



California High-Speed Rail: Operations Report

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

October 2016

Agenda

▶ Operations Report Metrics

- Executive Summary
- Right-of-Way (ROW)
- Environmental
- Third Party Agreements
- Contract Management
- Finance/Budget
- ARRA Schedule
- Risk

Executive Summary

ROW Acquisition

- ▶ The current report presents ROW acquisition progress relative to CPI thru CP4 through August 31, 2016. As of that date, the Authority has secured legal possession of 861 parcels, with 804 delivered to the design-builder (DB). There were 13 parcels delivered in CPIABC, 6 parcels delivered in CPID and 8 parcels delivered in CP2-3 for a total delivery of 27 parcels during the month of August.
- ▶ The Authority is focused on delivery of key early construction parcels through utilization of the Settlement Teams and partnering with the DB. This partnering effort has been successful and has enabled multiple locations to start construction and additional locations will start during the remainder of 2016. The partnering efforts will continue to identify key parcels needed to continue meaningful construction.
- ▶ The CP2-3 ROW Acquisition plan is in the process of being rebaselined with the DB. 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.
- ▶ The Authority is working with TPZP to rebaseline the delivery schedule for the remaining parcels in CPI. The agreed upon dates will drive the construction schedule to ensure substantial completion by June 2019, which aligns with the time extension granted.
- ▶ The CP4 rebaselining effort per the requirements of the contract is being initiated and is anticipated to be completed in the next 90 days. ATC approvals and design changes are triggering changes to a large percentage of remaining parcels in CP4. The new delivery dates for the changed parcels will be reflected in the agreed upon rebaselining.
- ▶ The probabilistic analysis update for CPI, CP2-3, and CP4 are underway and scheduled to be completed in November 2016. A supplemental risk informed ROW analysis specifically focusing on “construction critical” parcel delivery is planned to be completed in November 2016.

Executive Summary

Environmental

- ▶ Updating schedules for our partner agencies at the monthly regional agency meetings prior to posting them on the federal dashboard. This is to occur in September.
- ▶ Following the successful partner agency meeting on October 1, 2015, hosting an additional meeting between State and Federal agencies for September 27, 2016.
- ▶ Updating the V.5 environmental methods for ground subsidence, induced growth, and cultural resources.
- ▶ Finalizing programmatic guidance on outreach for circulating the draft EIR/EIS documents.
- ▶ Continuing work by the San Francisco to San Jose, San Jose to Merced, Burbank to Los Angeles, and Los Angeles to Anaheim regional teams to complete project definition necessary for the EIR/EISs.
- ▶ For electrical interconnections, conclude review of PG&E technical study reports and prepare preliminary design for electrical distribution improvements of Sites 4 and 5 between San Jose and the Central Valley Wye.
- ▶ Preparing administrative draft EIR/EIS for the Central Valley Wye (M-F) and for the Locally Generated Alternative (F-B).
- ▶ Continuing work among the Authority, FRA, USFWS, CDFW, 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 the four Southern California project sections.
- ▶ Organized and participated in an all day Fresno workshop with the leadership of the construction packages to discuss implementing environmental commitments and identify “lessons learned” for future documents and permits.
- ▶ Updating the Impact Avoidance and Minimization Features and standardized Mitigation Measures for program-wide use after meeting with project construction managers to incorporate additional “lessons learned.”

Executive Summary

Third Party Agreement Execution

- ▶ The current report presents Third Party Agreement execution progress relative to CPI, CP2-3, and CP4 and agreement execution progress relative to Central Valley (Non-CP), North and South through August 31, 2016.
- ▶ The plan for agreement execution within the CPs is based on the respective design-build contractor schedules and is updated monthly to reflect changes in the respective contractor's schedule. The forecast for agreement execution is based on short-term historical trends for agreement process durations.
- ▶ All Master/Cooperative Agreements for CPI-4 are executed.
- ▶ For Railroads, the only agreements necessary to start construction that are pending are BNSF Relocation and Construction agreements for CPI, CP2-3, and CP4 which need 100% DB design to execute.

Executive Summary

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 - continued temporary formwork and structural concrete construction for the bridge superstructure; Cottonwood Creek – continued temporary formwork and for the bridge superstructure, place structural concrete for bridge columns; Fresno Trench (between Belmont & SR-180) - continued foundation work; Tuolumne Street Overcrossing – structural concrete placement for bridge superstructure; Downtown Fresno Viaduct (North Avenue & SR-99) – constructing bridge columns and foundations, continuing to mobilize materials for formwork for the bridge superstructure; and San Joaquin River Viaduct (SR-99 On-Ramp) – 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.
- ▶ **CP2-3** - 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 beginning building demolition activities. Field work continues with geotechnical exploration, utility location activities, and installation of delineators to identify the environmental footprint. Other early start activities are being planned for, including a total of eight overcrossings or grade separations in Fresno, Tulare and Kings Counties, clearing & grubbing and embankment construction in the north area of the project, and paving work on local streets and roads.
- ▶ **CP4** – The Authority awarded this contract to California Rail Builders (CRB) on February 29, 2016 and issued a Notice to Proceed on April 15, 2016. CRB has continued mobilization and preliminary design activities, including planning for environmental re-examinations, updating the risk register, meeting with third parties and early development of the Right-of-Way acquisition plan.
- ▶ **SR-99 Realignment** – The CMGC Contract for the Main Package was executed on July 25, 2016 between Caltrans and Granite Construction Company. The Notice to Proceed was issued on August 8, 2016. Construction work continues on the Early Work Package, this includes underground (drainage systems), retaining walls, grading and paving at various locations such as Ashlan Avenue off-ramp, Clinton Avenue on-ramp and State Route 99 (SR-99) mainline.

Executive Summary

Finance/Budget

- ▶ Capital outlay expenditures were \$132.6M through August-2016 as reported in the Capital Outlay report for October-2016, compared to \$74.1M for October-2015.
- ▶ Delays in ROW impacted construction schedules. 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. Continued monitoring will be performed to assess any changes should the ROW delivery be delayed further than anticipated.

Agenda

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 - Third Party Agreements
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 - Risk

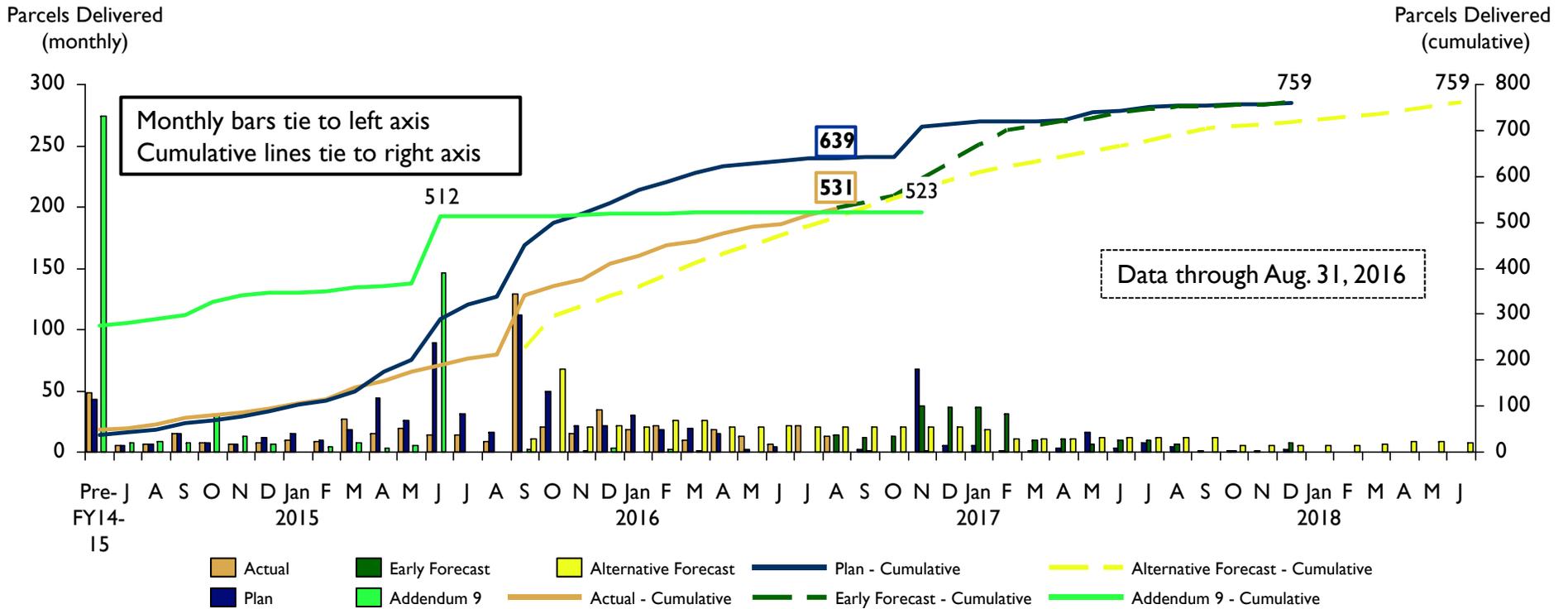
ROW Metrics - Context

- ▶ 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:
 - Plan: 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.
 - Early Forecast: Refined every month based on future expected delivery.
 - Alternative Forecast: 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.

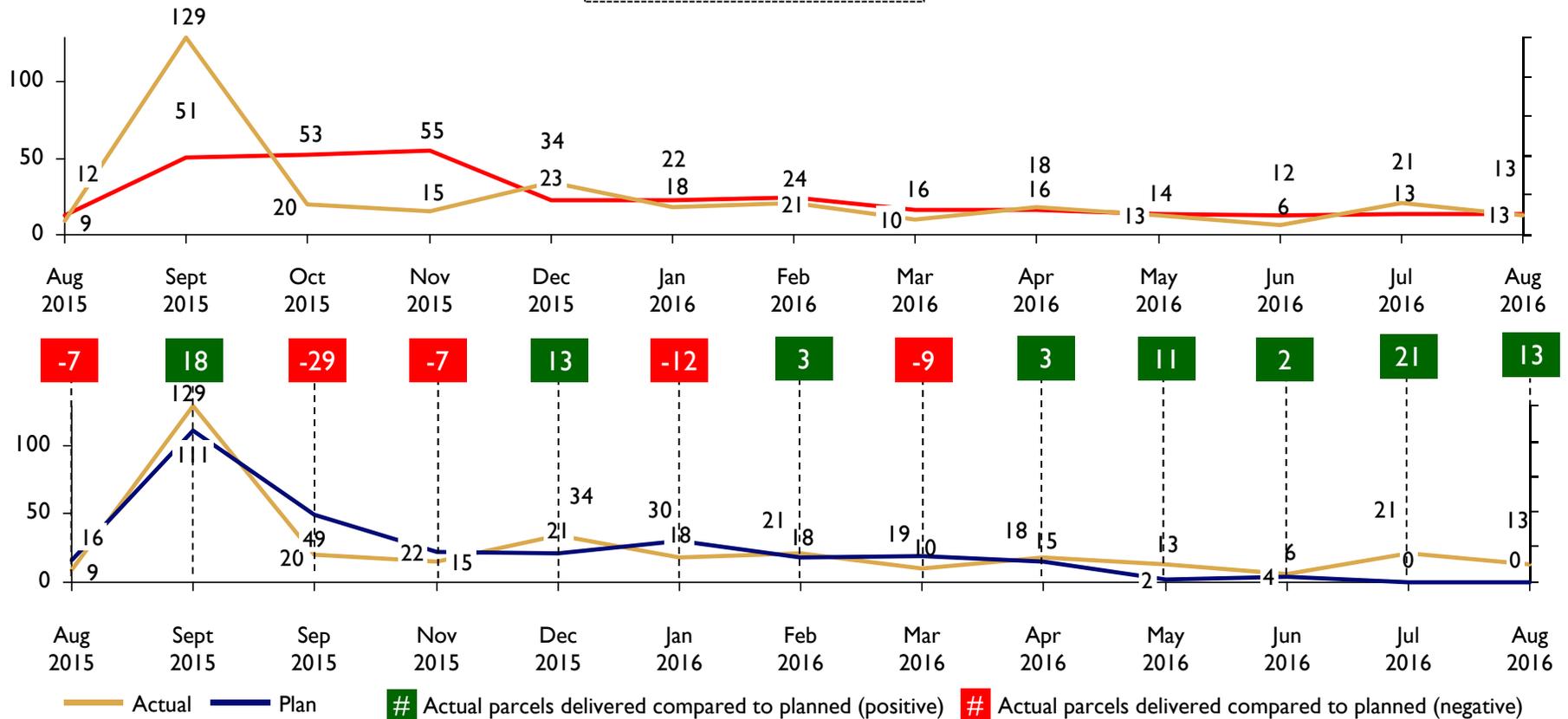
Source: September 2, 2016 ROW Weekly Report

ROW – CP1ABC Historic Performance

CPIABC Performance (in number of parcels)

— 3-Month Rolling Avg (3-month average)
— Actual

Data through Aug. 31, 2016



Notes:

1. "Plan": Negotiated schedule as of December 2014
2. Design changes and lag in data entry can cause slight changes to plan and actual counts

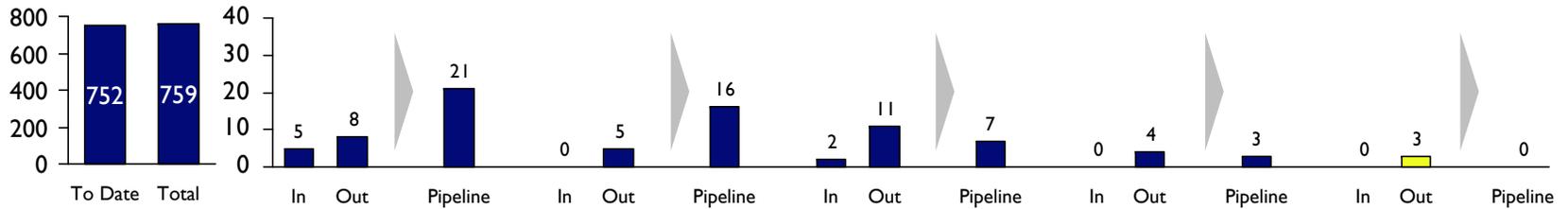
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

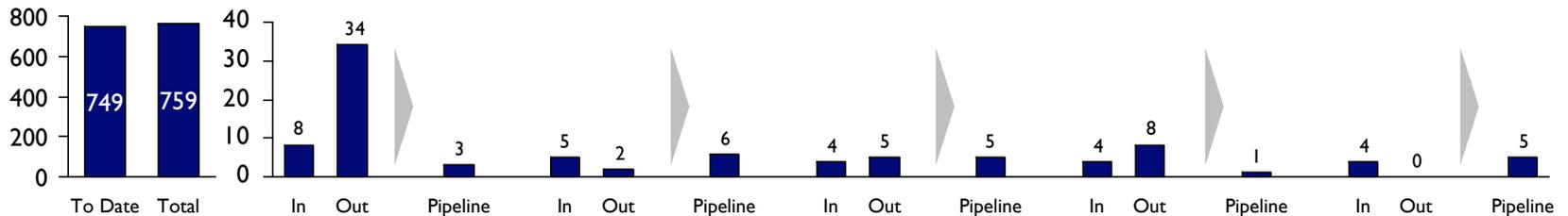
Completion April 2016 May 2016 June 2016 July 2016 August 2016

Appraisal



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

Just Compensation



- Parcels in pipeline pending DGS setting Just Compensation

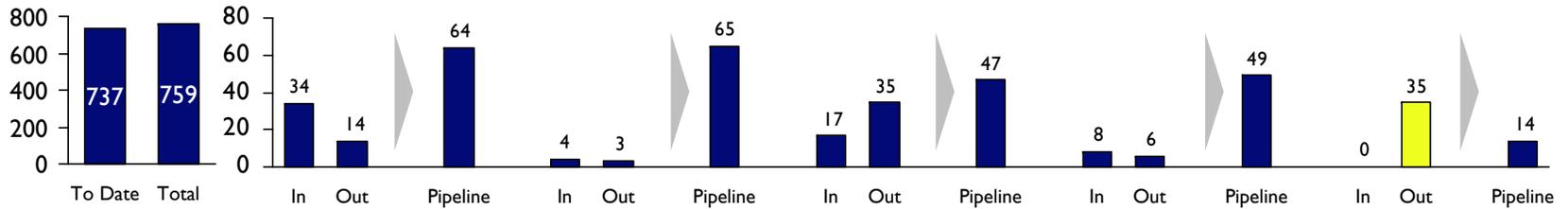
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

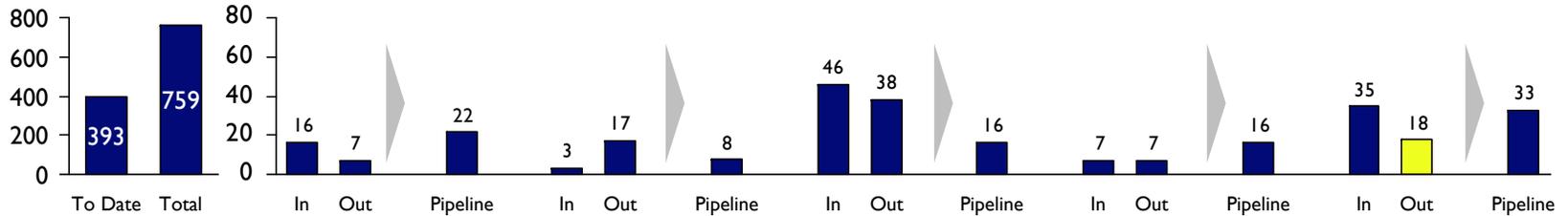


First Written Offer



- Pipeline consists of railroad parcels and non-railroad parcels

Negotiation Acquisition

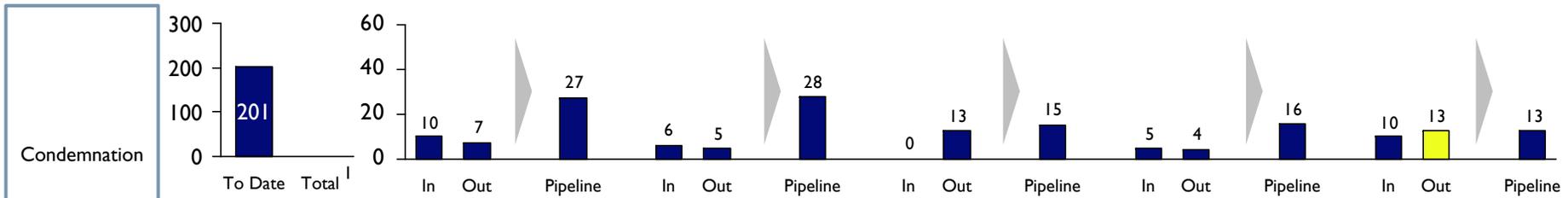


- Pipeline consists of signed agreements being processed through escrow, pending offers at property owners' decision to sign or enter condemnation and pending revised First Written Offer (FWO).

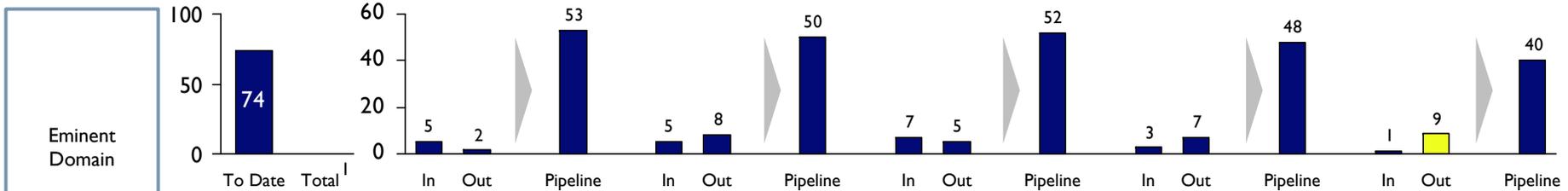
Source: September 2, 2016 ROW Weekly Report

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 parcels that may take the condemnation route is unknown

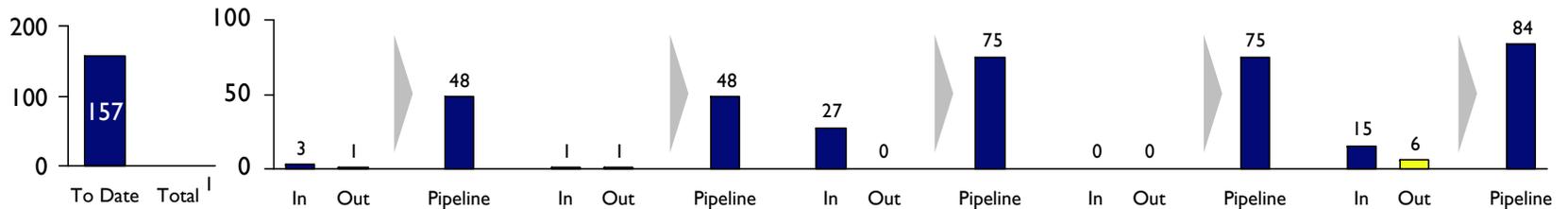
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

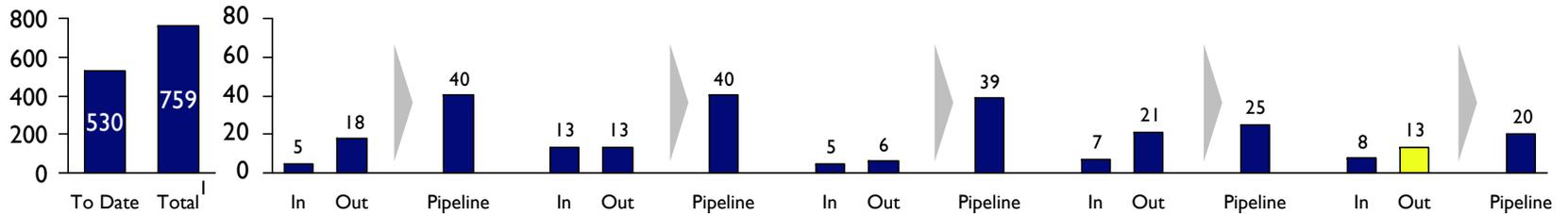


Public Agency / Railroad



- 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.

Delivery



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

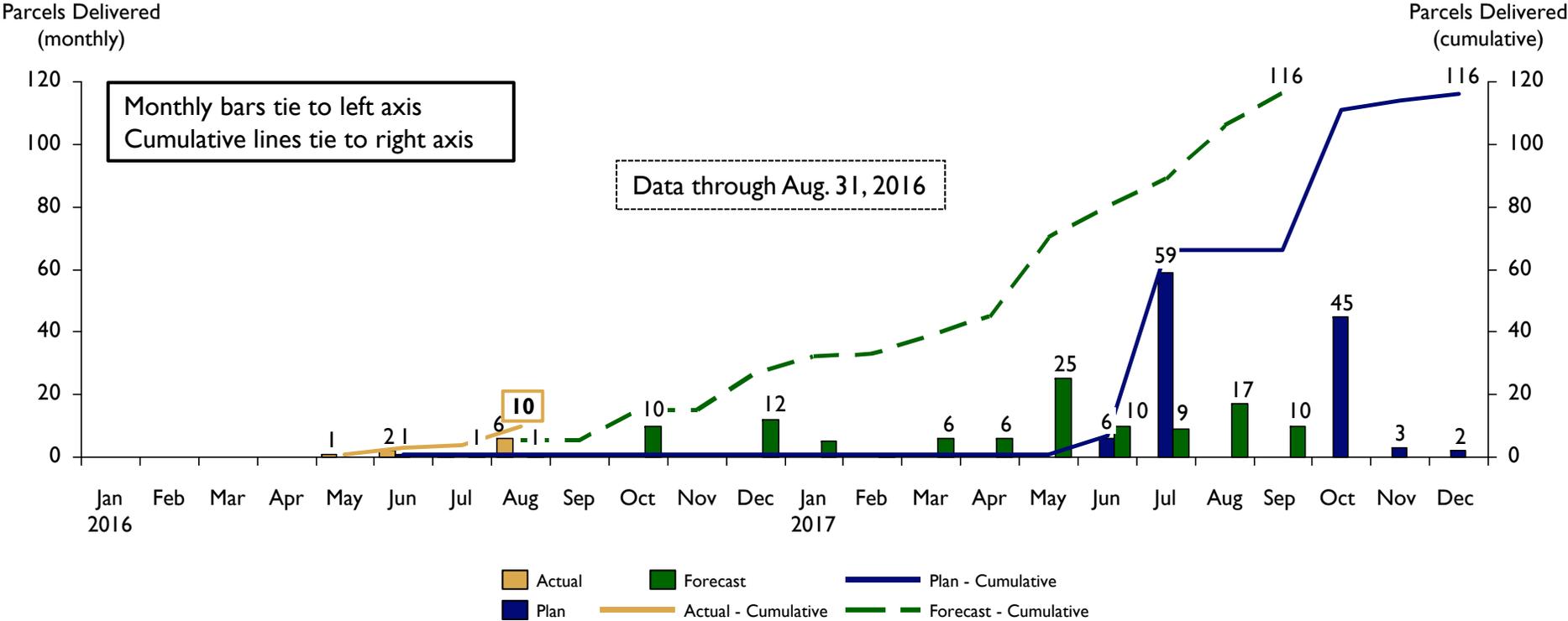
(1) Total number of public parcels to be identified

Source: September 2, 2016 ROW Weekly Report

ROW – CP1D Parcels Delivered to Design-Build by Month

Plan vs. Actual vs. Forecast

CPID - Delivered to DB (in number of parcels)



Notes:

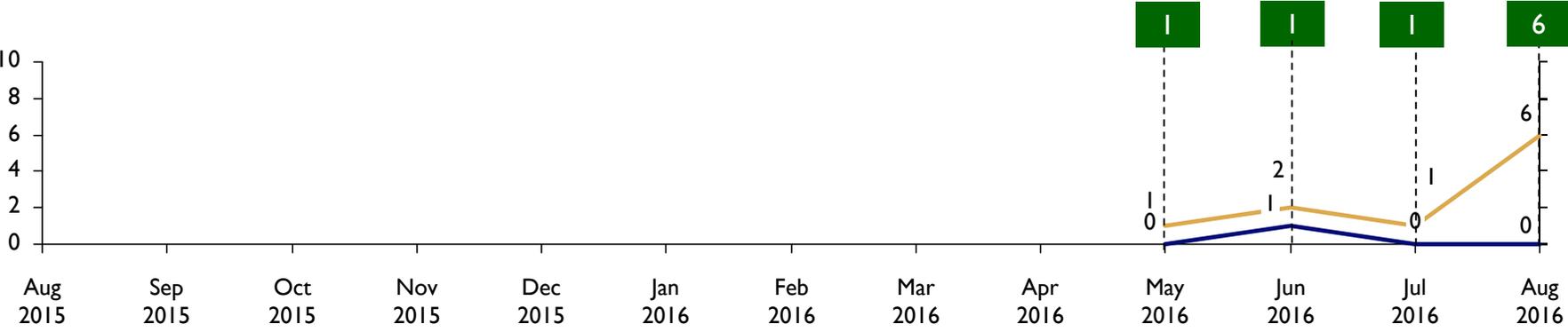
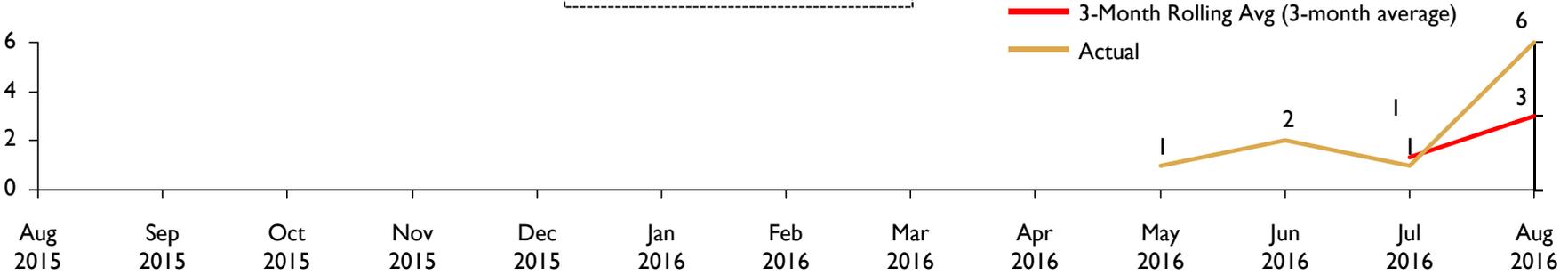
- 1. The “Plan” numbers have been developed as a placeholder until acquisition plan with DB is finalized.
- 2. “Forecast”: Continually refined based on expected delivery.
- 3. Total number of parcels will be updated as design changes are approved.

Source: September 2, 2016 ROW Weekly Report

ROW – CP1D Historic Performance

CPID Performance (in number of parcels)

Data through Aug. 31, 2016



— Actual — Plan # Actual parcels delivered compared to planned (positive) # Actual parcels delivered compared to planned (negative)

- Notes:
1. 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.

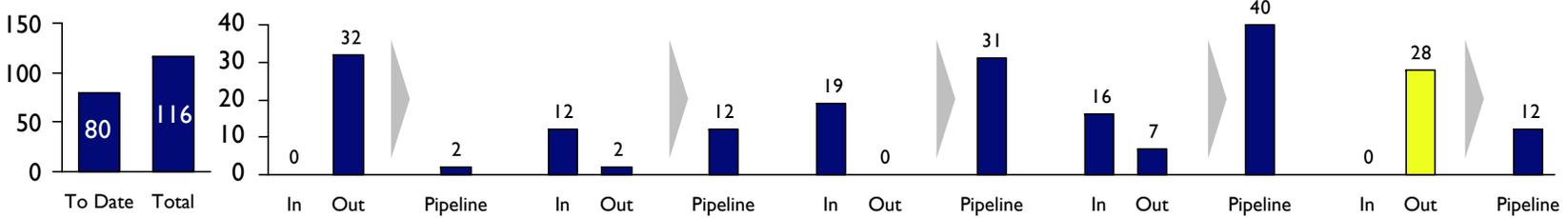
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

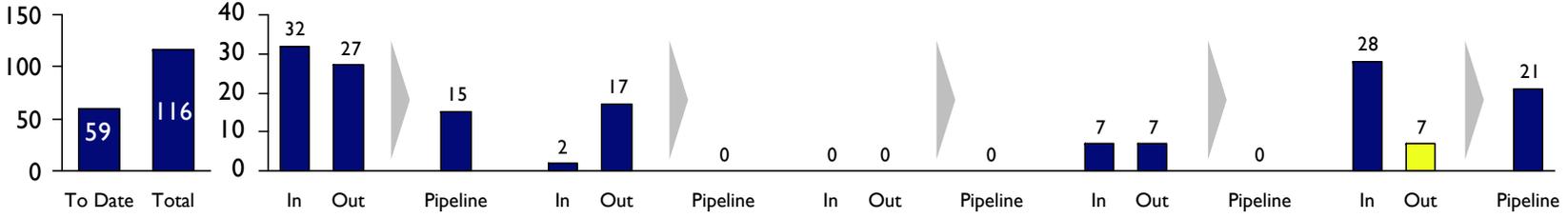
Completion April 2016 May 2016 June 2016 July 2016 August 2016

Appraisal



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

Just Compensation



- Parcels in pipeline pending DGS setting Just Compensation

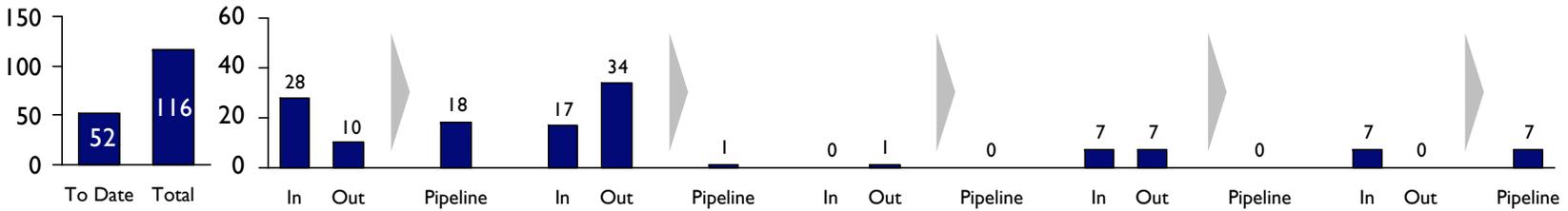
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

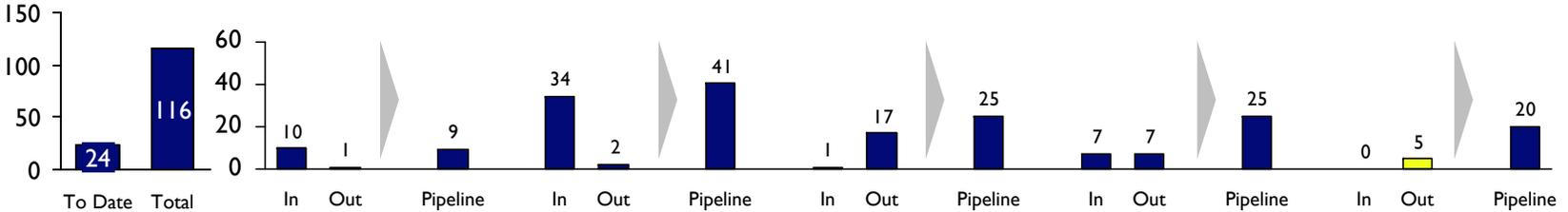
Completion April 2016 May 2016 June 2016 July 2016 **August 2016**

First Written Offer



- Pipeline consists of railroad parcels and non-railroad parcels

Negotiation Acquisition



- 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)

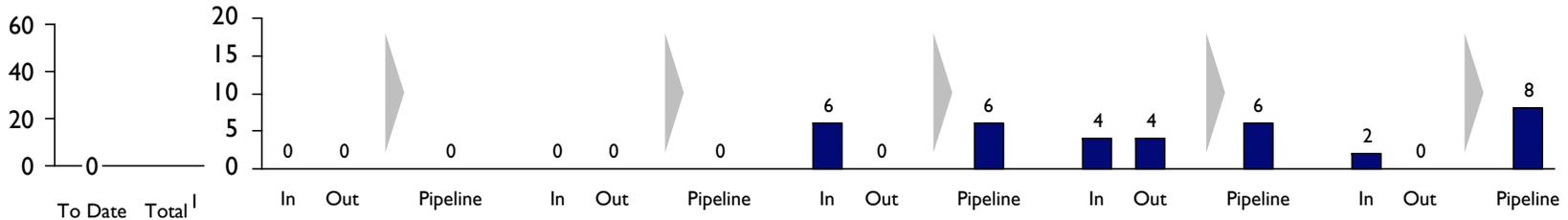
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

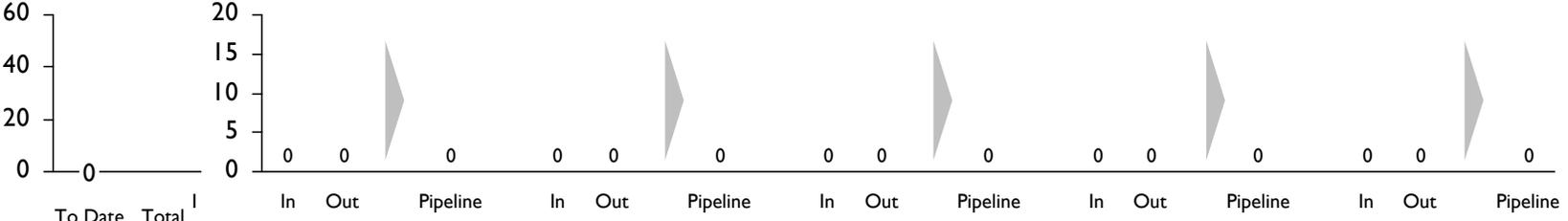
Completion April 2016 May 2016 June 2016 July 2016 August 2016

Condemnation



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

Eminent Domain



- Pipeline comprised of suits (parcels) at Caltrans legal pending filing with the courts seeking Court Orders of Possession.

(1) Total parcels that may take the condemnation route is unknown

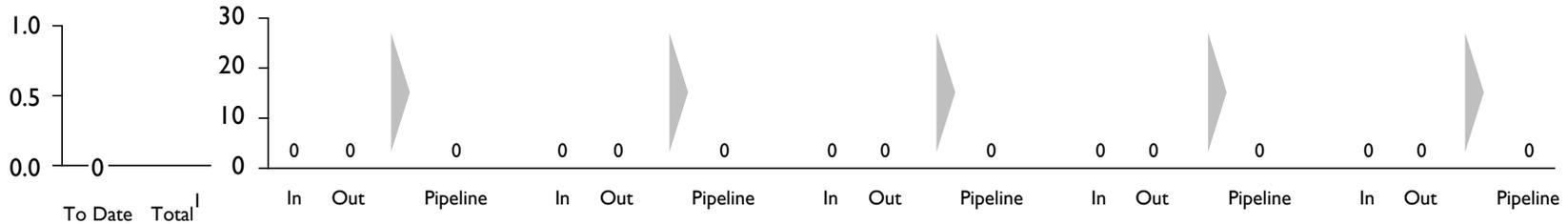
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

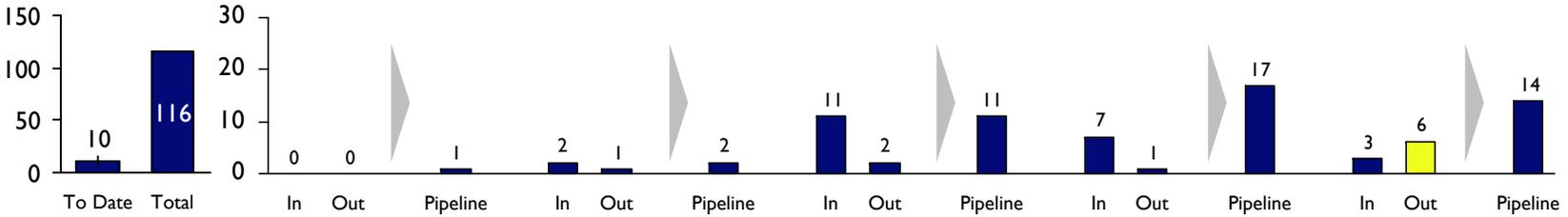
Completion April 2016 May 2016 June 2016 July 2016 August 2016

Public Agency / Railroad



- 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.

Delivery



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

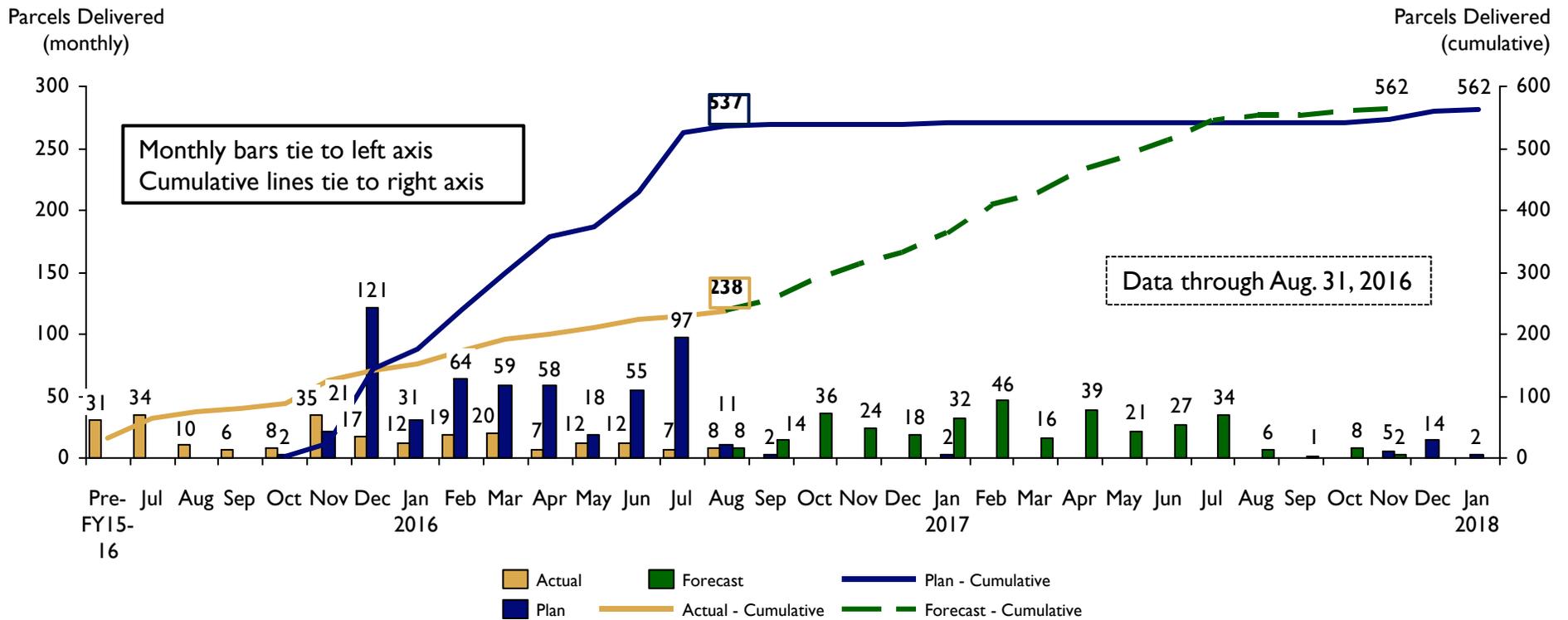
(1) Total number of public parcels to be identified

Source: September 2, 2016 ROW Weekly Report

ROW – CP2-3 Parcels Delivered to DB by Month

Plan vs. Actual vs. Forecast

CP2-3 - Delivered to DB (in number of parcels)



Notes:

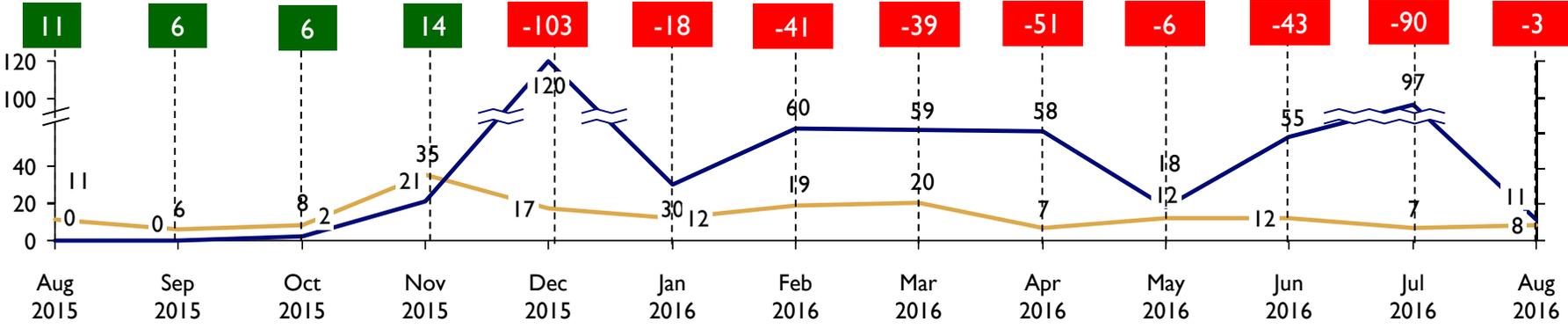
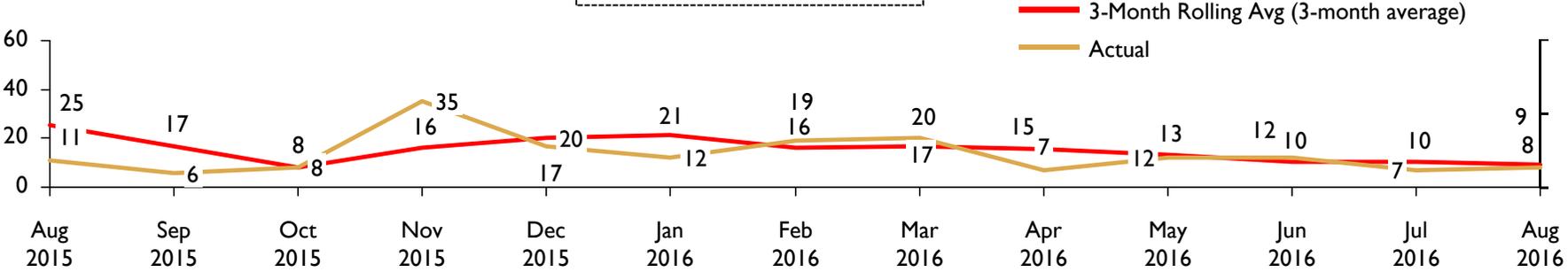
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2. "Forecast": Continually refined based on expected delivery.
3. Total number of parcels will be updated as design changes are approved.

Source: September 2, 2016 ROW Weekly Report

ROW – CP2-3 Historic Performance

CP2-3 Performance (in number of parcels)

Data through Aug. 31, 2016



— Actual — Plan # Actual parcels delivered compared to planned (positive) # Actual parcels delivered compared to planned (negative)

Notes:
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 2. Contract executed in June 2015; 31 parcels delivered after contract execution
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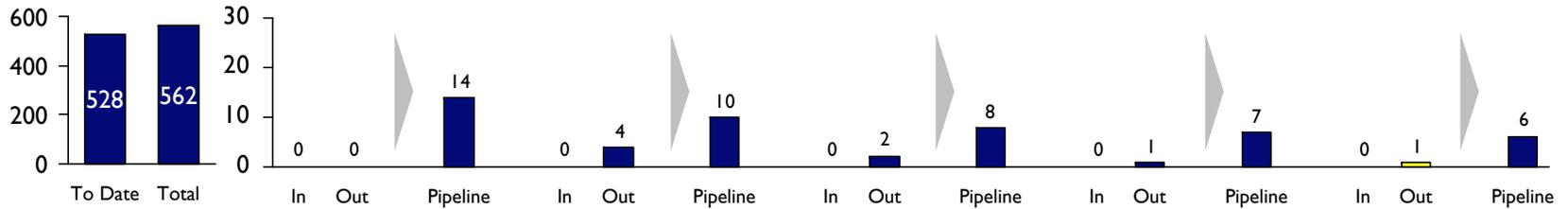
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

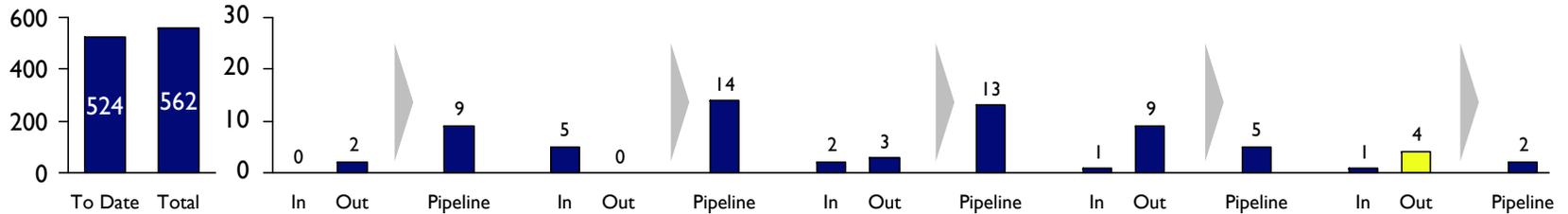
Completion April 2016 May 2016 June 2016 July 2016 **August 2016**

Appraisal



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

Just Compensation



- Parcels in pipeline pending DGS setting Just Compensation

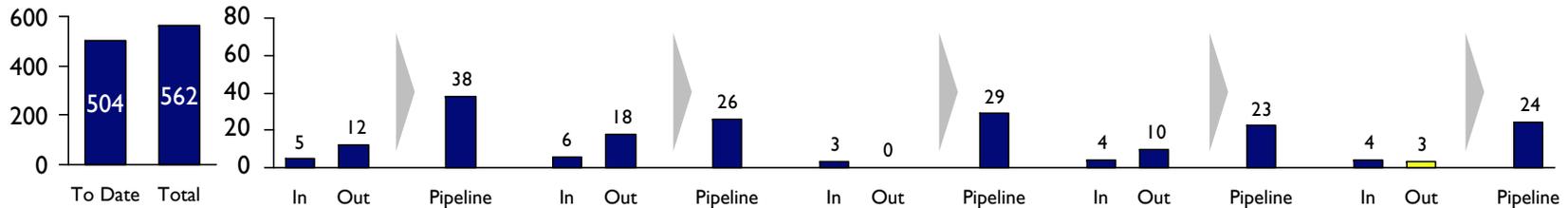
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

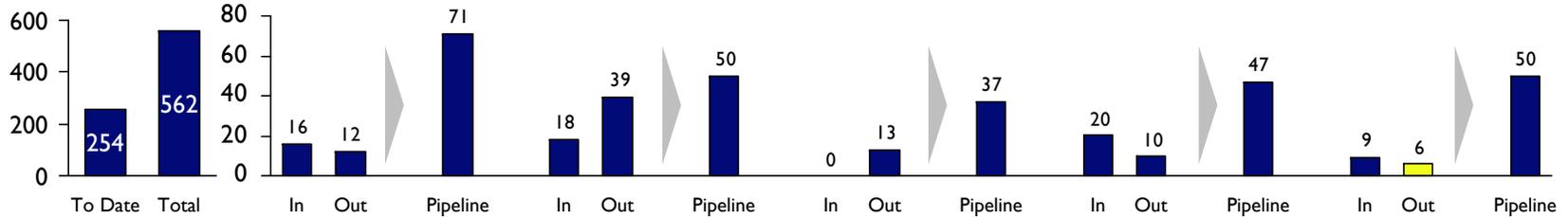
Completion April 2016 May 2016 June 2016 July 2016 August 2016

First Written Offer



- Pipeline consists of railroad parcels and non-railroad parcels

Negotiation Acquisition



- 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)

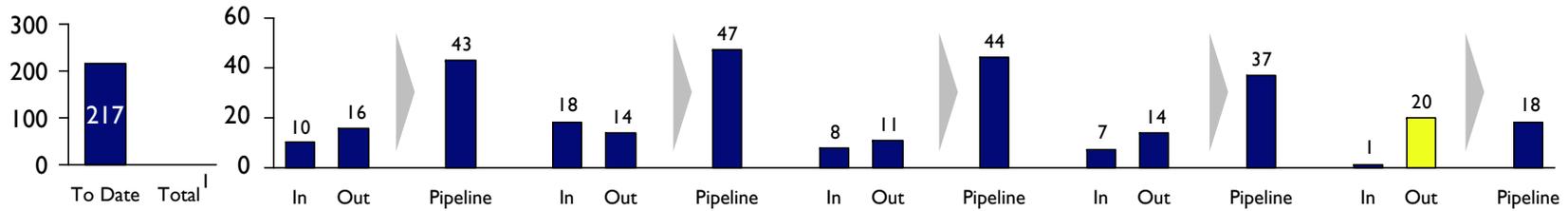
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

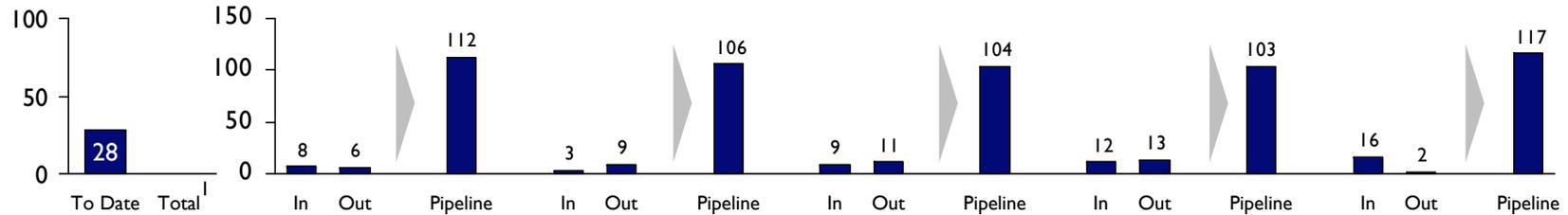
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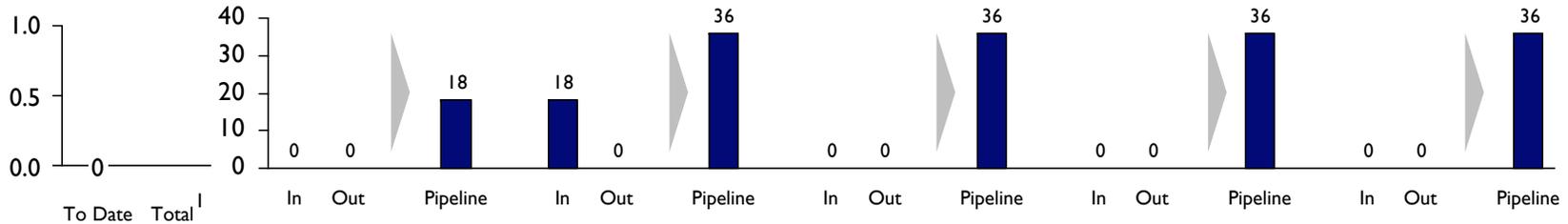
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ROW – CP2-3 Pipeline by Process (4 out of 4 pages)

Volume of Activity by Process (Flow) - Pipeline

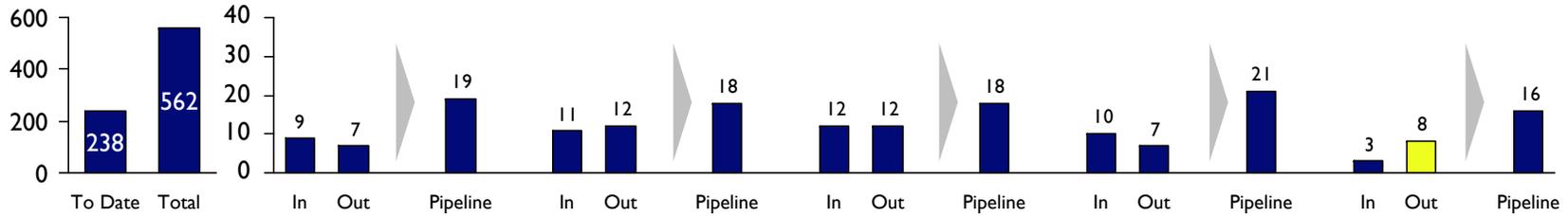
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Delivery



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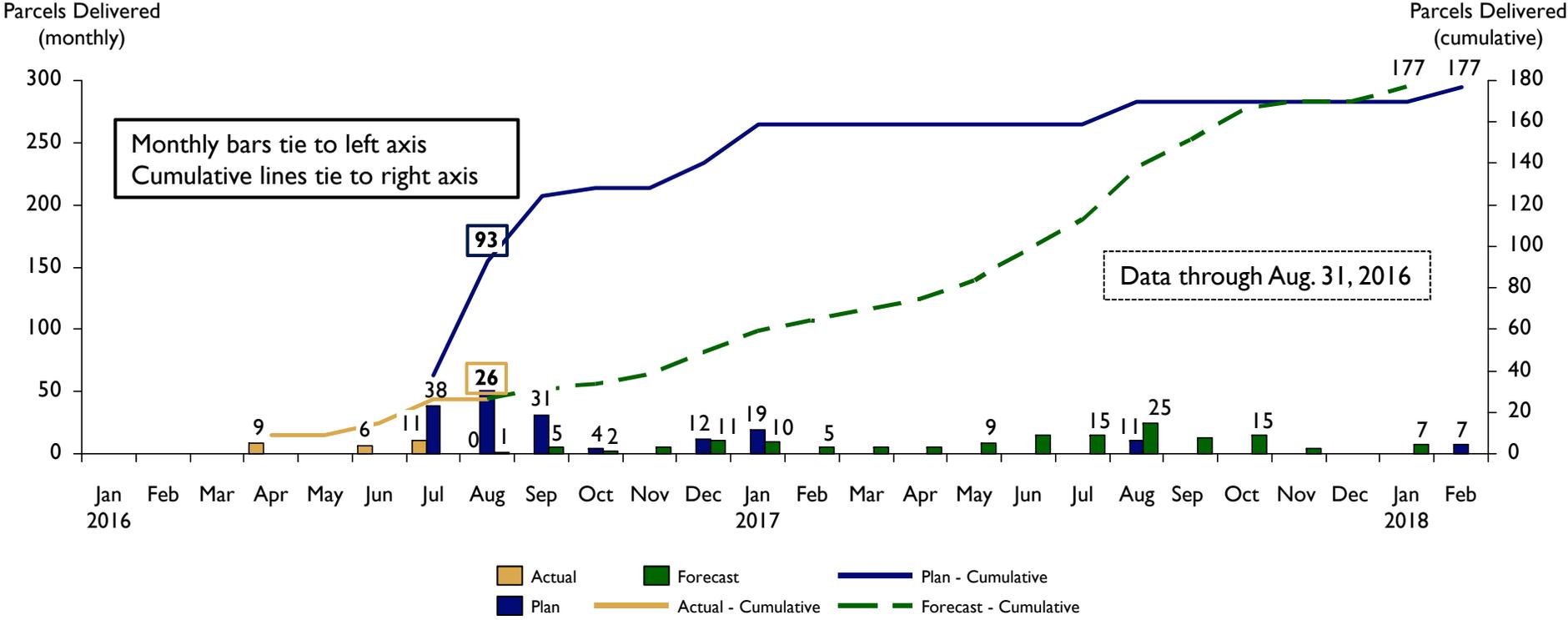
(1) Total number of public parcels to be identified

Source: September 2, 2016 ROW Weekly Report

ROW – CP4 Parcels Delivered to DB by Month

Plan vs. Actual vs. Forecast

CP4 - Delivered to DB (in number of parcels)



Notes:

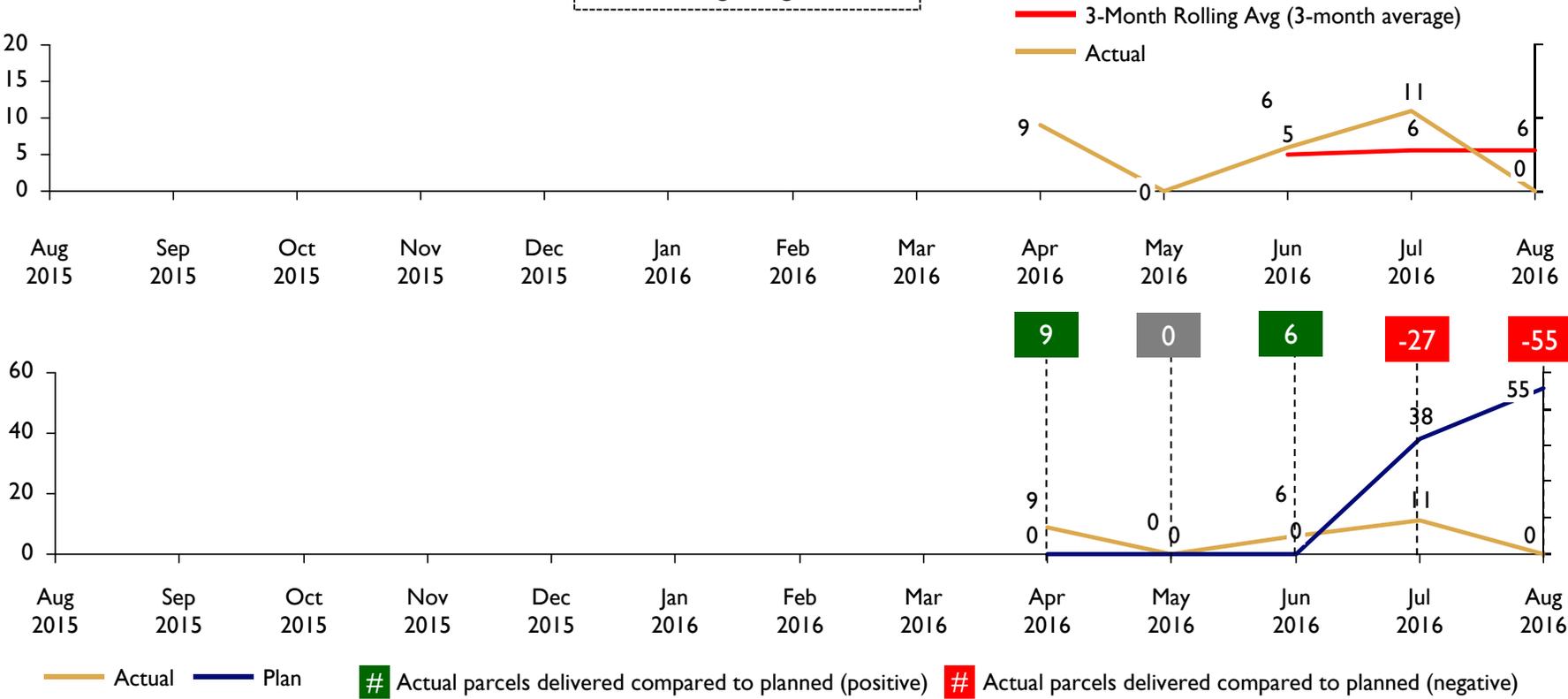
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ROW – CP4 Historic Performance

CP4 Performance (in number of parcels)

Data through Aug. 31, 2016



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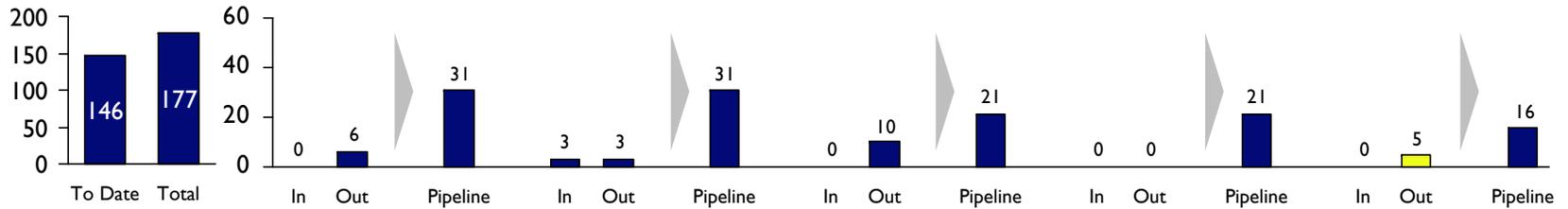
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

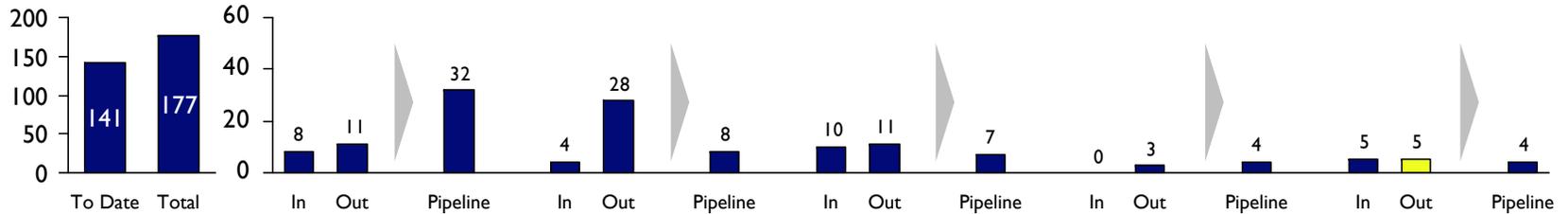
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Just Compensation



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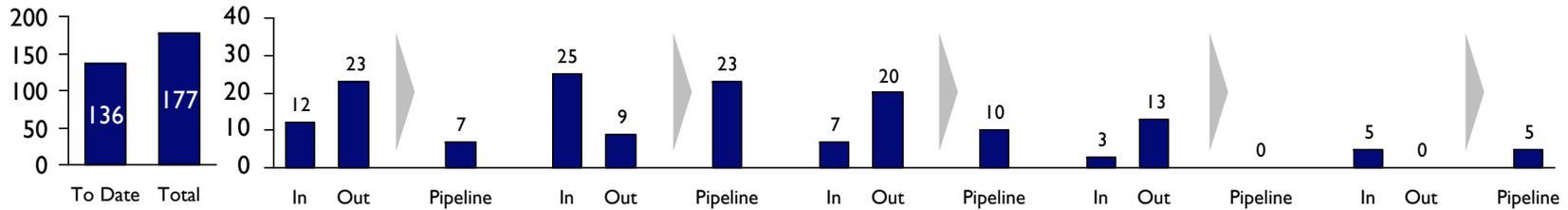
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

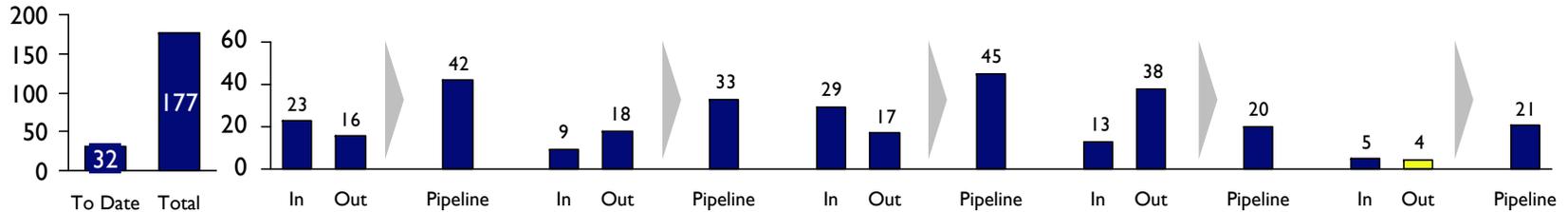
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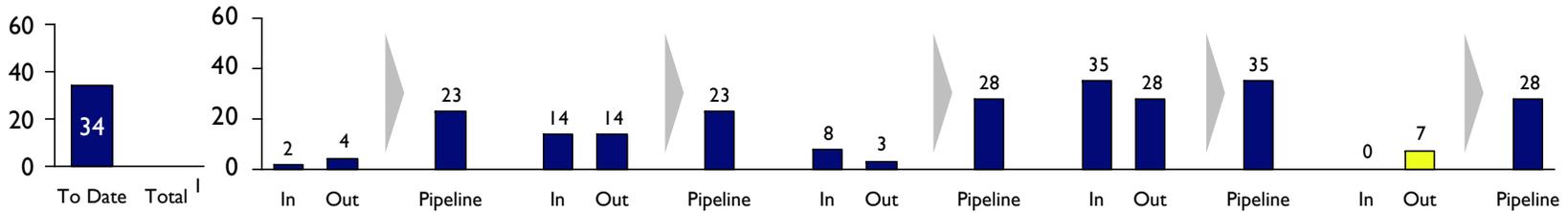
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

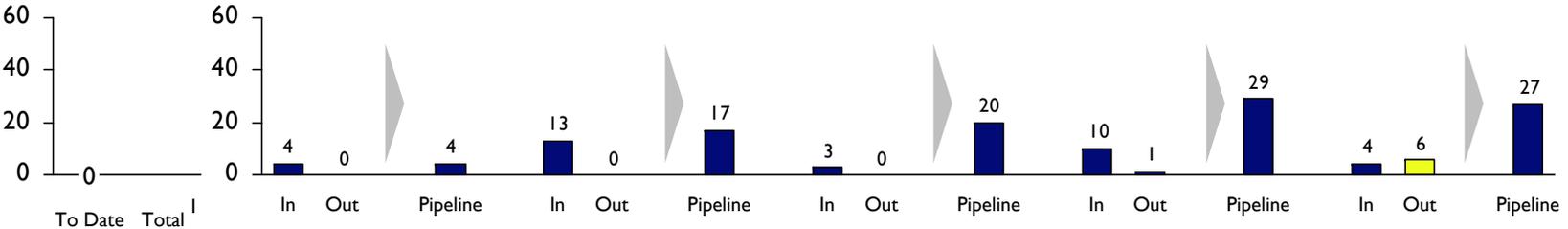
Completion April 2016 May 2016 June 2016 July 2016 August 2016

Condemnation



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

Eminent Domain



- Pipeline comprised of suits (parcels) at Caltrans legal pending filing with the courts seeking Court Orders of Possession.

(1) Total parcels that may take the condemnation route is unknown

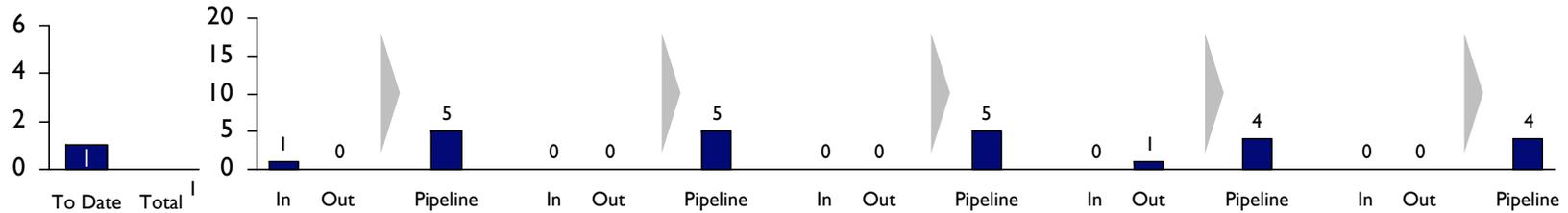
Source: September 2, 2016 ROW Weekly Report

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

Volume of Activity by Process (Flow) - Pipeline

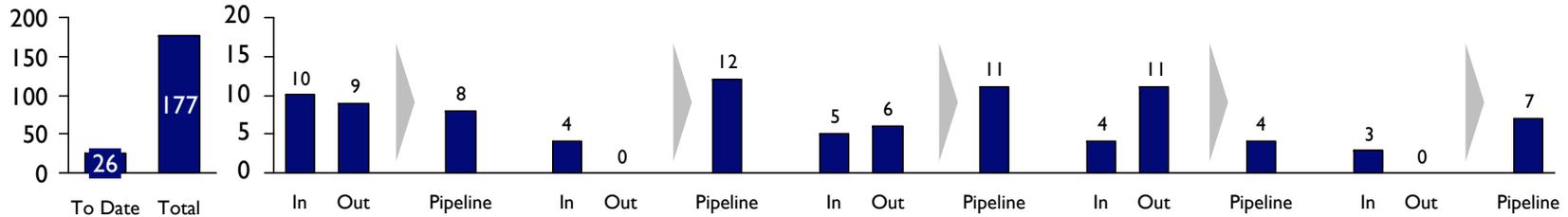
Completion April 2016 May 2016 June 2016 July 2016 August 2016

Public Agency / Railroad



- 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.

Delivery



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

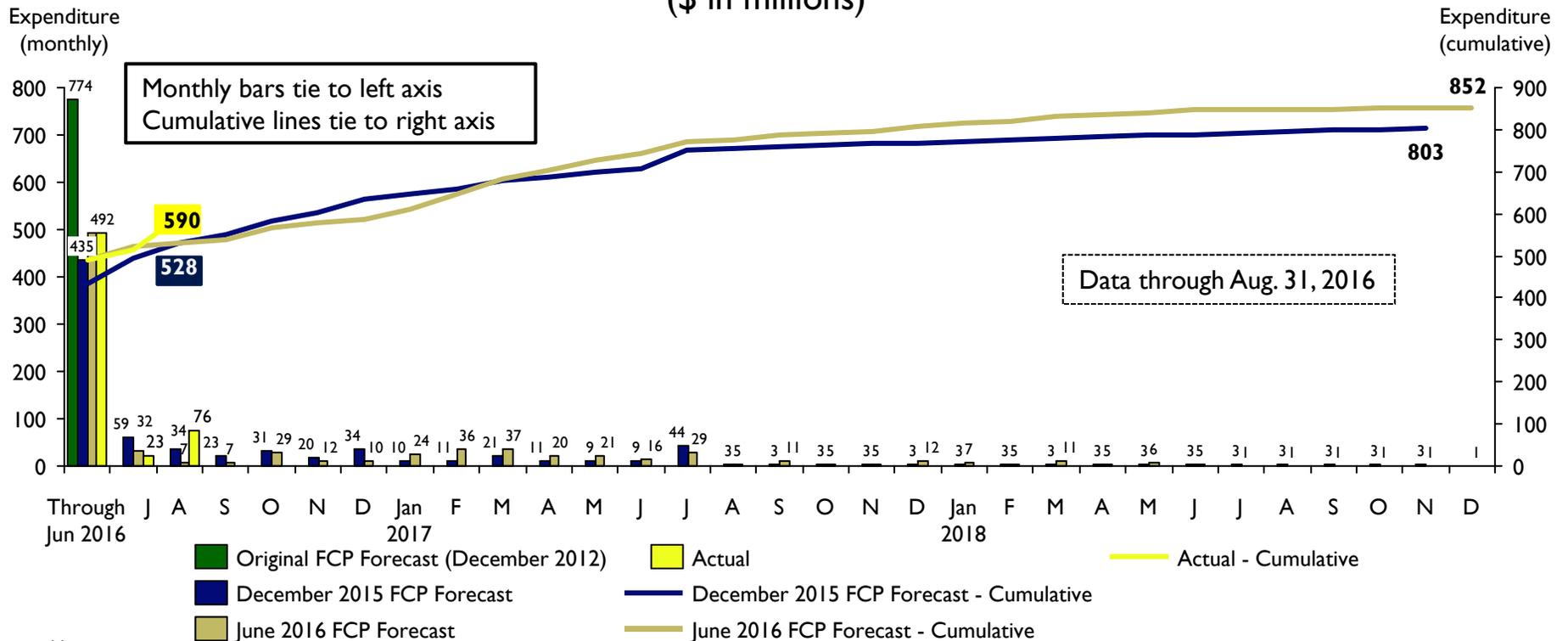
(1) Total number of public parcels to be identified

Source: September 2, 2016 ROW Weekly Report

Total ROW Expenditure by Month

Forecast vs. Actual

Total ROW Expenditure Schedule (\$ in millions)



Notes:

1. Amounts represent monthly totals; not parcel-by-parcel forecast and actual expenditures.
2. \$24M of ROW preliminary costs is not allocated to specific construction package (CP).
3. "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in Dec-12.
4. Total ROW budget in Original FCP is \$774M, and was forecasted to be fully spent by Jun-15. Current total ROW budget is \$852M.
5. Dec-15 FCP was not approved, and was only used to track expenditure performance prior to the approval of Mar-16 FCP.
6. Jun-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.

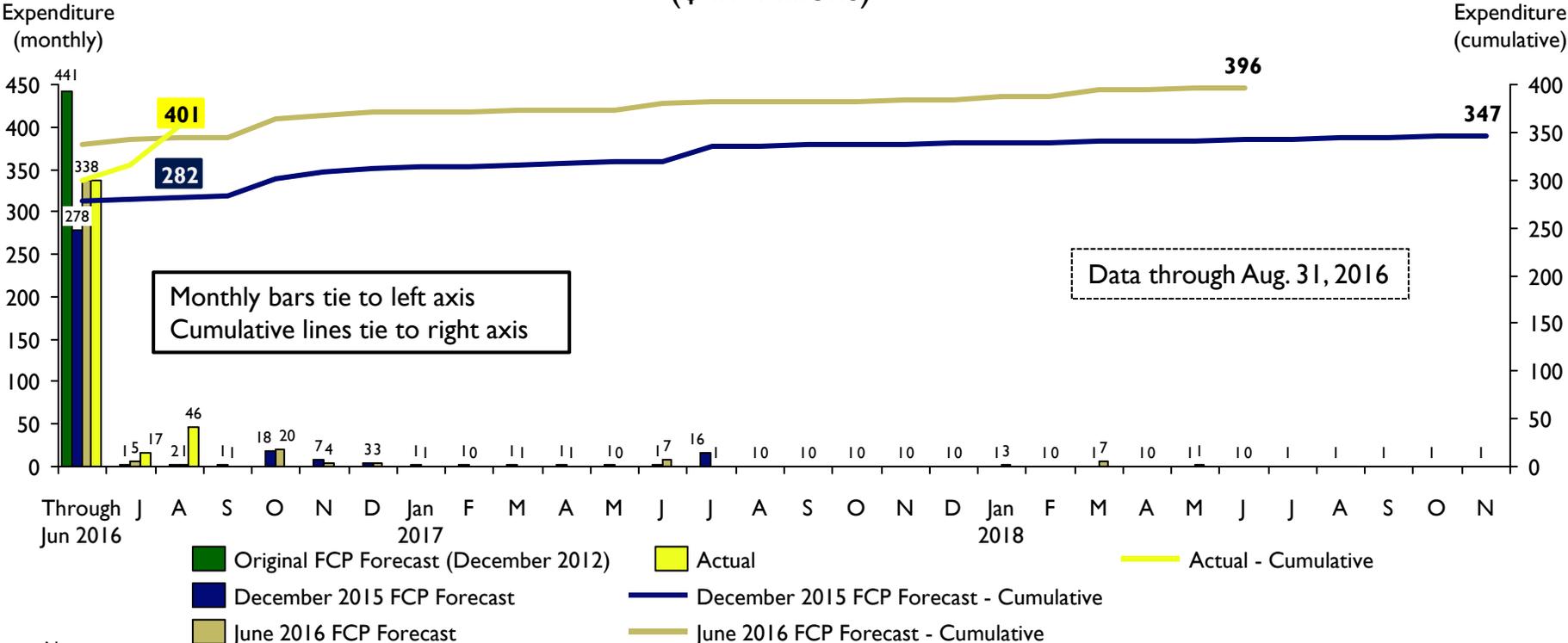
Sources:

1. Interim Funding Contribution Plan Worksheet, Aug-2016
2. Funding Contribution Plan, Jun-2016
3. Funding Contribution Plan, Dec-2015
4. Funding Contribution Plan, Dec-2012

ROW-CP1 Expenditure by Month

Forecast vs. Actual

ROW-CPI Expenditure Schedule (\$ in millions)



Notes:

1. Amounts represent monthly totals; not parcel-by-parcel forecast and actual expenditures.
2. Does not include CPID (North Extension) acquisition costs.
3. "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in Dec-2012.
4. CPI ROW budget in Original FCP is \$441M, and was forecasted to be fully spent by Jun-15. Current CPI ROW budget is \$396M.
5. Dec-15 FCP was not approved, and was only used to track expenditure performance prior to the approval of Mar-16 FCP.
6. Jun-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.

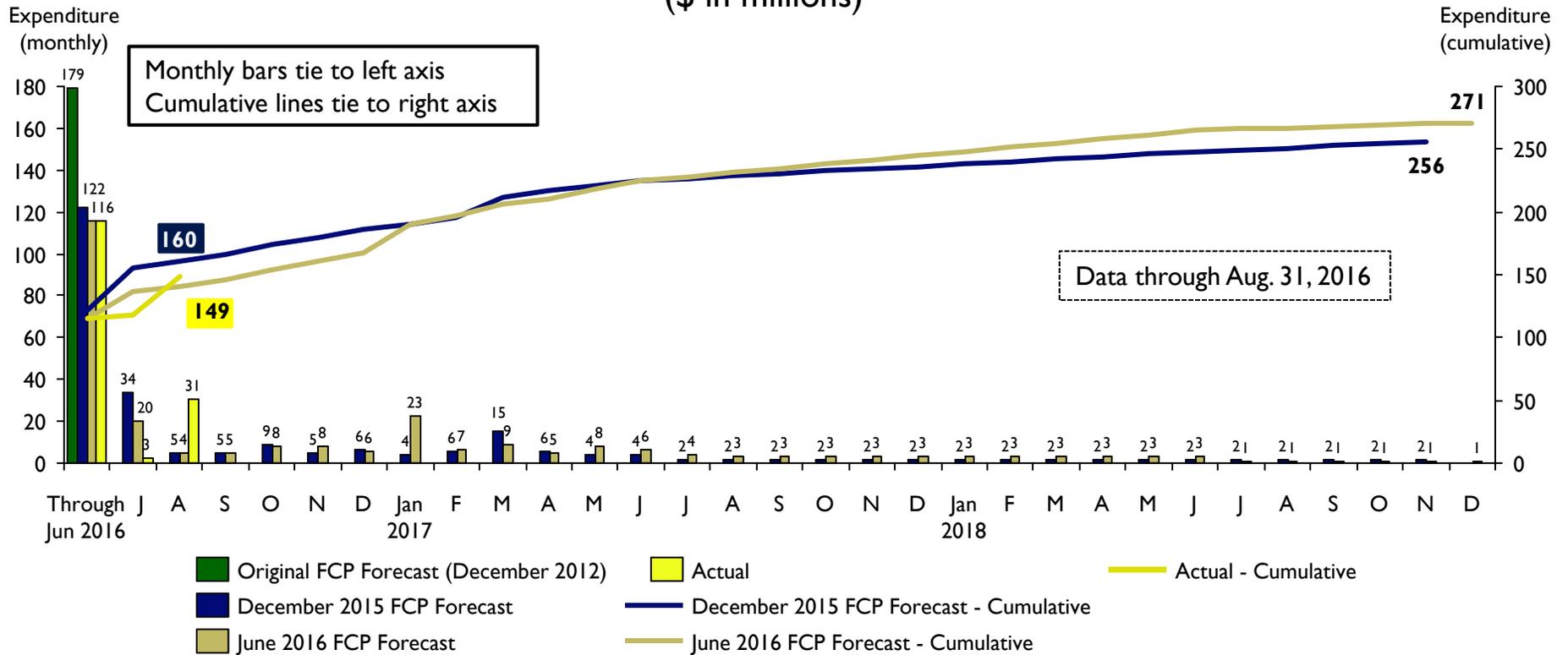
Sources:

1. Interim Funding Contribution Plan Worksheet, Aug-2016
2. Funding Contribution Plan, Jun-2016
3. Funding Contribution Plan, Dec-2015
4. Funding Contribution Plan, Dec-2012

ROW-CP2-3 Expenditure by Month

Forecast vs. Actual

ROW-CP2-3 Expenditure Schedule (\$ in millions)



Notes:

1. Amounts represent monthly totals; not parcel-by-parcel forecast and actual expenditures.
2. "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in Dec-012.
3. CP2-3 ROW budget in Original FCP is \$179M, and was forecasted to be fully spent by Jun-2015. Current CP2-3 ROW budget is \$271M.
4. Dec-15 FCP was not approved, and was only used to track expenditure performance prior to the approval of Mar-16 FCP.
5. Jun-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.

Sources:

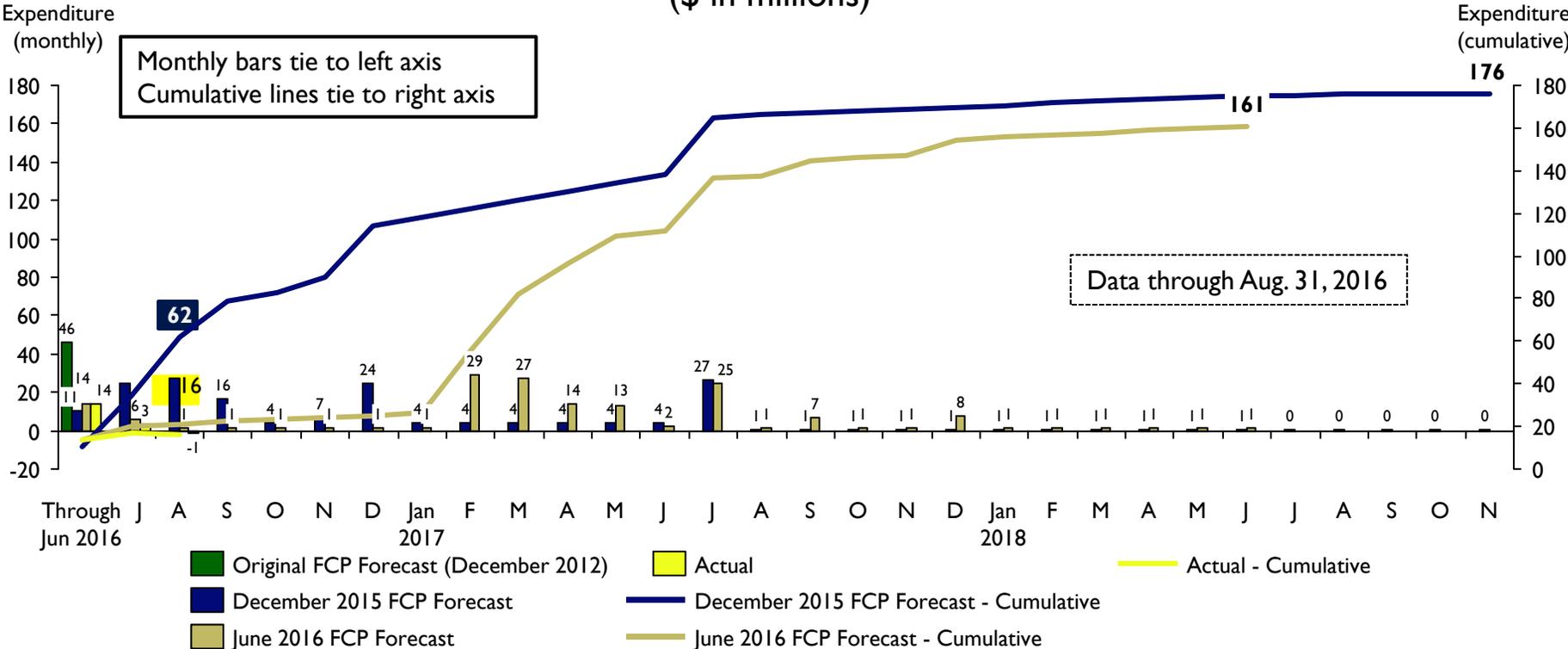
1. Interim Funding Contribution Plan Worksheet, Aug-2016
2. Funding Contribution Plan, Jun-2016
3. Funding Contribution Plan, Dec-2015
4. Funding Contribution Plan, Dec-2012

ROW-CP4 Expenditure by Month

Forecast vs. Actual

ROW-CP4 Expenditure Schedule

(\$ in millions)



Notes:

1. Amounts represent monthly totals; not parcel-by-parcel forecast and actual expenditures.
2. CP4 ROW parcel delivery data will be added to Operations Report once deliveries ramp-up
3. "Original FCP Forecast" refers to the first Funding Contribution Plan approved by the FRA in Dec-2012.
4. CP4 ROW budget in Original FCP is \$46M, and was forecasted to be fully spent by Jun-2015. Current CP4 ROW budget is \$161M.
5. Dec-15 FCP was not approved, and was only used to track expenditure performance prior to the approval of Mar-16 FCP.
6. Jun-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:

1. Interim Funding Contribution Plan Worksheet, Aug-2016
2. Funding Contribution Plan, Jun-2016
3. Funding Contribution Plan, Dec-2015
4. Funding Contribution Plan, Dec-2012

Agenda

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

Environmental Clearance Metrics - Context

- ▶ The following slides track several metrics for each environmental 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.
 - In spring 2016, with a revised project control regime, the earned value and forecast costs will be reported monthly.
 - 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.
 - Environmental Milestone Schedule (page 44) provides an overview of key upcoming milestones across all environmental project sections and projects.

Note: The Environmental 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 August 2016¹

Segment	Progress to Date	Next Steps
San Francisco to San Jose	<ul style="list-style-type: none"> Continued project definition for blended system. Held blended Infrastructure Working Group, Safety and Security Working Group and Joint Schedule Working Group meetings. Held community working group meetings in Mountain View, San Jose, San Francisco 	<ul style="list-style-type: none"> Maintain stakeholder outreach. Complete project scoping report 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	<ul style="list-style-type: none"> Conducted working group and stakeholder meetings to discuss potential refinements to project alternatives. Mailed letters for the first permission to enter packet for natural and cultural resource field surveys to property owners. 	<ul style="list-style-type: none"> Continue stakeholder outreach. 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. Conclude discussions with the US Bureau of Reclamation on the proposed crossing of the San Luis Reservoir.
Central Valley Wye (M-F)	<ul style="list-style-type: none"> Continued developing an additional alternative, as approved during the June 2016 Board meeting. Reviewed draft final environmental footprint and engineering for project definition of additional alternative. Completed RDP review of several Supplemental EIR/EIS sections, including utilities and energy. 	<ul style="list-style-type: none"> Update technical reports and administrative draft sections to include additional alternative. Continue coordination with stakeholders and resource agencies, including the US Bureau of Reclamation, to identify a preferred alternative. Complete preliminary engineering for project definition for additional alternative.
Central Valley Interconnections	<ul style="list-style-type: none"> Responded to FRA comments on the draft environmental evaluation for interconnection and upgrade improvements for the test track. Conducted environmental analysis for sites 4 to 7 covering the San Jose to Merced and Wye project sections. 	<ul style="list-style-type: none"> Continue to coordinate with PG&E on electrical interconnections and upgrades. Prepare biological resources memo and cultural survey reports for sites 6 and 7.
HMF	<ul style="list-style-type: none"> Environmental screening criteria and clearance approach still under discussion. 	<ul style="list-style-type: none"> Assess schedule performance once screening criteria and approach are finalized.
Locally-Generated Alternative (F-B) ²	<ul style="list-style-type: none"> Participated in public open house in Shafter on August 25. Continued review of Checkpoint C Summary Report. Developing technical reports and administrative draft for LGA evaluation. 	<ul style="list-style-type: none"> Continue outreach, community and agency meetings. Prepare Section 404 and Section 401 Clean Water Act permit applications for construction year 2016.

¹ Text identified in red indicate change from previous month.

² Previously referred to as the Bakersfield F Street Station Alignment

Environmental Milestones Schedule (to ROD)

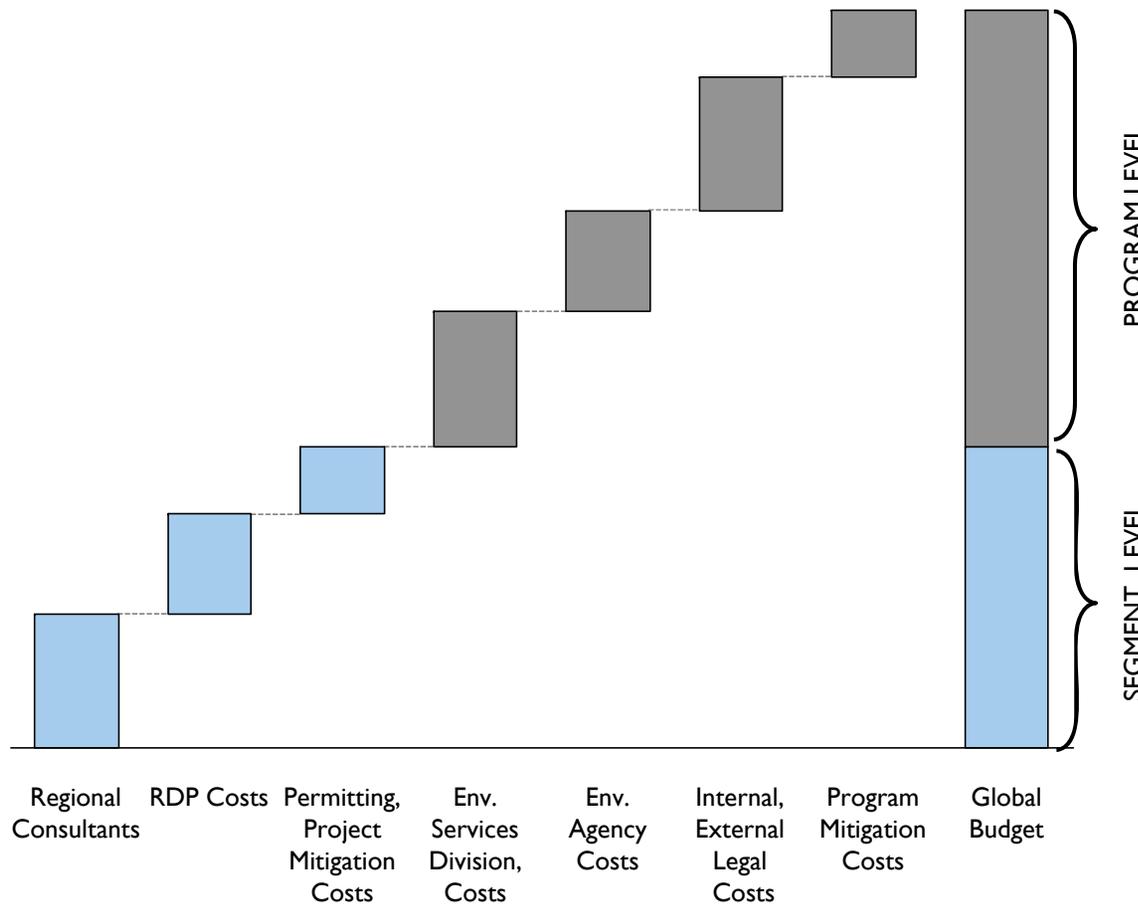
Information through August 2016¹

Segment	Progress to Date	Next Steps
Bakersfield to Palmdale	<ul style="list-style-type: none"> Completed review of draft transportation technical report, biological and aquatic resources technical report, and air quality technical report. Continued draft preliminary engineering for project definition (PEPD). 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Continued geotechnical investigation in Angeles National Forest. Preparing Clean Water Act Checkpoint B submittal. Reviewing remaining “in progress” documents for preliminary engineering for project definition (PEPD). 	<ul style="list-style-type: none"> Carry on coordination activities with the USFS and other resource agencies. Complete administrative draft review of Chapter 2 – Alternatives. Distribute additional permission-to-enter letters for field studies. Continue to prepare and review draft technical reports and EIR/EIS chapters and sections. Develop regional approach for biological mitigation.
Burbank to LA	<ul style="list-style-type: none"> Reviewed draft technical studies for paleontological resources; geology, soils and seismicity; hazardous materials and wastes; and biological aquatic resources. Convened comment resolution meeting for draft PEPD for Burbank to Los Angeles and Los Angeles to Anaheim sections. 	<ul style="list-style-type: none"> Complete final preliminary engineering for project definition. Submit draft project description to FRA. 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	<ul style="list-style-type: none"> Review of draft technical studies for aquatic resources delineation; aquatic resources impacts report; relocation impacts report; paleontological resources; geology, soils and seismicity; transportation; and hazardous materials and wastes. FRA approval of key viewpoints memo for aesthetics and visual resources. 	<ul style="list-style-type: none"> Complete final preliminary engineering for project definition. Continue discussions with USEPA and USACE regarding permitting strategy under the Clean Water Act. Carry on coordination with corridor operators. Define project footprint for environmental evaluation.

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

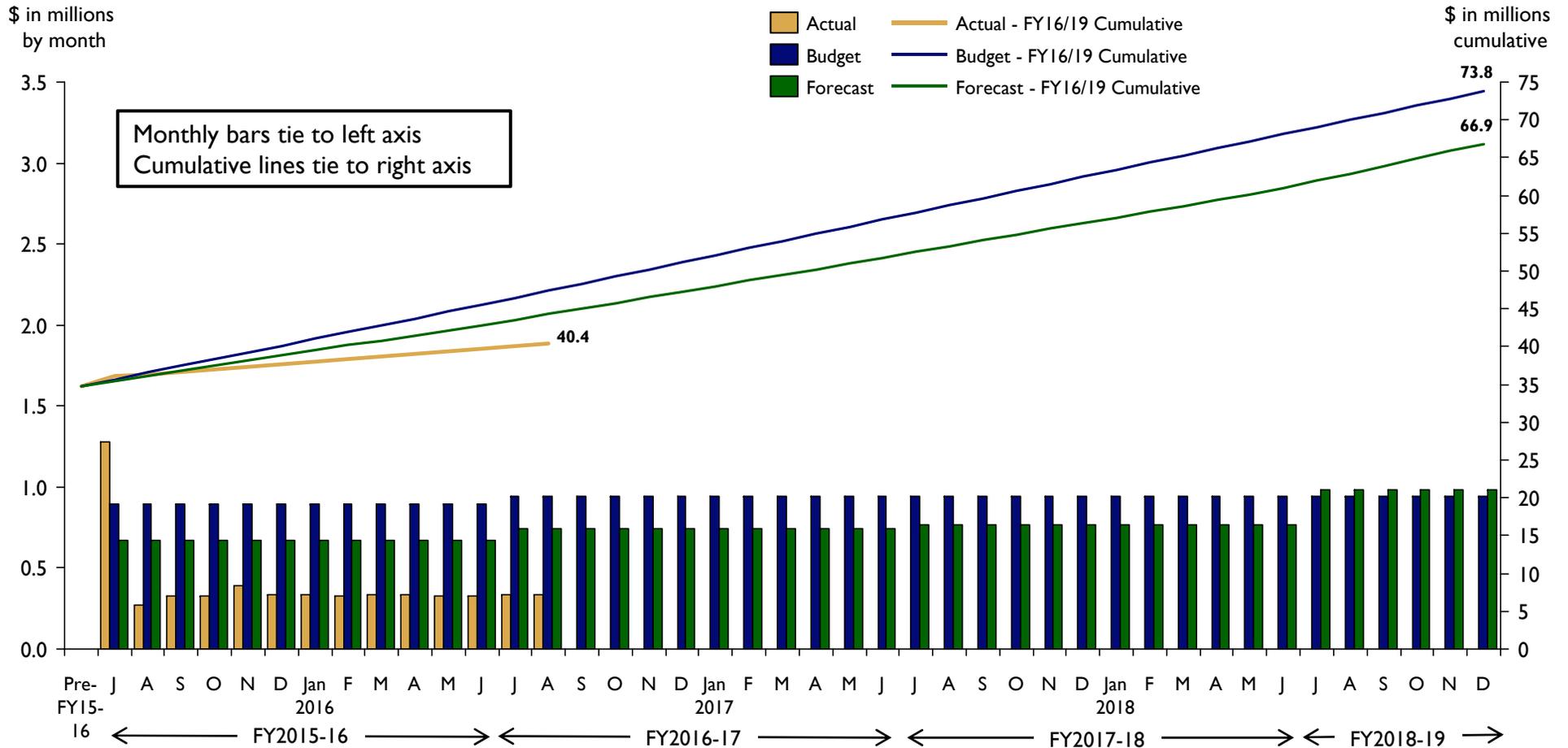
Global Environmental Budget includes activities involved in the scope at the program and segment levels

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 environmental 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 in-house 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)



Notes:

1) All estimates are preliminary and subject to change.

Source: Based on actual costs and future estimates for the Authority environmental staff, in-house legal review and resource agency agreements.

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

	Segment	Progress	Complete Purpose & Need Statement		Complete Alternatives Analysis		Board Concurrence of Preliminary Preferred Alternative for Draft EIR/EIS		Publish Draft EIR/EIS		Publish Final EIR/EIS and Obtain ROD		Date EIR/EIS To Be Completed	
			Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Last Month	Current Month	Original Target	Revised 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 100%	Complete 100%	Complete 100%	Complete 100%	Jul-16 Nov-16	Jul-16 Nov-16 13%	Jan-17 Feb-17	Jan-17 Feb-17	Nov-17 Dec-17	Nov-17 Dec-17	Nov-17	Dec-17
4	San Jose to Merced	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Sep-16 Dec-16	Sep-16 Dec-16 13%	Feb-17 Mar-17	Feb-17 Mar-17	Nov-17 Dec-17	Nov-17 Dec-17	Nov-17	Dec-17
5	Central Valley Wye (M-F) ²	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Sep-15 May-17	Sep-15 May-17 60%	Feb-16 Feb-17	Feb-16 Feb-17	Dec-16 Dec-17	Dec-16 Dec-17	Dec-16	Dec-17
6	CV Electrical Interconnections	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Jul-16 Aug-16	Jul-16 Aug-16 95%	Nov-16 Nov-16	Nov-16 Nov-16	Oct-17 Oct-17	Oct-17 Oct-17	Oct-17	No Change
7	HMF	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Apr-16 TBD	Apr-16 TBD	Sep-16 TBD	Sep-16 TBD	May-17 May-17	May-17 May-17	May-17	No Change
8	Locally Generated Alternative (F-B) ³	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Jul-16 Oct-16	Jul-16 Oct-16	Dec-16 Jan-17	Dec-16 Jan-17	Dec-16	Jan-17
9	Bakersfield to Palmdale	Plan Forecast % Complete	Complete 100%	Complete 100%	Jan-16 Mar-16 85%	Complete 100%	Oct-16 Dec-16	Oct-16 Dec-16 20%	Feb-17 May-17	Feb-17 May-17	Nov-17 Dec-17	Nov-17 Dec-17	Nov-17	Dec-17
10	Palmdale to Burbank	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Aug-16 Jan-17	Aug-16 Jan-17 25%	Mar-17 Apr-17	Mar-17 Apr-17	Nov-17 Dec-17	Nov-17 Dec-17	Nov-17	Dec-17
11	Burbank to LA	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Mar-17 Feb-17	Mar-17 Feb-17 5%	Jun-17 Jul-17	Jun-17 Jul-17	Nov-17 Dec-17	Nov-17 Dec-17	Nov-17	Dec-17
12	LA to Anaheim	Plan Forecast % Complete	Complete 100%	Complete 100%	Complete 100%	Complete 100%	Mar-17 Feb-17	Mar-17 Feb-17 15%	Jun-17 Jul-17	Jun-17 Jul-17	Nov-17 Dec-17	Nov-17 Dec-17	Nov-17	Dec-17

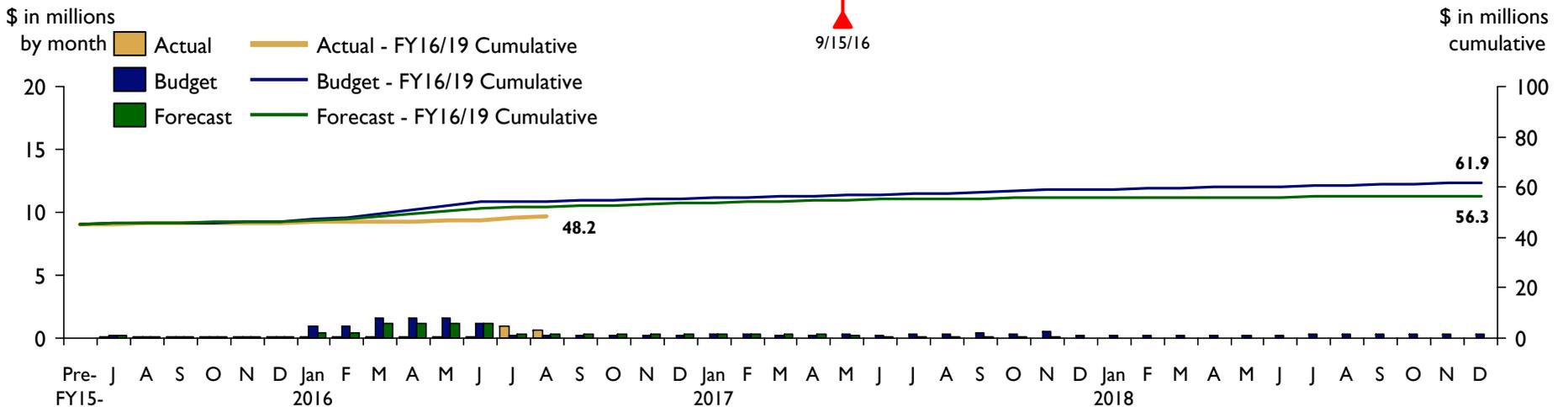
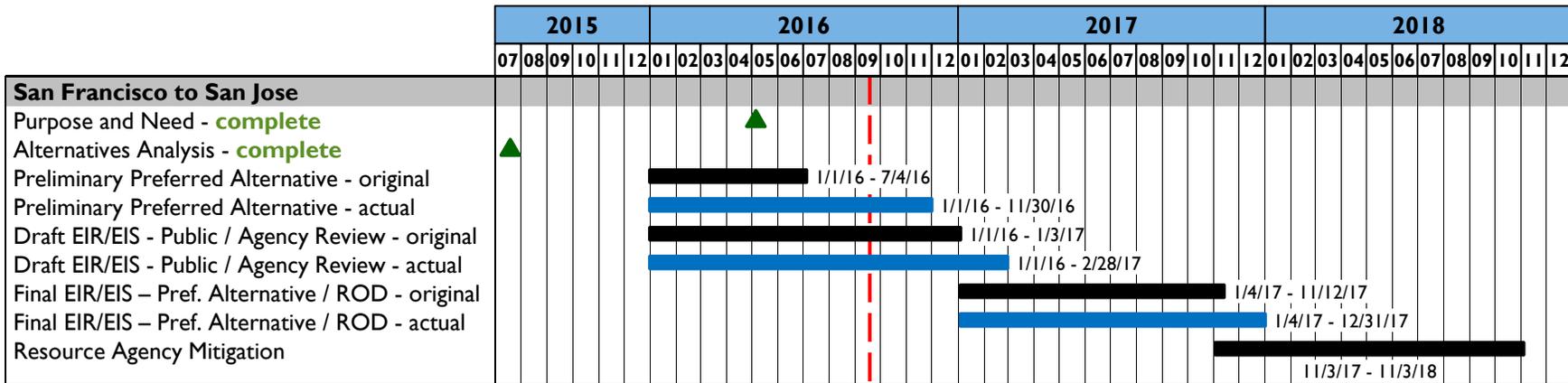
- Dates identified in red indicate change from previous month.
- Purpose and Need and the Alternatives Analysis were achieved as part of the Merced to Fresno EIR/EIS, completed in September 2012.
- Purpose and Need and the Alternatives Analysis were achieved as part of the Fresno to Bakersfield EIR/EIS, completed in June 2014.

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

Segment	Schedule Status and Mitigation Strategies
1 Merced to Fresno	EIR certified and project approval May 2012; FRA ROD issued September 2012
2 Fresno to Bakersfield	EIR certified and project approval May 2014; FRA ROD issued June 2014
3 San Francisco to San Jose	Potential schedule impact for Complete Preliminary Engineering for Project Definition. No impact to final milestone, and mitigation underway. The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
4 San Jose to Merced	Potential schedule impact for Complete Preliminary Engineering for Project Definition. No impact to final milestone, and mitigation underway. The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
5 Central Valley Wye (M-F)	No Delay Forecast at this Time The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options. Interim milestone dates adjusted to reflect addition of new alternative for evaluation.
6 CV Electrical Interconnections	No Delay Forecast at this Time. Expect to have sites 8 to 12 cleared by October 2016 for the test track.
7 HMF	No Delay Forecast at this Time Dates are subject to change pending Authority decision regarding type of environmental clearance documentation needed.
8 Locally Generated Alternative (F-B)	No Delay Forecast at this Time The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
9 Bakersfield to Palmdale	No Delay Forecast at this Time The schedule continues to be reviewed to identify opportunities for compressing activities and other environmental clearance options.
10 Palmdale to Burbank	Potential schedule impact for Preliminary Preferred Alternative and Publishing the Draft EIR/EIS No impact to final milestone, and mitigation underway. The schedule continues to be reviewed to identify opportunities for compressing activities and other efficiencies.
11 Burbank to LA	No Delay Forecast at this Time The schedule continues to be reviewed to identify opportunities for compressing activities and other efficiencies.
12 LA to Anaheim	No Delay Forecast at this Time The schedule continues to be reviewed to identify opportunities for compressing activities and other efficiencies.

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

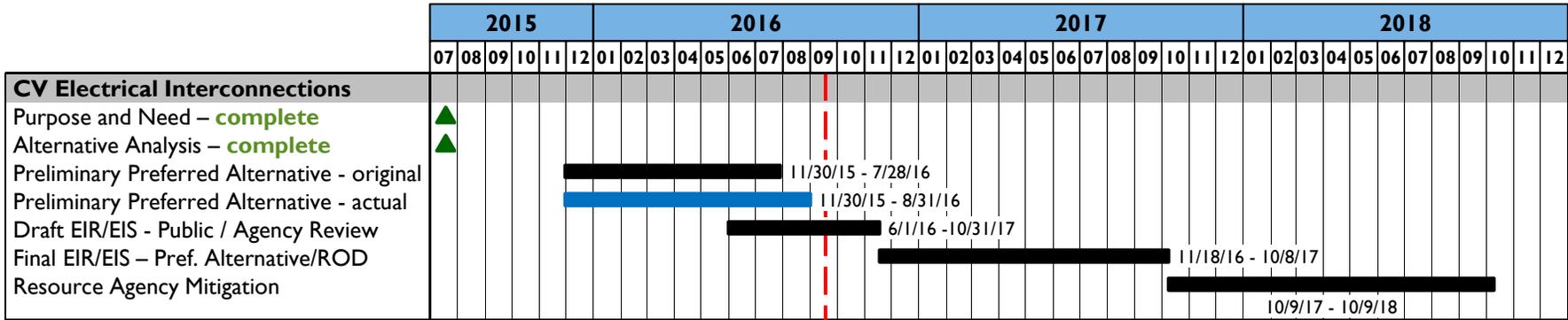
3 San Francisco to San Jose



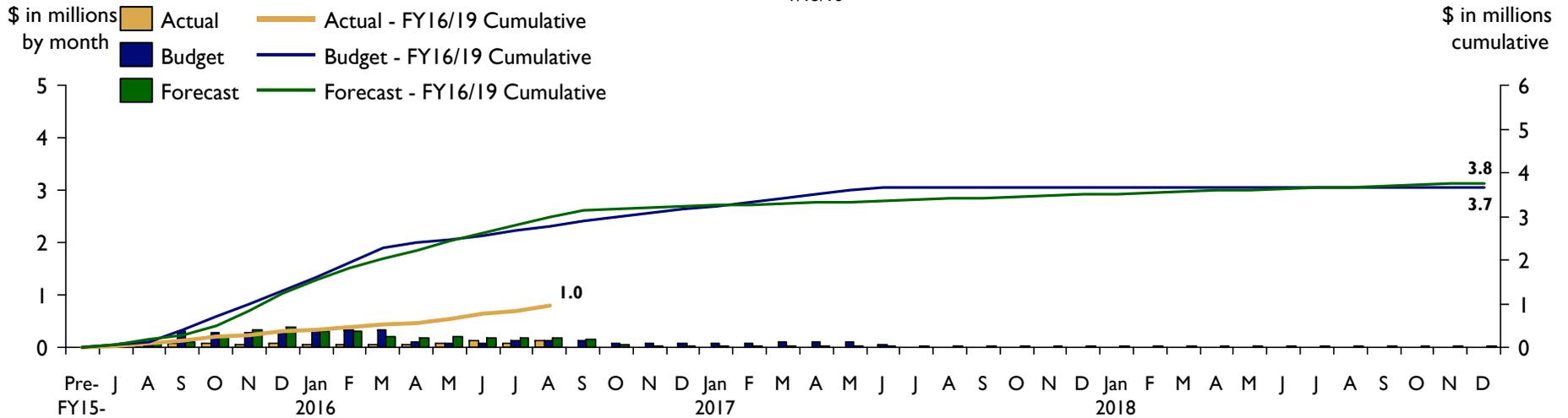
- 16 Notes:
- 1) All estimates are preliminary and subject to change.
 - 2) Forecast based on RDP November 2015 estimate through December 2018.
 - 3) At this time, no habitat mitigation assumed in estimate.
 - 4) Actual costs have been adjusted to be consistent with revised consultant and RDP costs.

Source: Based on actual costs and future estimates for the EEC and RDP.

6 Central Valley Electrical Interconnections



9/15/16

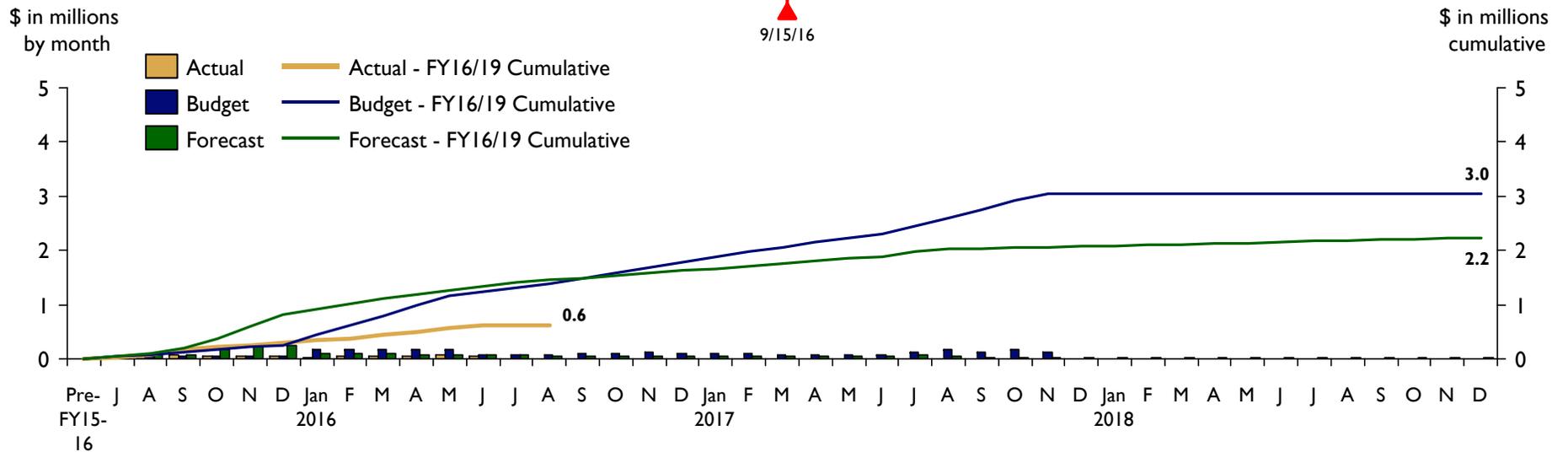


- Notes:
- 1) All estimates are preliminary and subject to change.
 - 2) Environmental clearance approach under review.
 - 3) Forecast includes RDP and RC costs December 2015 through December 2018.
 - 4) At this time, no habitat mitigation assumed in estimate.

Source: Based on actual costs and future estimates for the RC and RDP.

7 Heavy Maintenance Facility

	2015			2016					2017					2018																
	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12
Heavy Maintenance Facility																														
Purpose and Need – complete	▲																													
Alternatives Analysis – complete	▲																													
Preliminary Preferred Alternative	8/1/15 - 4/29/16																													
Draft EIR/EIS - Public / Agency Review	11/2/15 - 9/15/16																													
Final EIR/EIS – Pref. Alternative/ROD	9/16/16 - 5/31/17																													
Resource Agency Mitigation	5/10/17 - 5/10/18																													



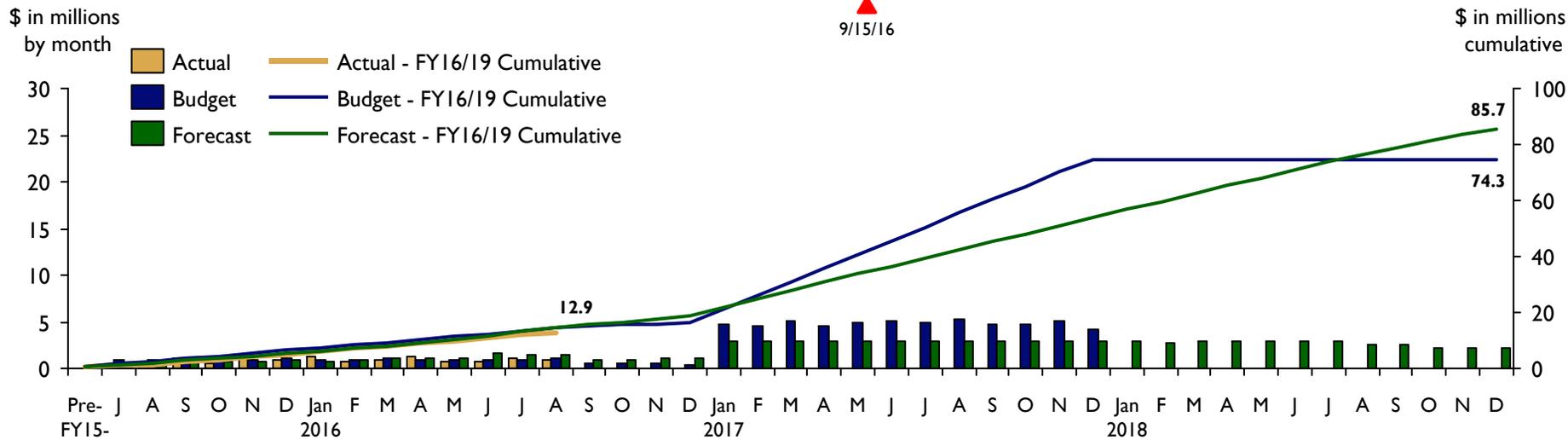
Notes:

- 1) All estimates are preliminary and subject to change.
- 2) Environmental clearance approach under review.
- 3) Forecast includes RDP and RC costs December 2015 through December 2018.
- 4) At this time, no habitat mitigation assumed in estimate.

Source: Based on actual costs and future estimates for the RC and RDP.

8 Locally Generated Alternative (F-B)

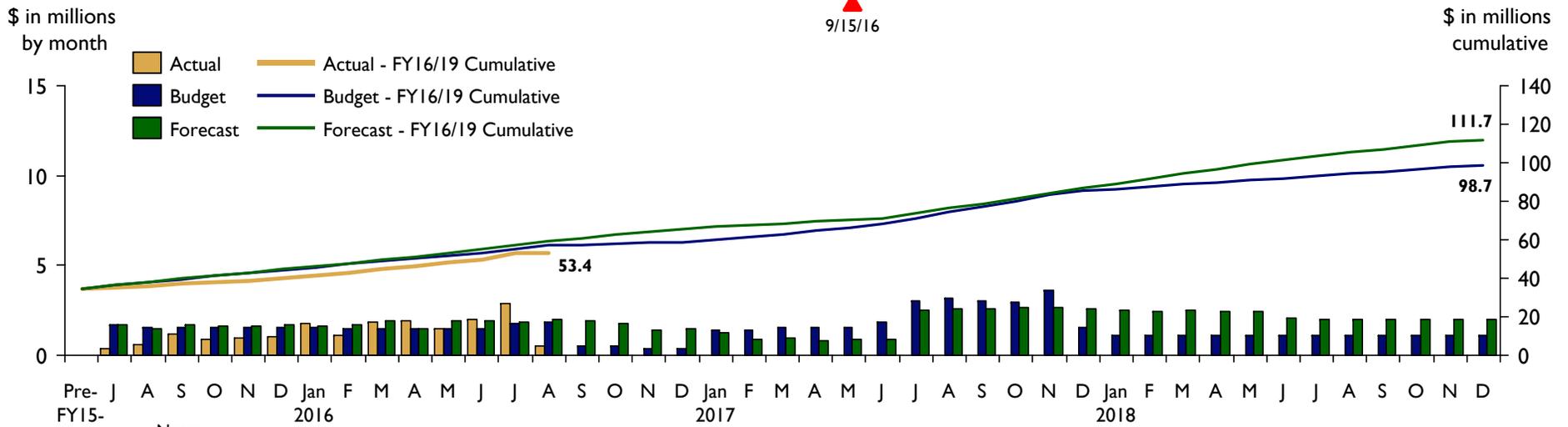
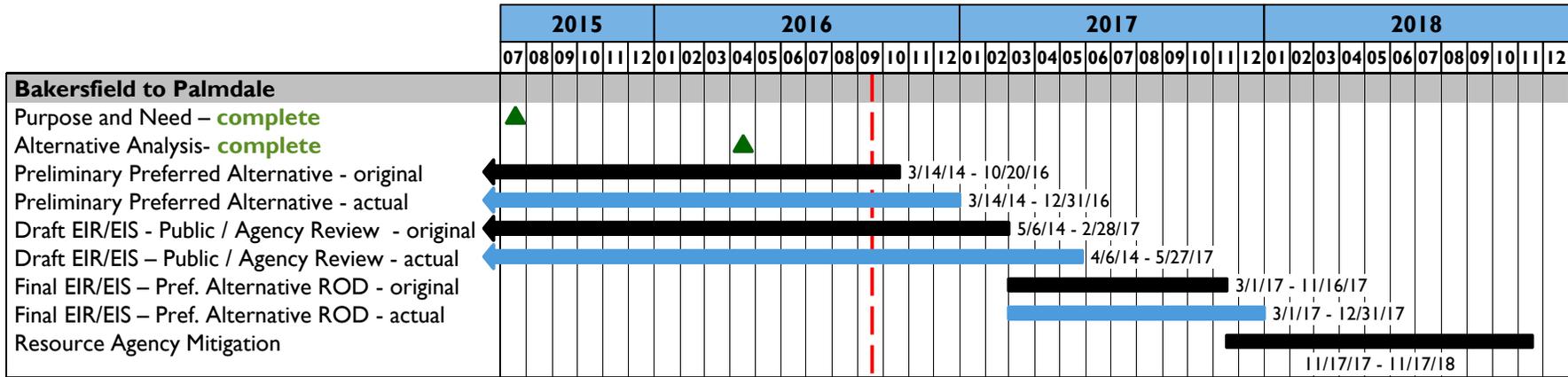
	2015			2016			2017			2018								
	07	08	09	10	11	12	01	02	03	04	05	06	07	08	09	10	11	12
Bakersfield F Street Alignment																		
Purpose and Need – complete	▲																	
Alternative Analysis – complete	▲																	
Preliminary Preferred Alternative – complete																		
Draft SEIR/SEIS - Public / Agency Review - original																		
Draft SEIR/SEIS – Public / Agency Review - actual																		
Final SEIR/SEIS – Pref. Alt./ROD - original																		
Final SEIR/SEIS – Pref. Alt./ROD - actual																		
Resource Agency Mitigation																		



- 16 Notes:
- 1) All estimates are preliminary and subject to change.
 - 2) Forecasted includes RDP and RC costs through December 2018.
 - 3) Habitat Mitigation included.
 - 4) Purpose and Need and the Alternatives Analysis were achieved as part of the Fresno to Bakersfield EIR/EIS, completed in June 2014

Source: Based on actual costs and future estimates for the RC and RDP.

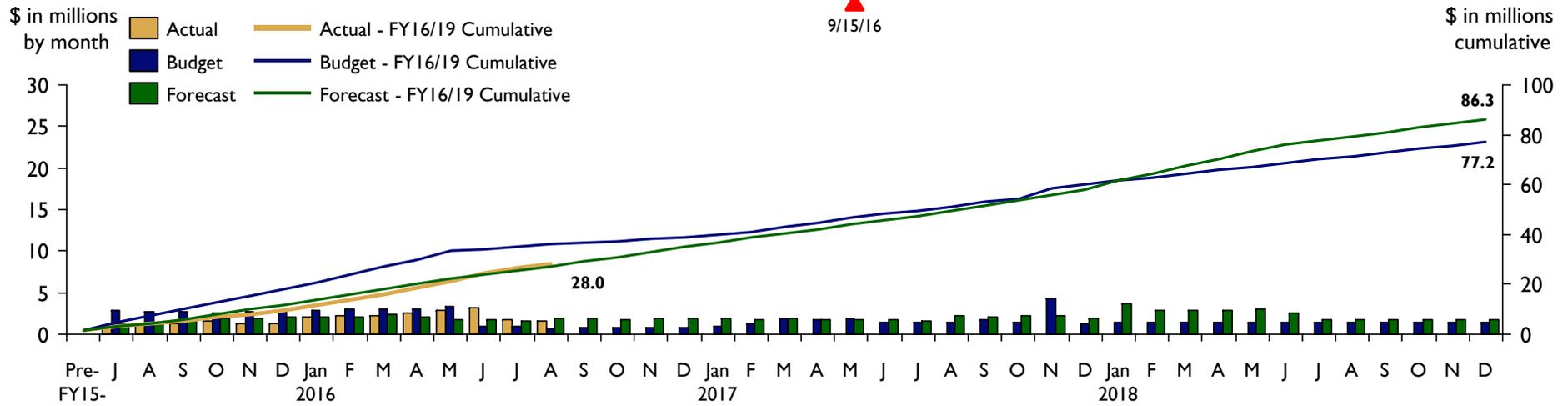
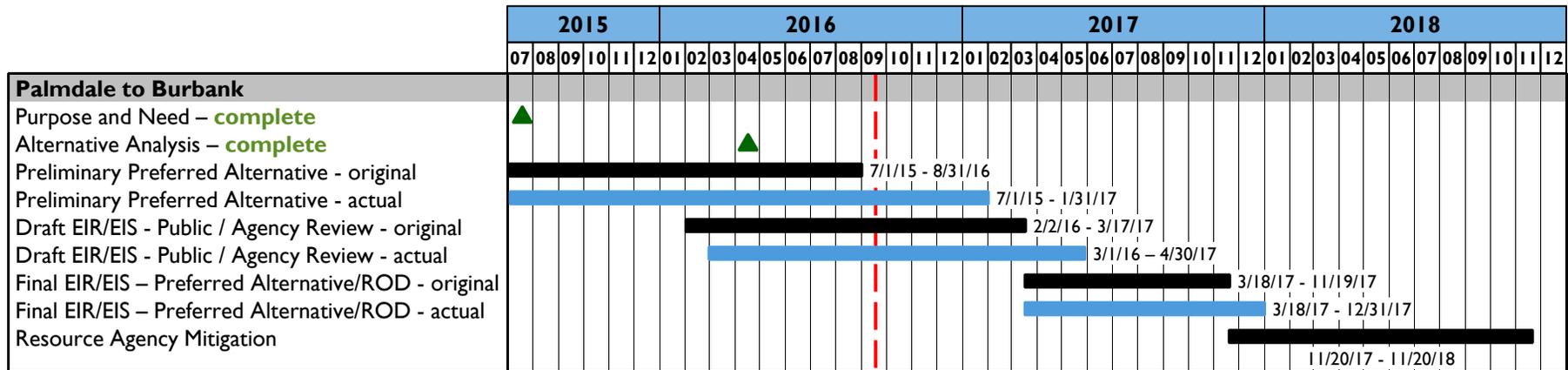
9 Bakersfield to Palmdale



- Notes:
- 1) All estimates are preliminary and subject to change.
 - 2) Forecast includes RDP and RC costs through December 2018.
 - 3) Habitat Mitigation included.

Source: Based on actual costs and future estimates for the RC and RDP.

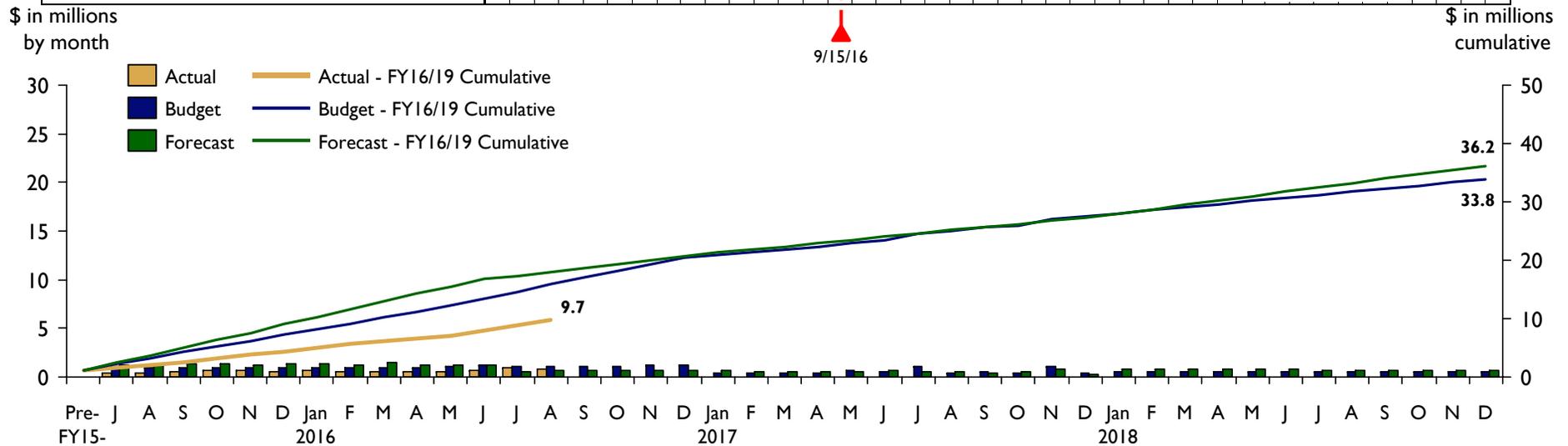
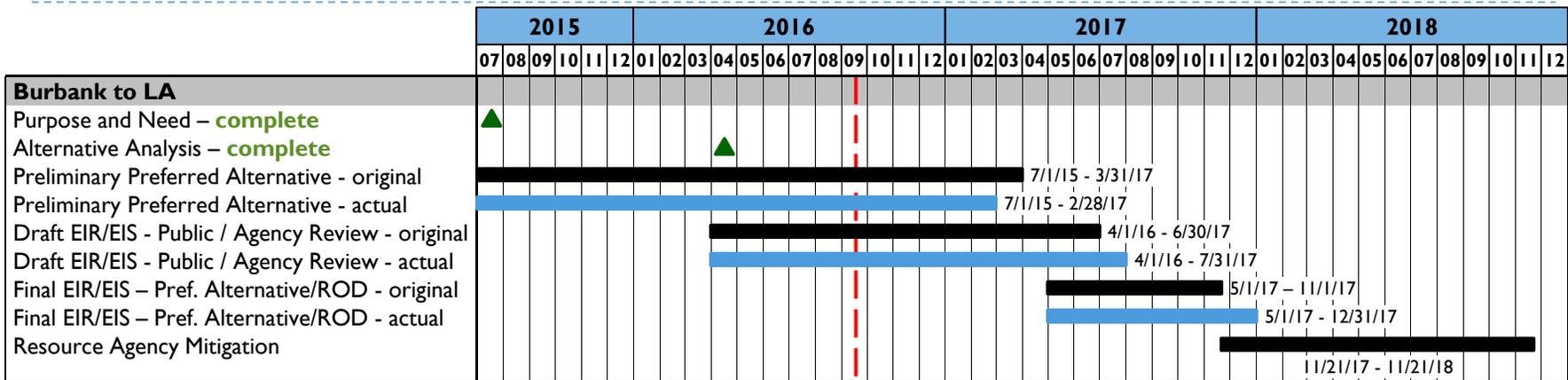
10 Palmdale to Burbank



- Notes:
- 1) All estimates are preliminary and subject to change.
 - 2) Forecast includes RDP and RC costs through December 2018.
 - 3) Habitat Mitigation included.

Source: Based on actual costs and future estimates for the RCs and RDP.

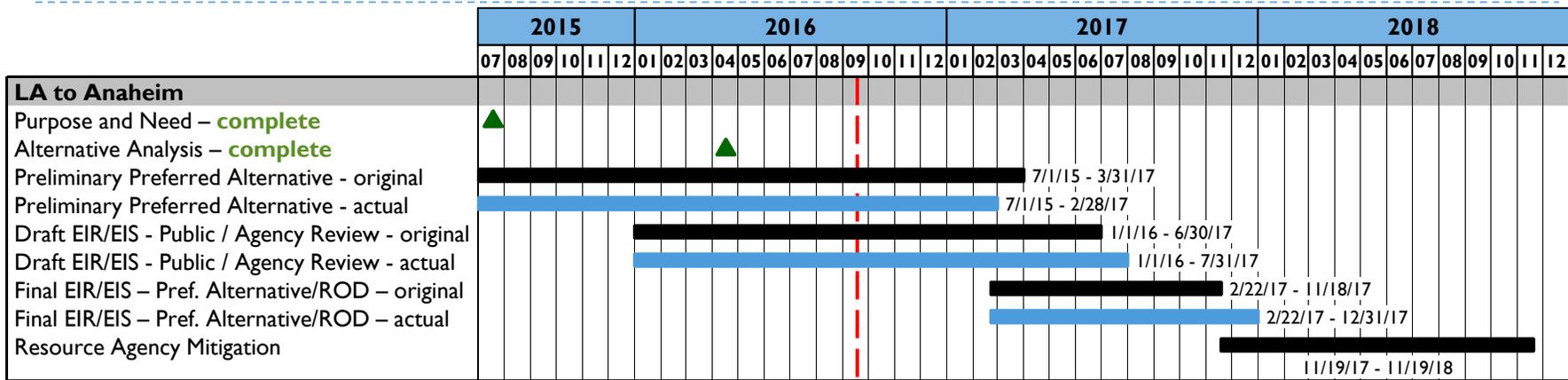
11 Burbank to LA



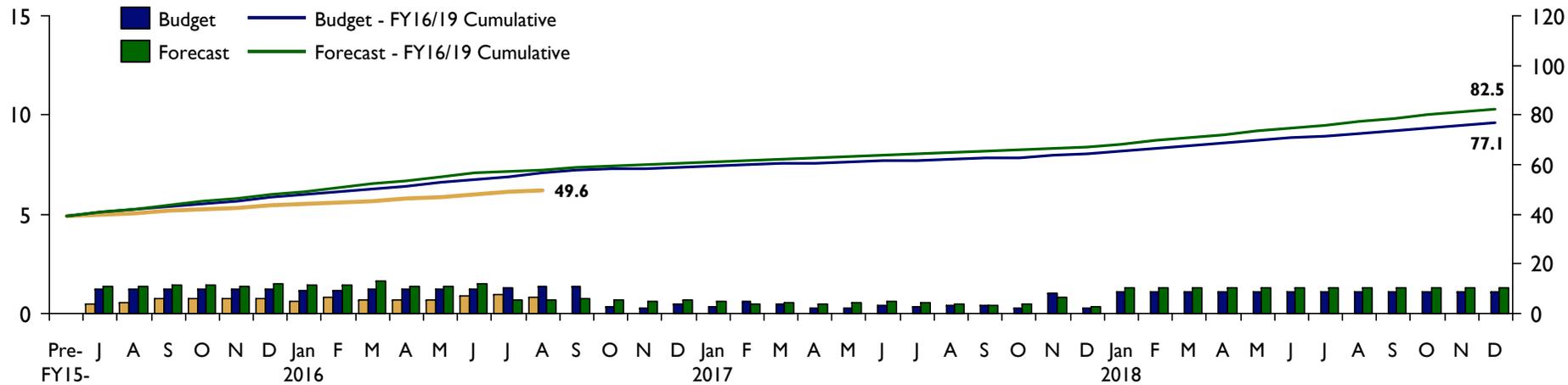
- Notes:
- 1) All estimates are preliminary and subject to change.
 - 2) Forecast includes RDP and RC costs through December 2018.
 - 3) Habitat Mitigation included.

Source: Based on actual costs and future estimates for the RCs and RDP.

12 LA to Anaheim



\$ in millions by month \$ in millions cumulative



- Notes:
- 1) All estimates are preliminary and subject to change.
 - 2) Forecast includes RDP and RC costs through Dec. 2018.
 - 3) Habitat Mitigation included.

Source: Based on actual costs and future estimates for the RCs and RDP.

Four-month look ahead - milestones and other key deliverables, all sections/projects: *Information through August 2016*¹

Milestone	Segment	Due Date	% Completion	Status
Complete Record Set Preliminary Engineering for Project Development ²	Locally Generated Alternative (F-B)	July 2016	90%	Delayed
Complete Draft Preliminary Engineering for Project Definition	Burbank to Los Angeles and Los Angeles to Anaheim	July 2016 (Draft-submitted)	100%	Completed
Complete Preliminary Engineering for Project Definition ³	San Jose to Merced	November 2016	20%	On Target
Complete Environmental Evaluation of PG&E Sites 8 -12 ⁴ ; Select Preliminary Preferred Alternative for Draft EIR/EIS	Central Valley Interconnections	August 2016	95%	On Target
Finish Scoping Report	San Francisco to San Jose	September 2016	95%	On Target
Present Checkpoint B, Range of Alternatives to agencies	San Francisco to San Jose	October 2016	15%	On Target
Conclude Record Set Preliminary Engineering for Project Development	Bakersfield to Palmdale	April 2017	58%	On Target
Present Checkpoint B, Range of Alternatives to agencies	Palmdale to Burbank	December 2016	46%	On Target

Notes:

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

² A delay has occurred because of consideration of potential project changes.

³ A delay has occurred because of continuing work to complete project definition.

⁴ A delay has occurred because of need to revise documentation following FRA review.

⁵ A delay has occurred with definition of the Bakersfield station.

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

Milestone	Segment	Due Date	% Completion	Status
Finish Project Definition Report ⁵	Bakersfield to Palmdale	May 2016	100%	Delayed
Complete of Preliminary Engineering for Project Definition	San Francisco to San Jose	November 2016	18%	On Target
Board Concurrence on Preliminary of Preferred Alternative Staff Report	San Francisco to San Jose	November 2016	13%	On Target
Publish Administrative Draft EIR/EIS	San Francisco to San Jose	December 2016	12%	On Target
Board Concurrence of Preliminary Preferred Alternative Staff Report	San Jose to Merced	December 2016	13%	On Target
Publish Administrative Draft EIR/EIS	San Jose to Merced	December 2016	15%	On Target
Resolution of Nationwide Permit Approval and MOU with Signatory Agencies	Burbank to Los Angeles and Los Angeles to Anaheim	December 2016	75%	On Target
Complete Jurisdictional Water and Wetlands Delineation Technical Memos	Burbank to Los Angeles and Los Angeles to Anaheim	December 2016 (Draft received August 2016)	80%	On Target

Notes:

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

² A delay has occurred because of consideration of potential project changes.

³ A delay has occurred because of continuing work to complete project definition.

⁴ A delay has occurred because of need to revise documentation following FRA review.

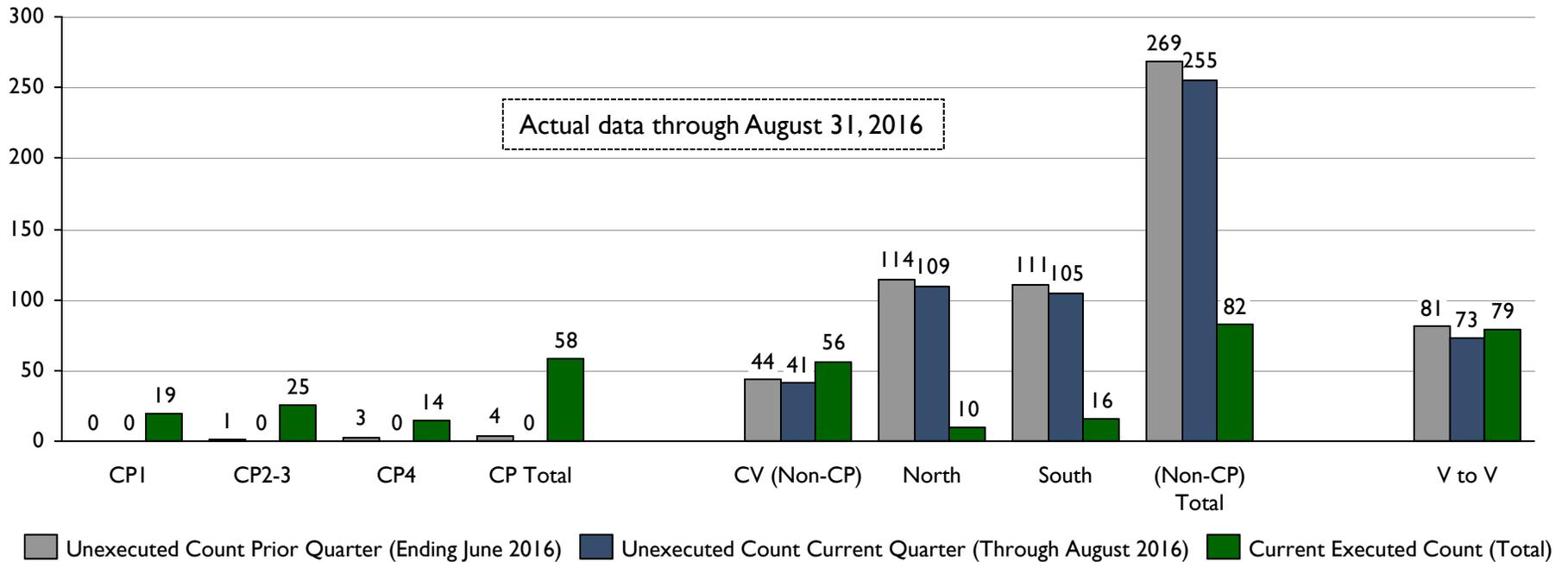
⁵ A delay has occurred with definition of the Bakersfield station.

Agenda

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

CP1, CP2-3, CP4, Central Valley (Non-CP), North and South Executed and Unexecuted Agreements

Total Executed/Unexecuted Agreements
(in number of agreements)



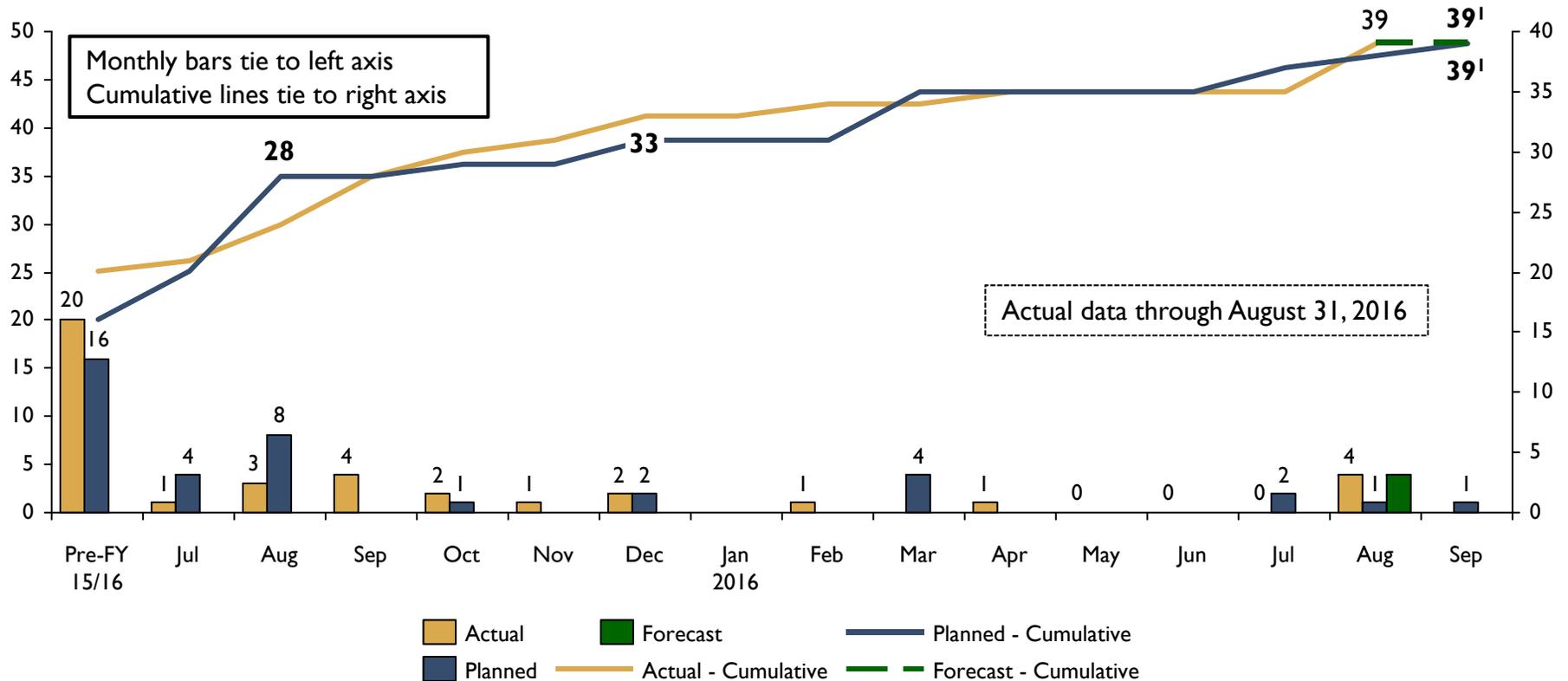
Notes:

1. Some Agreements are counted more than once because they are required for more than one section.
2. CPI, CP2-3, CP4 and CP Total counts only include Master/Cooperative Agreements
3. Central Valley (Non-CP), North, South and (Non-CP) Total counts include Master/Cooperative Agreements and Reimbursement Agreements for environmental coordination and project development.
4. V to V count is a subset of the agreement already represented.
5. The count for the “Non-CP” 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.

CP2-3 & CP4 Third Party Agreements by Month

Plan vs. Actual vs. Forecast

CP2-3 & CP4 Third Party Agreements (excluding Railroads) (in number of agreements)



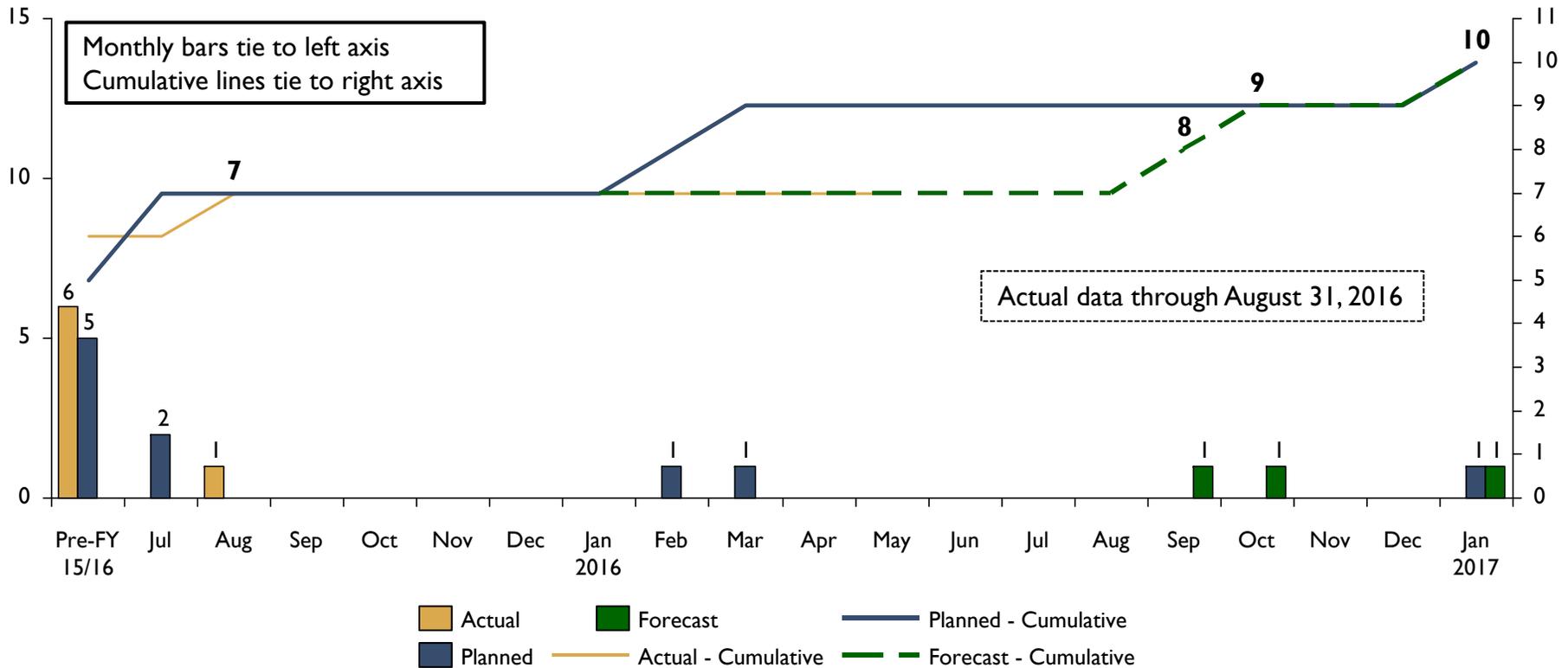
Notes:

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

Railroad Third Party Agreements Separate from CP1, CP2-3, and CP4 by Month

Plan vs. Actual vs. Forecast

Railroads – Third Party Agreements Separate from CP1, CP2-3, and CP4 DB Contracts
(in number of agreements)



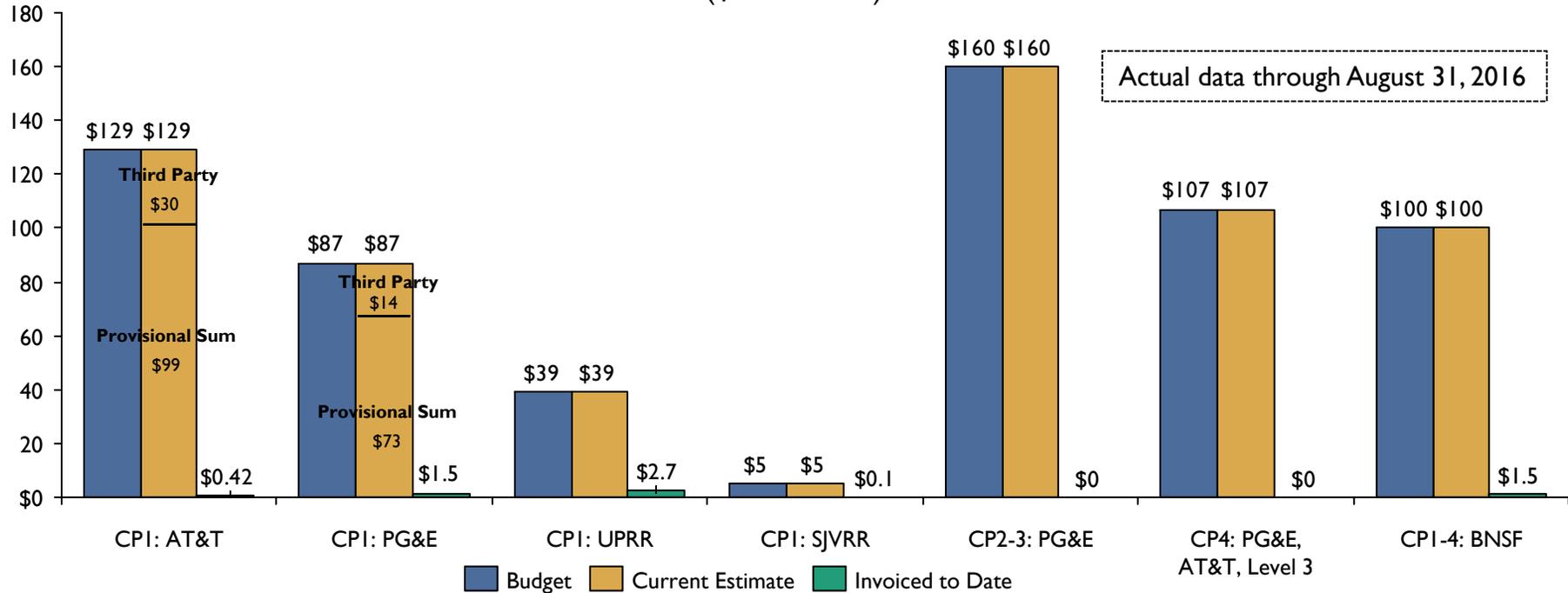
Notes:

1. 10 total Railroad agreements to be executed. Execution of BNSF agreements are dependent on DB designs.

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

Board Authorized, Current Estimate and Invoiced Amounts

Board Authorized, Current Estimate and Invoiced Amounts
(\$ in millions)



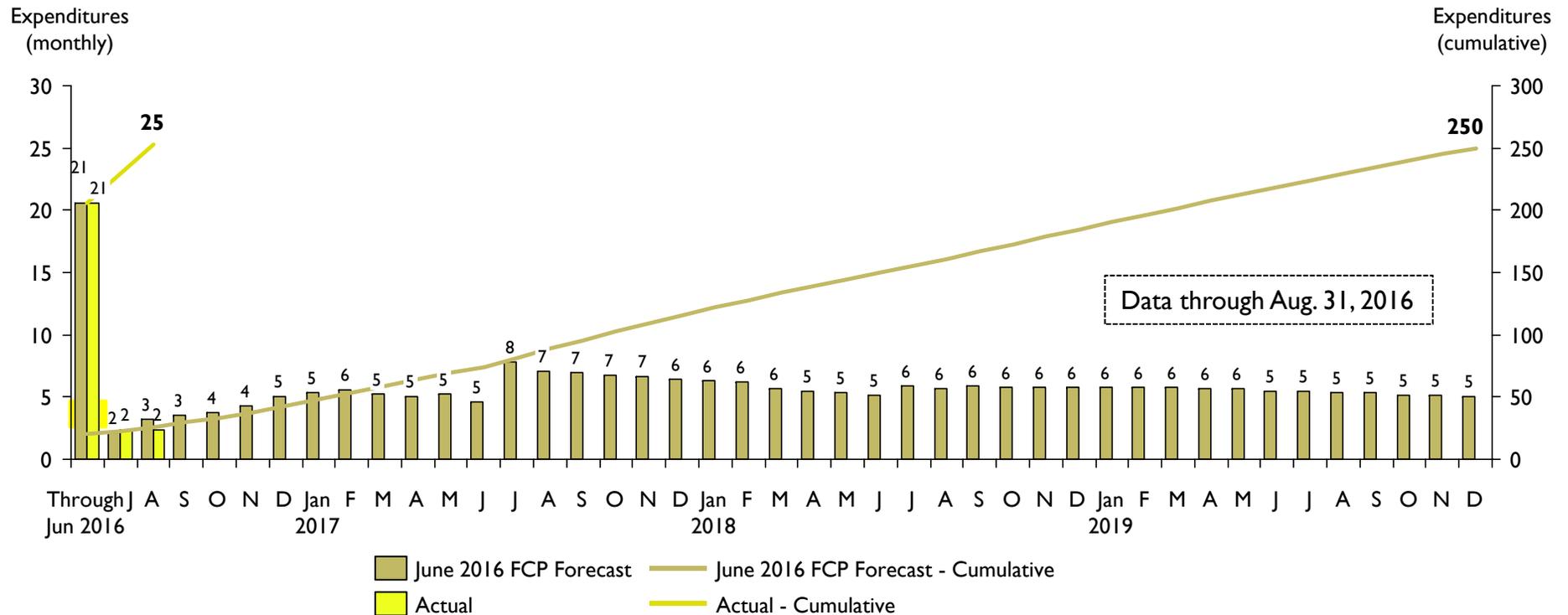
Notes:

1. 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. Current estimates for CPI are due to a better understanding of utility impacts as part of physical ground and underground surveys required for design.
4. Current estimates for CP2-3 and CP4 are based on most current information available and have not be 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:

- Original FCP Forecast (December 2012) did not have task level detail for other expenditures.
- Other costs include – utilities, railroads, local municipalities, irrigation districts and resource agency support.
- Jun-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.

Sources:

- Interim Funding Contribution Plan Worksheet, Aug-2016
- Funding Contribution Plan, Jun-2016

Agenda

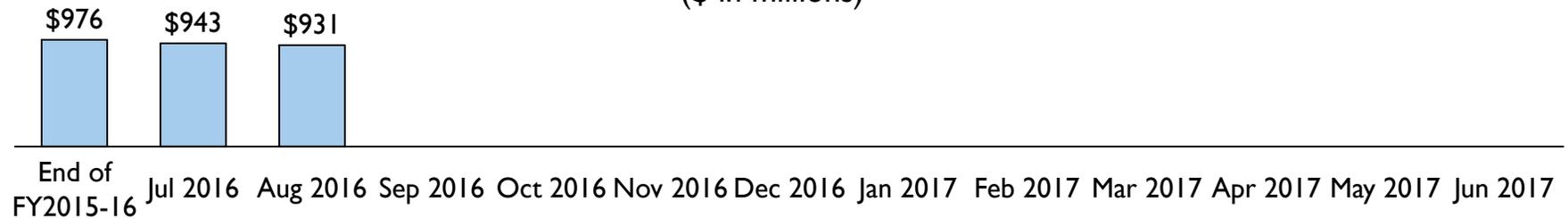
- ▶ Operations Report Metrics
 - Executive Summary
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 - ARRA Schedule
 - Risk

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 CPI, 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

CPI – Contract Balance Remaining¹
(\$ in millions)



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)



Notes:

1. Remaining Contract Value = [Revised DB Contract Amount] – [Authority Approved Invoices to Date]. Revised DB contract amount, increased to \$1,285M 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: August 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										
Contingency	\$160M	\$160M	\$160M										
Change Orders (from contingency)	\$79.3M	\$29.2M	-\$39.1M See Note 2										
Contingency Balance Remaining	\$80.7M	\$51.5M	\$90.5M										
Contingency %	8.3%	5.5%	9.7%										

Note:

1. 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.

Source: August 31, 2016
CPI Performance Metric Report

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
June 2016 FCP Forecast Value	\$342.2M	\$358.2M	\$373.9M										
Earned Value/ Invoiced to Date	\$279.8M	\$342.2M	\$354.0M										
Planned Value	\$749.8M	\$768.4M	\$788.5M										
Schedule Performance Index	37%	45%	45%										

Source: August 31, 2016
CPI Performance Metric Report

CP2-3 Contract Management – Contingency Value

CP2-3 – Contract Balance Remaining
(\$ in millions)



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)



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: August 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										
Contingency	\$261.2M	\$261.2M	\$261.2M										
Change Orders (from contingency)	\$4.0M	\$0.0M	\$0.0M										
Contingency Balance Remaining	\$257.2M	\$257.2M	\$257.2M										
Contingency %	22.3%	22.5%	22.7%										

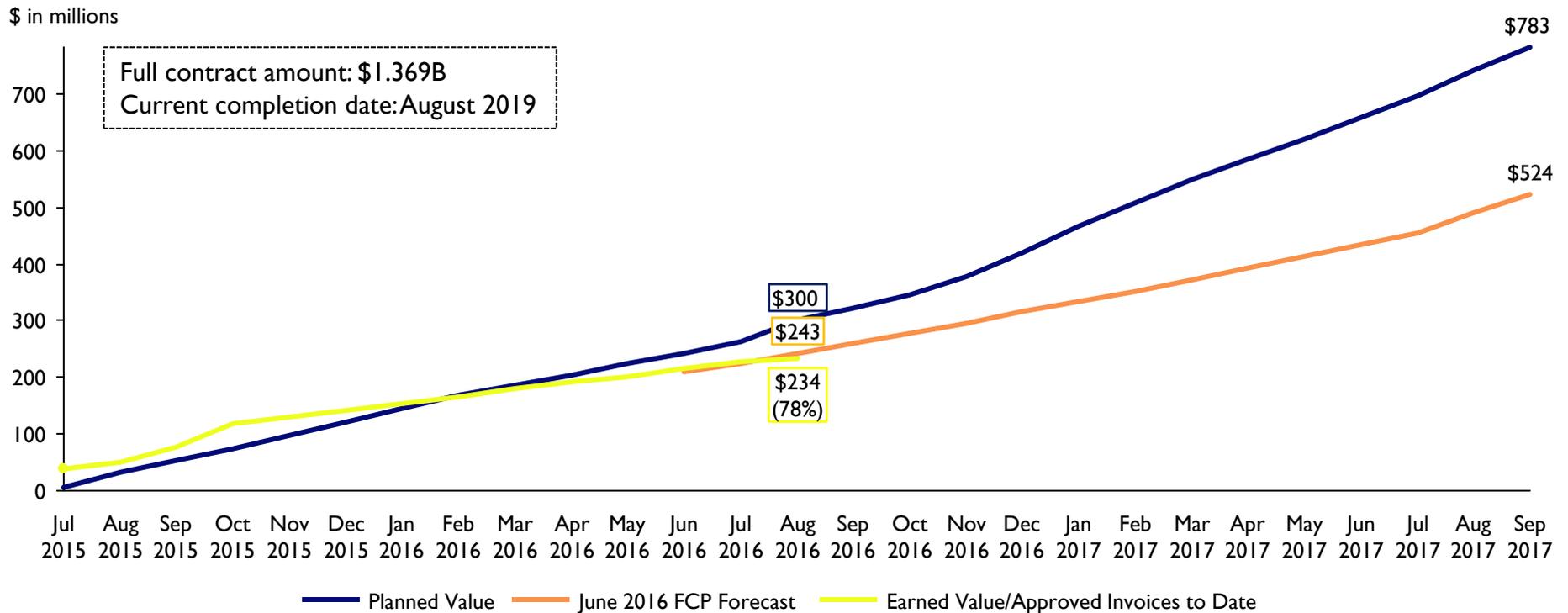
Note:

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: August 31, 2016
CP2-3 Performance Metric Report

CP2-3 Contract Management – Schedule Performance Index

CP2-3 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. CP2-3 DB contract forecast expenditures from January 2016 to June 2017 will be 100% ARRA funded, until full ARRA drawdown.
4. Jun-16 FCP has been submitted to the Federal Railroad Administration (FRA), and is under review.

Sources:

1. FCP Forecast: Funding Contribution Plan, Jun-2016
2. Earned Value/Approved Invoices to Date: August 31, 2016 CP2-3 Performance Metric Report
3. 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
June 2016 FCP Forecast Value	\$208.7M	\$224.7M	\$242.7M										
Earned Value/ Invoiced to Date	\$216.3M	\$226.9M	\$234.1M										
Planned Value	\$242.2M	\$262.5M	\$300.3M										
Schedule Performance Index	89%	86%	78%										

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

CP4 Contract Management – Contingency Value

CP4 – Contract Balance Remaining
(\$ in millions)



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)



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: August 31, 2016
CP4 Monthly Status Report

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										
Contingency	\$62.0M	\$62.0M	\$62.0M										
Change Orders (from contingency)	\$1.4M	\$0.0M	\$0.0M										
Contingency Balance Remaining	\$60.6M	\$60.6M	\$60.6M										
Contingency %	13.6%	13.6%	14.3%										

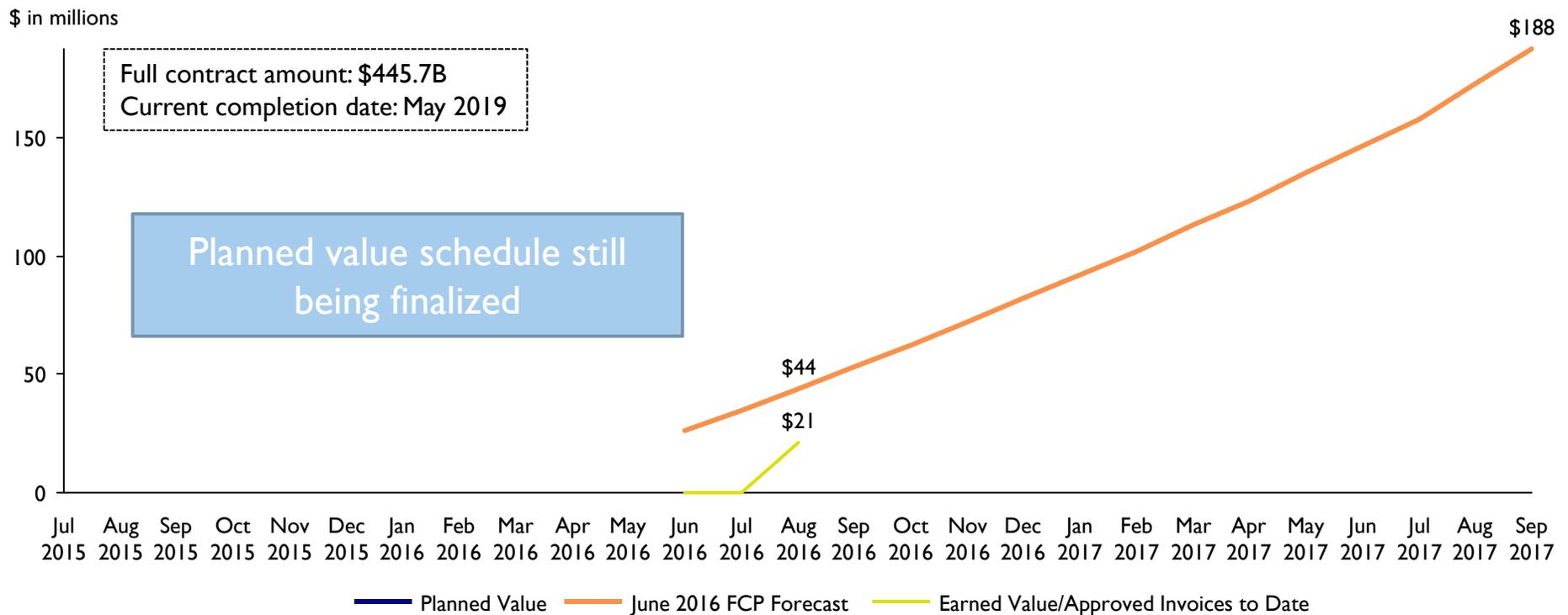
Note:

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: August 31, 2016
CP4 Monthly Status Report

CP4 Contract Management – Schedule Performance Index

CP4 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. CP4 DB contract forecast expenditures from January 2016 to June 2017 will be 100% ARRA funded, until full ARRA drawdown.
4. Jun-16 FCP has been submitted to the Federal Railroad Administration (FRA), and is under review.

Sources:

1. FCP Forecast: Funding Contribution Plan, Jun-2016
2. Earned Value/Approved Invoices to Date: August 31, 2016 CP4 Monthly Status Report
3. 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
June 2016 FCP Forecast Value	\$26.3M	\$34.7M	\$44.1M										
Earned Value/ Invoiced to Date	\$0.0M	\$0.0M	\$21.1M										
Planned Value	See Note I	See Note I	See Note I										
Schedule Performance Index	N/A	N/A	N/A										

Notes:

I. CP4 Planned Value schedule still being finalized.

Source: August 31, 2016
CP4 Monthly Status Report

SR-99 Contract Management – Contingency Value

SR-99 – Contract Balance Remaining
(\$ in millions)



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 EWP and MP Contingencies.



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: August 31, 2016
SR-99 Performance Metric Report

SR-99 Contract Management Raw Data: Contingency Value

SR-99 – Contingency (\$ in millions)

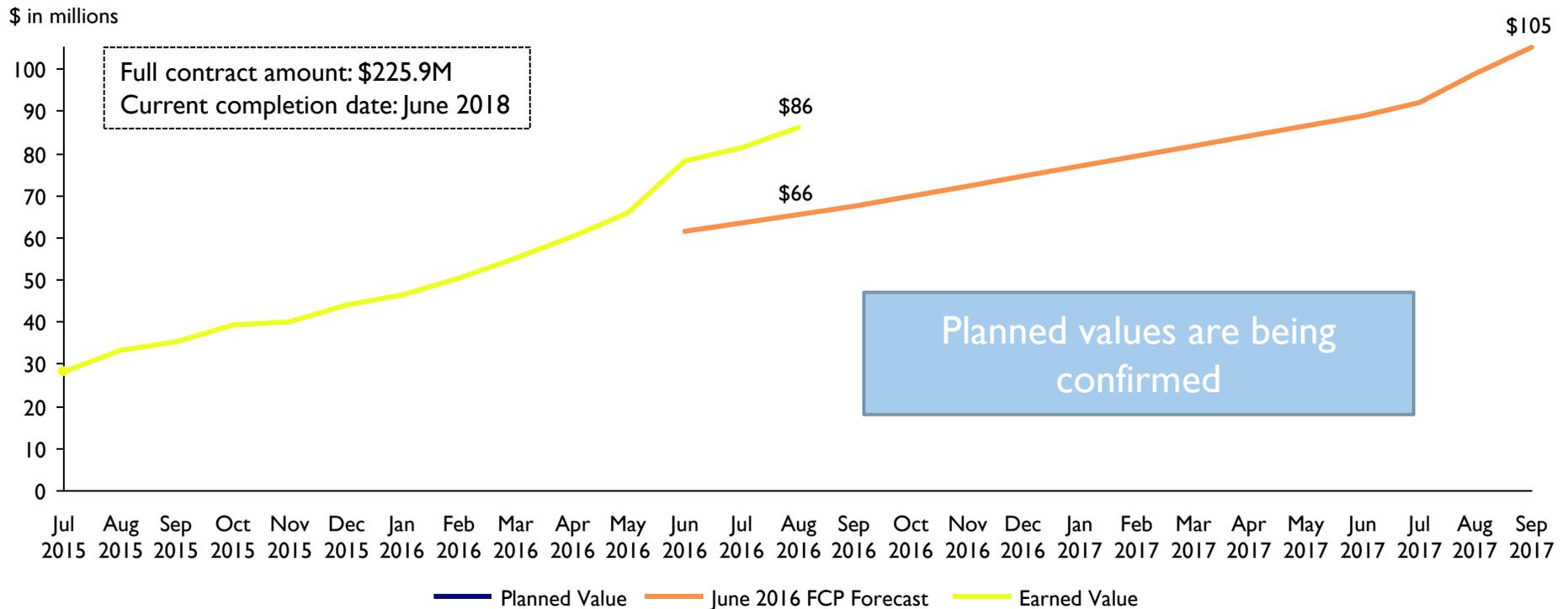
	End of FY2015-16	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017
Contract Balance Remaining	\$144.7M	\$140.9M	\$136.8M										
Contingency	\$9.5M	\$9.5M	\$9.5M										
Change Orders (from contingency)	\$1.3M	\$0.0M	\$0.4M										
Contingency Balance Remaining	\$8.2M	\$8.2M	\$7.8M										
Contingency %	5.7%	5.8%	5.7%										

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: August 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.
2. 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, Jun-2016
2. Earned Value: August 31, 2016 SR-99 Performance Metric Report
3. 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
June 2016 FCP Forecast Value	\$61.7M	\$63.6M	\$65.5M										
Earned Value ¹	\$78.1M	\$81.3M	\$86.1M										
Planned Value	See Note 2	See Note 2	See Note 2										
Schedule Performance Index	93%	86%	82%										

Note:

1. SR-99 contract with Caltrans is not a Design-Build contract. Earned value is not necessarily equal to invoice to date/actual cost amount.
2. Planned Values are being confirmed.

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

Agenda

- ▶ Operations Report Metrics
 - Executive Summary
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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 October F&A Capital Outlay Report includes financial data through August 31, 2016

As of August 31, 2016, the Authority has spent 12.3% of FY2016-17 budget, 72.8% of the federal ARRA grant, and 80% of the FY2014-15 Cap and Trade appropriation

FY2016-17 Expenditures to Date (Data as of August 2016)

Total appropriation includes some funding for Phase II planning and FY2015-16 Cap and Trade creating a difference with the total budget below.

Total Appropriation	FY2016-17 Budget		FY Expenditures to Date		Expenditures - % of Budget	
	Jul-16	Aug-16	Jul-16	Aug-16	Jul-16	Aug-16
\$9.015B	\$1.71B	\$1.71B	\$0.08B	\$0.21B	4.6%	12.3%

Total Expenditures to Date (\$ in billions) (Data as of August 2016)

ARRA expenditures are 72.8% of federal ARRA grant funds and 20.7% of \$9.0B total budget

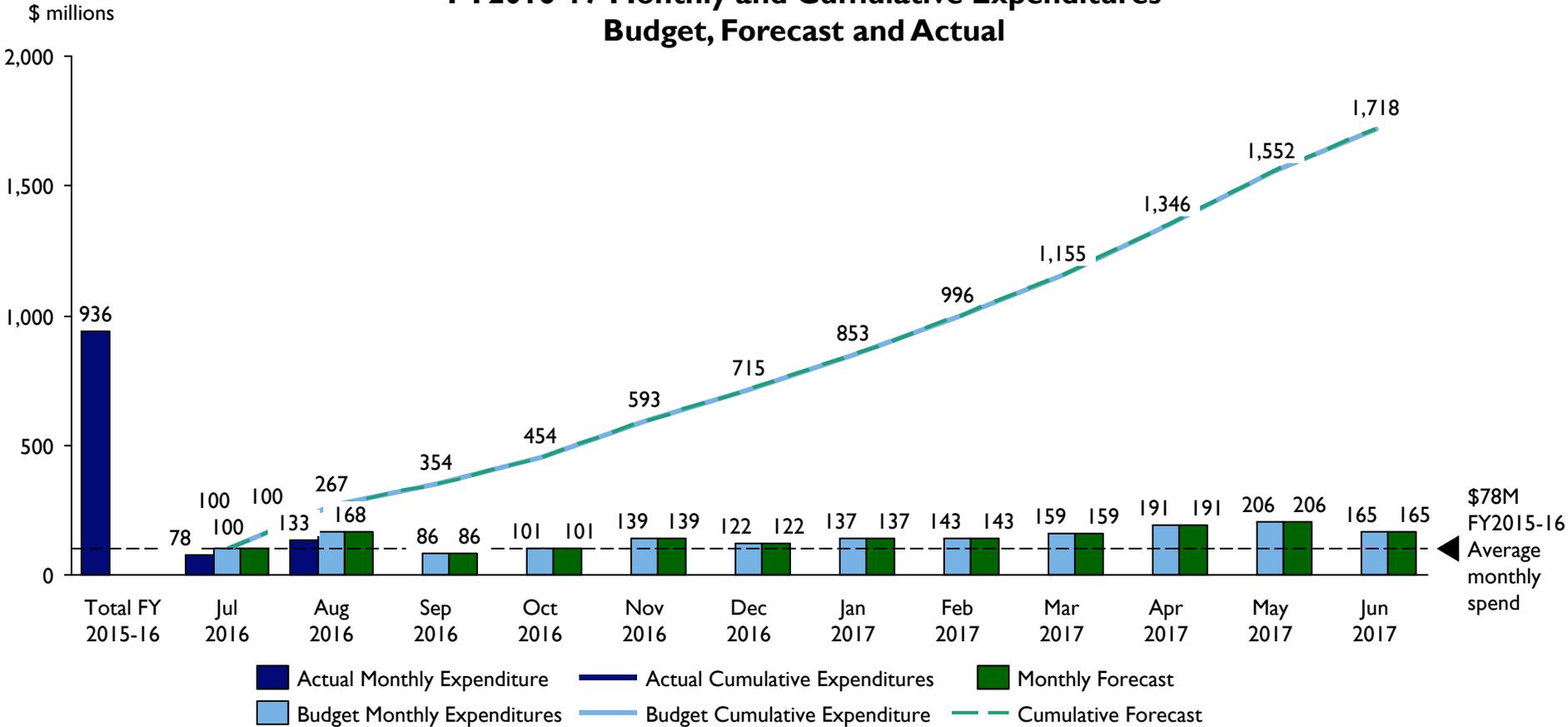
	TOTAL		Planning		Construction	
	Budget	Expended	Budget	Expend to Date	Budget	Expend to Date
ARRA Grant	\$2.55	\$1.86	\$0.44	\$0.38	\$2.11	\$1.48
FY10 Grant	\$0.93	\$-	\$-	\$-	\$0.93	\$-
PROP IA	\$3.18	\$0.32	\$0.58	\$0.32	\$2.61	\$-
Cap and Trade	\$1.22	\$0.20	\$0.33	\$0.06	\$0.89	\$0.14
Local Assistance	\$1.10	\$-	\$-	\$-	\$1.10	\$-
Total	\$8.99	\$2.38	\$1.35	\$0.77	\$7.64	\$1.62

Note: Numbers may not add due to rounding

Source: F&A Capital Outlay Report, October 2016 – balance subject to change due to pending approval of tapered match and federal reimbursements

Finance/Budget – FY2016-17 Expenditures

**FY2016-17 Monthly and Cumulative Expenditures
Budget, Forecast and Actual**



Source: F&A Capital Outlay Reports (Sep-2015 – October-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	Oct 2015	Nov 2015	Dec 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	\$74.1M	\$125.5M	\$161.4M	\$234.5M	\$293.1M	\$391.0M	\$453.3M	\$536.2M	\$624.0M	\$775.0M	\$936M
Monthly expenditures	\$0	\$74.1M	\$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	Aug 2016	Sept 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	June 2017
Total FY Budget	\$1.7B	\$1.7B										
Expense to Date	\$78.5M	\$211.1M										
Monthly expenditures	\$78.5M	\$132.6										
Total FY Forecast	\$1.7B	\$1.7B										

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
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ARRA Schedule – Context

- ▶ The following slides provide the ARRA grant drawdown schedule, and track ARRA grant monthly expenditures

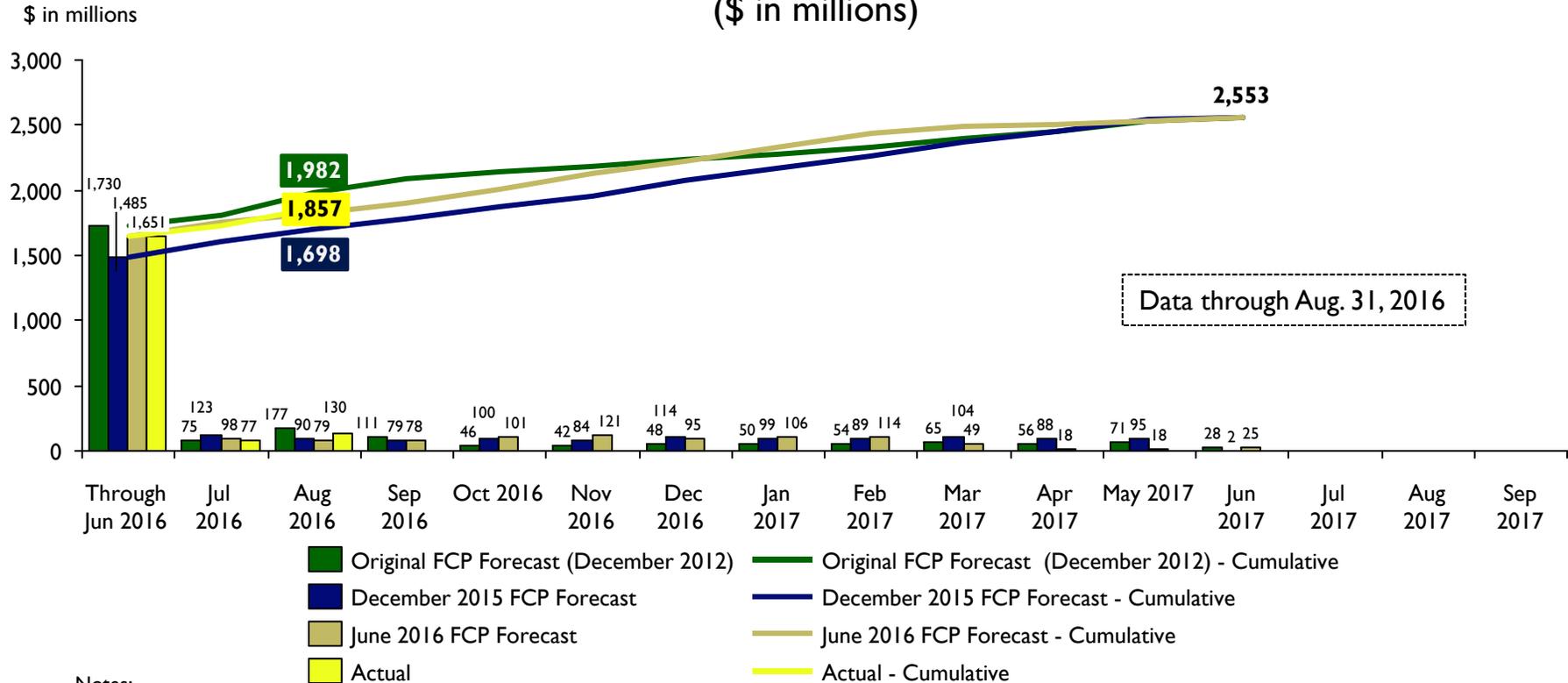
- ▶ The ARRA grant is broken down into two expenditure types:
 - ARRA-Project Development: Environmental Review, Preliminary Engineering Design, Project Administration and other project development related costs
 - ARRA-Construction: Program Management, Project Construction Management, ROW Acquisition, 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

ARRA Drawdown Schedule (\$ in millions)



Data through Aug. 31, 2016

Notes:

1. The program can frontload all of the ARRA funds to help spend those funds as early as possible.
2. 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. Jun-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.

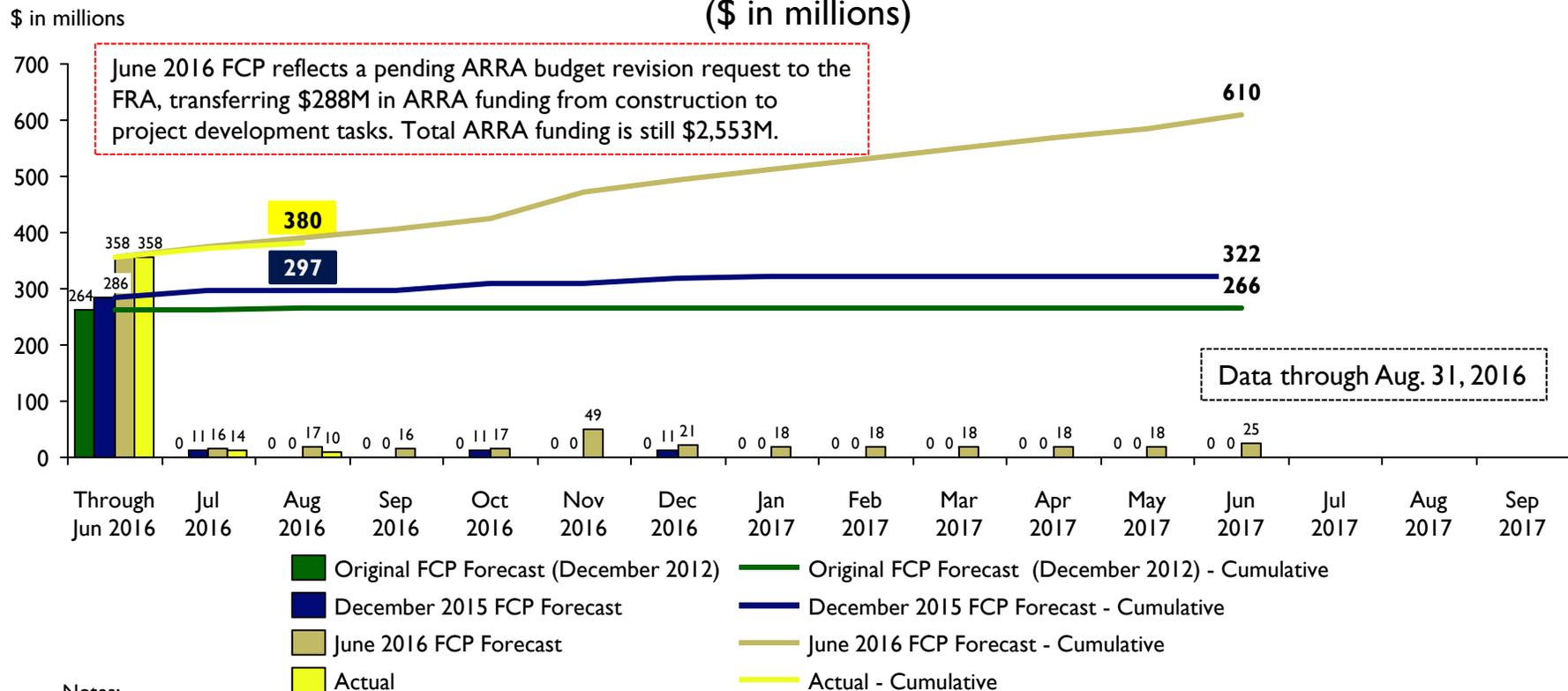
Sources:

1. Interim Funding Contribution Plan Worksheet, Aug-2016
2. Funding Contribution Plan, Jun-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



Notes:

1. The program can frontload all of the ARRA funds to help spend those funds as early as possible.
2. 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. Jun-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.

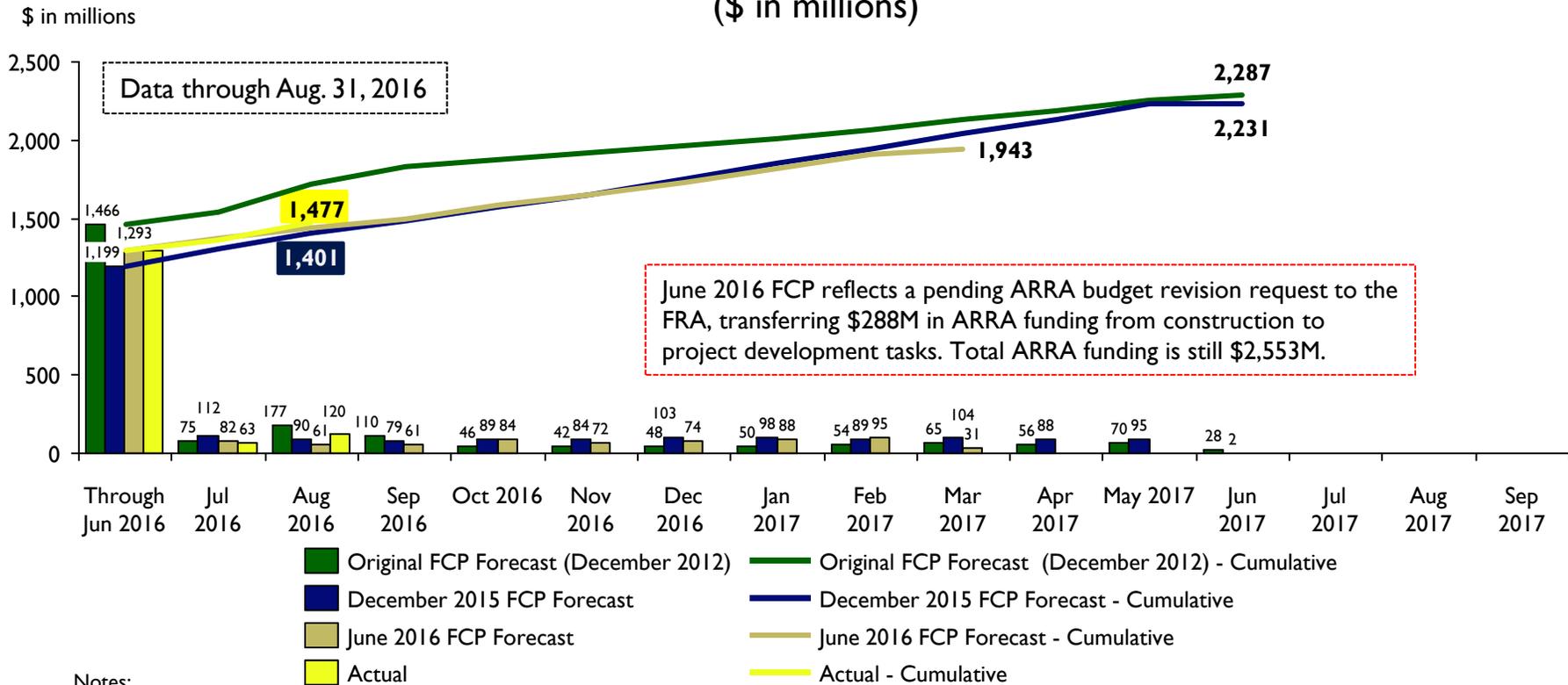
Sources:

1. Interim Funding Contribution Plan Worksheet, Aug-2016
2. Funding Contribution Plan, Jun-2016
3. Funding Contribution Plan, Dec-2015
4. Funding Contribution Plan, Dec-2012

ARRA Expenditure by Month

Forecast vs. Actual

ARRA-Construction Drawdown Schedule (\$ in millions)



Notes:

1. The program can frontload all of the ARRA funds to help spend those funds as early as possible.
2. 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. Jun-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.

Sources:

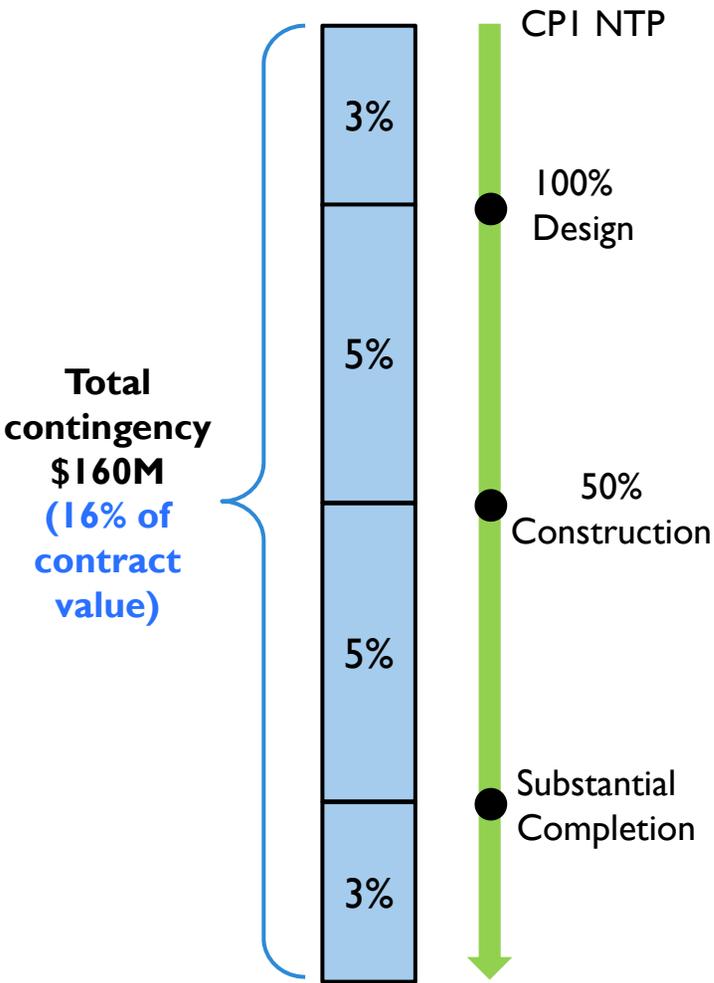
1. Interim Funding Contribution Plan Worksheet, Aug-2016
2. Funding Contribution Plan, Jun-2016
3. Funding Contribution Plan, Dec-2015
4. Funding Contribution Plan, Dec-2012

Agenda

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

CP1 Contract – Establishing Contingency Floor

- ▶ Based on an analysis of the risks associated with CPI, a contingency of \$160M or slightly less than 16% of the contract value, was set aside.
- ▶ 3% of the contract value or approximately \$31M of the contingency was reserved for potential additional costs arising at or following substantial completion. This percentage is based on FTA guidance and is intended to serve as an added layer of protection against potential unidentified (additional) costs.
- ▶ Between these points, the floor is set based on FTA’s contingency targets for the amount of work outstanding at each milestone. For example, an additional 10% of contract value was reserved for potential additional cost arising between the start of construction and substantial completion, making the total required contingency at the 100% design stage to 13% of the contract value.



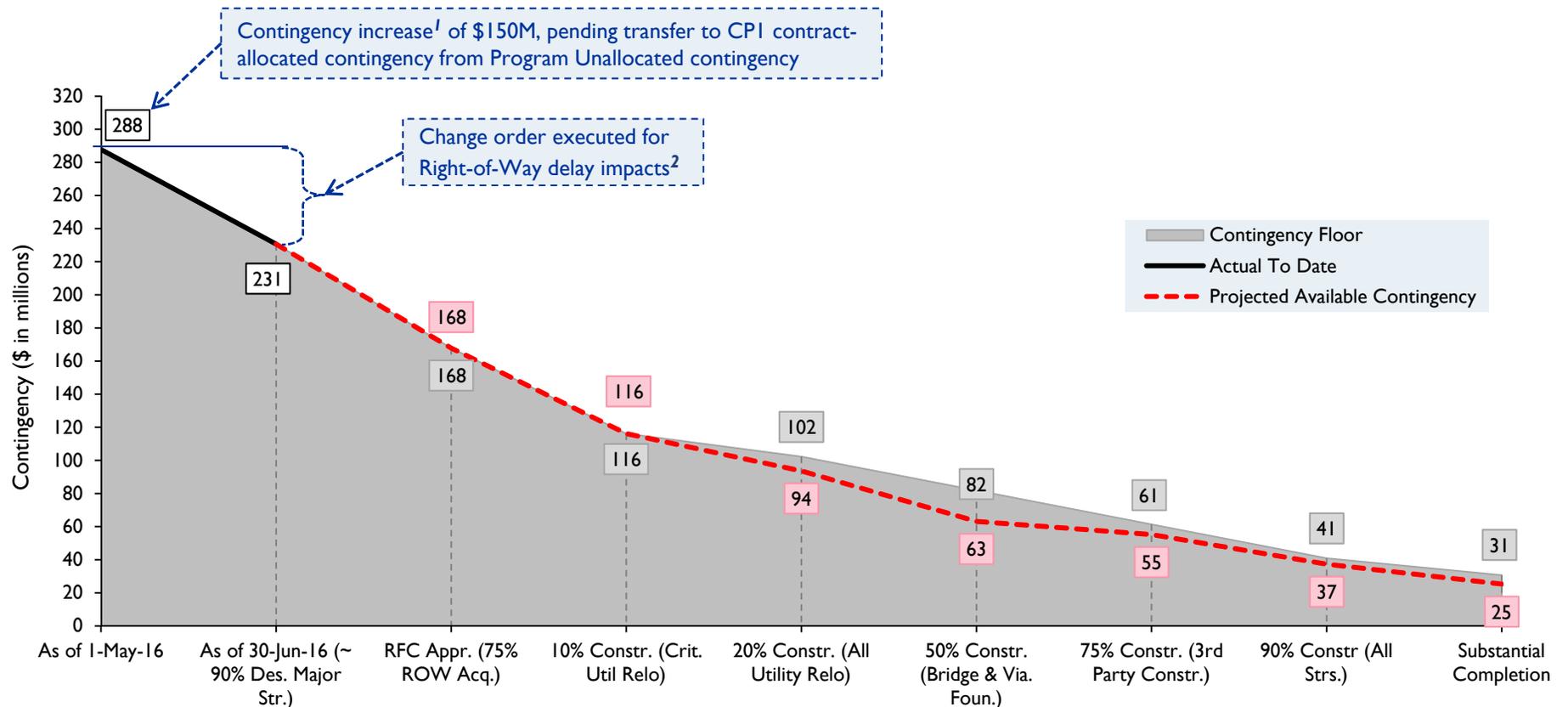
* Based on FTA Project and Construction Management Guidelines (July 2011)

Projected Available Contingency Level at Future Milestones

Contract Milestones	Projected ¹ Available Contingency (\$ in millions)	Potential Risks Expected to Occur at Contract Milestones	Mean Rem. Risk Exposure (\$ in millions)
As of May 1, 2016	\$287.9 ²		
As of June 30, 2016 (~90% Design of most structures)	\$230.7	<ul style="list-style-type: none"> • Right-of-Way delay impacts - completion deadline extension • Design of Utility conflicts 	\$57.2
100% RFC Design	\$167.8	<ul style="list-style-type: none"> • Madera County Design roadway revisions (Avenues 9, 12, 13, 15 and 15.5) • Other Known scope changes incl. McKinley, GSB, etc. • City of Fresno Tier 2 requirements • Additional railroad requirements 	\$62.9
10% Construction	\$116.1	<ul style="list-style-type: none"> • Delays in agreement with RR agencies (50% impact) • Utility relocations increased scope • Delays in obtaining permits (50% impact) • SJVRR Spurs - Scope considers one spur in the vicinity of Dry Creek Canal 	\$51.7
20% Construction	\$93.6	<ul style="list-style-type: none"> • Utility Provisional Sum • Construction contract work Prov. Sums 	\$7.5
50% Construction	\$63.1	<ul style="list-style-type: none"> • Changed/Differing Site Conditions • Class I & II Hazmat 	\$30.5
75% Construction	\$55.2	<ul style="list-style-type: none"> • Change or misrepresentation of environmental requirements • SR99 & SR180 Interface Coordination 	\$7.9
90% Construction	\$37.3	<ul style="list-style-type: none"> • Direct costs associated with intrusion protection 	\$17.9
Substantial Complete	\$25.3	<ul style="list-style-type: none"> • ROW acquisition delays (50% impact) • Delays in obtaining permits (50% impact) • Delays in acquiring compensatory mitigation sites 	\$24.1

1. Content as of June 30, 2016. The projections for remaining contingency available will be reviewed and adjusted at major project milestones. This will take into account actual known impact of risks that are realized and free-up the mean impact of the risks that are avoided.
 2. The CPI contract-allocated contingency has not been adjusted to reflect this increase of \$150M and is pending transfer from the Program Unallocated contingency.

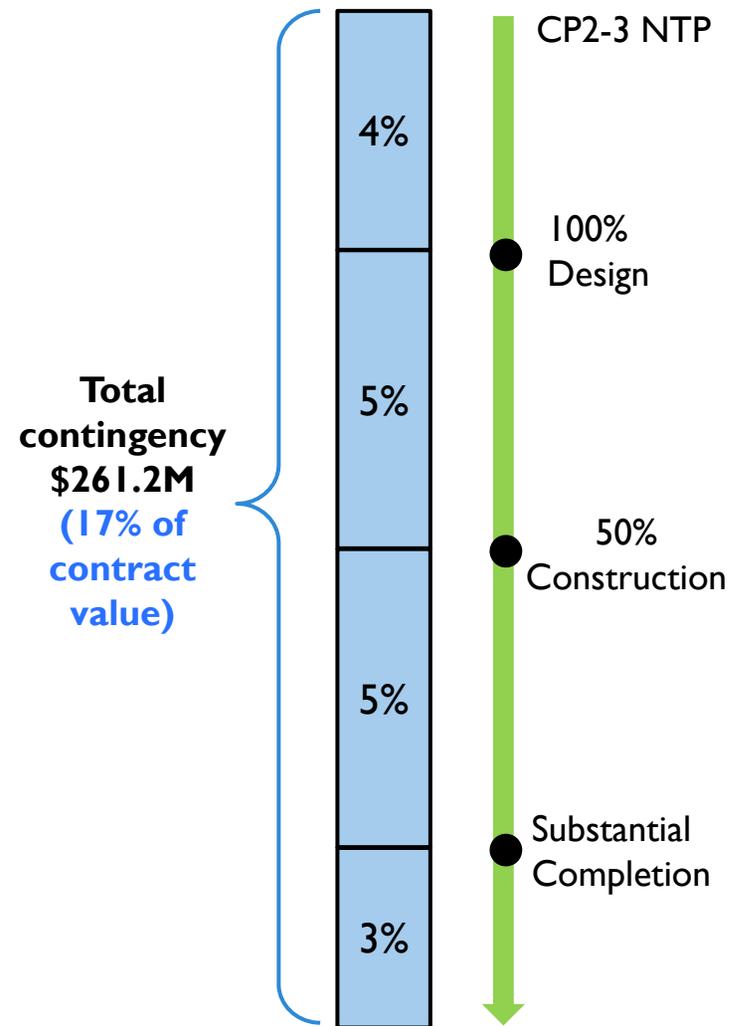
CP1 Contract - Contingency report



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.
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.

CP2-3 Contract – Establishing Contingency Floor

- ▶ Based on an analysis of the risks associated with CP2-3, a contingency of \$261.2M or slightly over 17% of the contract value (base contract plus the PG&E provision sums and third party allowance), was set aside.
- ▶ Three percent of the contract value or approximately \$46M of the contingency was reserved for potential additional costs arising at or following substantial completion. This percentage is based on FTA guidance and is intended to serve as an added layer of protection against potential unidentified (additional) costs.
- ▶ Between these points, the floor is set based on FTA's contingency targets for the amount of work outstanding at each milestone. For example, an additional 10% of contract value was reserved for potential additional cost arising between the start of construction and substantial completion, making the total required contingency at the 100% design stage to 13% of the contract value.



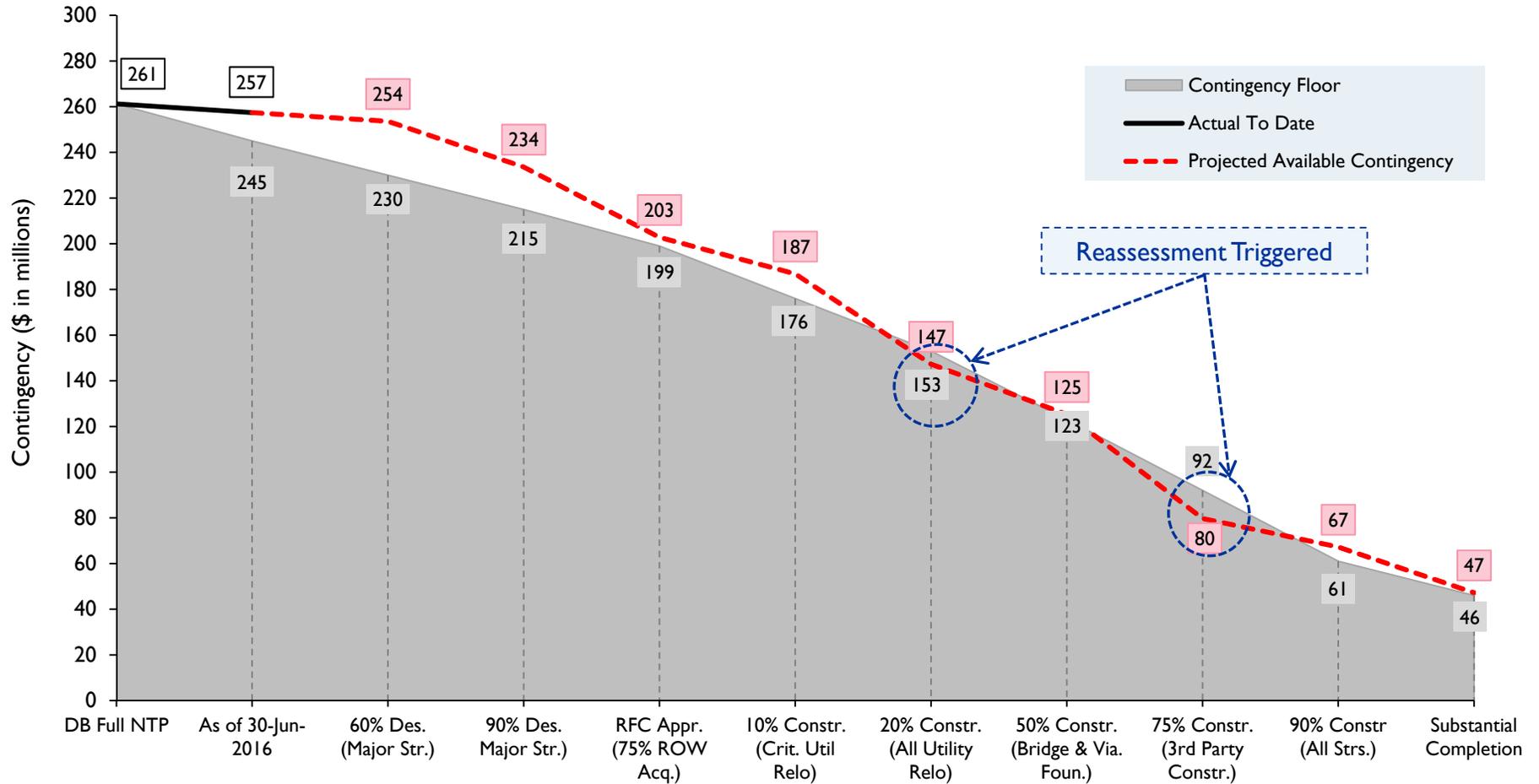
* Based on FTA Project and Construction Management Guidelines (July 2011)

Projected Available Contingency Level at Future Milestones

Contract Milestones	Projected Available Contingency (\$ in millions)	Potential Risks Expected to Occur at Contract Milestones	P90 Risk Exposure (\$ in millions)
CP2-3 NTP	\$261		
60% Design	\$253.6	<ul style="list-style-type: none"> • Scope changes as per Environmental requirement modifications 	\$15.3
90% Design	\$233.6	<ul style="list-style-type: none"> • Kings County Roadway Modifications • Notice of approval of restricted drawings 	\$20.0
100% RFC Design	\$202.8	<ul style="list-style-type: none"> • Fresno & Tulare County Roadway Modifications • SBE/DBE participation, community benefits agreement and NTHI 	\$30.8
10% Construction	\$186.8	<ul style="list-style-type: none"> • Delays in agreement with RR agencies (20% impact) • ROW acquisition delays (20% impact); Delays in obtaining permits (20% impact) • Uncooperative Kings County delaying Authority work (20% impact) • CPUC delays (20% impact) 	\$16.0
20% Construction	\$147.3	<ul style="list-style-type: none"> • Uncertainty in utility relocation costs; Uncertainty in canal relocation costs • Construction Water hard to find 	\$39.5
50% Construction	\$125.3	<ul style="list-style-type: none"> • Changed/Differing Site Conditions • Class I & II Hazmat 	\$22.0
75% Construction	\$79.7	<ul style="list-style-type: none"> • BNSF railroad intrusion protection measures (50%) 	\$45.6
90% Construction	\$67.2	<ul style="list-style-type: none"> • Agricultural crossings at Hanford and Cross Creek necessitated by embankments. 	\$12.5
Substantial Complete	\$47.2	<ul style="list-style-type: none"> • ROW acquisition delays (50% impact) • Delays in obtaining permits (50% impact) • Delays in acquiring compensatory mitigation sites (50% impact) 	\$40.1

Note: Content as of June 11, 2015. The projections for remaining contingency available will be reviewed and adjusted at major project milestones. This will take into account actual known impact of risks that are realized and free-up the P90 impact of the risks that are avoided.

CP2-3 Contract - Contingency report



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