\$1.82					
FYI0 Grant	\$0.93	\$0.93		\$-	\$0.93	\$-					
PROP IA	\$3.18	\$0.33	\$0.57	\$0.33	\$2.61	\$-					
Cap and Trade	\$1.61	\$0.26	\$0.33	\$0.08	\$1.28	\$0.18					
Local Assistance	\$1.10 \$-		\$-	\$-	\$1.10	\$-					
Total	\$9.37 \$2.82		\$1.34	\$1.34 \$0.82		\$2.00					

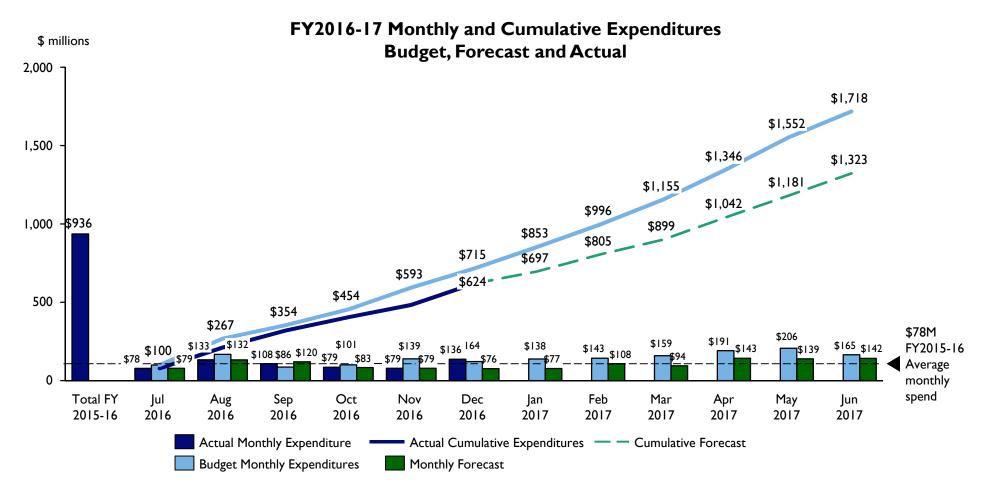
Note: Numbers may not add due to rounding

Source: F&A Capital Outlay Report, February 2017 – balance subject to change due to pending approval of tapered match and federal reimbursements I FY2014-15 Cap and Trade appropriation was \$250M.

² Total ARRA expenditures are \$2.229B or 87.3% of the \$2.553B grant as of December 31, 2017 including FRA paid, approved, and pending invoices plus invoices pending submittal to FRA, invoices received by HSRA, and Work-in-Progress. Total ARRA Expenditures are \$2.241B or 87.8% of the \$2.553B grant as of January 17, 2017



Finance/Budget - FY2016-17 Expenditures



Source: F&A Capital Outlay Reports (Sep-2015 – December-2016)

Notes: Forecast data may shift due to monthly actuals



Finance/Budget Raw Data Capital Outlay Budget, Expenditures, and Forecast

FY2015-16 Raw Data

	July 2015	Aug 2015	Sept 2015		Nov 2015		Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	June 2016
Total FY Budget	\$1.7B	\$1.7B	\$1.7B	\$1.7B	\$1.7B	\$1.8B	\$1.9B	\$1.9B	\$1.9B	\$1.9B	\$1.9B	\$1.9B
Expense to Date	\$0	\$74.IM	\$125.5M	\$161.4M	\$234.6M	\$293.IM	\$391.0M	\$453.3M	\$536.8M	\$624.0M	\$775.0M	\$936M
Monthly expenditures	\$0	\$74.IM	\$51.4M	\$35.9M	\$73.2M	\$58.5M	\$98.0M	\$62.3M	\$83.5M	\$87.2M	\$150.9M	\$175.3M
Total FY Forecast	\$1.7B	\$1.7B	\$1.3B	\$1.0B	\$1.0B	\$1.1B	\$0.9B	\$0.9B	\$0.8B	\$0.9B	\$0.9B	\$0.9B

FY2016-17 Raw Data

	July 2016					Dec 2016		Mar 2017	Apr 2017	May 2017	June 2017
Total FY Budget	\$1.7B	\$1.7B	\$1.7B	\$1.7B	\$1.7B	\$1.7B					
Expense to Date	\$78.5M	\$211.1M	\$318.5M	\$403.5M	\$482.6M	\$623.6M					
Monthly expenditures	\$78.5M	\$132.6M	\$107.4M	\$85.3M	\$78.8M	\$136.4M					
Total FY Forecast	\$1.7B	\$1.7B	\$1.3B	\$1.3B	\$1.3B	\$1.3B					

Source: F&A Capital Outlay Reports

Notes: Numbers may not add due to rounding; no July 2015 expenditures were received by the July-2015 reporting deadline.



Agenda

- Operations Report Metrics
 - Executive Summary
 - Right-of-Way (ROW)
 - Project Development
 - Third Party Agreements
 - Contract Management
 - Finance/Budget
 - ARRA Schedule
 - Risk



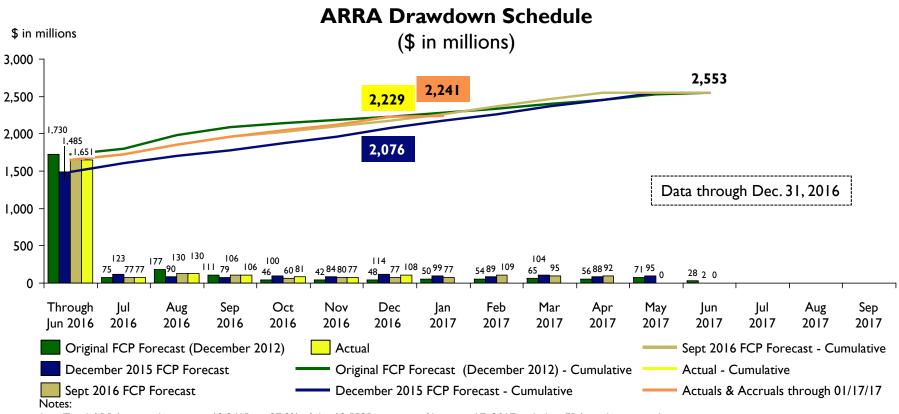
ARRA Schedule – Context

- The following slides provide the ARRA grant drawdown schedule, and track ARRA grant monthly expenditures
- ▶ The ARRA grant is broken down into two expenditure types:
 - ARRA-Project Development: Environmental Review, Preliminary Engineering Design, Project Administration and other project development related costs
 - ARRA-Construction: Program Management, Project Construction Management, ROW Acquisition, Design-Build Contracts, Third Party Agreements, Project Reserves and Contingencies
- The ARRA schedule tracks:
 - Actual expenditures: reported each month
 - Forecast expenditures: adjusted quarterly based on the Funding Contribution Plan



ARRA Expenditure by Month

Forecast vs. Actual



- 1. Total ARRA expenditures are \$2.241B or 87.8% of the \$2.553B grant as of January 17, 2017 including FRA paid, approved, and pending invoices plus invoices pending submittal to FRA, invoices received by HSRA, and Work-in-Progress.
- 2. The program can frontload all of the ARRA funds to help spend those funds as early as possible.
- 3. State funds can be matched against federal funds and matched against ARRA funds already spent.
- 4. "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in December 2012.
- 5. Dec-15 FCP was not approved, and was only used to initially track performance prior to the approval of the Mar-16 FCP.
- 6. Sept-16 FCP has been submitted to the Federal Railroad Administration (FRA), and is under review.
- 7. Numbers may not add due to rounding.
- 8. Variance in FCP and Capital Outlay numbers due to timing differences.

Sources:

- Interim Funding Contribution Plan Worksheet, Dec-2016
- 2. Funding Contribution Plan, Sep-2016
- 3. Funding Contribution Plan, Dec-2015
- 4. Funding Contribution Plan, Dec-2012



ARRA Expenditure by Month

Forecast vs. Actual

ARRA-Project Development Drawdown Schedule (\$ in millions) \$ in millions 550 511 500 450 407 407 400 358 358 322 320 350 286 266 300 250 200 Data through Dec. 31, 2016 150 100 50 0 11 8 0 0 14 0 0 0 0 0 0 Sep Oct Sep Through Jul Aug Nov Dec Feb Mar May Jul Aug lan Apr lun 2016 2016 2016 2017 Jun 2016 2016 2016 2016 2017 2017 2017 2017 2017 2017 2017 2017 Original FCP Forecast (December 2012) Actual Sept. 2016 FCP Forecast - Cumulative December 2015 FCP Forecast Original FCP Forecast (December 2012) - Cumulative Actual - Cumulative Sept 2016 FCP Forecast December 2015 FCP Forecast - Cumulative Actual & Accrual through 01/17/2017 Notes: The program can frontload all of the ARRA funds to help spend those funds as early as possible. State funds can be matched against federal funds and matched against ARRA funds already spent. Sources:

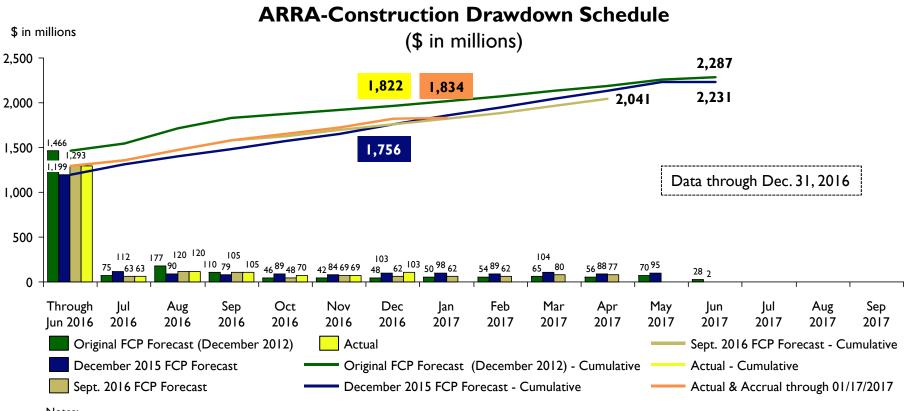
- "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in December 2012.
- Dec-15 FCP was not approved, and was only used to initially track performance prior to the approval of the Mar-16 FCP.
- Sep-16 FCP has been submitted to the Federal Railroad Administration (FRA), and is under review.
- Numbers may not add due to rounding.
- Variance in FCP and Capital Outlay numbers due to timing differences.
- As of the Nov-16 report, an orange trend line has been added to report ARRA Actuals and Accruals.

- Interim Funding Contribution Plan Worksheet, Dec-2016
- Funding Contribution Plan, Sep-2016
- Funding Contribution Plan, Dec-2015
- 4. Funding Contribution Plan, Dec-2012



ARRA Expenditure by Month

Forecast vs. Actual



Notes:

- 1. The program can frontload all of the ARRA funds to help spend those funds as early as possible.
- State funds can be matched against federal funds and matched against ARRA funds already spent.
- 3. "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in December 2012.
- 4. Dec-15 FCP was not approved, and was only used to initially track performance prior to the approval of the Mar-16 FCP.
- 5. Sep-16 FCP has been submitted to the Federal Railroad Administration (FRA), and is under review.
- 6. Numbers may not add due to rounding.
- 7. Variance in FCP and Capital Outlay numbers due to timing differences.
- 8. As of the Nov-16 report, an orange trend line has been added to report ARRA Actuals and Accruals.

Sources:

- Interim Funding Contribution Plan Worksheet, Dec-2016
- 2. Funding Contribution Plan, Sep-2016
- Funding Contribution Plan, Dec-2015
- 4. Funding Contribution Plan, Dec-2012

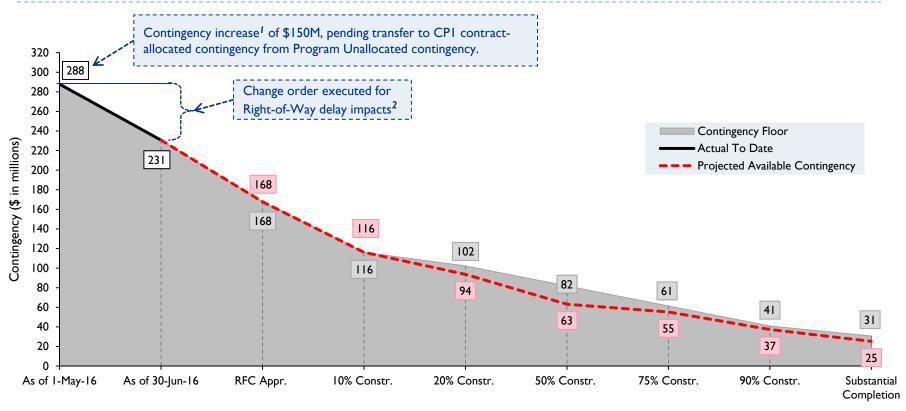


Agenda

- Operations Report Metrics
 - Executive Summary
 - Right-of-Way (ROW)
 - Project Development
 - Third Party Agreements
 - Contract Management
 - Finance/Budget
 - ARRA Schedule
 - Risk



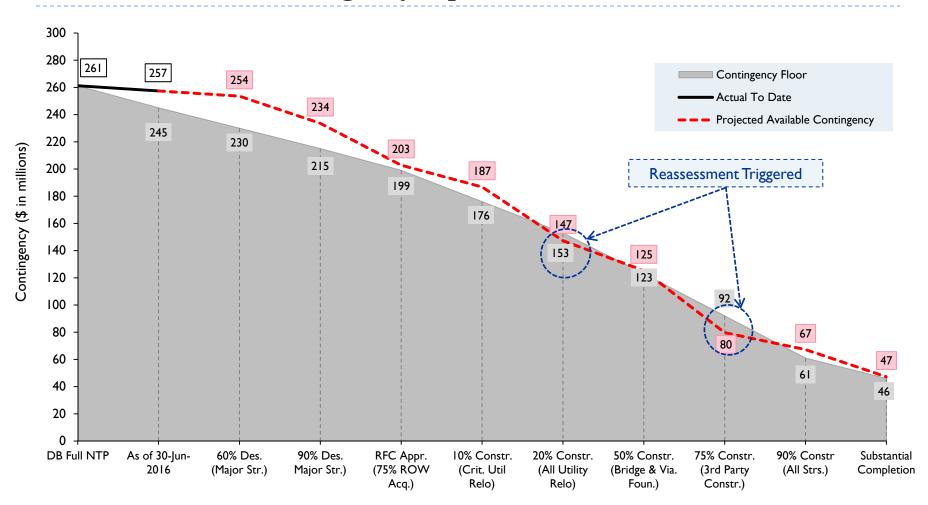
CP 1 Contract - Contingency report



- 1. Reassessment Triggered: Based upon an updated contingency risk analysis, on February 16, 2016, the F&A Committee and Board of Directors was advised that the Authority is forecasting a need to increase contingencies on CPI by approx. \$150M. This contingency increase is incorporated in the approved 2016 Business Plan and does not affect the overall program budget. This increase in contingency will be transferred to Third Party Utility (PG&E and AT&T) relocation work as per May 2016 F&A update. The project team is currently analyzing remaining risk exposure on CP I project and plan to update contingency drawdown in December 2016.
- 2. The Right-of-Way delay impacts through December 31, 2015 have been resolved with the Contractor in Change Order 00099, with the delay costs coming out of project contingency. CPI budget and contingency have not been adjusted to reflect this added scope. The Authority is preparing to transfer funds for the added scope into the CPI budget and to re-evaluate the appropriate level of contingency in light of the added scope and other factors.



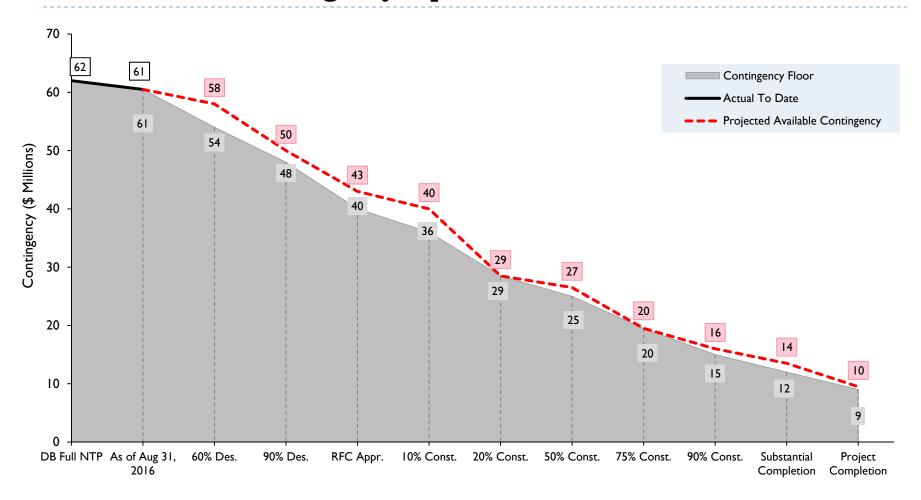
CP 2-3 Contract - Contingency report



Note: Content as of June 30, 2016; to be updated once the 60% design of major structures is completed.



CP 4 Contract - Contingency report



Note: Content as of 31 August-2016; to be updated once the 60% design of major structures is completed.

